

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

Prepared For:

**Town of St. Lucie Village Board of Aldermen
St. Lucie Village, Florida**

Prepared By:

**Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410**

April, 1990

"Preparation of this document was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-167, Laws of Florida and administered by the Florida Department of Community Affairs."

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COMPREHENSIVE PLAN**

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
FUTURE LAND USE ELEMENT**

I. INTRODUCTION

St. Lucie Village is nestled between the banks of the Indian River Lagoon and U.S. Highway 1, immediately north of the City of Fort Pierce. The Village, approximately 2 1\2 miles long, is comprised of 490 acres. The Village is also located only slightly over 1 mile due east of the main runway of the St. Lucie County International Airport.

The area that is now St. Lucie Village has some of the oldest settlement history in Florida. Shell middens, attributed to the Ais Indians, dating back 1000 to 2000 years can be found throughout the coastal area. White men first surveyed the area in 1843 and in 1850 Fort Capron was constructed. From this period, through the early 20th century, a number of homes were constructed, many of which are still occupied. The oldest homes in the county are located in the southern portion of the Village.

In recognition of this rich history, the southern portion of the Village was approved by the Florida National Register Review Board as a Historic District. In December, 1989, the St. Lucie Village Historic District was placed on the National Register of Historic Places.

The residents of St. Lucie Village are closely tied to the Indian River Lagoon, not only for aesthetic and recreational reasons, but also because many of the Village's families can be traced 4 to 5 generations in their occupational ties to the Lagoon.

In 1961, the Village officially became more than a neighborhood by incorporating. Discussions were being conducted with the St. Lucie County Commissioners regarding changes to the zoning and land use designations in the village area to industrial in order to allow for the construction of an industrial park. This concept clashed with the area residents' view of what types of land uses created a desirable mix with what already existed. Therefore, in order to gain control of land use decisions, the village incorporated so as to exert greater control over the destiny of their surroundings.

St. Lucie Village can generally be characterized as being a low density, single family area. Commercial land uses are grouped along the U.S. 1 corridor which forms the village's western boundary. The village wishes to maintain these current uses and the present overall character.

Unfortunately, the draft Comprehensive Plan submitted by St. Lucie County specifically encourages the development of a regional jetport within one mile of the village limits. The development of the jetport at this location will severely impair the village's ability to develop as desired. If ultimate development of the jetport were to occur, approximately 60% of the land area comprising the village will have to be rezoned to non-residential uses due to the resulting noise. This topic is explored in greater detail later in this element in a section entitled, "Potential Impacts of St. Lucie County Airport Expansion on Future Land Uses".

II. EXISTING CONDITIONS

Existing Land Use

As discussed in the Introduction section of this element, St. Lucie Village is a predominately single-family residential community. Figure 1 presents all of the existing land uses in the community as of August 1987. This data was collected from a windshield survey taken of the entire village at that time. Table 1-1 presents the acreage and percentage breakdown for all land use types.

For the purposes of compiling Figure 1 and Table 1-1, the Village Marina, a privately-owned and operated marina, was classified as a commercial use. In addition, the Recreation/Open Space category includes the Town Hall Site, the only public structure within the Village, and all other village-owned property. None of these lands are currently improved for active recreation although all provide passive recreation opportunities. No other governmental agencies own land in the village.

There are no agricultural lands, educational uses (public or private), or industrial uses in the village. Further, the only conservation area presently within the village is the Indian River Lagoon which does not include any land area above the mean high-water-mark.

In the southern part of the village is an enclave of 22 residential structures along the Indian River Lagoon which are over 50 years old or greater and which architecturally reflect the early days of the village and coastal St. Lucie County. As a result, the village researched these structures and proposed them

TABLE 1-1

EXISTING LAND USES
ST. LUCIE VILLAGE
1987

<u>Category</u>	<u>Density/Intensity</u>	<u>Acres</u>	<u>Percent of Land Area</u>
Residential			
Single Family (SF)	0.25-4.0 DU's/AC	77.87	15.88
*Historic Resources (HR)	0.25-1.0 DU's/AC	25.00	5.10
Multi-Family (MF)	5.0-6.0 DU's/AC	3.81	0.78
Mobile Homes (MH)	3.0-6.0 DU's/AC	7.05	1.44
Commercial (C)	20%-70% Lot Coverage	17.75	3.62
Recreation/Open Space (ROS)	Passive Recreation and public buildings	3.59	0.73
Rights-Of-Way (ROW)	Public Streets and Railroads	49.60	10.12
Vacant (VAC)	No Development or Use	<u>305.54</u>	<u>62.33</u>
Total Land Area		490.21	100.00

** Conservation (CON) Submerged Lands of the Indian River Lagoon 335.00

* Identified Historic Resources include only single family homes at this time.

** Identified Conservation areas include only the Submerged lands of Indian River Lagoon at this time.

Source: REP/Inc.

to the Florida Department of State, Division of Historic Resources for designation as a state and national historic district. As of September 1989, the state formally recognized the area as an historic district. As of December 1989, the St. Lucie Village Historic District was placed on the National Register of Historic Places.

The historic district includes all structures of historical significance within the village. However, indian burial mounds and shell middens are also known to exist on several properties east of the FEC railroad. These sites are listed on the State Master Site File by the United States Geological Survey (USGS) section in which they are located. Given this large locational description and to prevent vandalism and looting, these sites are not mapped in this Comprehensive Plan. However, all vacant properties proposed for development will be checked carefully for the presence of archaeological sites.

Surrounding Land Uses

Surrounding Land Uses include the urban character of the City of Fort Pierce to the south, suburban and rural portions of St. Lucie County to the west and north, and the St. Lucie County Airport slightly further west. The generalized surrounding land uses of the unincorporated county are indicated on Figure 1.

Natural Resources

Indian River Lagoon

The portion of the Indian River Lagoon within St. Lucie Village has been established by the state as an aquatic preserve (see Figure 2). This designation authorizes the Department of Natural Resources to oversee the preservation, conservation, and management of the lagoon's marine resources through regulations

which restrict dredge and fill activities and construction of structures in the preserve. The designation also becomes a consideration in review by Florida Department of Environmental Regulation of development of adjacent land which could degrade water quality through improper drainage or waste treatment. Except for the dead-end canals which adjoin the lagoon, the lagoon constitutes the only surface water body in the village.

Floodplains

East of the (FEC) railroad right-of-way, the village lies within the 100-year floodplain of the Indian River (see Figure 2). This area generally conforms to Vacant Area #1 as described in the section of this element entitled, Vacant Land Availability and Suitability for Development. As explained in that section, this area's suitability for development and redevelopment is affected by the following factors.

The area consists of approximately 50 acres divided into five large parcels. The few number of parcels and their large sizes facilitate assemblage for future subdivision; however, there are some limiting environmental factors. First, the soils of the area tend to be poorly drained and some of the area is within the 100 year floodplain and subject to storm surge. Second, there are some possible wetland areas (see Figure 5). Third, the presence of historic resources is also possible as the State Bureau of Historic Resources lists archaeological sites as being present in this USGS Quadrangle Section. Fourth, the area is adjacent to the an active railroad track along its entire western boundary. Fifth, new plotted lots would have to be large enough to accommodate septic systems (at least 0.5 acres). And finally, there are no roads to service a majority of the land area.

The town has no rivers, bays, lakes, or harbors, although the marina and the residential area in the northern part of the village provide docking facilities.

Soils and Minerals

The village has two primary soils associations. The St. Lucie-Satellite-Welaka Variant association is found in the village to the west of the FEC railroad (see Figure 3). This association contains nearly level to sloping, excessively drained and some what poorly drained soils that are sandy throughout. The second primary association, Nettles-Ankona-Pepper, is found east of the FEC railroad and contains nearly level, poorly drained soils.

Sand for fill is the only known source of commercially valuable minerals in St. Lucie Village. However, no mining has ever been conducted in the village and the current zoning regulations do not permit mining uses.

Wetlands

The South Florida Water Management District (SFWMD) has classified land uses and vegetative cover throughout its area of jurisdiction. The wetland areas identified by the District within the village are shown in Figure 4. These wetland areas are classified by the SFWMD as mixed-forested, freshwater wetlands. Thus, the entire area indicated on Figure 4 may not include wetlands. Instead, point data collected by the District suggests that isolated wetlands may be present in these areas either naturally or artificially. Therefore, should development be proposed in the areas indicated on Figure 4, specific site studies will have to be conducted to determine if true wetlands exist.

Waterwells and Cones of Influence

There are no existing or planned waterwells or cones of influence within St. Lucie Village. However, the entire village is dependent upon groundwater for potable use with each individual residence having its own well(s). As a result the village has entered into an interlocal agreement with the county and SFWMD as part of the town's participation in the county-wide Wellfield Protection Program. In May, 1989 the village adopted an interim wellfield protection ordinance paralleling that of St. Lucie County.

