

Town of South Palm Beach, Florida

Comprehensive Plan 2024 EAR Based Amendments

June 2024

DRAFT For Review Only

Prepared by:



Town of South Palm Beach, Florida Draft Comprehensive Plan Update June 2024

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INTRODUCTION

The Town

The Town of South Palm Beach occupies a strip of oceanfront property five-eights of a mile in length on the barrier island between the Town of Palm Beach to the north, and the Town of Lantana to the south. The easternmost boundary of the Town is the Atlantic Ocean and the western boundary is defined by the shoreline of the lagoon created by the northern end of Hypoluxo Island in Lantana. The Town is situated approximately one mile east of U.S. Highway 1 and about two miles south of Lake Worth Road. The only public road in the Town is State Road A1A which is locally known as South Ocean Boulevard.

The development of the present Town of South Palm Beach began in July 1955 when the Town was incorporated. The Town grew at a slow and steady pace until the boom of the early seventies, which produced over a thousand units within a little over a year. Since then, the Town continued growing, but at a much slower pace. Presently, By the 1990s, the Town was is completely built-out with all parcels developed. This 2024 update of the Comprehensive Plan will address current conditions and Town plans for the future and implement the EAR Based Amendments. The format of the plan is maintained in this update. Underlines are proposed additions and strike-thru's are deletions.

The Plan

The <u>2008 update of the</u> Comprehensive Plan of the Town of South Palm Beach as presented here was prepared to meet the requirements of the Florida Local Government Comprehensive Planning and Land Development Regulation Act of 1985, Chapter 163, Florida Statutes. The Plan was prepared in accordance with the guidelines established in Chapter 9J-5, Florida Administrative Code.

Th<u>is</u> Plan<u>update</u> contains <u>nine</u> <u>ten</u> required elements in addition to sections on population and public participation. The <u>ten</u> <u>nine</u> elements of the Plan are: Future Land Use, Transportation, Housing, Infrastructure, Coastal Management, Conservation, Recreation and Open Space, Intergovernmental Coordination, and Capital Improvements <u>and Property Rights</u>. Each element contains data and analysis sections which form the basis for the goals, objectives and policies which follow.

Unlike most local governments in Florida, growth management is hardly an issue in the Town of South Palm Beach, since the Town is built out. The primary concerns of the Town are protection of the existing quality of life and preservation of natural resources. These are the issues that the Plan focuses on. Since the entire Town is a coastal area, <u>Coastal Management is the element where these issues are primarily addressed</u>.

CHAPTER 1 POPULATION

I. RESIDENT POPULATION GROWTH

Historically, the growth of the Town of South Palm Beach has been somewhat sporadic compared to the growth pattern of Palm Beach County or the State of Florida as can be seen in Table 1. From its incorporation in 1955 until the early seventies, the Town grew at an extremely sluggish pace and reached a population of 188 in 1970. Then came the building boom of the early seventies, in which over one thousand units were built within a little over a year. After a short lull following the boom, the Town managed to grow at a steady pace to 1996. The Town has been considered built out since that time.

In terms of population, the Town grew from a population of 113 in 1960 to 188 in 1970, a growth rate of over sixty-six percent (66%) for the decade. The Town reached a population of 1304 in 1980 largely due to the building boom of the early seventies resulting in an increase of nearly six-hundred percent (600%) over a period of ten (10) years. Since its incorporation, the Town has grown at a much faster rate than either Palm Beach County or the State of Florida until its growth started slowing down following the boom of the early seventies. From 1980 through 1986, the Town's population grew by only 8.1 percent (8.1%) (an annual growth rate of one point three five percent (1.35%) compared with thirty point three percent (30.3%) growth of Palm Beach County and nineteen point six percent (19.6%) for the State of Florida. Between 1986 and 2006 the Town grew by a total of 116 permanent residents. Future population growth will be limited to approximately 316 persons occupying the 180 additional units that could be constructed on some properties if redevelopment occurs.

Year	Resident	Seasonal	Total
1986	1410	1666	3076
1990*	1504	1630	3134
1995*	1600	1538	3138
- <u>2000**</u>	1708	1398	3106
2004**	<u> </u>	1355	2886
2006***	1526	1355	2881
2011	1556	1377	2933
2016	1586	1399	2985

TABLE 1 POPULATION PROJECTIONS, TOWN OF SOUTH PALM BEACH

* Projection

* April 1, 2000 Census estimates of population indicated a permanent population of 1,708. April 1, 2004 population estimates from the Bureau of Economic and Business Research, University of Florida also indicate a permanent population of 1,531.

*** April 1, 2006 population estimates from the Bureau of Economic and Business Research, University of Florida indicate a permanent population of 1526. NOTE: Population projections for the years 2011 and 2016 are based on the potential for redevelopment of certain properties that are presently developed at less than the allowed density. Redevelopment of these properties at the allowed density would allow a maximum of 180 additional residential units. The projections reflect 30 units being constructed in the five year projection period an additional 30 units being constructed in the ten year projection period. Current person per unit numbers were used to determine the resident, seasonal and total population projections. The Town of South Palm Beach is bounded on the north and south by municipalities and on the cast and west by water bodies. Annexation is not an option to accommodate additional residents. Increasing density within the Coastal High Hazard Area that comprises the entire town is also not an acceptable alternative to accommodate population growth. Demographic profiles resulting in additional persons per unit are unlikely to change significantly in the foreseeable future.

Population trends in the Town are presented in Table 1 below. The Town resident population has been generally stable since 1990 when the U.S. Census counted 1,480 residents. The resident population peaked in 2000 with 1,531 but decreased slightly to 1,358 in the 2010 U.S. Census count. Note, the Decennial Census results are used for the 10 year population estimates but the University of Florida BEBR population estimates are used at the other time periods. The 2023 BEBR year-round resident population estimate was 1,469 people. BEBR estimates are the basis for State Revenue sharing.

Year	Resident Population	Source
1990	<u>1,480</u>	U.S Census
2000	<u>1,531</u>	U.S Census
2010	<u>1,358</u>	U.S. Census Correction 2/11/14
2015	<u>1,366</u>	<u>Univ of FL BEBR</u>
2018	<u>1,400</u>	<u>Univ of FL BEBR</u>
2019	<u>1,448</u>	Univ of FL BEBR
2020	<u>1,471</u>	U.S Census
2021	<u>1,472</u>	<u>Univ of FL BEBR</u>
2022	<u>1,472</u>	<u>Univ of FL BEBR</u>
2023	<u>1,469</u>	<u>Univ of FL BEBR</u>
Source:	Walter H Keller, Inc.	
Notes:	BEBR is the Bureau of E	conomic and Business Research

Table 1 – Population Trends 1990 - 2023

II. POPULATION CHARACTERISTICS

Age and Sex A.

Table 2 below provides a tabulation of the sex, age groups, median age and average persons per household and persons per family in 2020. Note the 2023 BEBR population estimate in Table 1 was 1,471. Females comprised 56.5% of the resident population whereas men were at 43.5%. Females were 51.2% of the Palm Beach County population. A significant portion of the Town's population (55.4%) is older than 65 years of age. Palm Beach County has 25.2% of the population older than 65 years of age. The median age for the Town is 67.5 years old whereas Palm Beach County's median age is 45.2. Palm Beach County's Planning Division has estimated the 2020 seasonal population of the Town (resident and seasonal) to be 2,587 people.

Characteristics Sub-category	Total	%	-
		<u> 70</u>	Size
Total Housing Units			
Total	<u>1,854</u>		
Year Round Units	943	<u>50.9%</u>	
Vacant & Seasonal	<u>911</u>	49.1%	
Households and Families			
Total Households	<u>943</u>	100.0%	<u>1.66</u>
Family Households	<u>385</u>	<u>40.8%</u>	<u>2.32</u>
Married Couple Households	<u>319</u>	<u>33.8%</u>	<u>2.16</u>
Male Head of Household, No Spouse H	louseholds <u>10</u>	<u>1.1%</u>	<u>3.70</u>
Female Head of Household, No Spouse	Households 56	<u>5.9%</u>	<u>3.14</u>
Non Family Households	<u>558</u>	<u>59.2%</u>	<u>1.27</u>
<u>Tenure</u>			
Owner Occupied Housing Unit	<u>821</u>	87.1%	<u>1.69</u>
Renter Occupied Housing Unit	<u>122</u>	<u>12.9%</u>	<u>1.49</u>
- Year Structure Built			
<u>Total</u>	<u>1,854</u>		
Built 2020 or Later	<u>0</u>	<u>0%</u>	
Built 2010 to 2019	<u>30</u>	<u>1.6%</u>	
Built 2000 to 2009	<u>0</u>	<u>0%</u>	
Built 1990 to 1999	<u>21</u>	<u>1.1%</u>	
Built 1980 to 1989	<u>384</u>	<u>20.7%</u>	
Built 1970 to 1979	<u>1,028</u>	<u>55.4%</u>	
Built 1960 to 1969	<u>320</u>	<u>17.3%</u>	
Built 1950 to 1959	<u>41</u>	2.2%	
Built 1940 to 1949	<u>24</u>	<u>1.3%</u>	
Built 1939 or Earlier	<u>6</u>	0.3%	
Source: 2020 US Census and 2022 American Community S	urvey 5 Year Estimates		

Table 2 – 2020	Population	Sex, Age	Groups &	Persons/Household

Walter H Keller, Inc.

The population of South Palm Beach continues to have a much different age composition than either Palm Beach County or the State of Florida as a larger portion of the Town's population compromises retired people. Tables 2 and 3 indicate the age and sex composition of the Town's population.

TABLE 2

AGE OF RESIDENTS COMPARISON 1989 TO 2004

AGE CATEGORY*	1989 COMPREHENSIVE PLAN	2004 ESTIMATES
0-15	<u>-1.9 %</u>	2.1 %
16-24	3.9 %	1.9 %
25-44	10.4 %	11.3 %
45-64	32.0 %	30.5 %
OVER 65	51.9 %	54.2%

*Age categories were revised from 1989 Comprehensive Plan based on available 2004 data.

Source: 1989 South Palm Beach Comprehensive Plan; US Census Bureau

By comparison, based on the 2000 census, in Palm Beach County 26.2 percent of residents are over 65 years of age and 21.3 percent are under 18. Statewide 17.6 percent are over 65 and 22.8 percent are under 18.

TABLE 3 GENDER COMPARISON 1989 TO 2004

GENDER	1989 COMPREHENSIVE PLAN	2004
MALE	44.4 %	4 2.9 %
FEMALE	55.7 %	57.1 %

Source: 1989 Comprehensive Plan; US Census Bureau

III. HOUSEHOLD CHARACTERISTICS

Household characteristics of South Palm Beach continue to be substantially different from those of Palm Beach County and the State of Florida due to the greater percentage of retiree population which falls in the "post child-raising" age groups. The most striking difference is in the household size which was far smaller in the Town of South Palm Beach (1.56) (1.76) in 2020 1980 as compared to the size of Palm Beach County (2.41) (2.42) or the State of Florida (2.55). The average household size continues to fall well below the Palm Beach County and State of Florida numbers. The 2000 Census indicates an average household size of 1.54 in South Palm Beach compared to 2.34 in Palm Beach County and 2.46 statewide.

IV. POPULATION PROJECTIONS

The Town of South Palm Beach is completely built out <u>and there are no remaining vacant parcels</u>. This is the single most important factor to be taken into consideration in projecting the Town's population through the year <u>2035 and 2045</u>. 2016. as shown in Table 1 in keeping with the following assumptions:

The Shimberg Center for Housing Studies and BEBR have projected future population estimates for the Town for 2035 and 2045 which would approximate 10 and 20 year forecasts. The 2035 population estimate is 1,746 and the 2045 population estimate is 1,888.

Forty-four point five percent (44.5%) of the Town's residential units are used seasonally or occasionally. The resident component of the Town's population will increase gradually with the corresponding decrease in the seasonal component. This is based on the current trend caused by less movement between northern and southern residences as the population ages. <u>Redevelopment may also occur where additional residential units will be added to the Town's residential supply.</u> These factors will need to occur in order to reach the future population estimate.

- 1. The population of the Town of South Palm Beach is very close to a saturation point. It is assumed that the Town's population will reach that point over the next 25 to 30 years as redevelopment of the existing condominium buildings occurs.
- 2. There are no remaining vacant properties within the Town limits.
- 3. A major shift in the age or sex composition of the Town's population is not anticipated in the foreseeable future. The median age of the Town's population will increase slightly over the years.
- 4. The average household size in South Palm Beach will decline only marginally over the years.
- The existing motel (Palm Beach Oceanfront Inn) will continue to exist as a motel with fiftyeight
 (58) units through the year 2016.

CHAPTER 2 PUBLIC PARTICIPATION AND PLAN EVALUATION

I. PUBLIC PARTICIPATION

It is the policy of the Town of South Palm Beach to seek public input throughout the entire comprehensive planning process including consideration of amendments to the Comprehensive Plan and preparation of Evaluation and Appraisal Reports (EAR). The Town recognizes that public input must be sought through a variety of channels, both formal and informal, in order to ensure that the residents of the Town will have ample opportunity to express their concerns and opinions as they may relate to comprehensive planning. In order to implement this policy of the Town encouraging public participation in the planning process, the following procedures are established:

A. The Town shall advertise in a newspaper of general circulation in the Town, any official action that will affect the use of real property in South Palm Beach. Such action shall generally include adoption of a Comprehensive Plan or a Land Development Regulation Ordinance, or any revision or modification to such a plan or ordinance including any change in Zoning Regulations.

B. During the comprehensive planning process, timely written notices shall be sent to all condominium homeowners' associations and owners of single family residences in the Town in order to keep the Town's residents informed of the status of the plan and to seek their written comments as they may relate to comprehensive planning. Such notices shall indicate the information available for review at the Town Hall.

C. Public Hearings shall be held in conformance with Chapter 163, F. S. by the Local Planning Agency and the Town Council prior to adoption of a Comprehensive Plan or any element of the Plan or any revision to such a Plan or any element of the Plan.

D. The Local Planning Agency shall take into consideration all written and verbal comments received from the Town's residents in connection with the Comprehensive Plan during the planning process, and shall prepare a response statement to such comments prior to adoption of the Plan by the Town Council. Copies of the response statement shall be sent to the members of the Town Council and the individuals, organizations and agencies who had made comments during the planning process, at least two weeks prior to the final Public Hearing to be conducted by the Town Council in the Plan adoption process.

E. The Local Planning Agency shall release information at regular intervals during the planning process. Copies of the information to be released shall be made available for review at Town Hall.

II. MONITORING AND EVALUATION

In the preparation of the required seven-year Evaluation and Appraisal Reports (EAR), the following procedures shall be followed:

<u>A.</u> The Town shall follow adoption procedures outlined in Florida Statutes and the Florida Administrative Code. Additional public input may be solicited by the Town Council at their discretion.

<u>B.</u> The Evaluation and Appraisal Report shall include updating of the baseline data pertaining to population, housing and traffic <u>where appropriate</u>, and measurable objectives to be accomplished in the seven-year intervals of the Plan adoption and for the long-term period.

 $\underline{C.}$ The Evaluation and Appraisal Report shall describe accomplishments in the first seven-year period and the degree to which the goals, objectives and policies have been successfully reached. The report shall also identify obstacles or problems which resulted in under achievement of goals, objectives or policies.

<u>D.</u> In order to correct the problems identified, the Evaluation and Appraisal Report shall modify the existing goals, objectives or policies, or establish new ones.

 \underline{E} . In order to ensure continuous monitoring and evaluation of the Plan during the seven-year period, the Town Manager's office shall prepare an ANNUAL STATUS REPORT outlining any major change in the baseline data, plan amendments, specific problems encountered in the accomplishments of goals, objectives or policies, and comments received from the concerned citizens.

CHAPTER 3 FUTURE LAND USE ELEMENT

I. EXISTING LAND USE DATA

The Town of South Palm Beach is an <u>a built-out</u> ocean-front community predominately residential in character approximately 68 acres in size. As of <u>February 2023</u> March 2006, the residential land use accounted for eighty-three four point five percent (<u>83%</u>) (84.5 %) of the total land area within the Town's jurisdiction. There are only two types of residential land uses existing in the Town: single-family and multi-family of which the latter accounts for eighty-one point one (<u>81.1%</u>) percent eighty-two point five percent (<u>82.5%</u>) of the total land area. The table below shows the tabulation of existing land uses. Note, since the Town is built-out, the existing and future land uses are the same.

LAND USE	ACRES	
Single Family Residential	-1.3	-2.0
Multiple Family Residential	5 4.4	82.5
Commercial**	-1.0	-1.5
Recreational*	-1.3	-2.0
Public Buildings	-0.9	-1.4
Rights-of-Way	-7.0	10.6
TOTAL	65.9	<u> </u>

TABLE 4 EXISTING LAND USES 2006

* Recreational land a coastal strip between the Atlantic Ocean and privately owned ocean front property. ** Non-conforming use

Map 1 illustrates the existing land uses in South Palm Beach. The multi-family residential use is in the form of mid to hi-rise condominium buildings with an average density of approximately thirty-three (33) units per acre. The only single-family residential use is located in the extreme northeast corner of the Town of South Palm Beach and includes four (4) single-family dwellings. Single family and multi-family are the only two types of residential uses permitted in the existing Zoning Ordinance of the Town.

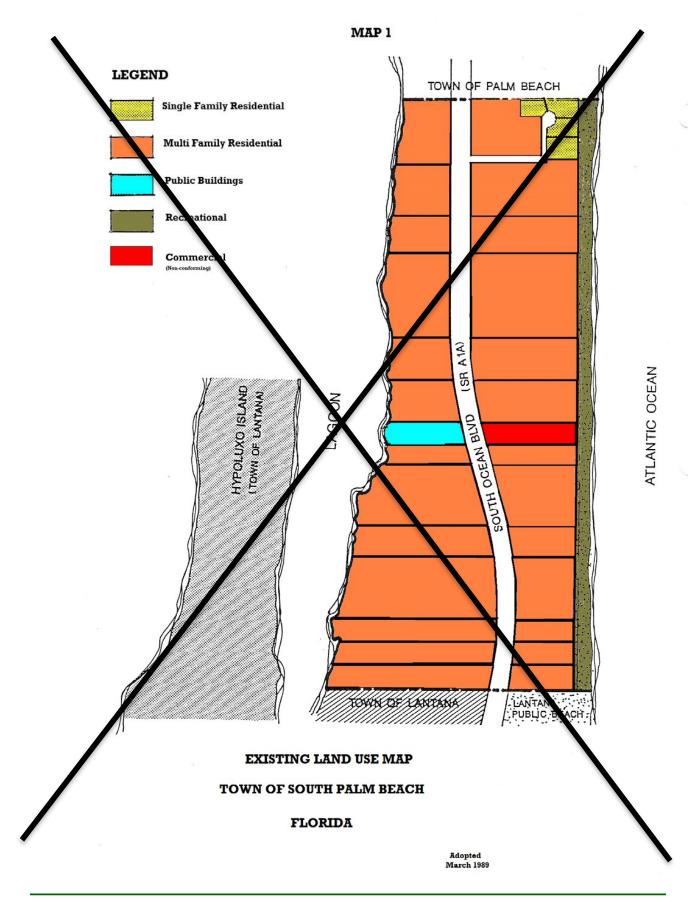
The only commercial use in the Town is comprised of a motel containing fifty-eight (58) units. It exists as a non-conforming use, since the existing Zoning Ordinance of the Town does not allow any commercial use in South Palm Beach.

The recreational land use within the Town's jurisdiction consists of the beach along the Atlantic Ocean landward of the mean high-water line. The beach accounts for the only significant natural resource in the Town. The Palm Beach County 2023 Aerial Map was used to estimate the existing beach. The beach area was estimated to be 3.7 acres. The Town is built out with no other natural resources existing within its jurisdiction. The public building use shown above incorporates the Town Hall complex including the public safety building. There is no other public building in the Town.

Road right of way Streets in South Palm Beach accounts for only ten point-two percent-six percent (10.2%) (10.6%) of the total land area. Included in streets are South Ocean Boulevard (State Road A1A) and the private ingress-egress easement providing access to four (4) single-family dwellings mentioned

earlier. South Ocean Boulevard with its 100-foot right-of-way accounts for nearly <u>eight</u> ten percent (<u>8%</u>) (10%) of the total land area in the Town.

Adjoining the Town to the north is the Town of Palm Beach with multi-family residential use. To the south <u>and west</u> is the Town of Lantana with recreational use east of State Road A1A.



Walter H. Keller, Inc. Consulting Engineers & Planners Due to the fact that no land uses other than residential are allowed in the Town, the residents of South Palm Beach must rely on adjacent communities for their commercial, retail and professional office services. There have been no negative impacts from this arrangement on the past, and none are anticipated in the future due to the built-out nature of the Town.

II. LAND USE ANALYSIS

Traffic circulation provided by the existing facilities including South Ocean Boulevard (State Road A1A) and the private easement, appears to be quite adequate to serve the existing land uses as shown on the Existing Land Use Map. South Ocean Boulevard also has surplus capacity. The existing service infrastructure including sanitary sewer, solid waste, drainage, and potable water services are also adequate to serve the existing land uses, as well as, any future land uses through the year 2035 2016.