III. POPULATION ESTIMATE AND PROJECTIONS

Several methods and data sources are available for use in estimating the population of St. Lucie Village. Included among these are University of Florida, Bureau of Economic and Business Research (BEBR) estimates and various statistical manipulations of historic population and housing trends. In determining the 1988 population of the village for use in this Comprehensive Plan, several methods and data sources have been considered and evaluated.

1988 Population Estimate

Table 1-2 presents various findings from the 1980 Census concerning population and housing within the village. This information is taken from the Census Summary Tape File 1A which represents a 100% sample of the entire village. While some of the figures involve estimates for individual households which did not provide complete responses on Census questionnaires, the information is as complete and accurate as possible in representing the prevailing conditions in 1980.

Although the 1980 Census information is over eight years old, it still remains the best, and in some cases the only source of information for certain housing and population characteristics. This is particularly true in small towns such as St. Lucie Village which traditionally have had low growth rates and a fairly homogenous mix of housing units and people. Thus, unlike other areas of Florida, including St. Lucie County as a whole, many of the housing and population characteristics found in the village in 1980 are thought to still prevail today.

1988 Permanent Population

The University of Florida, Bureau of Economic and Business Research (BEBR) provides yearly population estimates for each municipality and county within the state. The State of Florida uses these estimates as the "official" population estimates for use in various programs including the distribution of state revenue sharing funds. Yearly estimates for the period of 1981 through 1988 are provided on Table 1-3. The 1970 and 1980 estimates are from the U.S. Census Bureau.

TABLE 1-2

SELECTED POPULATION AND HOUSING CHARACTERISTICS
ST. LUCIE VILLAGE
1980

Characteristic

Total Population		593
Total Housing Units		309
Year-Round Housing Units	289	
Seasonal Housing Units	20	
Occupied Year-Round Housing Units		248
Vacant Year-Round Housing Units		41
Year-Round Units Held for Occasional Use	9	
Year-Round Housing Unit Occupancy Rate		86%
Mean Persons Per Occupied Year-Round Household		2.39

Source: 1980 Census Summary Tape File 1A.

TABLE 1-3

POPULATION ESTIMATES
ST. LUCIE VILLAGE
1970-1988

<u>Year</u>	<u>Population</u>
1970	428
1980	593
1981	594
1982	609
1983	608
1984	605
1985	586
1986	586
1987	588
1988	608

Sources: 1970 and 1980 Census; U.F., BEBR.

The BEBR estimates for the period of 1981 through 1988 show uneven yearly population gains and losses within the village. The 1988 estimate of 608 people represents a total growth of only 15 persons over the eight year period, or an annual growth rate of only 0.313%. This contrasts greatly with the growth experienced between 1970 and 1980. According to the Census estimates, the village gained 165 residents during the 1970's for an annual growth rate of 3.314%, a rate which is ten times greater than that estimated by BEBR to have occurred thus far in the 1980's.

Throughout the 1980's, village officials have been skeptical of the BEBR estimates. The uneven growth pattern and total rate of growth estimated by BEBR appear to run counter to other trends occurring within the village. These include:

- A. The construction of 28 new year-round housing units since 1980 with only one demolition;
- B. The construction of major additions to existing units since 1980;
- C. The addition of several new families with 2 or more children occupying both new residences and existing residences; and
- D. No change or a slight decrease in the vacancy rate found in 1980.

Thus, while village officials do not believe the growth rate has been as high as that experienced in the 1970's, they do believe it is higher than that estimated by BEBR.

As an alternative permanent population estimate and as an estimate to be used for the purposes of this Comprehensive Plan, the following methodology is used:

1. The net addition of 27 year-round housing units since 1980 yields a total of 316 year-round units ($289 + 27 = 316$).
2. An occupancy rate equal to that found in 1980 for year-round housing units (86%), yields a total of 272 occupied year-round housing units ($316 \times 0.86 = 272$).
3. A total persons per occupied household factor equal to that found in 1980 (2.39), yields a total of 650 permanent residents ($272 \times 2.39 = 650$).

The estimate of 650 persons is some what higher than BEBR's but it is consistent with the population and housing trends presented previously. Further, it still indicates a very low rate of growth compared to past trends within the village and certainly the rest of the state. The addition of 57 persons since 1980, as calculated above, yields an annual growth rate of only 1.15% between 1980 and 1988.

1988 Seasonal Population Estimate

As with the permanent population estimate, the seasonal population estimate for St. Lucie Village is based upon findings of the 1980 Census and empirical trends that have occurred within the village since 1980. Seasonal estimates for the village are not conducted by BEBR or other known organizations. Thus, the following findings of the 1980 Census and trends since 1980 serve as the basis for estimating the seasonal population:

- A. The 1980 Census listed 20 of the total 309 units within the village as "seasonal" and 9 of the year-round units as "held for occasional use", for a total of 29 possible seasonal units;
- B. All new units built since 1980 have been intended for year-round occupation and have been inhabited by full-time residents;
- C. According to the village officials, none of the permanent residences found in 1980 have been converted to seasonal use, in fact, some of the year-round units listed as held for occasional use may now contain full-time residents;
- D. The few seasonal residents identified by village officials include only retired couples or single individuals; and
- E. According to village officials, the peak season tends to be in the winter months although not all seasonal residents inhabit the village at the same time.

Based on the above factors, the following methodology is used for estimating the 1988 seasonal population of St. Lucie Village for the purposes of this Comprehensive Plan:

- 1. The 20 units listed as "seasonal" by the 1980 Census plus the 9 year-round units listed as "held for occasional use" yield 29 total possible seasonal units ($20 + 9 = 29$).
- 2. Assuming an occupancy rate equal to that found for year-round units in 1980 (.86), yields a maximum total of 25 occupied seasonal units at any one time ($29 \times 0.86 = 25$).

3. Assuming a persons per household factor of 2.0 yields a maximum total of 50 seasonal residents at any one time (25 x 2.0 = 50).

The addition of 50 seasonal residents to the 650 permanent residents yields a 1988 functional population of 700 persons. Thus, seasonal residents are estimated to comprise approximately 7.1% of the total functional population of the village.

Population Projections

In order to project the future population of St. Lucie Village, the future development potential of the village must be considered together with historic housing and population trends. The housing and population trends presented previously indicate a much lower rate of growth within the past eight years relative to the previous decade. While this trend is helpful in projecting future conditions, it must be cross-checked with the availability of land to support further growth and circumstances which induce or inhibit growth.

Almost all of the new units constructed within the village in the past eight years have occurred along Indian River Drive or in one of the two more recent subdivisions. Indian River Drive has been very attractive to new development because of its location along the Indian River Lagoon. This area traditionally has been the focus for the village and the primary amenity which has attracted residents. However, few lots remain for new development.

The River Gate and River Woods subdivisions located in the northeastern and east-central portions of the village have also provided the greatest opportunities for new development (see Figure 5). Platted in the 1960's and late 1970's respectively,

these two areas represent the only "modern" type subdivisions within the village. However, these too are near buildout and have few remaining vacant lots in which to support new development.

The few remaining number of platted lots will continue to lessen new residential development opportunities. As discussed later in this element, some large vacant areas do exist, but environmental and fiscal constraints severely limit their development. Further, as is also discussed later in this element, the village has designated the entire area east of the FEC railroad as Single Family Low Density Residential (SF) which permits only single family, detached units with minimum lot sizes of 0.5 acres. Therefore, the development of new subdivisions containing more than a few lots is highly unlikely.

The result of the vacant land analysis and future land use designation of most of the vacant areas within the village indicates that opportunities for new growth will continue to remain scarce. Thus, the low growth rate experienced since 1980 is likely to continue. Should the 1.15% annual rate of growth continue along with a persons per household factor of 2.39, a total of 58 new residential units would be expected by the year 2005.

Without a change in the future land use designations or large annexations, the addition of 58 units would approach the buildout potential of the village. Therefore, the growth rate experienced thus far in the 1980's appears to be consistent with the growth potential of the town. As a result, this Comprehensive Plan projects this rate on a straight-line, compounding basis through the year 2005. Table 1-4 presents the population projections for each of the next six years and five year intervals beyond that.

TABLE 1-4

POPULATION ESTIMATE AND PROJECTIONS
ST. LUCIE VILLAGE
1988-2005

<u>Year</u>	<u>Permanent</u>	<u>Seasonal</u>	<u>Functional</u>
1988	650	50	700
1989	657	50	707
1990	665	50	715
1991	673	50	723
1992	681	50	731
1993	689	50	739
1994	697	50	747
1995	705	50	755
2000	745	50	795
2005	789	50	839

Source: REP/Inc.

As discussed previously, the village has not experienced a growth in seasonal units thus far in the 1980's. Federal tax policies which no longer permit deductions for second homes compounded with rising costs for home maintenance are likely to further reduce the demand for seasonal homes. Since few areas remain within the village for new development of any type, the development of new seasonal units is unlikely. Therefore, this Comprehensive Plan assumes that seasonal population within St. Lucie Village will remain constant and consist of those units that already exist.

IV. FUTURE LAND USE ANALYSIS

Facilities and Services Availability

A review of traffic circulation facilities in St. Lucie Village indicates that, overall, capacity is generally adequate to accommodate existing and future development within the next five (5) years. However, some new streets will need to be provided as vacant parcels are developed. As discussed previously, the village has not experienced a growth in seasonal units thus far in the 1980's. Federal tax policies which no longer permit deductions for second homes compounded with rising costs for home maintenance are likely to further reduce the demand for seasonal homes. Since few areas remain within the village for new development of any type, the development of new seasonal units is unlikely. Therefore, this Comprehensive Plan assumes that seasonal population within St. Lucie Village will remain constant and consist of those units that already exist.

All residents of the village have septic tanks and receive their water from wells into the shallow aquifer, which extends from the surface to a depth of about 140 feet. Recharge is from rainwater percolating through fine sands, canal water infiltration, and irrigation water from agricultural areas of the county. The shallow aquifer is underlain by the Floridan Aquifer, which supplies irrigation water. The high mineral content of the Floridan Aquifer makes it unsuitable for potable water use without extensive treatment. Protection of the shallow aquifer can be accomplished in part by limiting development densities and maintaining a high percentage of residential uses with minimal impervious surfaces so that recharge can continue. Please consult the Infrastructure Element of this Comprehensive Plan for a further discussion of the septic, well and aquifer recharge uses in the village.

Vacant Land Availability and Suitability for Development

The village currently has over 300 acres of vacant land most of which can be divided into four (4) areas (see Figure 5). Area #1 consists of those lands in the northeast corner of the village west of the River Harbor and River Gate Estates Subdivisions. Area #2 consists of the large property located south of Torpey Road and north of the River Woods Subdivision. The southern portion of the village between the FEC railroad tracks and homesites adjacent to the river comprises Area # 3. Finally, Area #4 consists of those properties located between Old Dixie Highway and U.S. Highway 1. Each of these areas has developmental constraints, yet still afford some development opportunities as explained below.

Vacant Area #1

The vacant land in the northeast corner of the village is comprised of about eight (8) parcels and encompasses approximately fifty (50) acres. Five (5) parcels contain the majority of the area. The few number of parcels and their large sizes facilitate assemblage for future subdivision; however, there are some limiting environmental factors. First, the soils of the area tend to be poorly drained and some of the area is within the 100 year floodplain and subject to storm surge. Second, there are some possible wetland areas (see Figure 5). Third, the presence of historic resources is also possible as the State Bureau of Historic Resources lists archaeological sites as being present in this USGS Quadrangle Section. Fourth, the area is adjacent to an active railroad track along its entire western boundary. Fifth, new platted lots would have to be large enough to accommodate septic systems (at least 0.5 acres). And finally, sixth, there are no roads to service a majority of the land area.

Beyond the constraints, this area also has some development advantages not found in other vacant areas east of the FEC railroad. First, the small number of large, contiguous parcels helps to facilitate land assemblage. And second, the area has more of a slope than most other eastern areas of the village. This helps to lessen the possibilities of flooding and the effects of storm surge. Although these development constraints are present, this area has a high potential for future subdivision and development of single family homes. The key to the development of this area rests in the creation of a subdivision plan that not only accommodates some of the environmental factors, but uses them to enhance those portions of the area that can be developed.

Vacant Area #2

The second high concentration of vacant land is the large parcel located immediately south of Torpey Road and north of the River Woods Subdivision. The parcel is approximately seventy-two (72) acres in size and contains a vacant single family unit. In the past, several developments have been proposed for this area but none have been approved and most never made formal application. State agencies have informed potential developers that the presence of wetlands and archaeological resources on the site would severely limit any development activities. Thus, would-be developers have become discouraged and withdrawn their plans. Much of the area, like other areas east of the FEC railroad tracks, is generally wet, within the 100 year floodplain and subject to storm surge. The State Division of Historic Resources has indicated the presence of archaeological resources within this USGS Quadrangle Section; however, exact locations are generally not revealed in order to prevent looting and vandalism. Therefore, it is recommended a complete archaeological survey be conducted prior to the approval of any development on this site.

Factors favoring development on this site include 2,000 plus feet of shoreline on the Indian River Lagoon and the fact that the entire lot is under one ownership. Even with the environmental constraints, it is still possible for some development to occur. The key development factor will be the costs to obtain subdivision approval and place infrastructure, particularly roads and sewage disposal facilities, relative to the amount of land that can be developed and sold.

Vacant Area #3

The vacant lands located north and south of Chamberlain Boulevard between the FEC railroad tracks and the riverside homesites are actually a part of the riverside homesite properties. As shown on Figure 1, most of the riverfront properties extend several hundred feet west to the railroad tracks. Development of this area would require the assemblage of approximately fifty (50) acres of the western portions of over thirty (30) separate lots and the subsequent re-subdividing of these lands into buildable lots with attendant roads. For this to occur, a number of physical and fiscal development constraints would have to be overcome.

The first of several fiscal constraints is the lack of any roads to service the western property areas. Access is currently obtained off of Indian River Drive via private driveways, and most of these do not extend much beyond the existing homes. Second, the demand for homesites adjacent to railroad tracks is generally low. And third, many of the property owners in this area have owned their lots for some time, in some cases generations, and have little interest in subdividing their property.

Should the accumulation and subsequent re-subdivision of these properties be proposed at some point in the future, the physical constraints of the land would severely limit the development intensity. First, the soils of the area tend to be poorly drained and the entire area is within the 100 year floodplain and subject to storm surge. Second, the presence of isolated wetlands would require space for mitigation and further reduce the developable area. Third, large areas would also be needed to accommodate the on-site septic systems as centralized water and sanitary sewer services are not available anywhere in the village. And fourth,

some of these lands are part of lots containing the homes recently placed on the National Historic Register. The splitting of these properties may be particularly difficult.

The combination of fiscal and physical constraints indicates the area will not be assembled and re-subdivided in the near future, if ever. In addition, an overwhelming majority of village residents voiced their opposition to a proposed small subdivision in this area in 1988. Thus, those desiring residences in St. Lucie Village will either seek vacant lots elsewhere in the village or an existing lot and structure. However, a few individual lots in this area may be subdivided among different generations of the same family if done in accordance with appropriate ordinances.

Vacant Area #4

The area between Old Dixie Highway and U.S. Highway 1 constitutes the fourth area of high vacant land concentrations. The Future Land Use Map proposes commercial uses for the properties on U.S. Highway 1 and single and multi-family residential use along Old Dixie Highway (see Figure 6). The entire area constitutes approximately sixty (60) acres, about half of which is designated Highway Oriented Commercial on the Future Land Use Map. The remaining one-half is split almost evenly between Single Family, Low Density Residential and Medium Density Residential designations with a small area of General Community Commercial. A number of occupied commercial and residential uses are interspersed throughout this area. The location of this area on the eastern slope of the Atlantic Coastal Ridge and along U.S. Highway 1 brings with it several development constraints and opportunities.

Generally, U.S. Highway 1 runs along the crest of the Atlantic Coastal Ridge. Therefore, depending on their size and horizontal configuration, many of these properties contain a high to moderate degree of relief. The soils of the ridge tend to be well drained but the slope of the area can contribute to excessive run-off in periods of high rainfall. There are no known historic resources within this area.

Although there is little development to the north of the village, U.S. Highway 1 is a main north-south artery in the county. Therefore, some opportunities for highway oriented commercial do exist and should increase with the growth of the northern part of the county. Likewise, the easy access to Fort Pierce and natural setting of the community make it attractive for continued residential development. The magnitude of growth experienced in the south and central parts of the county is not expected; however, the lifestyle and location of the village will certainly attract some growth. As lots along the river become increasingly scarce, the topography west of Old Dixie Highway will become an attractive alternative.

Future Land Use Categories

The following nine (9) Future Land Use categories are depicted on the Future Land Use Map (Figure 6) and used for projecting future land use needs.

1. Single Family, Low Density Residential (SF) - up to 2 single family dwelling units per acres, with a minimum lot size of 0.5 acres.
2. Medium Density Residential (MF) - up to 4 dwelling units per acre, with a minimum lot size of 0.25 acres.