There are four classifications of soils found within the Town of South Palm Beach. Definitions of these soils, as provided in the Soil Survey of the Palm Beach County, Florida Area are provided below:

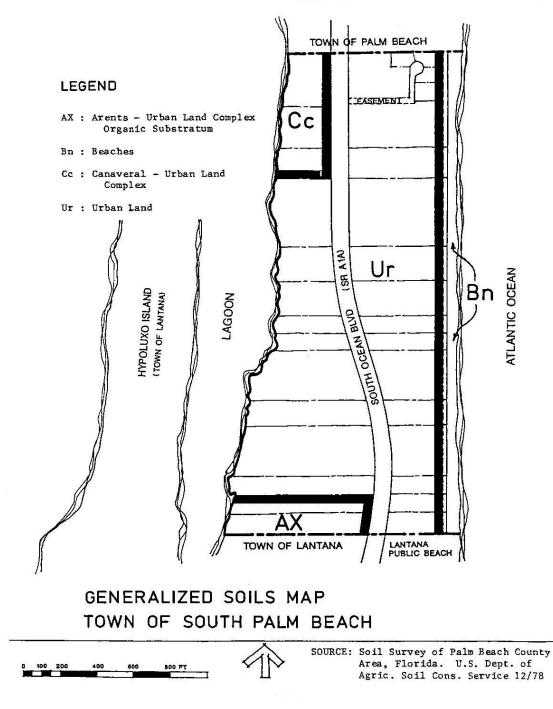
- AX: Arents Urban land complex, organic substratum. This complex consists of nearly level, somewhat poorly drained, sandy soils and urban land overlying organic soils. The areas were formerly organic marches and swamps that were filled for urban use.
- Bn: Beaches. This classification consists of narrow strips tide-washed sand along the Atlantic coast. As much as half of the beach may be covered by water during daily high tides, and all of the beach may be covered during storm periods.
- Cc: Canaveral Urban land complex. This complex consists of Canaveral sand and Urban land. About twenty-five to forty percent (25-40%) of this complex is covered by sidewalks, streets, parking areas, building, and other structures. About forty to sixty percent (40-60%) of the complex consists of lawns, vacant lots, and undeveloped areas. These open areas are made of nearly level, somewhat poorly drained to moderately well drained Canaveral soils that have been modified.
- Ur: Urban land. Consists of areas that are sixty (60) to more than seventy five percent (75%) covered with streets, buildings, large parking lots, shopping centers, industrial parks, airports, and related facilities. Other areas are generally altered to such an extent that the former soils cannot be easily recognized.

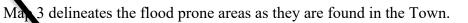
Map 1.1 <u>on the following page</u>, depicts the generalized soil associations as they are found in South Palm Beach.

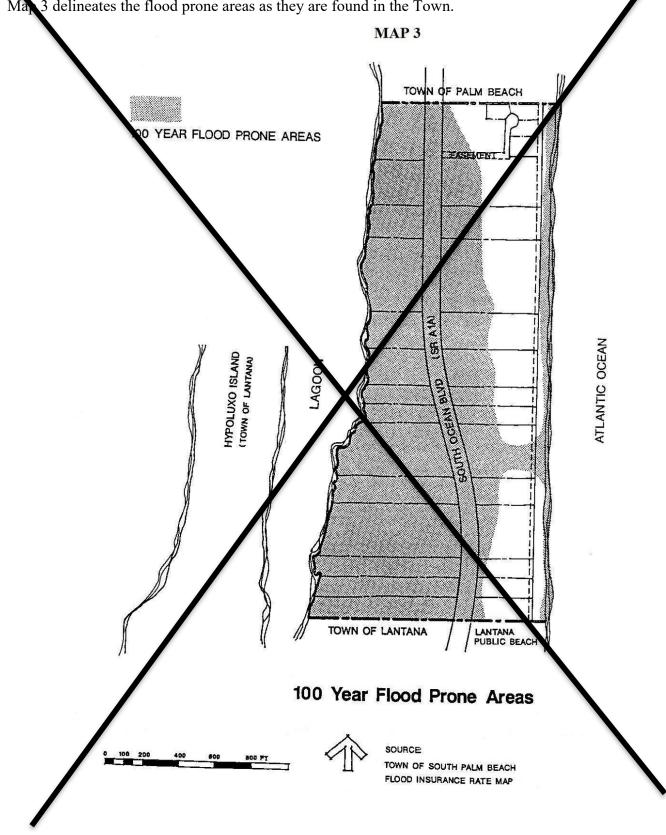
As discussed in the populations section earlier, the Town's population has nearly reached its peak since the Town is built-out.

The Town does not have any areas identified as blighted areas since the entire housing stock of the Town is in good condition. The only inconsistent use with the character of the Town currently existing is the motel, for the Town is a residential community housing a primarily retiree population. The commercial use existing on the motel site is grandfathered in and will continue to exist until its redevelopment. When redeveloped, the use will conform to the residential character of the community.

MAP 1.1

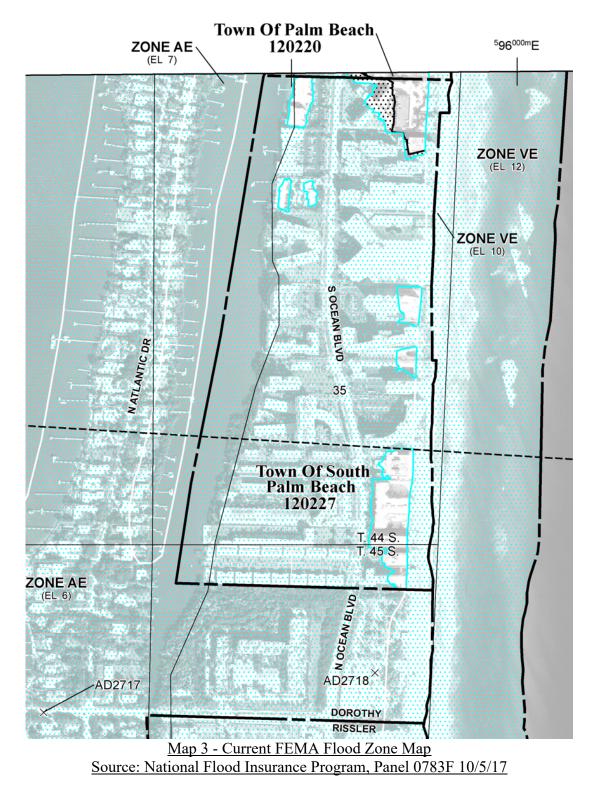






Town of South Palm Beach Comprehensive Plan Draft June 2024

Walter H. Keller, Inc. Consulting Engineers & Planners Map 3 below, illustrates the current FEMA Flood Map for the Town of South Palm Beach. The majority of the Town is in the Special Flood Hazard Area with a 1% annual chance flood (100-year flood) Zone AE (Elevation 6). Clear areas border with blue are not part of the Special Flood Hazard Area are Zone X with a 0.2% chance of flood. This Map will be replaced in the near future with Map 3.2 on the following page



Town of South Palm Beach Comprehensive Plan Draft June 2024

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Map 3.1 illustrates the preliminary FEMA Flood Map for the Town of South Palm Beach which is expected to replace Map 3.1 in the near future. A majority of the Town is in the Zone AE (Elevation 9) and (Elevation 8). Velocity Zones VE (11 Elevation and 14 Elevation are located along the shoreline along with some Zone X areas which are outside of the Special Flood Hazard Area.



Map 3.1 - Preliminary FEMA Flood Zone Map Source: FEMA National Flood Insurance Program, Panel 783, Preliminary 12/20/19

III. FUTURE LAND USE MAP

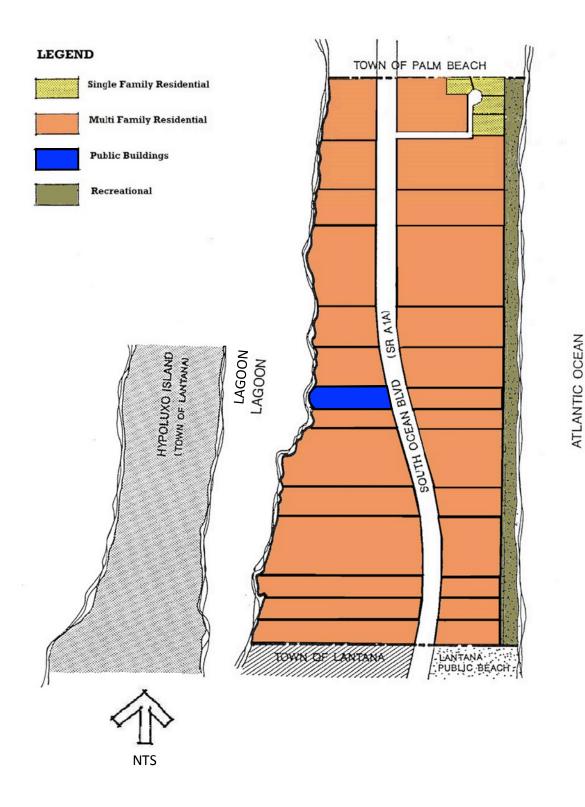
Table 3 below, identifies the land uses within the Town. As noted previously, the Town is built-out and the existing and Future Land Uses are the same. Map 4, on the following page, illustrates the location of the Town land uses.

Land Use	<u>Acres</u>	<u>%</u>
Single Family Residential Multifamily Residential Public Buildings (Town Hall) Private Recreation/Open Space (Beach) Right of Way (SR A1A) Total	<u>1.3</u> <u>55.4</u> <u>0.9</u> <u>3.7</u> <u>7.0</u> <u>68.3</u>	$ \frac{1.9\%}{81.1\%} \frac{1.3\%}{5.4\%} 10.2\% 100.0\% $

Table 3 – 2024 Existing and Future Land Use

Source: Walter H Keller, Inc.

Note: The Beach Area is Approximate.



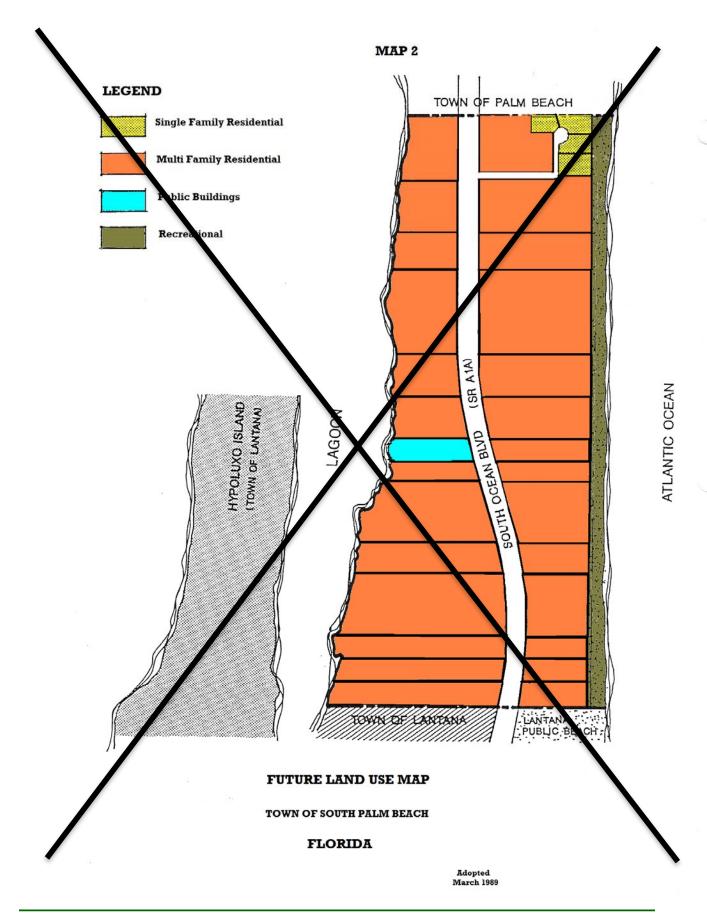
<u>Map 4 – Town of South Palm Beach 2045 Land Use Map</u> <u>Source: Walter H Keller, Inc.</u> Map 2 illustrates future land uses in South Palm Beach. With one exception, all existing land uses correlate to land uses depicted on the Future Land Use Map. The existing commercial use (motel) has been eliminated from the Future Land Use Map since it is an isolated commercial activity in conflict with the desired residential character of the Town.

The predominant land use in the Future Land Use Map is residential, primarily multi-family. The four single-family homes retain their land use classification. Aside from residential, there are two other land uses depicted on the Map; public buildings for the Town Hall complex, and recreational for the beach. The Town is completely built out.

Map 3 delineates the flood prone areas as they are found in the Town.

LAND USE	ACRES	·····································
Single Family Residential	1.3	2.0
Multiple Family Residential	55.4	<u>——84.0</u>
Public Buildings	0.9	
Recreational	<u> </u>	<u> </u>
Rights-of-Way		<u> </u>
Total	<u> </u>	

TABLE 5 FUTURE LAND USE



Town of South Palm Beach Comprehensive Plan Draft June 2024 *Walter H. Keller, Inc.* Consulting Engineers & Planners

IV. GOALS, OBJECTIVES, AND POLICIES

Goal Statement

ENSURE THAT THE CHARACTER AND LOCATION OF LAND USES MAXIMIZE THE ENJOYMENT OF NATURAL AND MAN-MADE RESOURCES BY RESIDENTS OF SOUTH PALM BEACH WHILE MINIMIZING THE THREAT TO HEALTH, SAFETY AND WELFARE POSED BY HAZARDS, NUISANCES, INCOMPATIBLE LAND USES, AND ENVIRONMENTAL DEGRADATION.

OBJECTIVE 1:

Ensure that adequate land development regulations are prepared, adopted, implemented, and enforced to manage future development and redevelopment in the Town.

- Policy 1.1: Land development regulations adopted shall regulate the use of land consistent with this element and ensure the compatibility of adjacent land uses.
- Policy 1.2: Multiple family residential densities shall be a maximum of thirty-three (33) dwelling units per acre based on the gross acreage of each individual land parcel designated for multiple family development. Where existing multiple family residential development currently exceeds thirty-three (33) dwelling units per acre reconstruction to the actual density on the site as of January 1, 2008 shall be allowed in the event of voluntary destruction or destruction beyond repair by hurricane, flood, fire, or other disaster. Single family residential densities shall be a maximum of four (4) dwelling units per acre based on the gross acreage of each individual land parcel designated for single family development.
- Policy 1.3 The maximum development intensity on land designated for public buildings on the future land use map shall be a floor area ratio of 1.0.
- Policy 1.4 Land development regulations adopted to implement the Comprehensive Plan shall incorporate standards directed at the regulation of signage throughout the Town.
- Policy 1.5 Land development regulations shall include provisions for safe and convenient on-site parking and traffic circulation for all public and private developments within the Town.
- Policy 1.6 Electric distribution substations shall be allowed in all land use categories on the Future Land Use Map. Prior to January 1, 2010 the Land Development Code shall be amended to include compatibility standards for electric distribution substations.

OBJECTIVE 2:

Future development and redevelopment activities will conform with the land use pattern depicted on the Future Land Uses Map and be consistent with the sound planning, principles, minimal natural limitations including soil capabilities, the goals, objectives and policies contained within this plan, and the desired residential character of the Town.

- Policy 2.1: All future development and redevelopment activities shall reinforce the Town's image as an ocean-front residential community.
- Policy 2.2: Non-residential land uses other than the necessary public facilities shall be prohibited anywhere in the Town.
- Policy 2.3: Land development regulations shall incorporate construction standards and regulations to guide development or redevelopment of flood prone areas.

OBJECTIVE 3:

Protect natural resources from development and redevelopment activities.

- Policy 3.1: Any development or redevelopment on an ocean-front parcel anywhere in the Town shall be adequately set back from the Coastal Construction Control Line and shall include restoration and re-vegetation of the dune system.
- Policy 3.2: The developer/owner of any site shall be responsible for the on-site management of runoff in a manner so that post-development runoff rates, volumes, and pollutant loads do not exceed pre-development conditions.

OBJECTIVE 4:

Issue development orders and permits for future development and redevelopment activities only if public facilities necessary to meet level of service standards, as adopted in the Plan, are available concurrent with the impact of the development.

Policy 4.1: Public facilities and utilities shall be located to maximize the efficiency of services provided; minimize their costs; and minimize their impact on the natural environment.

OBJECTIVE 5:

Eliminating existing land uses which are incompatible or inconsistent with the Future Land Use Element of the Plan at such time, as any existing non-conforming use is discounted or abandoned for six consecutive months or for eighteen months during any three year period.

Policy 5.1: Expansion or replacement of land uses which are incompatible with the Future Land Use Element of the Plan shall be prohibited.

OBJECTIVE 6:

Coordinate development and redevelopment activities with adjacent municipalities and appropriate State, regional and local entities including the Palm Beach County Emergency Management Agency to ensure that this development does not adversely impact hurricane evacuation times.

Policy 6:1: Prior to approval of development or redevelopment within the Town, an assessment of the impact of the proposed activity shall be undertaken to ensure that coastal area population densities do not exceed that which can be safely and efficiently evacuated in the event of a storm.

CHAPTER 4 TRANSPORTATION ELEMENT

I. TRANSPORTATION DATA

A. Existing Traffic Circulation

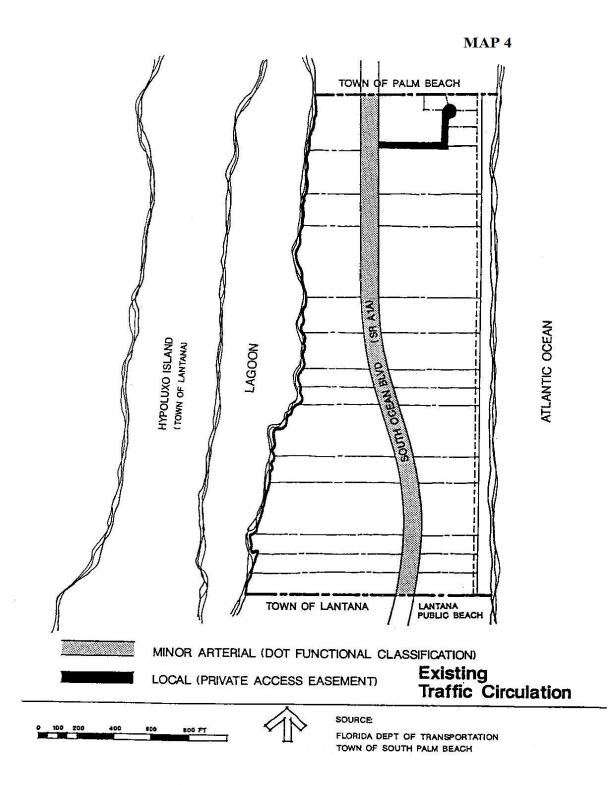
The existing street network in the Town of South Palm Beach compromises a 0.55 mile stretch of South Ocean Boulevard (State Road A1A) and 560 feet of private road in the form of an ingress-egress easement serving four single-family residences located in the extreme northeast corner of the Town.

South Ocean Boulevard (State Road A1A) is the only public roadway in the Town carrying north and south bound traffic passing through the Town and also providing access to properties fronting on both sides of the roadway. All properties located in the Town front on this public roadway with the exception of the four single-family residences. The right-of-way of State Road A1A is one hundred (100) feet wide. South Ocean Boulevard (State Road A1A) is a two-lane facility with grassed swales on both sides. The nearest roadway intersection is at East Ocean Boulevard about one-fifth of a mile south from the southern Town limits.

B. Functional Classification

The functional classification used by the Florida Department of Transportation for all urbanized area roads includes four categories: Urban Principal Arterial, Urban Minor Arterial, Urban Collector, and Local. Criteria or classifying roads are established in Administrative Rule Chapter 14-12.016.

The functional evaluation of roads is based on five roadway characteristics including traffic volume, length of road, number of lanes, speed, and whether the road is divided or undivided. Point values are assigned for each characteristic and the total number of points determines the functional classification of the road. Generally, a road with seventy (70) or more points will be classified as a principal arterial and the one with fifty to seventy (50 to 70) points as a minor arterial. State Road A1A is classified by the Florida Department of Transportation as a minor arterial primarily because of its length (Map <u>5</u> 4).



II. TRAFFIC CIRCULATION ANALYSIS

A. Existing Traffic Circulation

The existing design capacity of South Ocean Boulevard (State Road A1A) which is a two-lane roadway is listed below for different levels of service (LOS) assuming uninterrupted flow through the Town of South Palm Beach:

Level of Service	Roadway Volume (ADT)
А	2,500 N.A.
В	7,200 <u>9,225</u>
С	12,700 <u>14,100</u>
D	17,300 <u>19,125</u>
E	23,500

Source: Florida DOT Systems Planning Office, <u>Table 1 Generalized Annual Average Daily Volumes</u> <u>for Florida's Urbanized Areas 2018 FDOT QLOS</u> Table 4-3 Generalized Annual Average Daily Volumes for Florida's Rural Undeveloped Areas and Cities or Developed Areas Less than 5,000 Population

The Florida Department of Transportation collects traffic count information in three locations that could be impacted by traffic generated from development in South Palm Beach. The northern most location is on State Road A1A south of State Road 802 (Lake Worth Road). The central location is on State Road A1A north of County Road 812 (Lantana Road). The Average Daily Traffic on this segment for 2022 was 9,900 vehicles per day. This would equate to a LOS of "C". The 2045 Long Range Transportation Plan projects an average daily traffic volume of 11,700 vehicles per day. The 2045 LOS would still be LOS "C". The southernmost location is on State Road A1A south of County Road 812 (Lantana Road) counts at these locations for 2005 are depicted on Table 6 below. The 2045 Transportation Plan does not indicate a need to widen SRA1A more than the existing 2 lanes.