3. General Community Commercial (GC) - limited to commercial activities providing goods and services primarily to residents of the village. Consists of a relatively small mapped area and restricted to a maximum of 50% lot coverage by buildings.
4. Highway Oriented Commercial (HC) - provides goods and services to a large market area. Restricted to a maximum of 50% lot coverage by buildings.
5. Limited Marina Commercial (LMC) - up to a total of 12 wet and dry slips combined per acre. Accessory uses limited to boat ramps and bait sales which serve users of the marina, are also permitted. Retail boat sales, fuel sales, repair services and commercial fishing operations are strictly prohibited.
6. Recreation/Open Space (ROS) - includes active and passive public recreation areas and public buildings.
7. Conservation (CON) - provides protection for flora, fauna, and/or water quality. Structures and activities are limited to those permitted in specific area management plans adopted by the village or other governmental agencies. Conservation areas may be required to be platted as part of new subdivisions although ownership may remain private.
8. Historic Resources (HR) - indicates locally, state or federally recognized historic resources. To be used as an overlay district on any of the other six (6) land use districts to further restrict land use in accordance with local, state or federal regulations and policies regarding historic resources.

9. Rights-of-way (ROW) - includes all public streets and railroad rights-of-way.

Projected Future Land Use Needs, 2005

Table 1-5 presents the projected future land use needs of the projected population of St. Lucie Village for the year 2005. The projections are made by the future land use categories presented above. The table is intended to show the amount of developed land within each category that will be required in order to accommodate the population projected in Table 1-4 of this element.

In determining the future land use needs for the projected population, the following assumptions are used.

Single Family, Low Density Residential - As discussed throughout this plan, the existing character of the village is defined by its single family residences and this type of development is expected to continue. If the mean persons per household factor found in 1980 (2.39) were to continue, the projected population for the year 2005 would require an additional 58 units. Of these, 45 are expected to be single family. Although 0.5 acre lots are permitted, the constraints to development in vacant areas will mostly hold new development to approximately one unit for each one and a half acres. Thus, a total of 67.5 acres will be needed in addition to the existing 77.87 acres.

Medium Density Residential - Although no multiple unit developments have been built thus far in the 1980's, some small-scale attached units can be expected in addition to some small lot detached units. In all, 13 units are projected at a density of 3 units per acre. Again, this density is under that permitted for this category but the environmental constraints, particularly

TABLE 1-5

PROJECTED LAND USE NEEDS
ST. LUCIE VILLAGE
2005

Category	1987		2005		Percent Change
	Acres	Percent of Land Area	Acres	Percent of Land Area	
Land Area Residential					
Low Density	77.87	15.89	143.37	26.16	84.11
Medium Density	10.86	2.22	15.19	2.77	39.87
Commercial					
General Community	7.75	1.58	15.00	2.74	93.55
Highway Oriented	10.00	2.04	25.00	4.56	150.00
Limited Marine	4.88	0.01	4.88	0.01	0.00
Recreation/ Open Space	3.59	0.73	4.60	0.84	28.13
Conservation	-	0.00	100.00	18.25	-
Historic Resource	25.00	5.10	25.00	4.56	0.00
Rights-of -Way	49.60	10.12	55.66	10.16	12.22
Vacant	300.66	62.33	159.30	29.96	-46.27
Total Land Area	490.21	100.00	548.00	100.00	11.79
Submerged Lands Conservation	335.00		335.00		

the slope of the lands designated MF, are expected to keep the density under the maximum. Therefore, an additional 4.33 acres will be required.

Note: Development at a density greater than 2 dwelling units per gross acre shall only occur if the dwelling units are hooked up to a central sanitary sewer facility or a package treatment facility approved by the state.

All of the existing mobile homes are classified as medium density residential. Thus, the existing 7.05 acres of mobile homes are included in the total acres needed for this category.

General Community Commercial - Although the existing commercial uses within the village and the City of Fort Pierce can more than adequately satisfy the needs of the projected population of the village, some growth in community commercial uses is expected. Thus, by the year 2005, a total of 15 acres is projected.

Highway Oriented Commercial - The demand for highway oriented commercial uses will result from growth outside of the village rather than from within. Again, existing commercial uses in the area can adequately support the projected population of the village. However, as growth occurs in the northern part of St. Lucie Village, the U.S. Highway 1 corridor will become an attractive commercial location. Therefore, by the year 2005, a total of 25 acres is projected, some of which is likely to come through the annexation of outparcels along U.S. Highway 1.

Limited Marina Commercial - The existing and planned land uses preclude the development of any new marinas. The sensitive nature of the lagoon ecosystem and the Aquatic Preserve Management Plan will not permit new marina development directly on/in the lagoon. Therefore, only the existing deadend canals provide suitable area. Since these areas are already platted for

and mostly built with residential uses, marina development will not be possible. Further, the construction of new canals or marina basins is also not likely to be permitted by the village or state agencies.

Recreation/Open Space - The existing Recreation/Open Space areas owned by the village are sufficient to meet the projected demand at the level of service to be adopted by this plan (2.5 acres per 1,000 residents). However, subdivision requirements could bring up to another acre of recreation lands into public ownership in the form of small parks. Land acquisitions by other governmental agencies will most likely be for Conservation purposes although they may provide some passive recreation uses.

Conservation - The only existing Conservation areas are the submerged lands of the Indian River Lagoon. The lack of development in the large vacant areas of the village has not necessitated that land areas be so designated. However, as new subdivisions are proposed, the village will need to require that the most environmentally sensitive lands be set aside. This particularly will be needed along the lagoon shoreline and for undisturbed wetlands. Although these areas will not be mapped until they are specifically identified in the development review process, they are likely to amount to several acres. Further, land purchases by other governmental agencies will be encouraged by the village bringing the total land Conservation areas to 100.00 acres.

Historic Resources - The recently designated historic district includes almost all of the structures within the village which qualify for such a designation. Thus, new historic areas are likely to include archaeological sites rather than buildings. However, these too will not be specifically identified until the development review process for the parcels on which they are

located. Further, in order to prevent looting and vandalism, the archaeological sites are likely to be incorporated into the conservation areas. Therefore, no growth in this category is projected.

Right-of-Way - The expected new subdivisions, although small, will require that additional roads be built to service the new parcels. Thus, the land area in rights-of-way will increase. However, as discussed previously, the village also expects to annex some outparcels. As a result, the percentage of right-of-way found in 1987 (10%) is not expected to change.

In addition to presenting the future land use needs of the village, Table 1-5 also attempts to present a comparison of existing land uses with those which are projected. However, the comparison involves several caveats which limit its usefulness. Primarily, the 1987 existing land uses were classified by actual use than by a use category. For instance, mobile homes are classified as a use on Table 1-1 but do not alone comprise a future land use category. Instead, mobile homes have been included in the medium density residential category which also includes multi-family development and small lot detached units.

In addition, because lot lines were difficult to determine while conducting the existing land use survey, many of the single family lots were underestimated. In many cases, the front portion of a lot was classified as single family while the rear was classified as vacant. As described above in the projection methodology, new areas are needed for single family units based on a very low density. Thus, it may be more prudent to merely compare the number of new units to the number that already exists rather than comparing acreages.

Vacant Land Needs Analysis

Although much of the vacant land within the village possesses significant development constraints, it can accommodate the projected population. Without these constraints, the village could support as many as 3,000 people. However, the projected functional population for the year 2005 is only 839. Since vacant land areas exist throughout the village and in all future land use categories, growth within each sector is possible. As in the past, though, the village is expected to be characterized by a high percentage of low density, single family residential uses with some commercial and medium density residential uses located along the main thoroughfares.

Development over the next five (5) years is expected to be slow but constant. New structures will most likely be built on existing vacant lots with no large area land assemblages and re-subdivisions. Beyond this time period, however, some new subdivisions are expected, particularly in the northeastern portion of the village, with a continued infill of development along Old Dixie Highway and U.S. Highway 1.

The 1988, functional population (permanent and seasonal residents) of St. Lucie Village was estimated to be 700 persons. The projected 2005 population is 839 or approximately 20% greater than the existing population. As discussed previously, development of many of the vacant lands within the village is severely constrained. Many of these constraints are physical and relate to the environment while others are fiscal and relate to the costs that would be incurred by development. While rising property values and a shortage of prime, single family lots could release the fiscal constraints, the physical constraints are more difficult to overcome.

In particular, the eastern portion of the village has poorly drained soils, is located within the 100 year floodplain, is

subject to storm surge, and most of it contains wetlands. All of these physical conditions make development of any type difficult and, at a minimum, severely limit the development intensity. Therefore, it is highly unlikely that the maximum potential build-out of vacant land to support a population of 3,000 people will ever be achieved. Instead, the town will continue to develop at a low intensity, even lower than that permitted by the Comprehensive Plan and the zoning code. In fact, given all of the environmental obstacles to development and the projected rate of growth, the village should be near build-out at the projected 2005 population.

In addition to the vacant areas already in the village, the large unincorporated tract along the lagoon plus several small parcels along U.S. Highway 1 are expected to be annexed (see Figure 7). For the most part, these parcels possess the same constraints as those around them. The large tract, in particular, has severe development constraints including large wetlands, possible archaeological sites and the lagoon shoreline. Thus, while these parcels will add significantly to the physical size of the village, the relative addition to potential development is low.

Redevelopment Needs Analysis

A windshield survey conducted by REP/Inc. in 1987 of structural conditions in the town showed little evidence of blighting, although some of the residential structures between Old Dixie Highway and U.S. Highway 1 showed signs of deterioration. Overall, however, seventy-six percent (76%) of the housing stock was found to be in standard condition and only two percent (2%) was in need of major repair. Those structures in need of repair are scattered throughout the community with no particular areas in the village showing evidence of a high or even moderate concentration of blighting.

Non-Conforming Land Uses

Although blighting is not a problem in the village, there is a need to focus on the redevelopment/development of the area between U.S. Highway 1 and Old Dixie Highway. This area has a number of different land uses within it including commercial, multi-family residential, mobile homes and single family homes. Zoning and land use classifications have been inconsistent and often temporary thus leading to an uncoordinated pattern of development. Therefore, to improve the area and insure quality development, the village must adopt and implement a long-term land use plan.

The village is fortunate in that when it incorporated and established its own land uses and zoning, very few nonconformities were created. The primary reason for incorporation was to avoid industrial development that was being proposed, and to a degree, supported by the county. Thus, the eastern areas of the village in particular were aggressively protected through the institution of single family land use and zoning designations. The areas between Old Dixie Highway and U.S. Highway 1, however, have not attracted the same kind of interest, and thus, have developed with mixed results.

Recently, primarily through zoning decisions, the community leaders reached a consensus on the future development of the Old Dixie/U.S. Highway 1 area. First, all properties fronting U.S. Highway 1 are to be commercial. And second, all areas on Old Dixie Highway are to be residential with no commercial access to Old Dixie Highway permitted. The prohibition of commercial access onto Old Dixie Highway has been a consistent strategy; however, the complete commercialization of U.S. Highway 1 is somewhat of a departure from land use plans of the past. Thus, a few residential nonconformities exist on U.S. Highway 1.

In addition to the residential non-conformities, the village also contains a non-conforming commercial flea-market. The flea-market is located on the north-western corner of the village on U.S. Highway 1. However, the use is no longer consistent with the town's codes and long range plans for this area. Thus, future expansions are prohibited and non-conforming use regulations will continue to apply.

As a main county arterial, U.S. Highway 1 is expected to face increased traffic volumes as the northern part of the county develops. These traffic volumes are beneficial to commercial uses but are inappropriate for most residential uses. Decisions then have to be made as to the most appropriate types of commercial land uses. The village currently has two commercial districts in the zoning code and on the existing Future Land Use Map. These are Highway Oriented Commercial and General Community Commercial.

The zoning code defines the purpose of the General Community Commercial District as, "...to provide and protect an environment suitable for limited retail trade and service activities covering a relatively small area and that is intended to serve the population living in surrounding neighborhoods." While it is not the intent of the Future Land Use Element to duplicate the zoning code, it is important that the element provide clarity on the location and intensity of development. Therefore, the Future Land Use Map of this Comprehensive Plan will continue to distinguish between the two commercial districts.

In order to further the objectives and policies in this element and implement the land uses shown on the Future Land Use Map for the Old Dixie/U.S. Highway 1 area, the village will need to amend and adopt land development regulations. In particular, zoning code regulations should be adopted to provide buffering of the residential uses located on Old Dixie Highway from the commercial uses behind them on U.S. Highway 1. Such regulations could

include increased rear setbacks, fixed hours of operation, and requirements for walls, fences, and landscape buffers. Efforts should then be made to encourage the relocation of nonconforming uses.

Finally, the village should continue to attempt to annex outparcels adjacent to the town, or at least should be interested in their proposed development. The use of these outparcels could have a significant effect on the town's appearance, quality of life, and property values.

Compatibility with Land Use of Surrounding Areas

Land uses within St. Lucie Village, as designated in this element, are compatible with all existing land use in surrounding areas of unincorporated St. Lucie County. However, there is a serious conflict between St. Lucie County's future plans for ultimate development of St. Lucie County International Airport to regional jetport status and land use within St. Lucie Village. If this ultimate jetport development is pursued by St. Lucie County, approximately 60 percent of all land within St. Lucie Village would have to be rezoned from primarily residential to non-residential uses. The village shall continue on-going efforts to establish meaningful coordination with St. Lucie County to assure that development of St. Lucie County International Airport remains compatible with land use within St. Lucie Village. The Intergovernmental Coordination Element of this plan provides a discussion on the coordinating mechanisms and issues concerning this conflict.

Potential Impacts of St. Lucie County International Airport Expansion on Future Land Use

The expansion of the St. Lucie County International Airport (SLCIA) stands to severely disrupt the ability of St. Lucie Village to develop in the manner in which the Village's residents desire. Ultimate development of the jetport would require the rezoning of approximately 60% of the Villages' entire land area to non-residential uses. Despite repeatedly going on record as being in opposition to the development of the jetport at its present site, the village has received little attention from St. Lucie County. Specifically, the county's Ports and Aviation Element completely ignores the conflict that it is creating with the residents of St. Lucie Village.

The Port and Aviation Element, as presently drafted, clearly indicates a commitment to developing a regional jetport at the present site of the St. Lucie County International Airport. As previously stated, this creates a serious conflict with the existing and future village land use. The village's Future Land Use Map indicates primarily single family residential land use throughout the village. The county's draft Ports and Aviation Element incorporates the FAR Part 150 Noise Compatibility Plan studies prepared for SLCIA by reference.

The Port and Airport Authority also passed Resolution 88-03, which adopted all recommendations of the FAR Part 150 studies. Impacts on future land use within St. Lucie Village are clearly identified by two zones delineated in the FAR Part 150 studies, Accident Potential Zone 1 (APZ1) and the 65 Ldn noise contour.

The APZ1, as defined by the FAR Part 150 program, encompasses approximately 55% of the land and 45% of the residences within the Village, or approximately 230 acres and 115 residences. The potential exists for construction of additional homes within the Village APZ1 area by ultimate expansion time frame. Residential

land use is totally incompatible with APZ1, according to Appendix A of the FAR Part 150, Part II Noise Compatibility Plan.

The ultimate 65Ldn contour encompasses approximately 60% of the land and 44% of residences within the Village, or approximately 247 acres and 126 residences. The potential exists for construction of additional homes within the Village 65 Ldn contour area according to Table 6 of the Final Environmental Assessment for SLCIA.

Finally, the Village is concerned about the regional environmental impacts of jetport development at the present airport site, particularly on the Indian River Lagoon Aquatic Preserve, Jack Island State Park, Pepper Beach Park, Fort Pierce Inlet State Recreation Area, and other residential communities. The potential for fuel contaminants in airport run-off and particulate/aerosol fallout from jet exhaust presents a serious threat to water quality, biota and habitat in the Indian River Lagoon Aquatic Preserve.

Future Land Use Implementation

Figure 6 represents the future land uses for the village. While the map presents a solid concept on how development is to take place in the village, some nuances can not be captured at this time. Specifically, these include future Recreation/Open Space and Conservation areas.

As discussed previously, some subdivision of land is expected prior to the year 2005. During the review of these subdivision plans, land development codes requiring Recreation/Open Space dedications will be applied. In addition, environmental protection and preservation regulations will also be administered. These will likely result in the creation of natural reserve areas which will be dedicated as Conservation. However, since all of the vacant areas are presently under private

ownership and the village does not have the financial resources to purchase their development rights, these new Recreation/Open Space and Conservation areas can not be specifically identified at this time.

Should no new subdivisions occur, then the village will have accomplished many of its environmental protection/preservation goals as the density of new development would be extremely low. Lots in the existing vacant areas identified previously in this element are generally over five (5) acres each and it is doubtful that more than one or two units would be built on these parcels without first subdividing them. Thus, without subdivision, the density of new development would be very low and most of the natural resources would be preserved.

As part of the implementing ordinances for this plan, all subdivisions of land will require review and approval from the village Board of Aldermen. Requirements are to be developed not only for a minimum lot size, but to insure public access is available to each lot and that adequate rights-of-way and buffers are incorporated. Requirements will also be promulgated which insure that each newly created lot can be developed under requirements for the protection or preservation of ecological systems such as wetlands.