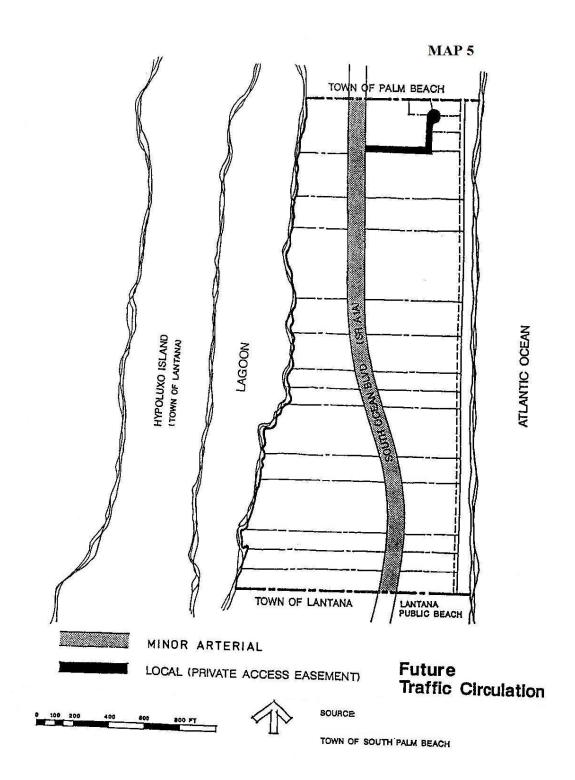
TABLE 6 AVERAGE DAILY TRAFFIC Location Average Daily Traffic

North	10,400
Central	11,800
South	6,100

Traffic through the Town of South Palm Beach and beyond continues to operate at a level of service C.

B. Analysis of Projected Needs

As mentioned earlier, the Town is completely built-out. No new facility or expansion of the existing facilities is necessary to satisfactorily handle the Town's future traffic needs.



Walter H. Keller, Inc. Consulting Engineers & Planners

III. GOALS, OBJECTIVES AND POLICIES

Goal Statements

CREATE A SAFE, CONVENIENT AND EFFICIENT SYSTEM OF TRAFFIC CIRCULATION TO SERVE THE RESIDENTS OF AND VISITORS TO THE TOWN OF SOUTH PALM BEACH.

OBJECTIVE 1:

The Town shall continue to coordinate with the Florida Department of Transportation, The Treasure Coast Regional Planning Council, and the Metropolitan Planning Organization of Palm Beach County in order to maintain South Ocean Boulevard (State Road A1A) as a two-lane facility safely accommodating traffic movements generated within, and passing through, the Town.

- Policy 1.1: Land uses generally regarded as generating high traffic volumes shall be prohibited in the Town.
- Policy 1.2: South Ocean Boulevard (State Road A1A) shall be maintained within the range of level of service C.
- Policy 1.3: No project shall be approved, or development order issued, if the traffic volumes existing prior to, or as a result of, the approval exceeds the threshold of a level of service C.

OBJECTIVE 2:

Development and redevelopment along South Ocean Boulevard (State Road A1A) will address both the aesthetics along the roadway and the safety of the motorists and pedestrians, while insuring protection and preservation of rights-of-way for this roadway.

- Policy 2.1: Landscaping and signs along South Ocean Boulevard shall be regulated to conform with adopted design criteria.
- Policy 2.2: On-site traffic circulation and parking shall be designed to minimize the number of driveways connecting with South Ocean Boulevard.
- Policy 2.3: Driveways connecting with South Ocean Boulevard shall be so located as to minimize the potential for conflict between roadway and pedestrian traffic.
- Policy 2.4: Land Development Regulations adopted to implement the Comprehensive Plan shall incorporate measures to ensure that the right-of-way for South Ocean Boulevard (State Road A1A) is protected in the future.

OBJECTIVE 3:

Regulate the provision of on-site vehicular parking and a bicycle/pedestrian way along South Ocean Boulevard.

Policy 3.1:	On-street parking on South Ocean Boulevard shall be prohibited in the Town.
Policy 3.2:	A bicycle/pedestrian way shall be maintained along the entire stretch of South Ocean Boulevard within the Town.
Policy 3.3	Encourage and support Florida Department of Transportation pedestrian safety improvements on South Ocean Boulevard within the Town.

OBJECTIVE 4:

Coordinate with all entities providing or regulating mass-transit systems within central Palm Beach County.

Policy 4.1: When and if public mass transit service becomes available to the Town of South Palm Beach, the Town shall investigate the feasibility of providing a transit stop and related amenities in support of this service.

CHAPTER 5 HOUSING ELEMENT

I. RESIDENTIAL GROWTH

The development of the present Town of South Palm Beach began with the incorporation in July 1955. Prior to the Town's incorporation, the area was mostly undeveloped except for a few small summer houses. The first major building, The Driftwood Motel, was built by the Wood family in January 1953. During the first five years of the Town's existence, construction of single family houses was the predominant type of development activity. The multi-family housing trend was established with the completion of two cooperatives in 1960.

Development continued sporadically during the sixties until the building boom of the early seventies in which more than one thousand multi-family units were built within a little over a year. Although the pace of construction of the early seventies substantially subsided, the trend in multi-family type of housing has continued to date.

II. INVENTORY

A. Characteristics of the Existing Housing Stock

1. TYPE OF DWELLING UNITS

Multi-family has been virtually the only type of housing in South Palm Beach since the building boom of the early seventies. The U.S. Census of 1980 showed that 1406 ninety-nine point six percent (99.6%) out of a total of 1,411 housing units in South Palm Beach were multi-family. The data compiled by the Town in 1986 indicates four (4) detached single-family units and 1,829 multi-family units, making up a total of 1,833 housing units. Since the 1980 Census, the housing stock of the Town has grown by 422 units all of which were multi-family.

There were a total of twenty-five (25) multi-family housing complexes comprising a total of 1,829 units in South Palm Beach in 1986. Two-hundred and ninety-five (295) of these multi-family units, representing 16 percent (16%) of the total number of multi-family units, were in four cooperative complexes. The remaining 1,534 units or eighty-four percent (84%) were contained in twenty-one (21) different condominium complexes. By 1996 a multifamily housing complex with sixteen (16) units was constructed on the only remaining vacant parcel in the Town. This brought the total housing units within the Town to 1,849 where it has remained stable through 2008. The most recently completed multifamily redevelopment occurred in 2019 across from Town Hall where 30 dwelling units were completed.

Table 5 on the following page provides information on the amount of total, year-round units and vacant and seasonal units, vacancy status, units in structure both occupied and vacant. Table 6 then follows with information on households and families (including family size), tenure and year the housing structure was built.

Town of South Palm Beach Comprehensive Plan Draft June 2024

Selected Housing	Analysis		
Characteristics	Sub-category	<u>Total</u>	<u>%</u>
<u>Total Housing Units</u>			
	Total	<u>1,854</u>	
	Year Round Units	<u>943</u>	<u>50.9%</u>
	Vacant & Seasonal	<u>911</u>	<u>49.1%</u>
Vacancy Status			
	Total	<u>911</u>	
	For Rent	<u>34</u>	<u>1.8%</u>
	Rented, Not Occupied	<u>4</u>	<u>0.2%</u>
	For Sale Only	<u>32</u>	<u>1.7%</u>
	Sold, Not Occupied	<u>1</u>	<u>0.1%</u>
	For Seasonal or Occasional Use	<u>825</u>	<u>44.5%</u>
	Other Vacant	<u>15</u>	<u>0.8%</u>
<u>Units In Structure</u>			
	Total	<u>1,854</u>	
	1, detached	<u>4</u>	0.2%
	1, attached	<u>42</u>	<u>2.3%</u>
	<u>5 to 9</u>	<u>135</u>	<u>7.3%</u>
	<u>10 to 19</u>	<u>54</u>	<u>2.9%</u>
	<u>20 to 49</u>	<u>464</u>	<u>25.0%</u>
	<u>50 or more</u>	<u>1,155</u>	<u>62.3%</u>
Structure Type by Oc	cupancy Status		
	<u>Total</u>	<u>1,854</u>	
Occupied Uni	<u>ts</u>	<u>943</u>	<u>50.9%</u>
	1, detached	<u>2</u>	<u>0.1%</u>
	1, attached	<u>26</u>	<u>1.4%</u>
	<u>2 - 9 Units</u>	<u>64</u>	<u>3.5%</u>
	<u>10 or more Units</u>	<u>851</u>	<u>45.9%</u>
Vacant Uni	<u>ts</u>	<u>911</u>	49.1%
	1, detached	<u>0</u>	0.0%
	1, attached	<u>22</u>	<u>1.2%</u>
	<u>2 - 9 Units</u>	106	5.7%
	10 or more Units	857	46.2%
	_		

Table 5 – Housing Units, Occupancy and Structure Type

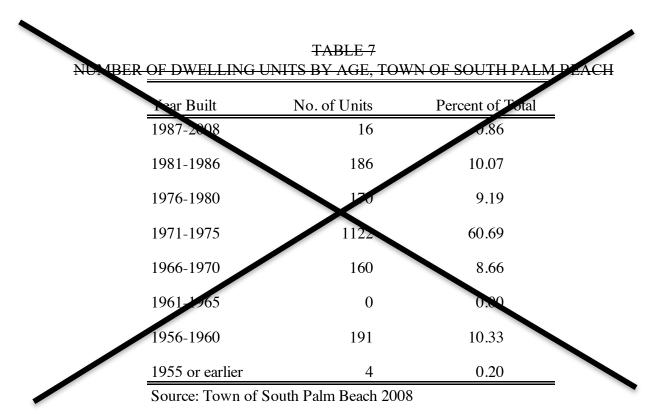
Source: 2020 US Census & American Community Survey 2016-2020 5 Yr Est. Walter H Keller, Inc.

Selected Housing	Analysis			vg Family
Characteristics	Sub-category	<u>Total</u>	<u>%</u>	Size
Total Housing Uni	—			
	Total	<u>1,854</u>		
	Year Round Units	<u>943</u>	<u>50.9%</u>	
	Vacant & Seasonal	<u>911</u>	<u>49.1%</u>	
Households and Fa	amilies			
	Total Households	<u>943</u>	100.0%	1.66
	Family Households	<u>385</u>	40.8%	<u>2.32</u>
	Married Couple Households	319	33.8%	2.16
	Male Head of Household, No Spouse Households	<u>10</u>	<u>1.1%</u>	3.70
	Female Head of Household, No Spouse Households	<u>56</u>	<u>5.9%</u>	<u>3.14</u>
	Non Family Households	<u>558</u>	<u>59.2%</u>	<u>1.27</u>
<u>Tenure</u>				
	Owner Occupied Housing Unit	821	87.1%	1.69
	Renter Occupied Housing Unit	122	12.9%	1.49
Year Structure Bui	lt			
1 cur Structure Dur	Total	1,854		
	Built 2020 or Later	<u>1,001</u> 0	0%	
	Built 2010 to 2019	<u>30</u>	1.6%	
	Built 2000 to 2009	<u>0</u>	0%	
	Built 1990 to 1999	21	1.1%	
	Built 1980 to 1989	384	20.7%	
	Built 1970 to 1979	1,028	55.4%	
	Built 1960 to 1969	320	17.3%	
	Built 1950 to 1959	41	2.2%	
	Built 1940 to 1949	24	1.3%	
	Built 1939 or Earlier	6	0.3%	
	Census and 2022 American Community Survey 5 Year Est	timates		
Walter H H	Keller, Inc.			

Table 6 – Households and Families, Tenure and Year Structure Built

AGE OF HOUSING UNITS

As described in the "Residential Growth" section above, most of the development in South Palm Beach occurred in the seventies and eighties. Well over eighty percent (80%) of the housing units are, therefore, less than thirty-five (35) years old in South Palm Beach.



3. TENURE CHARACTERISTICS

The percentage of renter occupied units has declined in South Palm Beach over the years as rental buildings were converted into condominium ownership. In 1986 there was not a single rental complex in the Town. The only rental units were the ones rented out by the absentee owners. Table 8 shows that percentage of renter occupied units was a little higher in Palm Beach County that in South Palm Beach in 2000.

TABLE 8 TENURE CHARACTERISTIC OF HOUSING STOCK SOUTH PALM BEACH AND PALM BEACH COUNTY, 2000

	South P	alm Beach	Palm Bea	ch County	
Owner-occupied	1575	85.2%		74.7	
Renter-occupied	176	<u> </u>	120,149	25.3	
Total occupied	1751	-94.7%	<u> </u>	85.2	
Total vacant	<u>—98</u>	<u>5.3%</u>	82,253	14.8	
Total Year-Round Units	1849		4 97,725		
COUDCE LLC D	C.1 C	2000			

SOURCE: U.S. Bureau of the Census, 2000-

4. COST OF HOUSING

Because of the ocean-front location of the Town, cost of housing in South Palm Beach is significantly higher than in Palm Beach County in general. According to the 2000 2018-2022 U.S. Census American Community Survey, the median value of an owner-occupied unit was \$314,700 \$173,600 in South Palm Beach versus \$368,300 \$135,200 in Palm Beach County. The median rent, according to the same Survey census, was \$1,440 \$820 in South Palm Beach against \$1,700 \$739 in Palm Beach County.

III. HOUSING ANALYSIS

The population of the Town of South Palm Beach is at the saturation point. The Town is completely built-out with no land area left for future growth. The Town virtually reached its peak population in the year 1996 and will continue to maintain more or less the same population through the year 2016. Redevelopment may add up to sixty (60) additional units and ninety-two (92) additional residents by 2016. This peak population which includes residents, as well as, seasonal populations is projected to be just less than 3,000. Redevelopment of the few properties that are currently built at densities below the maximum allowed could result in a seasonal population increase to 1,399 by the year 2016. The population projections were made on the basis of the fact that the Town has no more land to grow.

The average household size is expected to decline only marginally over the years. No major shift in the age, sex or income characteristics of the Town's population is expected to occur by the year 2016. With no commercial or industrial uses (with the exception of an existing motel), the Town is not expected to attract any working age population which may need housing. The Town is predominately a retiree community and is expected to continue as such through the year 2016. The Town's housing stock included 1,854 1849 units in 2020 1996.

The existing and projected housing stocks seem quite adequate to meet the housing needs of the Town's existing and projected populations. Through the year 2016, The Town is not expected to have any special housing needs such as rural and farm worker housing, low and moderate income family housing, group housing or housing rehabilitation.

IV. GOALS, OBJECTIVES AND POLICIES

Goal Statement

PROVIDE DECENT, SAFE AND SANITARY HOUSING TO MEET THE NEEDS OF THE PRESENT, AND FUTURE, RESIDENTS OF THE TOWN.

OBJECTIVE 1:

Maintain the quality of existing housing so as to conserve and extend the useful life of the existing housing stock, and assure that new construction is of high quality.

- Policy 1.1: The Town shall continue with strict enforcement of the Standard Building Code and Standard Housing Code and adopt revisions to these codes as appropriate to assure that the new building materials and techniques are allowed with South Palm Beach.
- Policy 1.2: The Town shall review and update, as necessary, other land development ordinances to assure that the residential quality of the Town is maintained.
- Policy 1.3: The Town shall continue to encourage land developers to consult and coordinate with the Town during the design and construction of residential development through the permit and code enforcement procedures already established in order to assure the maintenance of community character.

OBJECTIVE 2:

Provide opportunities for quality housing for all segments of the Town's population.

- Policy 2.1: The Town shall promote the construction of housing which is consistent with the needs of the Town's population by utilizing the procedures outlines in Policy 1.3.
- Policy 2.2: The Town shall support regional efforts to address low income and work force housing by working with the Palm Beach County Intergovernmental Plan Amendment Review Committee to attempt to develop and Interlocal Agreement whereby coastal municipalities could jointly pursue a comprehensive approach and solution to this country-wide issue within two (2) years from the date of adoption of this policy.

CHAPTER 6 INFRASTRUCTURE ELEMENT

I. DATA AND ANALYSIS

A. Sanitary Sewer

The Town of South Palm Beach has an agreement with the City of Lake Worth <u>Beach</u> Utilities for the collection and disposal of wastewater. In addition to South Palm Beach, the Lake Worth <u>Beach</u> Utilities also serves the City of Lake Worth <u>Beach</u>, the southern half of the Town of Palm Beach, Village of Palm Springs, Town of Lantana, Town of Manalapan, City of Atlantis, and Palm Beach State College. The predominant land use in South Palm Beach and other communities served by the Lake Worth Beach Utilities is residential. Except for the City of Lake Worth Beach, commercial land use is quite insignificant in the service area.

The sanitary sewer facilities in the Town of South Palm Beach include the north-south gravity lines, a lift station, and an eight (8) inch force main. Sewage from individual buildings flows by gravity into the lift station where it is pumped into the force main which also carries sewage from the Town of Manalapan. The force main carries sewage from the Town to the sub aqueous line in the City of Lake Worth <u>Beach</u> to the north that takes the sewage across the Intracoastal waters into the master pumping station just west of the Intracoastal. The sewage is then pumped through the City of Lake Worth <u>Beach</u> system which ties with the County system, which finally carries the sewage to the East Central Regional (ECR) Water Reclamation Facility (Wastewater Sewer Treatment Plant).

The Regional Treatment Facility which also serves the City of West Palm Beach and is located near the intersection of the Florida Turnpike and 45th Street in central Palm Beach County. It provides for secondary treatment of the sewage with the effluent disposal through deep well injection. At the present time, the sludge is land filled, but there is a long-range plan for using it as fertilizer.

The plant has a current capacity of 55 70 MGD. The City of Lake Worth Beach will continue its joint efforts with Palm Beach County and the East Central Regional (ECR) Water Reclamation Facility to develop sufficient plant capacity to serve the Lake Worth Beach Service Area and its sub-regional customers. The City will upsize its facilities in conjunction with the ECR to provide sufficient capacity to its customers. of which the Lake Worth group would utilize 12.5 MGD. Table 6.1 shows the present cap allocated and the projected needs by year 2010 of the participants in the Lake Worth group.

Table 9 shows that The Town of South Palm Beach accounted for a very small percentage two point seven percent (2.7%) of the 2008 current wastewater capacity allocated to the Lake Worth Beach Utilities. The Town has previously decided not to participate in the future expansion of the treatment plant since it does not anticipate any significant change in its needs. The Town's current allocation of .342 MGD seems to be quite is sufficient to handle the Town's present as well as, future needs through the year 2016.

	Present Cap Allocation	
Participants in Lake Worth Capacity	(MGD)	Projected Needs: 2016
Lake Worth	5.848	7.527
Palm Springs	3.343	4.250
Lantana	1.302	1.480
Palm Beach	0.941	0.941
South Palm Beach	0.342	0.342
Atlantis	0.464	0.600
Manalapan	0.152	0.152
Palm Beach Community College	0.108	0.108
<u>Total</u>	<u> 12.500</u>	

TABLE 9 SUMMARY OF SEWAGE TREATMENT CAPACITY ALLOCATION THE CITY OF LAKE WORTH UTILITIES

SOURCE: The City of Lake Worth Utilities, June 2008

On the basis of the current flow, the level of service at the present time is about one hundred (100) gallons per capita per day. The Town expects to maintain the same level of service in the future. The resident population for 2035 is 1,746 and if the seasonal population components is similar to 2020 conditons, the peak population would be 3,073. This would equate to 0.307.3 MGD. For 2045, a similar analysis would equate to 0.3323 MGD. For a projected population of 2985 by the year 2016, this would require a total capacity of .310 MGD. As mentioned earlier, the Town already has an allocation capacity of .342 MGD. The allocation leaves the Town with nearly ten percent (10%) surplus capacity which seems to be quite adequate to meet future needs.

As discussed above, no expansion or extension of the existing system is needed in South Palm Beach. Periodic maintenance and replacement are, however, necessary to keep the system functioning properly. The Town replaced the portion of the gravity sewer line, which extends south of the lift station, a few years ago. The remaining portion of the gravity sewer line which extends north of the lift station is considered to be in good condition.

Lack of increased capacity needs and continuing participation in the Lake Worth <u>Beach</u> Utilities Regional Treatment facility provides assurance that South Palm Beach will have adequate sewer capacity in the future through 2016 and beyond.

There are no septic tanks or package plants in South Palm Beach.

B. Solid Waste

Solid waste collection in South Palm Beach is provided by a private company based on a franchise agreement with the Town. The Solid Waste Authority (SWA) of Palm Beach County is the entity having operational responsibility for solid waste issues in the County. This agency was established for the purpose of developing and implementing plans for an integrated Countywide solid waste management system comprised of recycling, resource recovery, and transfer station and landfill facilities to serve the future needs of the County at a reasonable cost.

Based on generation characteristics in the Solid Waste Authority of Palm Beach County 1997 Residential Generation Study, the Town of South Palm Beach generates 1,320 tons of solid waste per year.

Solid waste in South Palm Beach is generated primarily by residences. The only non-residential land use in the Town <u>is</u> are a motel, with a restaurant, and the Town Hall complex.

C. Drainage

The Town of South Palm Beach does not have public storm sewers, canals, or any other drainage structures. Drainage swales extend on both sides of South Ocean Boulevard (State Road A1A). The runoff from saturated soil and impervious surfaces flows toward the lagoon because the natural slope is downhill from the beach dune to the lagoon.

There is an onsite drainage system incorporated in each development. In some cases the storm water drainage is handled through proper grading of the site which would allow storm water to run into swales where it can soak into the ground. Most developments, however, also include an underground collection and disposal system which would discharge the excess storm runoff into the lagoon on the west side of the Town. Those properties located to the east of State Road A1A only, have acquired easement from the properties located to the west of State Road A1A to run their storm water drainage pipes to the lagoon.

Up until July of 1988, storm water drainage systems have been addressed on a site-by-site basis. When a developer presented a site plan to the Town, it was up to the developer to design an adequate system. Since July of 1988, the Town has been using the South Florida Water Management District Standards for storm water retention/detention. The Town formally adopted these regulations in their Land Development Code in 1989.

Generally, the performance of these individual drainage systems adequately protect from flooding. Future development and redevelopment will be required to retain or detain runoff in a more environmentally sound manner. Retrofitting the existing developments may prove to be financially unfeasible at this time.

No natural drainage features or natural groundwater aquifer recharge areas exist within the Town of South Palm Beach. The Town is completely built out.

D. Potable Water

Potable water is supplied to South Palm Beach by the City of West Palm Beach Utility Department, which also provides water to the City of West Palm Beach and the Town of Palm Beach. The Utility Department also serves a small portion of unincorporated Palm Beach County north of Belvedere Road and west of Florida Mango Road in central Palm Beach County, on an emergency basis only. The Town of South Palm Beach does not own or maintain the potable water distribution system.

The predominant land uses served by West Palm Beach water system is residential, both in West Palm Beach and in South Palm Beach. In 2019, Current (2008) information from the West Palm Beach Public Utilities Department served an estimated 124,945 year-round residents. indicates there are approximately 32,000 residential and commercial meters. Approximately 1,448 of those residents were forty (40) of these meters are located in South Palm Beach.

The distribution network within the Town of South Palm Beach consists of a sixteen (16) inch water main which was installed in 1984 to augment the existing distribution system; a twelve (12) inch line running east of State Road A1A, and an eight (8) inch line running west of State Road A1A. An inline booster station has also been installed on the sixteen (16) inch main in the Town of Palm Beach to regulate water pressure toward the end of the supply line in South Palm Beach.

The water treatment plant for the City of West Palm Beach water system is located at First Street and Tamarind Avenue in West Palm Beach. The water system draws its water from Clear Lake and Lake Magnolia which are fed by a nine (9) square mile water catchment area located to the west of the City. The water catchment area itself is replenished by the L-8 Canal.

The West Palm Beach Utility Department supplie<u>ds</u> an average of 29 million gallons a day <u>in 2019</u>. The Town of South Palm Beach uses a maximum of 150 gallons per person per day for a total of 432,150 gallons per day. The water consumption in the Town of South Palm Beach accounts for nearly one point five percent (1.5%) of the total supply of the City of West Palm Beach water system.

The per capita consumption of water in South Palm Beach could vary from 100 to 150 gallons per day depending upon the time of year. The Town expects to maintain a level of service of 150 gallons per capita per day through the year 2035 2016. Using this level of service, the projected peak population of 3,073 2985 by 2035 2016 will require a supply of 460,950 447,750 gallons a day.

The water system is designed to provide an average day-round pressure of nearly 75 psi and a minimum of 20 psi under fire flow conditions.

With $47\underline{.3}$ million gallons a day treatment capacity, the water system of the West Palm Beach Utility Department has a surplus treatment capacity of $18\underline{.3}$ million gallons per day above the average per day use in $\underline{2019}$ $\underline{2008}$.

The water demand in South Palm Beach in not expected to increase significantly through the year 20352016 since the Town is built out. If the demand increases through 2045, it will not be due to any increase in overall population, but rather due to a shift in the proportions of permanent and seasonal residents as explained in the population section herein. In any case, the increase in demand is projected to be quite insignificant. For the Town, the ultimate demand through $2035 \ 2016$ is expected to be $460,950 \ 447,750$ gallons per day, a level that the existing system is capable of handling without any expansion.

West Palm Beach has a current <u>2013</u> (2008) consumptive use permit from the South Florida Water Management District that is valid for twenty (20) years. The permit includes a continuance of water supply to the Town of South Palm Beach. The permit includes provisions for West Palm Beach to seek alternative water supply sources.

The Town adopted by reference the West Palm Beach Water Supply Facility Work Plan attached at the back of this document.

II. GOALS, OBJECTIVES AND POLICIES

Goal Statement

ENSURE THAT NEEDED PUBLIC FACILITIES ARE AVAILABLE FOR PLANNED DEVELOPMENTS AND ARE PROVIDED IN A MANNER WHICH PROTECTS INVESTMENTS IN EXISTING FACILITIES AND PROMOTES ORDERLY, COMPACT URBAN GROWTH.

OBJECTIVE 1:

Ensure that at the time a development permit is issued, adequate facility capacity is available or will be available when needed to serve the development.

Policy 1.1: The following level of service standards are hereby adopted, and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:

FACILITY	LEVEL OF SERVICE STANDARD
Sanitary Sewer	Average sewage Generation Rate: 100 gallons per capita per day
Solid Waste	Average Solid Waste Generation Rate: 7.1 <u>3</u> lbs. per capita per day (county wide average)
Drainage	Water Quality Standard: Greater of first inch of runoff or 2.5 inches times the percentage of impervious areas to be retained or detained on site. (SFWMD standard)
	Water Quality Standard: Post-development runoff volumes shall not exceed pre-development runoff volumes for a storm event of three day duration and twentyfive (25) year return frequency (TCRPC Standard).
Potable Water	Average Water Consumption Rate: 150 gallons per capita per day

- Policy 1.2: The entire Town shall be considered a service area within which the Level of Service standards for sanitary sewer, solid wastes and potable water established above shall be applicable.
- Policy 1.3: The Town shall prepare annual summaries of capacity and demand for each facility if new development occurs.

Policy 1.4 Prior to the issuance of a building permit the Town shall consult with the City of West Palm Beach or other water, supplier if applicable, to determine if adequate water supplies to serve the new development will be available no later than the anticipated date of issuance of a certificate of occupancy by the Town.

OBJECTIVE 2:

Provide adequate storm water drainage to afford reasonable protection from flooding and to prevent degradation of the quality of the receiving waters. The Town shall also implement, in the Town Development Code, criteria to identify and correct existing drainage facility deficiencies and coordinate future expansion or improvement of these facilities in order to meet future needs.

- Policy 2.1: All development and redevelopment in the Town shall be required to conform with the standards and guidelines established in the most recent edition of VOLUME IV (Management and Storage of Surface Waters) of Permit Information Manual of South Florida Water Management District. In addition, the Town shall incorporate these standards into their Land Development Code.
- Policy 2.2: The Town shall incorporate criteria in the Land Development Code to establish priorities for the replacement, correction and provision of existing and future drainage facility needs.

OBJECTIVE 3:

The Town shall conserve potable water resources.

- Policy 3.1: The Town shall continue to work in cooperation with the Lake Worth Drainage District and South Florida Water Management District to maintain adequate surface water levels.
- Policy 3.2: The Town shall continue to coordinate with State, regional and local entities in the development and implementation of water conservation programs. Specific actions the Town will accomplish include: require a minimum of fifty percent (50%) of all landscaping to be drought tolerant species; print and deliver educational brochures to all residents providing information on water conservation techniques and Town Comprehensive Plan policies and other regulations regarding water conservation; require that rain sensor devices are components of all irrigation systems and limit the hours of irrigation consistent with limitations established by the South Florida Water Management District; and require use of low water volume plumbing fixtures. It is intended that these water conservation measures be incorporated into the Land Development Regulations prior to January 1, 2011. However, the requirements shall be implemented with adoption of the Ten (10) Year Water Supply Plan that is incorporated into the Infrastructure Element.
- Policy 3.3: The Town will implement the provisions of the Water shortage Emergency Plan when requested to do so by the South Florida Water Management District.

- Policy 3.4 The Town's potable water service is provided by the City of West Palm Beach (City). The City has included the Town's estimated population and water demand projections in the City of West Palm Beach 10-Year Water Supply Facility Work Plan Sub-Element. The Town adopts by reference the City of West Palm Beach 10-Year Water Supply Facility Work Plan adopted August 10, 2020. The Town will coordinate with the City on the Town's population projections, water demands, water conservation, and alternative water supply needs. (See ATTACHMENT A: *10 YEAR WATER SUPPLY FACILITY WORK PLAN, page XX*)
- Policy 3.5: The Town will update the Town's Water Supply Facility Work Plan within 18 months of any updates of the Lower East Coast Water Supply Plan by the South Florida Water Management District.

OBJECTIVE 4:

The Town shall continue to coordinate with the Solid Waste Authority in order to continue to maintain solid waste facilities, and plan for the expansion or improvement of these facilities to meet future demands.

- Policy 4.1: South Palm Beach shall coordinate with the Solid Waste Authority and all other applicable entities to establish priorities for solid waste facilities.
- Policy 4.2: The Town shall coordinate with the Solid Waste Authority in reducing solid waste quantities, establishing a resource recovery and recycling program, and providing for the disposal of household hazardous waste materials.

CHAPTER 7 COASTAL MANAGEMENT ELEMENT

I. DATA AND ANALYSIS

A. Existing Land Uses

South Palm Beach is a coastal community bounded by the Atlantic Ocean to the east and a lagoon within Lake Worth formed by the northern end of Hypoluxo Island to the west. The entire Town is a coastal area and is located on the barrier island with approximately 2,800 feet of ocean front. The Town in approximately 2.8 miles north of South Lake Worth Inlet and 11.5 miles south of the Lake Worth Inlet.

Characterized by mid-rise to high-rise condominium development, South Palm Beach is predominately a residential community. Table 10 shows the existing land uses in the coastal area which encompasses the entire Town:

LAND USE	ACRES	%	UNITS	DENSITY
Single-Family Residential	1.3	2.0	4	3 UN/AC
Multi-Family Residential	<u>55.4</u> 54. 4	<u>81.1</u> 82.5	18 <u>54</u> 29	34 UN/AC
Commercial (Motel)	1.0	1.5	58	58 UN/AC
Recreational (Beach)	<u>3.7</u> 1.3	<u>5.4</u> 2.0		
Public Buildings	0.9	<u>1.3</u> -1.4		
Streets	7.0	<u>10.2</u> 10.6		
TOTAL	<u>68.3</u> 65.9	100.0		

TABLE 10 EXISTING LAND USES, <u>2024</u> 2008

The existing land uses are illustrated on Map 1 in the Future Land Use Element. Shoreline uses through the entire Town are residential with the exception of a commercial use fronting the ocean and a public building complex fronting the lagoon. The only land use conflict exists between the residential character of the Town and the commercial use incorporating a motel. The commercial use is grandfathered in and exists as a nonconforming use only.

B. Water-Dependent and Water-Related Uses

The Town is completely built out. Water dependent recreation is the only water dependent use occurring in the Town. The beach along the ocean provides recreational opportunities to the Town's residents and others. Public access to the beach is available at the nearby public beaches. Lantana Municipal Beach with its one hundred, sixty-two (162) parking spaces adjoins the southern border of the Town; Lake Worth Public Beach offers seven hundred, fifty (750) parking spaces and a fishing pier one mile north of the Town.

No need for water-dependent or water-related development is anticipated within the Town for the foreseeable future.

C. Effect of Future Land Uses

The Town is predominately a retirement community with no industrial or business, with the exception of one motel. The implementation of the future land use plan is not likely to have any impact on the economic base of the Town. Nor would the implementation of the future land use plan have any impact on the vegetative cover; areas subject to coastal flooding; wildlife habitat; or living marine resources

D. Impact on Historic Resources

There are no known local, state or federal historic sites or buildings in South Palm Beach.

E. Estuarine Pollution

The lagoon to the west of the Town is part of the Intracoastal Waterway connected with the Atlantic Ocean through South Lake Worth Inlet to the south. The lagoon is within the corporate limits of the Town of Lantana.

There are no known point sources of estuarine pollution within South Palm Beach. The Town has supported the countywide study of non-point sources of estuarine pollution and has agreed to cooperate to the extent practicable in the development and implementation of specific water quality management tools as recommended in the Palm Beach County Area Wide Waste Treatment Management Plan. Table 11 provides a listing of State, regional and local regulatory agencies and programs which maintain or improve estuarine environmental quality.

F. Perils of Flood, Post Disaster Planning Concerns and Coastal High Hazard Areas

The areas projected to experience the most severe damage are identified in Map 3.2 on page 16 in the AE and VE Zones east of SR A1A although the Town is fortunate that much of this area has higher elevations. The Town participates in the National Flood Insurance Program and the Community Rating System (CRS). The Town is a Class 8 community. The Town reviews site plans and building permits relative to consistency with Flood Management Requirements.

TABLE 11

STATE, REGIONAL AND LOCAL REGULATORY AGENCIES AND PROGRAMS WHICH MAINTAIN OR IMPROVE ESTUARINE ENVIRONMENTAL QUALITY

STATE

- 1. <u>Department of Environmental Protection.</u> The Department of Environmental Protection (DEP) is responsible for regulating air and water quality and in some cases, water quantity (through the water management district) within the Intracoastal Waterway (ICW). The DEP is also the local contact for the initiation of dredge and fill applications in conjunction with the U.S. Army Corps of Engineers. The DEP is responsible for programs designed to protect and enhance the natural amenities throughout the State of Florida.
- 2. <u>Florida Commerce Department of Community Affairs (DCA)</u>. The <u>Bureau of</u> <u>Community Planning and Growth</u> Department of Community Affairs is responsible for reviewing Developments of Regional Impact (DRI) and for designating Areas of Natural Resources.
- 3. <u>Marine Fisheries Commission.</u> A seven member committee appointed by the Governor is delegated full rulemaking authority over marine life, with the exception of endangered species.
- 4. <u>Florida Fish and Wildlife Conservation Commission (FWC)</u>. The Florida Fish and Wildlife Conservation Commission's Environmental Services office in Vero Beach, along with the central office, assists in developing fish and wildlife protection programs.
- 5. <u>Florida Department of Transportation (FDOT)</u>. The <u>Florida</u> Department of Transportation works with the local governments on anticipated projects having possible impacts on the natural resources of the Town.
- 6. <u>Department of State</u>. The Division of State Library and Archives of Florida in the Department of State works closely with interested individuals and municipalities in order to protect archeological and historical sites.

REGIONAL

1. <u>South Florida Water Management District (SFWMD).</u> The Water Management District administers permitting programs for the local consumable use of water, storm water discharge, and dredge and fill activities

TABLE 11 (continued)

REGIONAL (cont.)

- 2. <u>Treasure Coast Regional Planning Council (TCRPC).</u> The Treasure Coast Regional Planning Council serves Palm Beach, Martin, St. Lucie and Indian River Counties. Among the TCRPC's duties are: assist the local governments with planning expertise; act as the regional representatives for the Development of Regional Impact review process; serve a regional clearinghouse for State and Federal projects and programs; and convey information from the local governments to the State and Federal levels.
- 3. <u>Florida Inland Navigation District (FIND).</u> FIND is responsible for providing and maintaining spoil areas to the U.S. Army Corps of Engineers for the dredging and maintenance of the Intracoastal Waterway (ICW).
- 4. <u>Lake Worth Drainage District (LWDD).</u> The LWDD is responsible for drainage and surface water control throughout southeastern Palm Beach County, from Okeechobee Boulevard to the north, to the Hillsboro Canal and the Palm Beach County/Broward County line to the south. Although the District does not include the Town of South Palm Beach, freshwater inputs from this system are eventually discharged to the ICW, and for that reason the LWDD has been included here.

LOCAL GOVERNMENTS AND SPECIAL DISTRICTS

- 1. <u>Adjacent Municipalities.</u> The Town of South Palm Beach coordinates its land use policies and environmental concerns with these municipalities. Further coordination mechanisms have been provided in the Intergovernmental Coordination Element.
- 2. <u>Town of South Palm Beach Departments.</u> The Town of South Palm Beach has established departments within the local government which have programs and/or policies which are utilized in the maintenance or improvement of environmental quality.

F. Hurricane Evacuation/Disaster

The Town of South Palm Beach is bordered on the east by the Atlantic Ocean and on the west by a lagoon within Lake Worth. Both of these bodies of water critically impact the hurricane/disaster evacuation plans of the Town. The entire Town, a barrier island, is within the Palm Beach County Mandatory Evacuation Zone. The Disaster Plan General Orders of the Town supplements the Palm Beach County Hurricane Evacuation Plan and provides for an orderly system of timely evacuation of the Town's residents and visitors. Considering the Town's coastal location as described above, the entire population of the Town will require evacuation during a hurricane/disaster. During the 2008 hurricane season, this population was estimated at 1,250 residents and visitors.

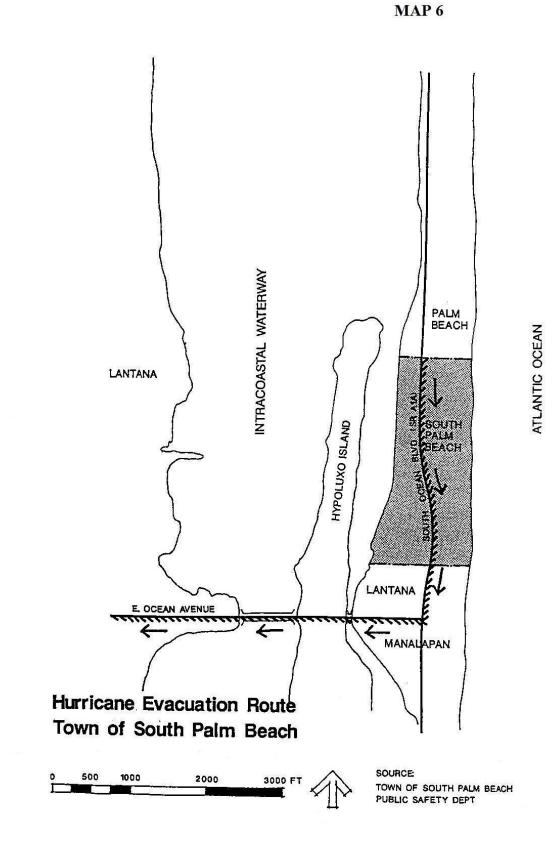
Although the entire population of the Town would require evacuation during a hurricane/disaster, the number of persons requiring hurricane shelters would be much smaller, as many people would prefer staying in motels, with family members, or friends. A Human Behavior Survey conducted as part of the Lower Southeast Florida Hurricane Evacuation Study estimates that no more than fifteen percent (15%) of the evacuees would seek public hurricane shelters during Category 1, 2 or 3 storms. The percentage increases to twenty percent (20%) for a Category 4 or 5 storm. Based on this percentage, no more than 300 people in South Palm Beach can be expected to seek public shelter during a hurricane/disaster.

The Town of South Palm Beach Peacetime Emergency Plan recommends four (4) Red Cross hurricane shelters for the Town's residents and visitors.

The official evacuation route for the residents and visitors is South Ocean Boulevard (State Road A1A) in the southbound direction to Ocean Avenue and then west to U.S. 1 in Lantana and on to designated shelters or other final destinations (see Map 6).

The transportation and hazard constraints in the evacuation route exist primarily due to the fact that the only route in and out of the Town is South Ocean Boulevard (State Road A1A). A severe storm, hurricane, or abnormal tide conditions which could cause serious flooding, which in turn could inundate this road, making the evacuation of the Town's population difficult, if not impossible. Further complicating this situation is the likelihood of an influx of mainland residents drawn to the Town as spectators of a hurricane/disaster, causing heavy traffic congestion, which could impede evacuation efforts via South Ocean Boulevard (State Road A1A).

It is estimated by the Town of South Palm Beach Police Department that the evacuation of the Town's entire population can be accomplished within five (5) hours or less in the event of a hurricane/disaster. Since the Town's entire population is expected to increase only marginally over the years, the implementation of the future land use element is not expected to have any significant impact on the Town's current evacuation plan.



Walter H. Keller, Inc. Consulting Engineers & Planners To facilitate the evacuation of the Town's population, the Town's Peacetime Emergency Plan proposes that a traffic control and counting point be established at the south boundary of the Town on South Ocean Boulevard (State Road A1A) to assist westbound traffic on Ocean Boulevard, and to restrict eastbound pedestrians and vehicular traffic from entering the Town. The Plan also proposes a traffic control and counting point at the north boundary of the Town on South Ocean Boulevard (State Road A1A) to block northbound traffic movement. The Town of Lantana Police department has also agreed to establish a similar post at the intersection of East Ocean Avenue and U.S. Highway 1.

The Town of South Palm Beach has a large number of elderly residents. The <u>2020</u> 2000 U.S. Census showed that over fifty-five point four percent (55.4%) (54%) of the Town's population in 2000 was 65 years or over in age. The Town's Peacetime Emergency Plan recognizes this and provides for free transportation service for evacuation for those who do not own automobiles or those who cannot drive. The Plan also provides for special assistance to those who are disabled or need special medical care if they are pre-registered with the Town. This service is provided in conjunction with the Palm Beach County Special Care Units Program offered by the Palm Beach County Emergency Management Division.

The Town of South Palm Beach recognizes the potential danger of a hurricane/disaster to a community located on a barrier island. In view of this potential danger, the Town is fully prepared to proceed with evacuation if the situation warrants it. The Town's experience with Hurricane David in 1979, Frances and Jeanne in 2004, and Wilma in 2006, proved that evacuation of the Town's entire population can be accomplished effectively within a reasonable time.

G. Coastal High-Hazard Areas

The area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. <u>See FEMA FIRM Maps</u> previously provided in Map 3 and Map 3.1 on pages 14 and 15 respectively.