The result of these regulations for most of the vacant areas will be the creation of very large lots (1-4 acres) or "left-over" areas which will be designated as Conservation. Requirements for large setbacks off of the lagoon and the preservation or relocation of wetlands will make it difficult to achieve the maximum permitted density, even at two units per acre. Thus, either through the creation of large lots or Conservation areas, the existing ecological systems will be preserved.

The goals, objectives and policies section of this element provides greater detail on some of the implementing regulations

to be adopted for this plan. In addition, the Coastal Management and Conservation Elements further describe the natural resources in the village and more specific requirements for their protection.

V. GOALS, OBJECTIVES AND POLICIES

GOAL 1.1.: CONTINUE TO ENSURE A HIGH QUALITY LIVING ENVIRONMENT THROUGH LAND USES THAT WILL MAXIMIZE THE NATURAL AND MAN MADE RESOURCES OF ST. LUCIE VILLAGE WHILE MINIMIZING ANY THREAT TO THE HEALTH, SAFETY, AND WELFARE OF THE TOWN'S CITIZENS THAT IS CAUSED BY INCOMPATIBLE LAND USES AND ENVIRONMENTAL DEGRADATION.

Objective 1.1.1.: Future growth and development will be managed through the preparation, adoption, implementation, and enforcement of revised land development regulations to be adopted in accordance with section 163.3202, F.S.

Policy 1.1.1.1.: The village shall adopt or amend existing land development regulations to ensure that they contain specific and detailed provisions intended to implement the adopted Comprehensive Plan, and which as a minimum:

- a. Regulate the subdivision of land;
- b. Regulate the use of land and water consistent with this element and ensure the compatibility of adjacent land uses and provide for open space;
- c. Protect the conservation areas designated on the Future Land Use Map and described in the Conservation and Coastal Management Elements of this Comprehensive Plan;
- d. Regulate development which has a potential to contaminate water, soil, or air;

- e. Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management consistent with the Infrastructure Element;
- f. Protect potable water wellfields;
- g. Regulate signage;
- h. Ensure safe and convenient on-site traffic flow and vehicle parking needs;
- i. Require landscape buffers using predominately native species and other appearance measures to maintain a high visual quality; and
- j. Provide that development orders and permits shall not be issued which result in a reduction of the levels of service for the affected public facilities below the level of service standards adopted in this Comprehensive Plan.

Policy 1.1.1.2.: Land development regulations adopted to implement this plan shall allow new residential development to be permitted only at densities equal to or less than the following future land use categories:

- a. Single Family, Low Density Residential - up to a maximum of 2.0 detached single family dwelling units per gross acre with a minimum lot size of 0.5 acres; and
- b. Medium Density Residential - up to a maximum of 4 dwelling units per gross acre with a minimum lot size of 0.25 acres.

Note: Development at a density greater than 2 dwelling units per gross acre shall only occur if the dwelling units are hooked up to a central sanitary sewer facility, or a package treatment facility approved by the state.

Policy 1.1.1.3.: Land development regulations adopted to implement this plan shall allow non-residential development to be permitted only at intensities equal to or less than the following future land use categories:

- a. General Community Commercial - commercial activities providing goods and services primarily to residents of the village with structural coverage limited to a maximum of 50% of the gross lot area;
- b. Highway Oriented Commercial - commercial activities providing goods and services to a market area larger than the village with structural coverage limited to a maximum of 50% of the gross lot area;
- c. Recreation/Open Space - active or passive recreation uses, lands under public ownership and public buildings;
- d. Conservation - structures and activities which are limited to those permitted in specific area management plans adopted by the village or other governmental agencies for the protection of flora, fauna and/or water quality.
- e. Historic Resources - locally, state or federally designated historic resources, the density and intensity of which is to be controlled by one or the other future land use categories but whose designation as an historic resource requires additional use and structural restrictions in accordance with local, state or federal regulations and policies regarding historic resources.

Objective 1.1.2.: Development orders and permits for development or redevelopment activities shall be issued only if the protection of natural and historic resources is ensured and consistent with the goals, objectives, and policies of the Conservation and Coastal Management Elements of this Comprehensive Plan.

Policy 1.1.2.1.: All development activities within areas designated on the Future Land Use Map as Conservation shall be consistent with the allowable activities for such areas as described in this Element.

Policy 1.1.2.2.: All development activities which endanger the continued existence of an endangered or threatened species or species of special concern on the site or in the area shall be prohibited. To implement this policy, the village shall prepare land development regulations consistent with Section 163.3202, Florida Statutes and Policy 1.1.1.1. of this comprehensive plan which address at a minimum the following:

- a. Inventory the flora and fauna of the site and identify any endangered or threatened species or species of special concern and the presence of their habitats;
- b. Inventory all on-site wetlands;
- c. Inventory any other significant on-site resources;
- d. Describe the impact of the proposed development on the inventoried resources and any mitigating measures to be taken.

Policy 1.1.2.3.: The city shall protect potable water wellfields through participation in and implementation of the St. Lucie County Wellfield Protection Program.

Policy 1.1.2.4.: Proposals for development within the 100-year floodplain as identified by the Federal Emergency Management Agency shall conform with local regulations adopted in accordance with Federal Flood Insurance Regulations, and which are consistent with the Conservation, Coastal Management, Infrastructure elements, and Policy 1.1.2.2. and Policy 1.1.3.1. of the Future Land Use Element of this comprehensive plan.

Policy 1.1.2.5.: The developer/owner of any site shall be responsible for the management of run-off consistent with the goals, objectives, and policies of the Infrastructure Element of this Comprehensive Plan.

Policy 1.1.2.6.: Extraction of natural resources shall be permitted only where compatible with existing and proposed land uses and in a manner consistent with the goals, objectives, and policies of the Conservation Element of this Comprehensive Plan.

Policy 1.1.2.7.: By August 1, 1990, the village shall:

- a. Adopt criteria for the identification of historic resources;
- b. Adopt regulations for the protection and preservation of historic sites and structures;
- c. Determine if any structures or sites meet the criteria for historic resources and so designate and map those that do;
- d. Submit a list of designated historic resources to the Florida Department of State, Division of Historic Resources for inclusion on state and national lists; and

- e. Continually update the list of historic resources as appropriate.

Objective 1.1.3.: Development orders and permits for development and redevelopment activities shall be issued only in those areas where suitable topography and soil conditions exist to support such development.

Policy 1.1.3.1.: The village shall prepare and adopt land development regulations consistent with Section 163.3202, Florida Statutes and this comprehensive plan which ensure that proposed development occur only in those areas that have the soil structure capable of supporting the proposed development and attendant on-site facilities.

Policy 1.1.3.2.: All proposed development shall be located in a manner such that the natural topographic features of a site are not altered so as to negatively affect the drainage of neighboring properties or visual aesthetics of the area.

Objective 1.1.4.: Development orders and permits for development and redevelopment activities shall be issued only in areas where public facilities necessary to meet level of service standards (which are adopted as part of the Capital Improvements Element of this Comprehensive Plan) are available concurrent with the impacts of development.

Policy 1.1.4.1.: All development shall be timed and staged in conjunction with the provision of facilities for which levels of service have been adopted by this plan.

Policy 1.1.4.2.: Public and on-site facilities and utilities shall be located to:

- a. Maximize the efficiency of services provided;

- b. Minimize their costs;
- c. Minimize their impacts on the natural environment; and
- d. Maximize consistency with the goals, objectives, and policies of this Comprehensive Plan.

Policy 1.1.4.3.: All development in areas not provided central sewer services shall be governed by the provisions of S.381.272, F.S., regulating on-site sewage disposal systems; and, Chapter 10D-6, FAC, which regulates the installation of individual sewage disposal facilities and St. Lucie County Health Department regulations regarding the same.

Objective 1.1.5.: Future growth, development and redevelopment shall be directed to appropriate areas as depicted on the Future Land Use Map, consistent with: the availability of suitable land for utility facilities necessary to support the proposed development; sound planning principles; minimal natural limitations; the goals, objectives, and policies contained within this Comprehensive Plan; the desired community character; and in a manner which limits urban sprawl.

Policy 1.1.5.1.: Residential neighborhoods shall be designed to include an efficient system of internal circulation, including the provision of collector streets to feed traffic onto arterial roads and highways.

Policy 1.1.5.2.: Subdivisions shall be designed so that all individual lots have access to the internal street system, and lots along the periphery are buffered from major roads and incompatible land uses.

Policy 1.1.5.3.: Development orders, and permits for future development and redevelopment activities shall be issued only in areas possessing the appropriate Future Land Use designation and

that are consistent with the goals, objectives, and policies of this Comprehensive Plan.

Policy 1.1.5.4.: All proposed commercial development requiring a change on the Future Land Use Map in order to be approved shall submit a market study indicating the economic feasibility of the development and the locational advantage over existing commercial lands.