H. Post-Disaster Redevelopment

In the event that property becomes available for redevelopment due to damage by storm, fire or other disaster, or due to attrition or age, the Town faces a range of options for redevelopment. Alternately, continuing beach erosion will force a choice among a range of options. These options fall into the following categories:

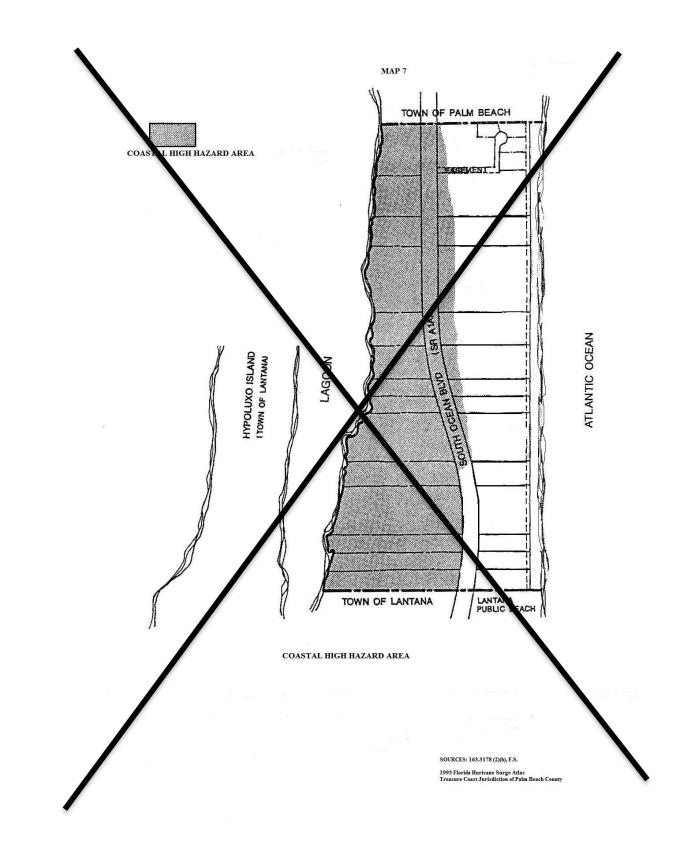
- 1. Abandon the shoreline. In light of the public and private investments on the barrier island, this is not considered a reasonable alternative.
- 2. Structural Solutions

In February, 2007 an erosion control study for the Town of South Palm Beach and the Town of Lantana was completed by Coastal Planning and Engineering Inc. under contract with Palm Beach County. The report indicated that the beach was narrow with a majority backed by seawalls and other coastal armoring. The report went on to say that: "the beach has experienced

significant fluctuations, long term erosion, and waves have impacted the seawalls during major storm events." This report documents in detail the historic erosion that has occurred to the shoreline in South Palm Beach. The report included an analysis of the following action alternatives and their probable effect on beach nourishment. The alternatives evaluated were: No Action, Beach Re-nourishment (large scale), Beach Renourishment (small scale), and Groins, T-head Groins, Offshore and Near Shore Segmented Emergent Breakwaters, Upland Coastal Structural Reinforcement /Replacement, and various combinations. The alternative that seemed to have the most promise for South Palm Beach was a combination that included near shore breakwaters. The Town of South Palm Beach has been working with Palm Beach County to perform the necessary engineering and to secure the necessary environmental permits to construct near shore breakwaters. It is anticipated that the earliest construction could begin is 2010.

3. Regulatory Solutions

The use of Town ordinances and rules to define an acceptable level of development. These would include the protection of beaches and dunes, minimum setbacks for storm protection, and restoration of degraded dunes.



Walter H. Keller, Inc. Consulting Engineers & Planners

II. GOALS, OBJECTIVES AND POLICIES

Goal Statement One

PRESERVE, PROTECT AND ENHANCE THE COASTAL RESOURCES AS DEVELOPMENT OR REDEVELOPMENT OCCURS IN SOUTH PALM BEACH.

OBJECTIVE 1.1:

Protect existing native vegetation as development or redevelopment occurs.

- Policy 1.1.1: Native vegetation communities such as those located in dunes along the ocean and along the lagoon to the west shall be preserved and incorporated in any development or redevelopment project through procedures adopted in the Land Development Code.
- Policy 1.1.2: The Town shall coordinate with the State and local agencies to provide for the reestablishment of shoreline vegetation where it has been removed.
- Policy 1.1.3: The development code shall require that the plant material used in landscaping of any development or redevelopment project shall be predominately native. The code shall contain a list of recommended native plant species adapted to the coastal environment of the area.

OBJECTIVE 1.2:

The Town shall continue to coordinate with the applicable Federal, State, and County agencies in order to protect and restored beach and dune system as a viable feature providing storm protection for upland property and serving as an important recreation and aesthetic resource.

- Policy 1.2.1: Codes which control and regulate construction activities in the coastal zone areas shall be adopted and enforced consistently throughout the Town.
- Policy 1.2.2: Codes shall be updated when necessary to conform with new state regulations and advances in the understanding of the coastal process.
- Policy 1.2.3: The coastal building setback requirement shall be modified when necessary to allow the setback line to follow any repositioning of the Coastal Construction Control Line (CCCL).
- Policy 1.2.4: In order to ensure storm protection to upland property, existing seawalls shall be maintained by the owner in a functional condition until such can be replaced by more appropriates storm protection methods.
- Policy 1.2.5: The Town shall establish a set of criteria for seawalls. Seawall horizontal alignment and toe scour protection shall be as permitted and required by the Florida Department of

Environmental Protection. Prior to December 31, 2009 the Town shall adopt a land development regulation requiring minimum vertical height for seawalls, annual inspection criteria and maintenance and repair requirements.

- Policy 1.2.6: The Town shall continue to support County and State beach re-nourishment programs which include the segments of beachfront in South Palm Beach and actively campaign for State and Federal funding for beach re-nourishment or erosion control through local legislative committees.
- Policy 1.2.7: The Town shall endeavor to enter into interlocal agreements with adjacent municipalities and Palm Beach County and the State of Florida to put in place vehicles for the funding of beach re-nourishment or erosion control programs.
- Policy 1.2.8: The Town shall explore the feasibility of improving public access to the beach by acquiring public easements and developing walkways from South Ocean Boulevard (State Road A1A) to the beach. The Town shall also explore the possibility of creating a public access at the northern boundary of the Town.
- Policy 1.2.9: In coordination with the Department of Environmental Protection, regulations that provide for the protection and restoration of dunes following beach restoration shall be established. Such regulations shall require the restoration of degraded dunes as part of any development or redevelopment project.
- Policy 1.2.10: The development code shall specify the appropriate vegetation for planting in dunes, and that such vegetation shall be protected from pedestrian and vehicular traffic. Any construction or reconstruction of beach access shall provide for dune crossing over walks.
- Policy 1.2.11: The Town shall cooperate with Palm Beach County on any programs of community awareness toward beach erosion problems and solutions that can be initiated on an individual basis.
- Policy 1.2.12: The Town will cooperate with the Department of Environmental Protection in regulatory efforts to re-vegetate and restore the dune system.

OBJECTIVE 1.3:

Protect, conserve and enhance coastal resources, living marine resources, wildlife and wildlife habitats, especially those with special status.

Policy 1.3.1: The Town shall cooperate with the State to implement adopted regulations that_provide for the protection of sea turtle nesting areas by prohibiting the disturbance of nests, restricting beach cleaning activities in nesting season, and controlling the emission of light from structure on, or adjacent to, the beach.

- Policy 1.3.2: Beach re-nourishment or erosion control projects shall protect sea turtles nesting areas by limiting construction in such areas to winter and spring months, or by authorizing personnel collecting eggs from their nests, incubating them, and releasing the hatchlings.
- Policy 1.3.3: The Town shall adopt regulations to regulate the specific and cumulative impacts of development and redevelopment on coastal resources, living marine resources wildlife and wildlife habitats, especially those with special status.
- Policy 1.3.4: The Town shall coordinate with the Department of Environmental Protection in implementing a manatee awareness program.

OBJECTIVE 1.4:

Maintain and/or improve estuarine environmental quality by preventing potentially adverse impacts of development or redevelopment from affecting this natural resource.

Policy 1.4.1: The Town shall coordinate with the South Florida Water Management District, Department of Environmental Protection and other entities to establish a regulatory program to limit the specific and cumulative impacts of development or redevelopment on this multi-jurisdictional estuarine system.

Goal Statement Two

PROTECT HUMAN LIFE AND LIMIT PUBLIC EXPENDITURES IN AREAS SUBJECT TO DESTRUCTION BY NATURAL DISASTERS.

OBJECTIVE 2.1

Limit public expenditures that subsidize development permitted in coastal high-hazard areas except for restoration and enhancement of natural resources.

- Policy 2.1.1: No construction or development activity shall be permitted, except through the Florida Department of Environmental Protection, seaward of the Coastal Construction Control Line (CCCL) unless it is intended for restoration and enhancement of natural resources.
- Policy 2.1.2: Existing permanent structures protruding into the coastal high-hazard areas shall be required to meet the most recent version of coastal building codes and regulations established by the Florida Department of Environmental Protection when redevelopment occurs on the property.
- Policy 2.1.3: The Coastal High Hazard Area is the area below the elevation of the category 1 storm surge line established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. This encompasses that portion of the Town lying west of State Road A1A (see FEMA FIRM Maps previously provided in Map 3 and Map 3.1 on pages 14 and 15 respectively). and is depicted on Map 7. Public infrastructure within this area may be built and reconstructed when necessary but not for the purpose of facilitating an increase in permitted density.

OBJECTIVE 2.2

The Town shall continue to maintain a hurricane evacuation time for a Category 3 storm of less than nine (9) hours.

- Policy 2.2.1: The Town shall cooperate with, and support, Palm Beach County in planning for hurricane evacuation.
- Policy 2.2.2: Every year, prior to hurricane season, the Town shall notify all condominium, cooperative and single family residents of their need to evacuate at various threat levels.

OBJECTIVE 2.3:

The Town shall continue to coordinate with the Palm Beach County Emergency Management Office to provide immediate response to post-hurricane situations.

- Policy 2.3.1: The current Local Peacetime Emergency Plan shall be modified to comply with the policies under this objective and shall contain step-by-step details for post-disaster recovery operations.
- Policy 2.3.2: After a hurricane, but prior to re-entry of the population into the evacuated areas, the Town Council shall meet to hear preliminary damage assessments, appoint a Recovery Task Force, and consider a temporary moratorium on building activities not necessary for the public health, safety and welfare.
- Policy 2.3.3: The Recovery Task Force shall review and decide upon emergency building permits, and repair and cleanup actions needed to protect public health and safety; coordinate with County, State and Federal officials to prepare disaster assistance applications; develop a redevelopment plan; and recommend amendments to the Comprehensive Plan, Local Peacetime Emergency Plan, and other appropriate policies and procedures.
- Policy 2.3.4: Repairs to potable water, wastewater, and power facilities; removal of debris; stabilization or removal of structures about to collapse; and minimal repairs to make dwellings habitable shall receive first priority in permitting decisions. Long term redevelopment activities shall be postponed until the Recovery Task Force has completed its tasks.
- Policy 2.3.5: If rebuilt, structures which suffer damage in excess of fifty percent (50%) of their appraised value shall be built to meet all current code requirements, including those enacted after construction of the structures.

OBJECTIVE 2.4:

The Town shall ensure that building, development and redevelopment activities minimizes damage to life and property from tropical storms, hurricanes and future sea level rise.

- Policy 2.4.1: All new construction and redevelopment shall conform to the Town's floodplain management regulations which are coordinated with the Florida Building Code. The Town shall adopt the current Flood Insurance Rate Map providing for substantial improvement and substantial damage determinations, permitting requirements and development and redevelopment in flood hazard areas.
- Policy 2.4.2: Continue to review finish floor elevations and building locations in the proximity of Special High Hazard Areas to eliminate potential flooding and sea level rise impacts.
- Policy 2.4.3: Continue to participate in the Community Rating System (CRS) and document CRS activities to maintain or improve the Town's Class rating in the CRS Program.
- Policy 2.4.4 Consider the impacts of sea level rise in the Town's Special Flood Hazard Areas when evaluating land use plan amendments to minimize any adverse flooding impacts of such amendments.

Goal Statement Three

PUBLIC FACILITIES SHALL BE ADEQUATE AND AVAILABLE TO SERVE THE RESIDENTS AND VISITORS TO THE TOWN'S COASTAL AREA.

OBJECTIVE 3.1:

Whenever development orders or permits are requested, apply the level of service standards adopted elsewhere in this Comprehensive Plan for facilities in the coastal area (entire Town) and additional standards under this objective. The entire Town shall be considered a service area for solid waste, drainage, water and sewer facilities.

Policy 3.1.1: Beach re-nourishment projects shall meet the following level of service standards:

- (a) Beach fill must include a protective berm high enough to prevent flooding by a ten- year storm event; and
- (b) Beach re-nourishment projects shall have a design life of at least five (5) years.
- Policy 3.1.2: Redevelopment projects must demonstrate that a negative impact will not occur to a renourished beach or any of the Town's beaches, as a result of the redevelopment project.
- Policy 3.1.3: The entire Town shall be considered a service area for solid waste, drainage, water and sewer facilities. Development within the Town shall be limited to the capacity of the respective facilities to supply the appropriate service as established by the level of service standard adopted in this Comprehensive Plan.

CHAPTER 8 CONSERVATION ELEMENT

I. ENVIRONMENTAL SETTINGS

The Town of South Palm Beach is geographically located on the east coast of Palm Beach County, entirely on the barrier island, and occupies a land area of 0.10 square miles. It is bordered on the east by the Atlantic Ocean and on the west by a lagoon within Lake Worth formed by the northern end of Hypoluxo Island. The Town has approximately 2,800 feet of ocean front. The Town is 2.8 miles north of the South Lake Worth Inlet and 11.5 miles south of the Lake Worth Inlet.

II. INVENTORY AND ANALYSIS

A. Water Resources

There are no rivers, bays, lakes, or wetlands in South Palm Beach. The Town's jurisdiction on the lagoon side of the Town runs along the shoreline leaving the lagoon water within the jurisdiction of the Town of Lantana.

B. Air Quality

South Palm Beach has very little air pollution originating in, or being transported by, the ocean breeze which tends to dissipate any pollutants which may enter the Town's air from nearby areas. The air quality in the Town is generally excellent. In spite of these factors the U.S. Environmental Protection Agency has classified all of Palm Beach County as being an ozone non-attainment area. This nonattainment classification is caused primarily by pollution generated from automobiles and light duty trucks, as well as, stationary sources within adjacent municipalities.

Ambient air quality is monitored through the State and Local Air Monitoring System (SLAMS). There are several stations in Palm Beach County under this system but none in South Palm Beach.

C. Floodplains

Nearly seventy-two percent (70%) (72%) of the Town's area is within the 100 Years Flood Zones (Zones A<u>E</u> and V<u>E</u>) as shown on figure Map 3 in accordance with the Flood Insurance Rate Map dated October 5, 2017 September 20, 1982. Most of the Town is within Flood Zone AE with Base Flood Elevation of seven (7) feet. The base flood elevation rises to ten (10) feet in the V Zone along the ocean. All the land within the 100 Year flood prone area is developed predominantly for multi-family residential use.

The Town has adopted several ordinances to address the beach and dune protection and construction in the flood prone areas. Ordinance No. 131, adopted in 1987, and known as the Coastal Construction Code establishes design criteria for wind loading, elevation, foundations, wave forces, water pressure loads, and public access to beaches. Ordinance No. 132, also adopted in 1987, is the Flood Damage Prevention Ordinance which requires all buildings and structures to be set back twenty-five (25) feet landward of the Coastal Construction Control Line (CCCL) and elevated above the base flood elevation. The Ordinance also sets forth certain construction requirements to protect buildings against flood damage and provides for protecting dunes against alterations. Beach and dune protection ordinances will be revised to ensure consistency with current State regulations.

D. Commercially Valuable Mineral

There are no known areas of commercially valuable minerals in South Palm Beach.

E. Soil Erosion

With the exception of the eroding beach which runs along the eastern boundary of the Town, there is no soil erosion in South Palm Beach, since all the land in the Town is built out. The beach erosion problem in South Palm Beach is discussed in detail in the Coastal Management Element.

F. Flora and Fauna

The Town of South Palm Beach is entirely within the South Florida Coastal Strand Ecological Community as described in *26 Ecological Communities of Florida*, Soil Conservation Service, 1981. This community is identified by its location adjacent to the Atlantic Ocean and by plants that are adapted to, or influenced by, the salty environment. The natural vegetation of this community is low growing grasses, vines, and plants, with few trees or large shrubs. The trees and shrubs often occur in stunted form due to the action of the wind. A variety of shorebirds, terns, and gulls can be found on or near the beach.

There is no parcel of land in South Palm Beach which has not been cleared of natural vegetation over the years. The only natural vegetation in South Palm Beach exists in some eroded dunes along the ocean to the east and in some areas along the lagoon shoreline to the west. The dominant plant species along the ocean include sea grape, coco plum, beach morning glory, and sea oats. Along the lagoon, the predominant species are red, white and black mangroves.

The Soil Conservation Service publication, mentioned above, identifies one plant occurring in the South Florida Coastal Strand Ecological Community as being on the list of rare and endangered plant species. The plant is beach star (Remirea maritima) which is designated an endangered species by the Florida Department of Agriculture.

The dominant mammal and reptile wildlife species in South Palm Beach include raccoon, mice, frogs, and lizards. Dominant birds include the American kestrel, pelicans, gulls, terns, shorebirds, and songbirds. The beach area, in addition to providing habitat to crustaceans such as crabs, serves as an important nesting ground for sea turtles which are designated as endangered or threatened species as shown in Table 12.

Green, loggerhead and leatherback turtles are known to nest along the sandy beaches of South Palm Beach. The nesting season occurs from April through November. Lights along the beaches tend to disorient baby sea turtles, causing them to move toward artificial lights after hatching, rather than following the glint on the ocean. The Sea Turtle Protection Ordinance adopted by Palm Beach County in August 1987 would require "lights out" from May to October along beaches in Palm Beach County, where sea turtles nest, then hatch and return to the ocean to continue their life cycle. The ordinance also requires coastal developers to submit a sea turtle protection plan with their site plan; which prohibits campfires, horses, and motorized vehicles (with some exceptions) on the beach from May to October; and requires that car lights be shielded from the beach using shrubbery and dune vegetation. A separate ordinance providing for the protection of sea turtles was also adopted for the Town of South Palm Beach in 1988.

The Atlantic Ocean to the east offers a wide range of habitat for saltwater fishes. In this area, the ranges of many tropical and subtropical species overlap giving the area a rich and diversified ichthyofauna. The marine finfish species occurring in the area are numerous. They include both commercially and recreationally important species, and those associated with coral reefs. Commercially important invertebrates are also found offshore.

With the disturbance and destruction of the natural environment of the area, the number of wildlife species has declined in South Palm Beach as in many other coastal communities. A number of wildlife species occurring in and around South Palm Beach have special protection status as shown in Table 12.

G. Commercial, Recreational and Conservation Uses

None of the resources in South Palm Beach is large enough for any significant commercial, recreational or conservation use. Marine resources of the Atlantic Ocean do have the potential for recreational and commercial uses, but the waters of the ocean are outside the Town's jurisdiction. The beach along the ocean does provide recreational opportunities and the Town is committed to conservation of the existing beach and dune resources.

H. Pollution Problems

The Department of Environmental Protection (DEP) has investigated water quality throughout the State, and published its findings in the 1988 Florida Nonpoint Source Assessment. According to this report, the Lake Worth area is classified as a severely impaired waterway. Symptoms of a severely impaired waterway include; fish kills, aquatic vegetation problems, algal blooms, a decline in the fishery, odor, turbidity/siltation, closed to swimming and shell fishing, and oxygen depletion. Some of the pollutants found in this area are: sediments, nutrients, bacteria, pesticides, debris, oils/grease and others. The sources of these pollutants range from construction to agricultural runoff, and the effects of urban development. The Town of South Palm Beach presently discharges untreated storm water to the lagoon during storm events.

DEP has established a number of programs to correct the water quality problems found in Lake Worth. The Town of South Palm Beach shall continue to utilize best management practices for development and redevelopment in order to improve the quality of this waterway.

	Common Name	;	Designated FWC	Status USFWS
Fish				
	Common Snool	X	SSC	
Ampl	nibians and Rept	tiles		
•	American alliga		SSC	Т
	Atlantic logger		Т	Т
	Atlantic green t		Е	Е
	Leatherback tur		Е	E
	Atlantic hawksl	oill turtle	Е	E
	Atlantic ridley	urtle	Е	Е
Birds				
211 45	Limpkin		SSC	
	Southeastern sn	owy plover	Т	UR
	Little blue hero		SSC	
	Reddish egret		SSC	UR
	Snowy egret		SSC	
	Tricolored hero	n	SSC	
	Arctic peregrine	e falcon	Е	Т
	American oyste		SSC	
	Wood stork		Е	E
	Brown Pelican		SSC	
	Least tern		Т	
Mam	mals			
	Right whale		Е	Е
	Sei whale		Е	Е
	Finback whale		Е	Е
	Humpback what	le	Е	Е
	Florida mouse		SSC	UR
	Sperm whale		Е	Е
	West Indian ma	natee	E	Е
	Е	Endangered		
	T	Threatened		
	SSC	Species of Special C	oncern	
	UR	Under Review for L		
	FWC	Florida Fish and Wi	0	Commission
		United States Fish a		Commission
	USDWS	United States Fish a	ing whante Service	

TABLE 12 SPECIAL PROTECTION STATUS OF WILDLIFE SPECIES IN THE SOUTH PALM BEACH AREA

Source:

Index

FWC, West Palm Beach Regional Office, August 1987

I. Water Use

Water needs of South Palm Beach are met by the City of West Palm Beach Utility Department which draws its water from Clear Lake and Lake Magnolia. The two lakes are fed by a large water catchment area to the west of the city replenished by the L-8 Canal.

There are no agricultural or industrial uses in South Palm Beach. The only commercial use in the Town happens to be a motel, which exists as a nonconforming use only, since the Town's Future Land Use Element does not designate a commercial use anywhere in the Town. The demand for water, therefore, is generated by residential use primarily. In view of the fact that the Town is built out, no significant increase in the Town's water use is anticipated through the year 2044 2016. The Town currently uses up to 435,450 gallons per day. The projected water need of the Town by the year 2016 is about 447,750 gallons per day.

South Palm Beach will <u>coordinate and</u> cooperate with West Palm Beach in development of a ten (10) year water supply plan that includes water conservation, and seeking alternative sources of water.

III. GOALS, OBJECTIVES AND POLICIES

Goal Statement

CONSERVE, PROTECT, AND APPROPRIATELY MANAGE THE NATURAL RESOURCES OF SOUTH PALM BEACH TO ENSURE THE HIGHEST ENVIRONMENTAL QUALITY POSSIBLE.