Policy 1.1.5.5.: The city shall designate future annexation areas on the Future Land Use Map and coordinate with the affected land owners, governments and agencies for the future annexation and land uses of these areas.

Policy 1.1.5.6.: In accordance with section 163.3202, F.S., land development regulation shall be adopted which require new development to reserve suitable land for utility facilities necessary to support the proposed development.

Policy 1.1.5.7.: Ingress and egress between Old Dixie Highway and parcels with frontage on U.S. Highway 1 shall be prohibited.

Objective 1.1.6.: Existing land uses which are incompatible or inconsistent with the Future Land Use Element shall be eliminated by the year 2000.

Policy 1.1.6.1.: Expansion or replacement of land uses which are incompatible with the Future Land Use Plan shall be prohibited.

Policy 1.1.6.2.: Regulations for buffering incompatible land uses shall be set forth in the land development regulations adopted in accordance with section 163.3202, F.S.

Objective 1.1.7.: The village shall maintain coordination with affected and appropriate governments, agencies and resource management plans to gain their input into the development process

and mitigate potential impacts of future development and redevelopment activities and to coordinate with regional and county hurricane evacuation plans.

Policy 1.1.7.1.: The village shall locate residential areas and establish densities in coastal areas in a manner consistent with the St. Lucie County Peacetime Emergency Management Plan.

Policy 1.1.7.2.: Requests for development orders or permits shall be coordinated, as required, with St. Lucie County, Treasure Coast Regional Planning Council, South Florida Water Management District and state and federal agencies.

Policy 1.1.7.3.: The village shall coordinate development approvals in a manner that furthers the goals, objectives, and policies of the Indian River Lagoon Aquatic Preserve Management Plan.

Objective 1.1.8: The village shall strive to resolve all issues surrounding the expansion of the St. Lucie County International Airport as expediently as possible.

Policy 1.1.8.1.: The village shall continue efforts to establish coordination with St. Lucie County to assure that development of St. Lucie County International Airport remains compatible with land use within St. Lucie Village.

Policy 1.1.8.2.: The village shall continue to provide written comment to all applicable parties, including the County and the FAA, on all issues surrounding the expansion of the current site of the St. Lucie County International Airport.

Policy 1.1.8.3.: The village shall continuously review all drafts of the County's comprehensive plan for consistency with their own plan, especially concerning the airport expansion issue.

APPENDIX 1A

SECTIONS OF 9J-5, FAC, NOT APPLICABLE TO ST. LUCIE VILLAGE

APPENDIX 1A

SECTIONS OF 9J-5, FAC, NOT APPLICABLE TO ST. LUCIE VILLAGE

9J-5.006(3)(b)2. An analysis of existing conditions in St. Lucie Village did not reveal the presence of any blighted areas. Therefore, the requirement to include an objective for the redevelopment and renewal of blighted areas is not applicable to the village.

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

TRAFFIC CIRCULATION ELEMENT

Prepared For:

The Town of St. Lucie Village, Florida

Prepared By:

Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

April, 1990

"Preparation of this document was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-167, Laws of Florida Department of Community Affairs."

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ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
TRAFFIC CIRCULATION ELEMENT

This traffic circulation element is prepared in accordance with Section 9J-5.007, Florida Administrative Code (FAC). This document contains an inventory and analysis of existing and future traffic circulation conditions within the village. The last section of this element then provides goals, objectives, and policies to ensure the desired future conditions are obtained.

I. INVENTORY

St. Lucie Village is located along U.S. Highway 1 in northern St. Lucie County. The town is bisected by Old Dixie Highway (SR 605) and the Florida East Coast (FEC) Railroad. The main line of the FEC extends north and south through the village. Its right-of-way lies immediately east of SR 605. At grade crossings of the FEC are located at Rouse Road, Torpey Road, Milton Road, Chamberlain Boulevard, and St. Lucie Lane. These grade crossings are protected by gates and flashing lights.

The following definitions, taken from Florida Department of Transportation (FDOT), describe the functional classification of streets and highways used throughout this element.

Principal Arterial roads are roadways providing service which is relatively continuous and of relatively high traffic volume, long trip length, and high operation speed. Every federal-numbered highway is a principal arterial.

Minor Arterial streets are those that interconnect with and augment the principal street system. Minor arterials place emphasis on land access and distribute travel to geographic areas smaller than those identified with a higher designated system.

Urban Collectors are roadways providing service which is of relatively moderate traffic volume, moderate trip length, and moderate speed. Collector roads collect and distribute traffic between local roads and major and minor arterials.

Local streets are those which provide service of relatively low traffic volume, short average trip length, or minimal through traffic movements, and high volume land access for abutting property.

Figure 8 illustrates the functional classification of streets in the village. U.S. Highway 1 is classified as principal arterial and Old Dixie Highway (SR 605) is classified as an urban collector facility on the county transportation network. The remainder of the streets in the village serve as local streets providing neighborhood access.

Table 2-1 provides an inventory of existing streets and their condition. The village currently has 2,850 linear feet of unpaved roadways. This represents 9.7 percent of the total 29,370 linear feet of roadway in the village.

TABLE 2-1

ROADWAY CONDITIONS
ST. LUCIE VILLAGE

<u>STREET</u>	<u>LENGTH IN FEET</u>	<u>CONDITION</u>
Old Dixie Highway (S.R. 605)	9,100 - paved	Good
U.S. Highway 1	Adjacent to town	Good
Rouse Road	300 - unpaved (adjacent)	Fair/No access to U.S. 1
Palmetto Road	300	Poor
Peninsula Drive	720	Fair
River Prado	720	Narrow
Waters Drive	720	Adequate
Hagan Drive	1,260	Fair/Narrow r-o-w
Torpey Road	2,015 - 970 unpaved	Fair/Poor
Milton Road	1,635	Adequate/Fair
River Woods Drive	930	Good
Anchor Way	1,200	Good
Outrigger Drive	450	Good
Spinnaker Court	280	Good
Euclid Street	570	Adequate
Chamberlain Blvd.	1,940	Good
N. Indian River Dr.	4,900	Narrow/Fair

TABLE 2-1 (CONTINUED)

Yacht Lane	920	Adequate
St. Lucie Lane	960	Narrow/Fair
Campbell Lane	750	Narrow/Fair

Good - paved with no surface deterioration

Adequate - paved or unpaved with minimal surface deterioration

Fair - paved or unpaved with some surface deterioration

Poor - paved or unpaved with considerable surface deterioration

Design Capacities

2 lane facility	17,400 vehicles per day
4 lane divided facility	36,700 vehicles per day

Source: Resource Engineering and Planning, Inc.; Comprehensive Plan, St. Lucie Village, 1979.

II. EXISTING TRAFFIC CIRCULATION ANALYSIS

Old Dixie Highway (SR 605) is a paved, two-lane facility in good condition for most of its length through the village. Chamberlain Boulevard, which extends east-west from U.S. Highway 1 to Indian River Drive, is a two-lane divided facility in good condition. U.S. Highway 1, which borders the village along its western boundary, is a four-lane facility also in good condition.

Several local streets in the south end of the village are narrow, almost one lane facilities; these include North Indian River Drive, St. Lucie Lane, Yacht Lane, and Campbell Lane. Euclid Street, Milton Road, Hagan Drive, and Waters Drive are adequate only in terms of width. In addition, Peninsula Drive near the north end of the village is only in fair condition, with no turnaround at the end. Palmetto Drive, also in the north end, is in poor condition, and River Prado has a very narrow pavement width.

One new neighborhood street has recently been added to the inventory in St. Lucie Village. This street, Lightlewood Lane, extends south from St. Lucie Lane and ends in a turnaround between the city limits and the residential lots south of St. Lucie Lane. Like the other streets in the south end of the village, Lightlewood Lane is very narrow, about 18 feet wide with a right-of-way of 50 feet in width.

The newer neighborhood facilities in the River Wood subdivision are in good condition and are of standard width for their function. Old Dixie Highway (State Road 605) exhibits good paving for most of its 9,100 feet through the village. U.S. Highway 1, which is adjacent to the village along its western boundary, has a 200-foot right-of-way and is in good condition.

Traffic count information for U.S. Highway 1 and SR 605 was obtained from St. Lucie County for 1988. The most recent counts indicate peak season 24 hour average daily traffic (ADT) on U.S. Highway 1 adjacent to the Village north of St. Lucie Boulevard is 19,888 vehicles and on SR 605 through St. Lucie Village, ADT is 1,765. These volumes indicate that U.S. 1 in the vicinity of St. Lucie Village is operating at level of service (LOS) A or better. SR 605 through the Village is operating at LOS A. The design capacities of U.S. Highway 1 and SR 605 are 36,700 and 17,400 vehicles, respectively. These capacities and levels of service are defined by FDOT and the Transportation Planning Systems Capacities (UTPS) based on a 9 percent peak hour factor.