OBJECTIVE 1:

Improve, protect and maintain air quality in South Palm Beach to meet or exceed the minimum air quality levels established by the Florida DEP.

- Policy 1.1: South Palm Beach shall cooperate with the County and the State in monitoring an Air Pollution Inventory System Facility if located in South Palm Beach.
- Policy 1.2: Land uses which could potentially have a negative impact on the area's air quality shall be prohibited in South Palm Beach.

OBJECTIVE 2:

Maintain per capita use of potable water at 150 gallons per capita per day through the year 2016.

- Policy 2.1: The Town shall cooperate with Palm Beach County and South Florida Water Management District (SFWMD) in promoting water conservation programs.
- Policy 2.2: The Town shall continue to coordinate with the South Florida Water Management District in a program of water conservation during non-emergency and emergency conditions as declared by the SFWMD.

OBJECTIVE 3:

Establish a framework of codes and rules to protect and restore dunes along the ocean.

- Policy 3.1: The Town shall require restoration of degraded dunes as a part of development or redevelopment of ocean-front parcels.
- Policy 3.2: The Town shall require planting of appropriate dune vegetation in dune restoration projects.

Policy 3.3: Beach access shall be constructed or reconstructed by means of appropriate dune over walks.

OBJECTIVE 4:

Continue to promote community awareness and education regarding the importance of restoring degraded dunes following beach restoration.

- Policy 4.1: To the extent possible, the Town shall consider the following techniques in achieving the above objective:
 - (a) Establish a program of community awareness toward beach erosion problems and solutions that can be initiated on an individual basis.
 - (b) Educate citizens in the methods of dune restoration and re-vegetation.
 - (c) Encourage property owners to re-vegetate, restore dunes, and to construct over walks to protect emerging dune systems.

OBJECTIVE 5:

Support and cooperate with State and other wildlife management organizations in efforts to manage and protect all existing ecological communities and wildlife, especially rare and endangered species, found in South Palm Beach.

- Policy 5.1: The Town shall protect the existing dune vegetation and habitat by requiring preservation and restoration of the dune system.
- Policy 5.2: The Town shall require preservation of the existing native vegetation along the lagoon shorelines on the west side.
- Policy 5.3: The Town shall continue to enforce their sea turtle protection policies to protect the rare and endangered species of sea turtles.
- Policy 5.4: The Town shall continue to coordinate with the Florida Department of Environmental Protection, Florida Game and Freshwater Fish Commission, and all other agencies in order to protect endangered and threatened species as they are found in South Palm Beach.
- Policy 5.5: The Town shall include the following three species in the present "Prohibited Trees" listing in the Landscape Code: Brazilian Pepper, Melaleuca, and Australian Pine. In addition, the Town shall encourage the removal of these species from private lands in a manner that prevents their spread or re-establishment.
- Policy 5.6: The Town shall protect and conserve the natural functions of existing soils, fisheries, floodplains, and marine habitats through the regulation of development and redevelopment activities.
- Policy 5.7: Natural Resources shall be protected from the adverse impacts of hazardous wastes through coordination with the Solid Waste Authority of Palm Beach County for disposal and handling of these materials.

OBJECTIVE 6:

Support establishment of a program sponsored by the South Florida Water Management District and other State agencies to conserve, appropriately use and protect the quality and quantity of waters flowing into the lagoon and ocean.

Policy 6.1: The Town shall support efforts of the SFWMD, Florida Department of Environmental Protection and other entities to establish a regulatory program to restrict activities known to adversely affect the quality of estuarine and oceanic waters.

CHAPTER 9 RECREATION AND OPEN SPACE ELEMENT

I. EXISTING FACILITY INVENTORY

There are no publicly-owned recreation sites within the Town of South Palm Beach. There are two major natural features adjoining the Town, the ocean running along the eastern boundary, and the lagoon along the western boundary of the Town that provide excellent opportunities for resource based recreation activities. Most of the condominium complexes also contain recreation facilities such as swimming pools, tennis courts and shuffleboard courts for their residents.

Most Town residents have access to the beaches. Beach access is made possible through normal land ownership rights and private agreements which include condominium homeowners' agreements and easements across neighboring properties. The entire land area contiguous to the beach is privately owned. There are two public beaches within the two miles of South Palm Beach with public parking and access. Lantana Municipal Beach with a total of one hundred, sixty-two (162) parking spaces is located on the southern border of the Town. The other nearby public beach is Lake Worth Public Beach with seven hundred, fifty (750) parking spaces located approximately one mile north of the Town.

The Town of South Palm Beach has numerous private recreational facilities available to the residents. All 27 multiple family residential buildings provide private recreational facilities. Table 13 below depicts the existing facilities.

Recreational Facility Type	Total Number Available
Pool	26
Barbeque Grill	31
Exercise Room	7
Sauna	17
Club House/Leisure Room	14
Tennis Court	1
Shuffle Board Court	1
Billiard Room	3
Jacuzzi/Spa	3
Dock	3

TABLE 13 RECREATION FACILITY INVENTORY

II. FACILITY NEEDS ANALYSIS

There are several important factors to consider when determining recreational facility needs for the Town of South Palm Beach. Among the factors are:

- 1. Per the 2020 U.S. Census, more than fifty-five percent (55.4%) Over fifty-four percent (54%) of the population are is over 65 years in age. Another twenty-six percent (26.4%) thirty percent (30%) are is between 45 and 64 years in age.
- 2. The Town is completely built out with no land remaining to provide public recreational facilities.
- 3. Every multiple family development within the Town provides an array of private recreational facilities.
- 4. During public meetings, additional recreational facilities were not mentioned as a need or desire by Town citizens.
- 5. Over sixty percent (60%) of the Town residents have direct beach access. Most of the remaining residents have beach access through private easements. The furthest distance any resident must travel to access a public beach with other recreational facilities available, is 3,300 feet.
- 6. New development causing additional recreational facilities demand is not possible due to the built out condition of the Town. Redevelopment will create a very small number of additional units.

The Future Land Use Map of the Town of South Palm Beach shows the existing beachfront as a recreational area. The Town is committed to preserving this resource for recreational purposes. The Town is a participant with Palm Beach County in a beach renewal project that includes the segment of beachfront in South Palm Beach. There is no other recreational use depicted on the Future Land Use Map of the Town.

III. GOALS, OBJECTIVES AND POLICIES

Goal Statement

ENSURE THAT ADEQUATE RECREATION OPPORTUNITIES AND OPEN SPACE ARE AVAILABLE TO SATISFY THE HEALTH, SAFETY AND WELFARE NEEDS OF THE CITIZENS OF SOUTH PALM BEACH.

OBJECTIVE 1:

Cooperate with the County and other municipalities in establishing public recreation facilities and open space areas in Palm Beach County.

- Policy 1.1: The Town shall coordinate through interlocal agreements, when necessary, with the neighboring municipalities and the County in an effort to ensure that recreation facilities and open space areas located in other local jurisdictions are accessible to the citizens of South Palm Beach.
- Policy 1.2: The Town shall coordinate with the county to build, operate and maintain recreation facilities designed to serve the central Palm Beach County area. Coordination efforts shall consist of technical assistance and interlocal agreements when feasible.

OBJECTIVE 2:

Encourage the development and use of private recreation and open space facilities in South Palm Beach.

- Policy 2.1: The Town shall require, through the Land Development Code that developers provide recreation and open space facilities in their developments.
- Policy 2.2: The Town shall coordinate the joint use of private recreation and open space facilities by a group of developments through informal agreements between the developments.
- Policy 2.3: The Land Development Code shall include recreation and open space definitions and standards as they apply to the Town of South Palm Beach.

OBJECTIVE 3:

Require maintenance of private recreational facilities and require any redevelopment of existing, multiple family residential units to provide recreational facilities at a minimum of the same level of service that is currently provided.

Policy 3.1 Levels of Service for recreational facilities shall be established as follows:

Recreational Facility

Level of Service

Pool	1 per 125 Town residents
Barbeque Grill	1 per 100 Town residents
Exercise Room	1 per 500 Town residents
Sauna	1 per 200 Town residents
Clubhouse/Leisure Room	1 per 300 Town residents
Tennis Court	1 per 3000 Town residents
Shuffle Board Court	1 per 3000 Town residents
Billiards Room	1 per 1000 Town residents
Jacuzzi/Spa	1 per 1000 Town residents
Dock	1 per 1000 Town residents

Private recreational facilities shall be counted in level of service determinations.

CHAPTER 10 INTERGOVERNMENTAL COORDINATION ELEMENT

I. INVENTORY OF ENTITIES

In an effort to promote intergovernmental coordination and cooperation, the Town of South Palm Beach coordinates and maintains a working relationship with the entities listed below. The Office of the Town Manager is responsible for day-to-day coordination with these entities.

A. Adjacent Municipalities

1. TOWN OF PALM BEACH

The Town of Palm Beach adjoins South Palm Beach to the north. Like South Palm Beach it is an ocean front community stretching north-south along the ocean with State Road A1A providing primary vehicular circulation.

2. TOWN OF LANTANA

Adjoining South Palm Beach to the south is the Town of Lantana with a Town-owned parcel separating South Palm Beach from Manalapan, another ocean front community to the south of South Palm Beach.

B. Other Local Governments

1. PALM BEACH COUNTY

South Palm Beach has a formal agreement with Palm Beach County for Fire Rescue Services and participates with other law enforcement agencies in Palm Beach County through the Law Enforcement Agencies Operational Assistance and Voluntary Cooperation and Mutual Aid Agreement.

C. Special Function Local Agreements

1. THE SCHOOL BOARD OF PALM BEACH COUNTY

The public school system of Palm Beach County incorporates the Town of South Palm Beach. There is no school facility within the Town, but the children are bused to schools in nearby communities.

2. COUNTY WIDE COASTAL COUNCIL

The Town of South Palm Beach has entered into an interlocal agreement with Palm Beach County, other coastal municipalities, four inlet special districts, two environmental bodies, and the Palm Beach County League of Cities to establish an organization which provides a forum for information exchange and cooperative effort in fulfilling interests of beach and shore protection, preservation and/or enhancement.

D. Utilities

1. CITY OF WEST PALM BEACH UTILITIES

Through a formal agreement with South Palm Beach, the City of West Palm Beach provides water service to the Town.

2. CITY OF LAKE WORTH <u>BEACH</u> UTILITIES

The Town has entered into an agreement with the City of Lake Worth <u>Beach</u> Utilities for the disposal of wastewater.

E. Regional Agencies

1. TREASURE COAST REGIONAL PLANNING COUNCIL

The Town is a member of the Council and is required to coordinate its planning activities with the Council under Chapter 163, F. S.

2. SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Under Chapter 373, F. S., the Town assists the Water Management District, when requested, in the enforcement of the provisions of the water resources legislation. <u>The Town has also adopted by</u> reference a Water Supply Facility Work Plan (see Attachment "A" in the back of book).

F. State Agencies

1. <u>FLORIDA COMMERCE</u> DEPARTMENT OF COMMUNITY AFFAIRS

The Town has signed an agreement with this state agency by which South Palm Beach has received a planning grant to revise its Comprehensive Plan in accordance with Chapter 9J-5, FAC. The Town will coordinate its planning activities and Comprehensive Plan with Florida Commerce, Bureau of Planning and Growth Department of Community Affairs through periodic submissions and approvals.

2. DEPARTMENT OF ENVIRONMENTAL PROTECTION

The Town does not have any agreement with the Department of Environmental Protection, presently. However, any beach re-nourishment project that the Town participates in will have to be approved by, and coordinated with, this state agency.

4. DEPARTMENT OF TRANSPORTATION

5. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

Although no historically or archeologically significant resources have been identified in the Town, in the event that a site is identified, the Town will coordinate with this agency to protect and preserve the resource.

II. ANALYSIS

A. Existing Coordination Mechanism

The Town of South Palm Beach has entered into a number of formal agreements with local agencies and governments, and informal arrangements with some neighboring municipalities as described above. These mechanisms have been quite effective in promoting intergovernmental coordination in South Palm Beach. The Town is also represented in the Palm Beach County League of Cities, which serves as a very important vehicle for intergovernmental communication in Palm Beach County. The Town Manager is responsible for coordinating activities between South Palm Beach and other entities.

B. Comprehensive Plan Elements

1. FUTURE LAND USE ELEMENT

The Town of South Palm Beach is fully built out. The Town of Palm Beach land adjoining the Town to the north is also built out.

2. TRANSPORTATION ELEMENT

As the only traffic circulation corridor in South Palm Beach, South Ocean Boulevard (State Road A1A) needs to be protected and maintained primarily as a residential road.

3. INFRASTRUCTURE ELEMENT

The Town is adequately served by the City of West Palm Beach Utility Department for potable water and by the City of Lake Worth <u>Beach</u> Utilities for sanitary sewerage. No significant increase in demand is anticipated for either of these services since minimal future growth is expected in the Town. The Town will continue to coordinate with these agencies its planning activities in the future.

4. CONSERVATION ELEMENT

With the exception of the beach and eroded dunes, no significant natural resources exist in South Palm Beach.

5. COASTAL MANAGEMENT ELEMENT

The Town should continue working with Palm Beach County and the Department of Environmental Protection on the beach renewal project that includes South Palm Beach.

6. RECREATION AND OPEN SPACE ELEMENT

There are no public recreation facilities in the Town and none are planned for the future. Presently, as well as, for the foreseeable future, <u>The</u> recreational needs of the citizens are being met through either private recreational facilities or at public facilities in adjacent communities. The Town has not identified any recreational needs or problems which would benefit from Intergovernmental Coordination. In the event that policies regarding the use of recreational facilities in adjacent communities are modified to exclude or prohibit the residents of South Palm Beach, it may be necessary to enter into an interlocal agreement for the provisions of recreational facilities.

7. HOUSING ELEMENT

The existing housing stock of the Town is in sound condition. There is no public or subsidized housing of any type in the Town and none is needed to satisfy the housing needs of the Town's population.

C. Comprehensive Regional Policy Plan (CRPP)

As mentioned earlier in this element, South Palm Beach is built out. The focus of the Town's Comprehensive Plan is not so much management of new growth and development as stabilization and preservation of existing development and coastal resources.

Protection of coastal resources is a major regional issue in the Treasure Coast Regional Planning Council's CRPP (Goal 9). The Town of South Palm Beach is concerned about these resources and has proposed several policies and implementation strategies to protect and preserve these resources. Of special interest to the Town are protection and restoration of dunes, renewal of the beach, and protection of sea turtle nesting areas. The Town must coordinate its efforts in achieving its goals and objective related to these issues with the Regional Planning Council since they are also of great significance to the entire region.

III. GOALS, OBJECTIVES, AND POLICIES

Goal Statement

ESTABLISH A SYSTEM OF INTERGOVERNMENTAL COORDINATION BETWEEN SOUTH PALM BEACH AND NEIGHBORING MUNICIPALITIES AND OTHER LEVELS OF GOVERNMENT TO ACHIEVE: COORDINATION OF DEVELOPMENT ACTIVITIES; PRESERVATION OF THE QUALITY OF LIFE; AND EFFICIENT USE OF AVAILABLE RESOURCES.

OBJECTIVE 1:

Ensure that all planning, development related activities, and establishment of LOS Standards are coordinated with the Comprehensive Plan of adjacent municipalities, the County, and other units of local government providing services, but not having regulatory authority over the use of land.

- Policy 1.1: The Town shall forward copies of the proposed Comprehensive Plan and any amendments to the plan to the adjacent municipalities and Palm Beach County through the intergovernmental Planned Amendment Review Committee (IPARC), as_well as, the City of West Palm Beach Utilities Department, the City of Lake Worth <u>Beach</u> Utilities, and the Treasure Coast Regional Planning Council.
- Policy 1.2: The Town shall file a written request with IPARC to receive copies of proposed comprehensive plans or plan amendments for review.
- Policy 1.3: The Town shall inform neighboring municipalities of major planning and development activities in South Palm Beach through the IPARC process.
- Policy 1.4: The Town shall utilize the Treasure Coast Regional Planning Council's informal mediation process to resolve conflicts with other local governments.
- Policy 1.5: The Town shall update the 10 Year Water Supply Work Plan within eighteen (18) months of the date that the South Florida Water Management District updates the Lower East Coast Regional Water Supple Plan.

OBJECTIVE 2:

Coordinate the development of community facilities and services with adjacent governments to determine if such services could be provided more efficiently and economically on an interjurisdictional basis.

Policy 2.1: The Town shall maintain and strengthen existing interlocal cooperation through continued participation in mutual aid arrangements.

OBJECTIVE 3:

Coordinate the management of the Lake Worth Lagoon and all other natural resources which fall under the jurisdiction of more than one local government with all applicable entities.

- Policy 3.1: The Town shall coordinate with all agencies or communities who have jurisdiction over the estuary in order to:
 - a) Prevent increased levels of estuarine pollution;
 - b) Control surface water runoff; and
 - c) Protect living marine resources as they now exist.

OBJECTIVE 4:

Coordinate water supply issues and needs on a continuing and ongoing basis with the City of West Palm Beach.

Policy 4.1: The Town shall continue to participate in coordination efforts with the City of West Palm Beach regarding water supply issues through the following activities: Continued participation in the Interlocal Plan Amendment Committee (IPARC) to discuss any water supply issues; annual meetings with West Palm Beach Utilities staff to share information regarding water supply issues and needs, use projections, implementation of alternative water supply projects, conservation measures, and other pertinent water supply issues that arise; and responding to annual contacts from West Palm Beach, required by the West Palm Beach Comprehensive Plan, relative to major projects, population projections, and water usage information.

CHAPTER 11 CAPITAL IMPROVEMENTS ELEMENT

I. INVENTORY

A. Needs Derived From Other Elements

The Town of South Palm Beach is a small ocean-front community which is built out. The analyses performed in the other elements of the Comprehensive Plan indicate that the existing facilities are adequate to serve the existing, as well as, future developments in the Town. No facility improvements are needed to meet the existing or future demands for transportation, sanitary sewer, solid waste, drainage, potable water or recreation facilities.

The Town of South Palm Beach working in partnership with Palm Beach County had an Erosion Control Study, completed in February, 2007, on our beach. This study analyzed the existing conditions of the beach and developed several alternative options for beach restoration. The consensus option having the most likelihood of success was the installation of erosion control structures classified as near shore breakwaters. Palm Beach County is taking the lead associated with detail engineering, permitting and construction of the near shore breakwaters. The estimated construction cost in 2010 is \$5,100,000 with the Town's share to be \$1,020,000. The Town of South Palm Beach plans to pay \$500,000 of this amount from cash reserves with the balance to come from a debt borrowing, the form to be determined near the time of the project. This should not cause financial hardship as the Town presently has no outstanding revenue or general debt obligations.

B. Public Educational and Health Care Facilities

No public educational or health care facilities are located in the Town of South Palm Beach.

C. Existing Revenue Sources & Funding Mechanisms

For the fiscal year 2007-08, the Town of South Palm Beach had a total of \$ 3,104,400 in revenues from the following sources:

Ad Valorem Taxes	\$ 2,415,000	77%
Intergovt'l Revenue	255,800	8%
Franchise Fees	211,100	7%
Fines & Forfeitures	12,500	1%
Licenses & Permits	95,400	3%
Miscellaneous	114,600	4%

As shown above, the Town's major sources of revenues are: property taxes; intergovernmental revenues such as state revenue sharing, sales tax, communications services tax, etc.; and franchise fees.

II. ANALYSIS

Local Conditions and Practices

As a community built out, the Town of South Palm Beach does not have any specific policies to guide the timing and location of construction, extension or increases in capacity of public facilities.

The existing infrastructure continues to be quite adequate to serve the existing, as well as, any redevelopment that may occur. No extension or increase in capacity of any public facility is necessary to correct any existing deficiency or to satisfy any future needs.

There are no public educational or health care facilities, nor any public facilities provided by any State agency, except State Road A1A, or the Water Management District in South Palm Beach.

There are no other tax bases, or sources of revenue, such as impact fees or user fees in South Palm Beach presently. With little growth projected in the Town and absence of user-oriented facilities, impact fees or user fees are not a feasible source of future revenues.

The analysis above makes it clear that the capital expenditures discussed above will have to be financed through a combination of general fund surplus and long-term bond issue.

III. GOALS, OBJECTIVES, AND POLICIES

Goal Statement

UNDERTAKE ACTIONS NECESSARY TO ADEQUATELY PROVIDE NEEDED PUBLIC FACILITIES TO ALL RESIDENTS OF THE TOWN IN A MANNER WHICH PROTECTS INVESTMENTS IN EXISTING FACILITIES AND MAXIMIZES THE USE OF EXISTING FACILITIES.

OBJECTIVE 1:

Provide capital improvements to replace or rebuild worn out, obsolete or eroded facilities when necessary, and include these capital improvements in the 5-Year Schedule of Improvements of this element, as soon as the need becomes evident.

- Policy 1.1: All capital improvement projects with costs of \$25,000 or greater shall be included in the 5-Year Schedule of Improvements of this element.
- Policy 1.2: Proposed capital improvement projects including those proposed by State, Regional, and local entities which provide services to the Town, shall be evaluated and ranked in order of priority according to the following guidelines:

a) Whether the project is needed to protect public health and safety, to fulfill the Town's legal commitment, to provide facilities and services, or to preserve or achieve full use of existing facilities.

b) Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement cost, or provides service to developed areas lacking some service.

- Policy 1.3: The Schedule of Capital Improvements shall be revised annually in conjunction with the annual revision of the Town budget. The Capital Budget shall be adopted annually as part of the operational budget of the Town.
- Policy 1.4: The Town shall direct capital improvement expenditures in a manner which is consistent with the other elements of the Comprehensive Plan.
- Policy 1.5: Capital Improvements financed by the Town shall be funded by either a debt to be repaid by user fees or assessments; or through the use of current assets; or a combination of the two.

OBJECTIVE 2:

Limit public expenditures that are for the purpose of increasing density in coastal high hazard areas.

Policy 2.1: The Town shall participate with other governmental agencies to the extent feasible, in funding the beach renewal project that includes the segment of beachfront within the Town's jurisdiction.

OBJECTIVE 3:

Ensure that decisions regarding the issuance of development orders and permits are based upon coordination of the development requirements included in the Comprehensive Plan, the Land Development Regulations, and the availability of necessary public facilities needed to support such development.

Policy 3.1:	The Town shall use the following LOS standards in reviewing the impacts of new development or redevelopment upon public facility provision:					
	Sanitary Sewer	100 gallons per capita per day				
	Solid Waste	7.1 <u>3</u> pounds per capita per day				
	Drainage	Water_Quality Standard: First inch of runoff or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater, to be detained on site (per Vol. IV, SFWMD)				
		Water Quality Standard: Post development runoff volumes shall not exceed predevelopment runoff volumes for a storm event of three day duration and twenty-five (25) year return frequency (TCRPC Standard).				
	Potable Water	150 gallons per capita per day				
	State Road A1A	Level of service "C"				
	Recreation and					
	Open Space	Level of ServiceRecreational FacilityLevel of ServicePool1 per 125 Town residentsBarbeque Grill1 per 100 Town residentsExercise Room1 per 500 Town residentsSauna1 per 200 Town residentsClubhouse/Leisure Room1 per 3000 Town residentsTennis Court1 per 3000 Town residentsShuffleboard Court1 per 3000 Town residentsBilliards Room1 per 1000 Town residents				

1 per 1000 Town residents

1 per 1000 Town residents

Jacuzzi/Spa

Dock

Private recreational facilities shall be counted in level of service determinations.

- Policy 3.2: Any plan amendment and development or redevelopment project shall conform with future land uses as shown on the Future Land Use Map of the Future Land Use Element.
- Policy 3.3: Development and redevelopment activities shall be approved only if public facilities are necessary to meet level of service standards as adopted in this plan and are available concurrently with the impact of the development.

OBJECTIVE 4:

Future development and redevelopment activities shall fund a proportionate cost of the needed facility improvements necessitated by the development.

Policy 4.4: Development and redevelopment shall be assessed a pro rata share of costs for improvements or expansion to public facilities, necessitated by the development impact, in order to maintain the adopted levels of service.

IV. IMPLEMENTATION

Monitoring and Evaluation

The role of monitoring and evaluation is vital to the effectiveness of any planning program and particularly for the Capital Improvements Element. This is largely because the Town's revenue and expenditure streams are subject to fluctuations every year. In order to maintain the effectiveness and relevance of the Capital Improvements Schedule, the Capital Improvements Element requires a continuous program for monitoring and evaluation. In accordance with Chapter 163, F.S., this element will be revised on an annual basis.

The annual review will be the responsibility of the Local Planning Agency, and the Town Manager will serve as advisory member at all formal deliberations related to capital improvement monitoring and evaluation. The Local Planning Agency's findings and recommendations will be presented to the Town Council at a public meeting. The Town Council will then direct the Town Manager to take appropriate action based upon the Local Planning Agency's findings and recommendations.

CHAPTER 12 PROPERTY RIGHTS ELEMENT

I. OVERVIEW

House Bill 59 (2021), Chapter 2021-195, Laws of Florida became effective on July 1, 2021. The Bill requires each local government adopt a Property Rights Element into its comprehensive plan. The inclusion of this element is intended to acknowledge and respect private property rights and to ensure they are considered in the local decision-making processes of the Town of South Palm Beach, Florida. In the following Goals, Objectives and Policies, the use of "Town" refers to the Town of South Palm Beach, Florida.

II. GOALS, OBJECTIVES, AND POLICIES

Goal Statement

THE TOWN WILL MAKE DECISIONS WITH RESPECT FOR PROPERTY RIGHTS AND WITH RESPECT FOR PEOPLE'S RIGHTS TO PARTICIPATE IN DECISIONS WHICH AFFECT THEIR LIVES AND PROPERTY.

OBJECTIVE 1:

The Town will respect judicially acknowledged and constitutionally protected private property rights.

- Policy 1.1: The Town will consider in its decision-making the right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.
- Policy 1.2: The Town will consider in its decision-making the right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.
- Policy 1.3: The Town will consider in its decision-making the right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.
- Policy 1.4: The Town will consider in its decision-making the right of a property owner to dispose of his or her property through sale or gift.

ATTACHMENT A

10 YEAR WATER SUPPLY FACILITY WORK PLAN SUBELEMENT

1.0 INTRODUCTION

1.1 Purpose and Objectives

The purpose of the City of West Palm Beach Water Supply Facility Work Plan (hereinafter the Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the local government's jurisdiction. Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or West Palm Beach Comprehensive Plan 11-UE Ord. 4892-20 its update. The 2013 Lower East Coast Water Supply Plan (LECWSP) Update was approved by the South Florida Water Management District.

The work plan reflects the assessments completed as part of the City's 2020 Capacity Analysis Report update that is submitted to the Florida Department of Health in Palm Beach County. The development and submittal requirements for both are based on the following:

Chapter 403, Part VI, F.S., requiring public water systems to provide for the timely planning, design, permitting, and construction of necessary public water system source, treatment, or storage facilities. Under Chapter 62-555.348, F.A.C., the City is required to prepare and submit an updated Capacity Analysis Report every five years. The 2020 Capacity Analysis Report Update was submitted to the Florida Department of Health in January 2020.

Chapter 1631, Part II, F.S., requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. The 2018 Lower East Coast Water Supply Plan (LECWSP) Update was approved by the South Florida Water Management District in November 2018.

Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. The 2013 Lower East Coast Water Supply Plan (LECWSP) Update was approved by the South Florida Water Management District.

Residents of the City buy their water directly from the City of West Palm Beach Public Utilities Department (PUD). Under this arrangement, the City's PUD ensures that enough capacity is available for existing and future customers and that supporting infrastructure, such as the water lines, are adequately maintained.

¹ Section 163.3177 (1)e), F.S., When a federal, state, or regional agency has implemented a regulatory program, a local government is not required to duplicate or exceed that regulatory program in its local comprehensive plan.

According to state guidelines, the Work Plan and the comprehensive plan amendment must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period.

- The City's Work Plan is divided into the following four sections:
- Section 1 Introduction
- Section 2 Background Information
- Section 3 Data and Analysis
- Section 4 Work Plan Projects/Capital Improvement Element/Schedule
- Section 5—Summary

1.2 Statutory History

The Florida Legislature has enacted bills in the 2002, 2004, 2005, 2011, and 2012, 2015 and 2016 sessions to address the state's water supply needs. These bills, especially Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapter 163 and 373 Florida Statutes (F.S.) by strengthening the statutory links between the regional water supply plans prepared by the water management districts, and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between the local land use planning and water supply planning.

1.3 Statutory Requirements

The following highlights the statutory requirements:

1. Coordinate appropriate aspects of its comprehensive plan with the appropriate water management district's regional water supply plan.

2. Ensure that its future land use plan is based upon availability of adequate water supplies and public facilities and services. Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted to the Planning Division for review. The submitted package must also include an amendment to the Capital Improvements Element, if necessary, to demonstrate that adequate public facilities will be available to serve the proposed Future Land Use Map modification.

3. Ensure that adequate water supplies and facilities are available to serve new development no later than the date on which the local government anticipates issuing a certificate of occupancy and consult with the applicable water supplier prior to approving building permit, to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy. This "water supply concurrency" is now in effect, and local governments should be complying with the requirement for all new development proposals. In addition, local governments should update their comprehensive plans and land development regulations as soon as possible to address these statutory requirements. The latest point at which the comprehensive plan must be revised to reflect the concurrency requirements is at the time the local government adopts plan amendments to implement the recommendations of the Evaluation and Appraisal Report (EAR).

4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to: West Palm Beach Comprehensive Plan 13-UE Ord. 4892-20

a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated regional water supply plan, or the alternative project proposed by the local government under s. 373.709(8)(b) and 373.709(2) (a) F.S.;

b. Identify the traditional and alternative water supply projects, bulk sales agreements, and the conservation and reuse programs necessary to meet current and future water use demands within the local government's jurisdiction; and

c. Include a water supply facility work plan for at least a 10-year planning period for constructing the public, private, and regional water supply facility identified in the Element as necessary to serve existing and new development. Amendments to incorporate the water supply facility work plan into the comprehensive plan are exempt from the twice-a-year amendment limitation.

5. Revise the Schedule of Capital Improvements to include any water supply, reuse, and conservation projects and programs to be implemented during the planning period.

6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the appropriate regional water supply plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s).

If the established planning period of a comprehensive plan is greater than ten years, the plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for established planning period, considering the appropriate regional water supply plan.

7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authorities' plans.

8. Address in the EAR, the extent to which the local government has implemented the 10year water supply facility work plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, bulk sales agreements, and conservation and reuse programs are meeting local water use demands. West Palm Beach Comprehensive Plan 14-UE Ord. 4892-20

2.0 BACKGROUND INFORMATION

2.1 Overview of the City of West Palm Beach

The City, established in 1894, is the largest municipality within Palm Beach County and serves as the County seat. The City boundaries encompass approximately fifty-eight (58) square miles and are bounded by the Intracoastal Waterway to the east, the South Florida Water Management District C-51 canal to the south, the City's 19.3 square mile Water Catchment Area (WCA) to the west, and the Beeline Highway and 59th Street to the north. Located adjacent to the City are several municipalities including, the Town of Palm Beach, City of Lake Worth, Town of Mangonia Park, and City of Riviera Beach.

Although the City is substantially built-out, approximately 98%, the City population grew from 82,103 in 2000 to 106,525 106,893 in 2015 to 115,176 in 2019, an increase of approximately thirty less than eight percent. This population growth is reflective of the fact that the City continues to experience infill and redevelopment within its limits. For future planning purposes, 2020 has been set as the base year for the ten-year and twenty-year planning horizons. In 2007, an evaluation of existing gross acreage by land uses revealed that 28.2% of the total gross acreage in the City is dedicated to residential use. The remaining gross acreages are allocated to non-residential such as recreation/open space (50%); commercial (5.4%); industrial (2.9%); and undeveloped (2%). The City does not anticipate substantial increases in land area in the near future, however, population projections indicate a continued modest growth for the City of approximately 25% for the next 20 years to a projected population of 133,502 in the year 2035.

2.2 Relevant Regional Issues

As the state agency responsible for water supply in the Lower East Coast planning area, the South Florida Water Management District (SFWMD) plays a pivotal role in resource protection, through criteria used for Consumptive Use Permitting. As pressure increased on the Everglades ecosystem resource, the Governing Board initiated rulemaking to limit increased allocations dependent on the Everglades system. As a result, the Regional Water Availability Rule was adopted by the Governing Board on February 15, 2007 as part of the SFWMD's Consumptive Use Permit Program. This reduced reliance on the regional system for future water supply needs, mandates the

1) Recognizing that surface water and ground water is limited, the City has invested in alternative water supplies including Aquifer Storage and Recovery (ASR) well, pump structure at C17 canal and gates at Stub canal and pumps at Renaissance structure for capturing storm water drainage and C51 canal water otherwise lost to tide.

2) The City's water supply permit allocation at Control 2 limits withdrawal based on annual

allocation in the permit thus only withdrawing allocated quantity from regional sources. 3) Recognizing that additional storage system may be needed to capture wet season flow volumes, the City constructed an ASR well which is used to pump and capture Clear West Palm Beach Comprehensive Plan 15-UE Ord. 4892-20 Lake water during the wet season and stored for use as source water during the dry season.

4) The City's, East Central Regional Water Reclamation Facility and Palm Beach County entered into an interlocal agreement to construct a reclaimed water facility located on the ECRWRF property and operated by the City of West Palm Beach. Currently the City and Palm Beach County have an interlocal agreement to provide reclaimed water to the Fit Team Ball Park of the Palm Beaches for the sole purpose of providing irrigation for the property which is located in the City of West Palm Beach service area.

5) The City at present doesn't use brackish groundwater as source water, however, the City is assessing the possible need for brackish groundwater in the future.

The intent of the City's Water Supply Facilities Work Plan is to meet the statutory requirements mentioned in subsection 1.2 of this plan and to coordinate the City's water supply initiatives with the 20132018 Lower East Coast Water Supply Plan (LECWSP) Update, prepared by the South Florida Water Management District.

This Water Supply Facilities Work Plan details the facilities and proposed alternative water supply (AWS) projects that are planned or completed recently and included in the LECWSP in order to assist the City in meeting the service area water demands through 2032. These projects are expected to be completed in increments consistent with the projected growth set forth in the Plan. The AWS projects are included in the City's Capital Improvement Element.

The City's watershed, Grassy Waters Preserve, provides flows to Loxahatchee River (one of the two Florida rivers designated as a National Wild and Scenic river) to meet its Minimum Flows and Minimum Water Levels through G161 structure.

3.0 DATA AND ANALYSIS

3.1 Service Area - Population Information

The City of West Palm Beach Potable Water Supply Service Area (Utility Service Area) includes the City of West Palm Beach, Town of Palm Beach and Town of South Palm Beach. The existing and future population figures for the Utility Service Area were developed based on the information obtained from the U.S. Census Bureau, Bureau of Economic and Business Research (BEBR), and data presented in the 2018 Lower East Coast Water Supply Plan Update (LECWSP). Specifically: are derived from Palm Beach County Planning, Zoning and Building Department and the University of Florida Bureau of Economic and Business Research (BEBR). Between 1990 and 2000, the Utility Service Area grew from 78,937 to 93,310, an increase of approximately eighteen (18%) percent. In 2008 the City's Utility Service Area population was estimated at 114,982. By 2015, the City's Utility Service Area population increased to 116,250; and in 2035 it is expected to increase to 144,150. This population growth is reflective of the fact that the City continues to experience redevelopment and infill projects within its limits.

• Historical population (2010 through 2018) obtained from the U.S. Census Bureau; West Palm Beach Comprehensive Plan 16-UE Ord. 4892-20

- Population data for years 2010 and 2019 obtained from BEBR website; and
- Population target data for 2040 was obtained from LECWSP.

The population projections are based on the Florida Department of Environmental Protection's "Guidelines for the Preparation of Source/Treatment/Storage Capacity Analysis Reports for Public Water Systems" using the decreasing rate of growth formulas.

The information from the LECWSP's 2040 population for the City's utility service area was used to determine the saturation value (Z) through trial and error until the predicted 2040 population was within 0.2 percent of the LECWS Plan value.

Between 2000 (82,103) and 2015 (116,897) the City experienced a population growth rate of more than forty percent in the City's service area. Between 2015 and 2019 (124,945) the population growth rate in the City's service area dropped to less than eight percent. The continued population growth, although slower, is reflective of the fact that the City's service area continues to experience infill and redevelopment within its limits.

The City does not anticipate substantial increases in land area in the near future, however population projections indicate a continued growth for the City's service area of approximately fifteen percent for the next 20 years to a projected population of 144,525 in the year 2040. The City's bulk service agreements account for a demand of up to 0.50 mgd and include the Solid Waste Authority and Bayhill Estates. The City anticipates that these agreements will remain in place during the 10-year planning horizon.

3.2 Service Area Map

The City Utility Service Area includes the City of West Palm Beach, Town of Palm Beach and Town of South Palm Beach. A copy of the City's Potable Water Supply Service Area map is provided in the Comprehensive Plan Map Series.

A trailer park on Community Drive located in Palm Beach County, but within the City's service area gets water from wells, and currently there is no plan to provide water to this area.

3.3 Population and Potable Water Supply Demand Projections

This section provides historical population projections from 2008 to 20122010 to 2019 and projected population projections through 2022 2020 and 2040 for the City Utility Service Area. Population projections for the City and its Utility Service Area are provided by the Palm Beach County Planning Division and are based on the City's Capacity Analysis Report submitted to

Department of Health Palm Beach County in January 2020. The Palm Beach County Planning Division establishes municipal projection figures by disaggregating county-level forecasts produced by the Bureau of Economic and Business Research (BEBR) analysis of the University West Palm Beach Comprehensive Plan 17-UE Ord. 4892-20 of Florida. Palm Beach County projections are prepared in 5-year increments. The City assumed a constant annual growth for each interim year based on the five-annual projections and extrapolated population projections. The total population estimates for the City, Town of Palm Beach and Town of South Palm Beach were based on the information obtained from the sources noted in Section 3.1 of the Work Plan. Use of the FDEP Guidelines to estimate future populations ensures consistency for reporting information to the public and regulatory agencies.

3.3.1 Historical Population Projections for the Service Area

Historical populations for the City Utility Service Area are as shown in attached Table 1. These figures are based on the U.S. Census data with the exception of the 2019 values which corresponds to the BEBR data.

3.3.2 Future Population Projections for the Service Area

Future population projections for the City Water Utility Service Area are as shown attached in Table 2 and are based on extracted from the City's Capacity Analysis Report submitted to the Department of Health Palm Beach County in January 2020.

3.3.3 Historical Water Use

The City's Water Treatment Plant historic water production figures are provided in attached Table 3 for years 2008 through 20122015 through 2019.

3.3.4 Future Water Demand Projections

Future water demand projections were calculated are estimated using the City's service area population projections multiplied by its projected the per capita factor of 243.3 gallons per capita per day (gpcpd) demands. The per capita factor selected was based on the highest rate over the past five years, consistent with that presented in the LECWSP and was used in the 2020 CAR update. Historically, a baseline per capita factor of 272 gpcpd was used based on the City's Consumptive Use Permit (CUP).

Attached Table 4 provides the projected finished water demand for the years 2020 through 2030.

Attached Table 5 summarizes the City's Bulk Service Agreements with local service providers and municipalities. The City has an additional interconnect agreement with Palm Beach County, which is not included as a capacity reservation as this is, by definition, on an emergency basis or subject to system capacity capability at the time of request.

The total quantity of water allocated through the bulk service agreements is combined with the City's projected annual demand and compared to the City's permitted annual allocation from Clear Lake attached in Table 6 based on a treatment process loss factor of 5 percent.

Attached Table 7 identifies Alternative Water Supply Sources (AWS) that can be utilized to meet the City's projected annual service area demand and bulk service agreement reservation. West Palm Beach Comprehensive Plan 23-UE Ord. 4892-20 Permitted maximum allocation of 15,038 MGY is based on City's permitted allocation for withdrawal from Clear Lake. For the AWS, C51 canal tidal capture (54 MGD), C17 canal tidal capture (72 MGD) and ASR (2 MGD) each source is assumed to provide water for 20 days based on availability and meeting the water use permit specified canal levels and the requirement of water being discharged to tide. The AWS is not part of the Consumptive Use Permit allocation.

3.4 Potable Water Supply System

3.4.1 SFWMD Water Use Permit

The City received a twenty-year water use permit from the South Florida Water Management District on February 14, 2013. Permit information is as follows:

WUP Number: 50-00615-W

Raw Water Source:

Ground Water from: ASR well for surface water storage/recovery and Surficial Aquifer System.

Surface Water from: Clear Lake via M-Canal and Lake Mangonia from Grassy Waters Preserve and Lake Okeechobee via L-8 Tieback through control 2 (67 MGD).

Raw Water Allocation Information:

Annual Allocation: 15,038.00 Million Gallons (MG)

Maximum Monthly Allocation: 1,392.32 Million Gallons (MG)

Annual allocation includes 15,038.00 Million Gallons (MG) from Clear Lake and 24,446 Million Gallons (MG) from SWFMD Canal (L-8) Tieback as existing surface water withdrawal and from Surficial Aquifer System 1,470 MG from West Wellfield (WWF) and 864 MG from East Wellfield (EWF). All allocations are for the Public Water Supply portion of the permit.

Specific Source Limitation:

Clear Lake Annual = 15,038.00 MG; Monthly = 1,392.32 MG Surficial Aquifer System West Wellfield (monthly)– 759.50 MG Surficial Aquifer System East Wellfield (EWF) (monthly)– 446.4 MG SFWMD Canal (I-8) Tieback (monthly)– 2,765.00 MG Permit Expiration: February 14, 2033.

3.4.2 Existing Withdrawal Facilities

Source: ASR well for surface water storage/recovery

1-24" x 1200' x 4861 GPM Well Cased to 985 feet

Source: Surficial Aquifer System-Western Wellfield

1-18" x 152.5'x 2,780 GPM Well Cased to 82.5 feet 1-18" x 153.5'x 2,780 GPM Well Cased to 83.5 feet 1-18" x 154'x 2,780 GPM Well Cased to 84 feet 1-18" x 163'x 2,780 GPM Well Cased to 93.5 feet 1-18" x 166'x 2,780 GPM Well Cased to 96 feet 1-18" x 170'x 2,780 GPM Well Cased to 100 feet 1-24" x 125' x 1000 GPM Well Cased to 119 feet 4-18" x 150'x 2,780 GPM Well Cased to 80 feet

Ground Water: Surficial Aquifer System -Eastern Wellfield

9-24"x150'x1000 GPM Wells cased to 120 feet. 1-24" x 98'x 1000 GPM Well Cased to 95 feet 1-24" x 186'x 1000 GPM Well Cased to 137 feet 1-24" x 181'x 1000 GPM Well Cased to 131 feet 1-24" x 95'x 1000 GPM Well Cased to 91 feet 1-24" x 101'x 1000 GPM Well Cased to 86 feet 1-24" x 170'x 1000 GPM Well Cased to 132 feet 1-24" x 97'x 1000 GPM Well Cased to 93 feet 1-24" x 125'x 1000 GPM Well Cased to 119 feet 1-24" x 195'x 1000 GPM Well Cased to 145 feet 1-24" x 142'x 1000 GPM Well Cased to 105 feet

Source: Clear Lake-Surface Water

4-14" x 100 HP x 8,400 GPM turbine pumps
1-16" x 100 HP x 5,250 GPM centrifugal pumps
2-18" x 125 HP x 10,500 GPM centrifugal pumps
1-30" x 150 HP x 17,500 GPM turbine pump
3-36" x 130 HP x 15000 GPM submersible pumps
4-42" x 200 HP x 33700 GPM axial flow pumps

3.4.3 Alternative Water Supplies

The City's Water Use Permit requires the City to "use alternative water supplies to account for

all increased demands from Clear Lake above the City's historic use. The City has approved alternatives, urban stormwater treatment via the Renaissance Project (637 MGY), tidal capture from C-51 canal (up to 54 MGD) via Renaissance treatment process, tidal capture from C-17 canal (up to 72 MGD) and ASR well (stored surface water-up to 8 MGD, though on average have pumped out 2 MGD). A discussion of the City's alternative water supply projects can be found in Section 3.6 of this report.

3.4.4 Interconnects

The City maintains interconnections with other public water suppliers as follows: 1. One interconnection with the Solid Waste Authority for delivery of up to 0.35 MGD of finished water.

2. One interconnection with the Palm Beach County at Bay Hill Estates for delivery of up to 0.5 0.15 MGD of finished water.

3. One emergency interconnection with Lake Worth Utilities (1.0 MGD).

4. Five emergency interconnections with Palm Beach County at SR7 at Okeechobee (3.0 MGD), M-Canal W to Coconut Blvd (0.15 MGD), Haverhill Road (1.5MGD), and Jog Road (3.0 MGD), Florida Mango Rd (1.0 MGD); and

5. Two emergency interconnections with the City of Riviera Beach with one at Military Trail (1.0 MGD) and one at Broadway Avenue (1.0 MGD).

3.5 Conservation

The City developed and adopted a Water Conservation Plan in July 2005. The Water Conservation Plan elements include an aggressive approach to the development and implementation of several alternative water supply projects, water conservation based water rate structures, leak detection programs, an irrigation limitation ordinance, native vegetation landscaping requirements, ultra-low volume plumbing fixture construction code, rain sensor override requirement ordinance, and extensive public education programs. The City will coordinate future water conservation efforts with SFWMD to ensure that proper techniques are applied. In addition, the City will continue to support and expand existing goals, objectives and policies in the comprehensive plan that promote water conservation in a cost-effective and environmentally sensitive manner. The City will continue to actively support the SFWMD in the implementation of new regulations or programs that are design to conserve water during the dry season.

The City's Water Conservation Programs strive to reduce the demand for water in a phased manner that will not only reduce water consumption but reduce utility bills and help to orient people's behavior in a way to conserve resources. The programs address Water and Resource Conservation goals within the City's Sustainability Action Plan through increasing education and awareness within the community. Conservation programs within the WPB Public Utilities service area includes:

High Efficiency Toilet Vouchers: for both residential and commercial customers, with over 3,422 distributed within the 2012 to 2019 period. In 2019 vouchers allow a purchase of up to \$125 per voucher and the program is funded for the period of 2020-2022.

Rain Barrel Workshops: average 100 free rain barrels with installation/use trainings per year as of 2019.

SFWMD WaterCHAMP: a free public education program that helps hotels and motels save water, improve energy efficiency and reduce operating costs using conservation educational placards and high efficiency faucet aerators. West Palm Beach has successfully implemented this program and over 50% of WPB hotels/motels are participating as of 2019.

Wyland's Mayors Water Challenge: the City has participated annually in this national water conservation education and awareness program. In 2013, West Palm Beach was a winner for cities of our size.

Sustainability outreach: The Office of Sustainability participates and implements multiple educational conservation programs annually, including E4 Home, E4 Life, E4 Climate, E4 Business/ Green Business Challenge, Imagine a Day without Water, DOE Better Buildings Challenge Water Pilot, Landlord ; Sustainability distributes over 500 water conservation kits per year at events throughout the year which include shower timers, high efficiency shower heads, faucet aerators, and other products.

The City plans to track monthly water use in City buildings for the U.S. Department of Energy Better Buildings Challenge.

The City's PACE (Property Assessed Clean Energy) programs include, whenever possible, water and energy savings.

The City plans to continue following implementation of the district's mandatory year-around landscape irrigation conservation measures as detailed in chapter 40E-24 FAC by informing customers through press releases and social media and, if needed, by enforcement through violation fines.

3.6 Alternative Water Supply Projects/Reuse

The City is committed to developing and implementing alternative water supply projects, including reuse, to the extent possible. The City's AWS activities include:

Renaissance Project: Constructed in 2002, the project is an innovative stormwater collection and reuse system that collects and treats stormwater normally discharged to tide. With an initial construction cost of \$17,600,000 the project was completed with financial support from the Environmental Protection Agency,

South Florida Water Management District, and Palm Beach County. The system captures, treat and stores approximately 637 million gallons per year, (MGY) or one (1.75) million gallons per day (MGD).

Aquifer Storage and Recovery (ASR) Well: Upon completion of construction, the ASR well was rated at 8 mgd. Located at the Water Treatment Plant it is designed to store excess surface water during periods of heavy rainfall. The excess water is pumped into the upper Floridan Aquifer System and is recovered when the water is withdrawn to meet increased demands during dry weather. Cycle testing continues and in 2019 the well acid cleaned, the injection pump rebuilt, and the effluent valve replaced. The City continues to invest in this alternative water source with plans to restart cycle testing in 2020.

C17 Canal Pump Structure: The constructed a new pump station was constructed to capture water prior to being sent to tide from C17 Canal, this pump structure has the potential to capture up to 72 MGD (operational conditions based on water being released to tide and canal levels).

4.0 WORK PLAN PROJECTS/CAPITAL IMPROVEMENT ELEMENT/SCHEDULE

4.1 Existing Water Treatment Plant Process

The West Palm Beach Water Treatment Plant (WTP) is owned and operated by the City of West Palm Beach (City). The WTP and associated distribution system provides potable water to the residents, visitors and business of West Palm Beach and the towns of Palm Beach and South Palm Beach. The WTP is located in Palm Beach County, Florida at 1009 Banyan Boulevard, West Palm Beach, Florida.

The City was founded in 1894 and has been the seat of Palm Beach County government since 1909. The initial urbanized portion of the City was approximately eight miles long and 3 miles wide. A coastal ridge lies several blocks to the west and runs parallel to the Intercoastal Waterway for the entire length of the City. The original City site now constitutes the central business district. The development and maintenance of the utility infrastructure system continues to provide an acceptable level of service and an essential component in the City's growth.

From the first water supply system developed in the late 1800s, the City's utility system has grown from a service population of approximately 500 people in 1900 to its current estimated service population of approximately 125,000 residents covering 61 square miles. The utility system provides water for both indoor and outdoor use for about 34,334 residential and commercial customers accounts.

The City's potable water system includes a raw water supply system, WTP, repump stations, storage tanks, the distribution system and various interconnections with neighboring utilities. The City's facilities including the source water supply, water treatment system, re-pump stations, available interconnection and the existing distribution system. Since the 2015 there have been several changes that include:

Modification of Raw Water Pump #27

- Construction of the 50.0 mgd Powered Activated Carbon (PAC) Basin;
- Filter Media Replacement;
- Abandonment of the 1 MG Clearwell/Storage Tank at the WTP;
- Construction and Operation of the 50 mgd Ultra-Violet Light (UV) Disinfection System;
- Construction of a direct suction header to the West Pump House;
- Installation of 4 new high service pumps in the West Pump House;
- Remote re-pump station switches from gaseous chlorine to sodium hypochlorite;
- Pre and post disinfectant injection at the Ibis Re-Pump Station; and
- Six Sigma project to address distribution system flushing volumes.

These projects total more than 25 million dollars (\$25,000,000) invested in the PWS since 2015 The City continues to be committed to the proper operation and maintenance of its PWS to ensure public health and safety.

The WTP is a surface water treatment facility operating on a source water supply that is collected, stored and transported by various catchment areas including urban rain cropping, wetlands, lakes and canals to meet the water supply needs.

The source water supply includes facilities owned and operated by the City along with facilities within the Regional Systems operated by the South Florida Water Management District and the United States Army Corps of Engineers.

The existing source water supply system dates to 1894 with the construction of a single steam driven pump and an 8-inch pipe to move water from Clear Lake to Henry Flager's Royal Poinciana Hotel. Over the years the source water supply has been expanded. The history of the supply includes the following milestones:

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1894 Clear Lake tapped as Water Supply.

1920's Clear Lake is connected to Lake Mangonia.

1930's M-Canal excavated to wetlands (Grassy Waters Preserve) west of the lakes.

1950's Grassy Waters Preserve (19.3 Square Miles) purchased.

1960's M-Canal Extension westward to the L-8 Canal and Lake Okeechobee.

1980's Western Wellfield constructed.

1990's Aquifer Storage and Recovery Well constructed.

2000's Renaissance Project construction and the Okeechobee Divide Structure constructed.

2010's Eastern Wellfield constructed, Australian Avenue Gates and Pumps constructed, and the C-17 Pump House constructed.

The Clear Lake WTP, originally completed in 1921, underwent an expansion in 1989 and as of 2020 is in the final steps of a major renovation including the addition of the PAC basins, the UV Treatment System and upgrades to the West Pump House's high service pumps and Raw Water Pump 27.

The WTP has a maximum permitted capacity of 47.3 mgd. The treatment process includes the following:

Hypochlorite Pretreatment - Turbidity Control (Optional);

- Powered Activated Carbon Taste and Odor Control (Optional);
- Cationic Polymer Turbidity Control;
- Ferric Sulfate Turbidity Control;
- Lime Softening, Turbidity and TOC Removal;
- Recarbonation pH Adjustment;
- Filter Aid Turbidity Control (Optional);
- Conventional/Biologically Active Filters Turbidity Control, Taste and Odor Control;
- UV Disinfection Bacteriological Control;
- Chlorine/Chloramines Bacteriological Control;
- pH Adjustment (Sodium Hydroxide) Lead and Copper Control;
- Orthophosphate (Corrosion Inhibitor) Lead and Copper Control; and
- Fluoride Dental Health.

The WTP uses conventional lime softening, filtration and chemical disinfection to comply with the federal and state safe drinking water regulations. The UV System, commissioned in February 2019, provides an additional barrier for public health purposes. The PAC Basin, expected to be fully operational in early 2020, will be used on an as needed basis to improve the taste and odor characteristic of the finished water.

The primary source of the City's water supply is surface water. Surface water travels through the City's M-Canal to the City's water supply lakes, Lake Mangonia and Clear Lake, from the City's West Palm Beach Comprehensive Plan 34-UE Ord. 4892-20 Grassy Waters Preserve, a 19.3 square mile aquatic preserve located in western West Palm Beach and from Lake Okeechobee through the L-8 Tieback through the City's control 2 structure.

Alternative sources of water that feed into this above-ground water supply system include the City's Renaissance Project, tidal water capture from C51 and C17 Canals, augmentation from surface water stored and recovered from the ASR well.

The Eastern and Western wellfield surficial wells During extreme drought conditions and the Clear Lake Divide structure are available to the City during periods of drought conditions.

4.2 Capital Improvements Element/Schedule

The City's financially feasible Capital Improvements Schedule, adopted annually, includes capital improvement projects necessary to maintain levels of service and provide for improved operational facility (See the Capital Improvements Element). The Utilities Department is currently performing/evaluating a condition assessment of the water treatment plant as well as distribution system assets and is in the process of prioritization of infrastructure projects including above ground and underground utilities. Based on the assessment and prioritization, the Utilities Department plans on borrowing money through a bond to address water treatment and distribution system needs.

2022: East High Service Building Motor Control Center. Project includes installation of Variable Frequency Drives on 2 of the 3 existing high service pumps. Project will

increase energy efficiency within the plant and provide better control over distribution system pressures.

2023: Recarbonation System Upgrades. Project includes replacement of the existing liquid carbon dioxide storage tanks and associated equipment. Project will decrease the plant's potable water demand freeing up capacity for customers and reduce liquid carbon dioxide consumption with an improved process.

2025: Kaye Street Re-Pump Station Motor Control Center: Project includes installation of Variable Frequency Drives on the booster pumps. Project will increase energy efficiency within the plant and provide better control over distribution system pressures.

2025: Lime Storage/Slaker Additions: Project includes the addition of a new lime silo and slaker. Project will increase lime storage capacity for storm events and slaker capacity for system reliability.

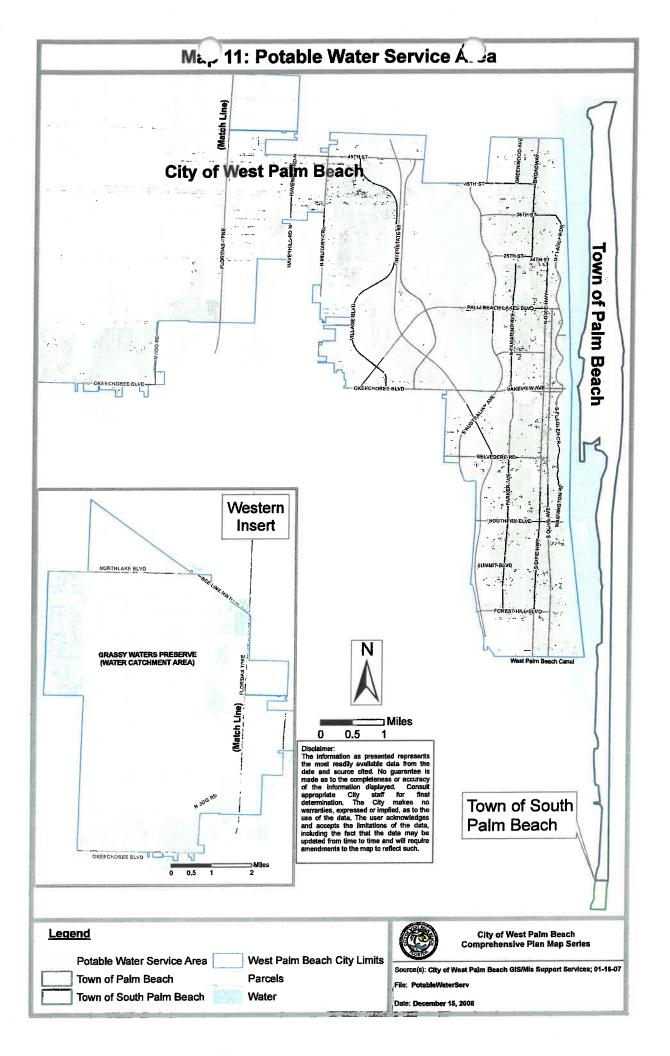
2030: Valley Forge Re-Pump Station Storage Tank Upgrade: Project includes the rehabilitation or replacement of the existing 3-million-gallon storage tank. Project will maintain the City's existing storage capacity.

2030: Valley Forge Repump Station Motor Control Center: Project includes installation of Variable Frequency Drives on the booster pumps. Project will increase energy efficiency within the plant and provide better control over distribution system pressures.

Upon reviewing the City's projected water demands, permitted allocation and alternative water supply projects, and after extensive long-term water supply evaluation and drought proofing measures the City does not anticipate the necessity of additional capacity within the 10-year planning horizon. Nevertheless, the City will continue to explore current technology and options to secure safe water supply to meet anticipated future demands.

5.0 SUMMARY

All requirements regarding preparation of a 10 Year Water Supply Facilities Work Plan have been accomplished by the City of West Palm Beach, the supplier of water to the Town of South Palm Beach. The Town of South Palm Beach endorses the effort and will continue to coordinate with the City of West Palm Beach in implementing elements of the work plan including water conservation efforts. Additional planning efforts, policy development, or other independent actions toward water supply planning by the Town of south Palm Beach are not warranted during the planning horizon.



Year	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
City of West Palm Beach Population	<u>106,893</u>	<u>108,790</u>	<u>110,345</u>	<u>111,398</u>	115,176
<u>Town of Palm</u> <u>Beach</u> Population	<u>8,585</u>	<u>8,690</u>	<u>8,746</u>	<u>8,802</u>	<u>8,321</u>
<u>Town of South</u> <u>Palm Beach</u> Population	<u>1,419</u>	<u>1.433</u>	<u>1,440</u>	<u>1,471</u>	<u>1,448</u>
<u>Total Service</u> <u>Area</u> Population	<u>116,897</u>	<u>118,913</u>	<u>120,531</u>	<u>121,671</u>	<u>124,945</u>

Table 1- Historical Population for the City of West Palm Beach Water Utility Service Area

. Table 2 – Future Population Projections for City of West Palm Beach Water Utility Service Area

Year	2020	2030	2040
Total Service Area			
Population	126,305	137,245	144,525

Year	Annual Finished	Daily Finished	Serviced Area	Per Capita Demand
	Water Produced at WPB WTP (MGY)	Water Produced at WPB WTP (MGD)	Population	(GPCPD)
2015	<u>10,331</u>	28,30	<u>116,89</u> 7	<u>242.1</u>
<u>2016</u>	<u>10,589</u>	<u>28.93</u>	<u>118,913</u>	<u>243.3</u>
<u>2017</u>	<u>10,669</u>	<u>29.23</u>	<u>120,531</u>	<u>242.5</u>
<u>2018</u>	<u>10,692</u>	<u>29.29</u>	<u>121,671</u>	<u>240.8</u>
<u>2019</u>	<u>10,586</u>	29.00	<u>124,94</u> 5	<u>232.1</u>

Table 3 – Service Area Historic Water Production and Demand

Table 4 – Utility Service Area Water Demand Projections

Year	Projected Population	Per Capital Demand (GPCPD)	Projected Annual <u>Finished Water</u> Demand (MGY)
2020	126,305	243.3	11,247
2021	127,610	243.3	11,333
2022	128.863	243.3	11,444
2023	130,066	243.3	11,551
2024	131,221	243.3	11,685
2025	132,330	243.3	11,752
2026	133,395	243.3	11,846
2027	134,417	243.3	11,937
2028	135,398	243.3	12,057
2029	136,340	243.3	12,108
2030	137,245	243.3	12,188

Utility/Agency Served		Quantity of Water (mgd)									
Solid Waste	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Authority	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Palm Beach County –											
Bay Hills	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.35
Total	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

Table 5 – Bulk Service Agreements Capacity Reservation

Table 6 Total Service Area and Bulk Service Agreement Demand Projection

	Bulk Service Agreement	Projected Service Area Finished Water Annual Demand	Water Demand	Total Raw Water Demand* with Bulk Service	Permitted Maximum Allocation of Raw Water	Surplus or (Deficit) Permitted Allocation
Year	MGY)	(MGY)	(MG)	(MGY)	(MGY)	(MGY)
2020	182.5	11,247	11,429.50	12,000	15,038	3,038
2021	182.5	11,333	11,515.50	12,091	15,038	2,947
2022	182.5	11,444	11,626.50	12,208	15,038	2,830
2023	182.5	11,551	11,733.50	12,320	15,038	2,718.00
2024	182.5	11,685	11,867.50	12,461	15,038	2,577.00
2025	182.5	11,752	11,934.50	12,531	15,038	2,507.00
2026	182.5	11,846	12,028.50	12,630	15,038	2,408.00
2027	182.5	11,937	12,119.50	12,725	15,038	2,313.00
2028	182.5	12,057	12,239.50	12,852	15,038	2,186.00
2029	182.5	12,108	12,290.50	12,905	15,038	2,133.00
2030	182.5	12,188	12,370.50	12,989	15,038	2,049.00

*Raw water demand is based on a 5% loss factor during the treatment process and is calculated by taking 5% of finished water demand and adding it to finished water demand to get the raw water demand.

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Sources							a 1
	WUP	Al	ternative Wa		Projection	Surplus	
	Clear	Renaissance	<u>C-51</u>	<u>C-17</u>	ASR Well	<u>Raw</u>	<u>WUP +</u>
	Lake	Project	Tidal	<u>Tidal</u>	<u>Recovery</u>	<u>Water</u>	<u>AWS –</u>
	Allocation	(MGY)	Capture	<u>Capture</u>	<u>(MGY)</u>	<u>Demand*</u>	Projection
Year	(MGY)		(MGY)	(MGY)		(MGY)	<u>(MGY)</u>
2020	15.038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,002</u>	<u>6,373</u>
<u>2021</u>	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,091</u>	<u>6,284</u>
<u>2022</u>	<u>15,038.00</u>	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,208</u>	<u>6,167</u>
2023	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,320</u>	<u>6,055</u>
2024	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,461</u>	<u>5,914</u>
<u>2025</u>	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,531</u>	<u>5,844</u>
<u>2026</u>	15.038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,630</u>	<u>5,745</u>
<u>2027</u>	<u>15,038.00</u>	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,725</u>	<u>5,650</u>
2028	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,852</u>	<u>5,523</u>
2029	15,038.00	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,905</u>	<u>5,470</u>
2030	<u>15,038.00</u>	<u>637</u>	<u>1,080</u>	<u>1,440</u>	<u>180</u>	<u>12,989</u>	<u>5,386</u>
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Table 7-Service Area Raw Water Demand Projections and Alternative Water Supply Sources

*Raw water demand is based on a 5% loss factor during the treatment process and is calculated by taking 5% of finished water demand and adding it to finished water demand to get the raw water demand.

Exhibit "A"

INFRASTRUCTURE ELEMENT

OBJECTIVE 3:

<u>Policy 3, 4:</u> The Town's potable water service is provided by the City of West Palm Beach (City). The City has included the Town's estimated population and water demand projections in the City of West Palm Beach 10-Year Water Supply Facility Work Plan Sub-Element. The Town adopts by reference the City of West Palm Beach 10-year Water Supply Facility Work Plan adopted <u>August 10, 2020</u>. The Town will coordinate with the City on the Town's population projections, water demands, water conservation, and alternative water supply needs.

Because Success Doesn't Just Happen



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