III. FUTURE TRAFFIC CIRCULATION ANALYSIS

For both U.S. Highway I and Old Dixie Highway, the county has adopted LOS C for average daily traffic. Thus, the portion of these roads within and adjacent to the village are operating well within the adopted standard. Further, the additional small number of residents projected for the village and the high percentage of low density future land use will have very little impact on the future traffic volumes of these roads.

Although the projected growth within the village is very small, the rate for St. Lucie County is much higher. Thus, by the year 2015, the county projects a need for a 6-lane divided cross-section for that portion of U.S. Highway I adjacent to the village. As the need for this improvement is rather distant, no funding sources or time schedule have been identified. However, in order to remain consistent with the county's plan, the village reflects this improvement on its Future Traffic Circulation Map (Figure 9).

No other improvements are programmed for the village area by either the county or state.

The low growth rate and intensity and density of development projected for the village should also not have an impact on local streets. As funding sources permit, the village will consider improvements to these streets listed as poor and fair on Table 2-1. However, extensive improvements are not anticipated.

Some additional local streets may be required as part of future subdividing, but these can not be specifically identified until such subdivisions are proposed. Thus, the only planning the village can provide at this time is to establish minimum criteria for new public rights-of-way and road surfacing. These standards will be implemented when future subdivisions are reviewed.

IV. GOALS, OBJECTIVES AND POLICIES

GOAL 2.1.: A SAFE, CONVENIENT AND EFFICIENT MOTORIZED AND NON-MOTORIZED TRANSPORTATION SYSTEM SHALL BE AVAILABLE FOR ALL RESIDENTS AND VISITORS TO ST. LUCIE VILLAGE.

Objective 2.1.1.: Roadway facilities shall be provided at or above the level of service standards adopted by this element.

Policy 2.1.1.1.: The city hereby adopts the following LOS standards for each listed facility type:

- a) Principal Arterial roadways - LOS standard C (LOS D - peak hour)
- b) Urban Collector roadways - LOS standard C (LOS D - peak hour)
- c) Local roadways - LOS standard C (LOS C - peak hour)

Policy 2.1.1.2.: Proposed roadway projects 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 village'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, provides service to developed areas lacking full service, or promotes in-fill development; and
- c) Whether the project represents a logical extension of facilities and services within a designated urban service area.

Policy 2.1.1.3.: The village shall defer any new roadway projects to projects needed to address identified deficiencies, particularly when high accident frequency is evident.

Objective 2.1.2.: Right-of-way needs shall be formally identified and a priority schedule for acquisition or reservation shall be established.

Policy 2.1.2.1.: In accordance with section 163.3202, F.S., land development regulations shall be adopted which, as coordinated with the St. Lucie County Thoroughfare Network Right-of-Way Plan, require the following rights-of-ways:

- a) Arterial roadways - 160' right-of-way;
- b) Collector roadways - 80' right-of-way;
- c) Local roads - 60' right-of-way (swale drainage); and 50' right-of-way (curb and gutter).

Policy 2.1.2.2.: The village shall require mandatory dedications or fees in lieu of as a condition of plat approval for acquiring necessary rights-of-way.

Policy 2.1.2.3.: The village shall review all proposed development for consistency with this Comprehensive Plan and impacts upon the adopted LOS standards.

Policy 2.1.2.4.: The village shall ensure that adequate roadway capacity is available concurrent with the impacts of new development.

Policy 2.1.2.5.: The village shall review St. Lucie County, MPO and FDOT plans when determining right-of-way needs in the village.

Objective 2.1.3.: The provision of motorized and non-motorized vehicle parking, and the provision of bicycle and pedestrian ways will be regulated.

Policy 2.1.3.1.: In accordance with section 163.3202, F.S., the land development regulations shall be adopted to ensure adequate and safe off-street parking and circulation is provided by all new development within the village.

Policy 2.1.3.2.: The village shall review all proposed development for its provision of bicycle facilities and/or sidewalks along all collector and arterial roadways both within and adjacent to the proposed development project.

Policy 2.1.3.3.: In cooperation with FDOT and in accordance with section 163.3202, F.S., the village shall review and revise local land development regulations to provide for the safe and efficient location and design curb cuts and driveways. Curb cut driveway spacing requirements shall apply to all new development and redevelopment activities.

Objective 2.1.4.: The village's transportation system will emphasize safety and aesthetics.

Policy 2.1.4.1.: The village shall eliminate or minimize roadway designs which lead to hazardous conditions by:

- a) Requiring the provision of adequate storage and weaving areas;
- b) Prohibiting direct access from driveways and local roads onto high-speed traffic lanes;
- c) Preventing conflicts between roadway and pedestrian or rail traffic; and
- d) Providing adequate capacity for emergency evacuation.

Objective 2.1.5.: Traffic circulation planning will be coordinated with the future land uses shown on the future land use map of this plan, the FDOT 5-Year Transportation Plan, plans of neighboring jurisdictions, and county MPO.

Policy 2.1.5.1.: The village shall review subsequent versions of the FDOT 5-Year Transportation Plan and county MPO documents in order to update or modify this element, in accordance therewith.

Policy 2.1.5.2.: The village shall review for compatibility with this element, the traffic circulation plans and programs of the unincorporated county and neighboring municipalities as they are amended in the future.

Policy 2.1.5.3.: All proposed amendments to this Traffic Circulation Element shall include a statement of findings supporting such proposals.

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

HOUSING ELEMENT

Prepared For:

Town of St. Lucie Village

Prepared By:

Resource Engineering and Planning, Inc.

Palm Beach Gardens, Florida 33410

April, 1990

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
HOUSING ELEMENT**

I. INTRODUCTION

The Housing element for the Town of St. Lucie Village documents existing housing conditions, projects future needs, and identifies existing and potential deficiencies in the housing supply. This document is prepared in accordance with the requirements of Rule 9J-5.010, Florida Administrative Code (FAC).

The Town of St. Lucie Village is one of three municipalities in St. Lucie County. The other two are Fort Pierce and Port St. Lucie. Fort Pierce is the oldest incorporated area and represents the financial and business center of the county. St. Lucie Village is located north of Fort Pierce between U.S. Highway 1 and the Indian River lagoon. The village is primarily a residential community for persons working in Fort Pierce and elsewhere in the county.

II. HOUSING INVENTORY

Data from the 1980 Census provides the most detailed information on housing and population characteristics within St. Lucie Village. Although this information is almost 10 years old, it is still likely to be a good indicator of general housing conditions and trends in a slow growth community such as St. Lucie Village. Where available, more up-to-date sources of data are used in this element. However, the lack of significant development over the past eight years has generated little private or public interest in the generation of new housing information for the village. Thus, this element relies almost exclusively on 1980 Census data.

Appendix 3A of this element provides a complete listing of all information available from 1980 Census Summary Tape File 1A and some information from Summary Tape File 3A. Tape File 1A represents a complete, 100% sample of all residents and units that were present in the village in 1980. While some of the data are extrapolated for those who did not provide complete responses, the information is as accurate as possible.

Summary Tape File 3A, on the other hand, was developed from only a sample of village residents. The results obtained from the sample are then extrapolated across the entire community. As a result, similar figures provided in both Tape File 1A and 3A vary to some extent. Therefore, where possible, this element uses the information from Tape File 1A.

Housing Characteristics, 1980

The following characteristics are all taken from the Census information located in Appendix 3A, except where otherwise noted. After the description of each characteristic, the appropriate file and section of each file is noted.

Dwelling Unit Types: The 1980 Census found a total of 309 dwelling units of which, 289 (or 93%) were listed as "year-round" and 20 of which were listed as "seasonal" (Tape File 3A, sections 4 and 5). Of the year-round units, 229 (79%) were single family, 50 (17%) were multi-family, and 10 (4%) were mobile homes (Tape File 3A, section 55). Of the seasonal units, 8 (50%) were single family and 8 were multi-family (Tape File 3A, section 103).

Dwelling Unit Tenure: In 1980, 248 (or 86%) of the year-round units were occupied (Tape File 3A, section 5). Of these, 58 units (or 23%) were listed as renter-occupied (Tape File 1A, section 26).

Dwelling Unit Age: Dwelling units within St. Lucie Village were found to consist of a variety of ages in 1980. Over 17% of the units were built prior to 1940 and 12% were built after 1974 (Tape File 3A, section 109). The community was split evenly between those built prior to 1960 and those built after 1960.

Dwelling Unit Rent: In 1980, the Census revealed a variety of rental prices within St. Lucie Village. Median contract rent was found to be \$176 per month with units ranging from \$50 to \$99 per month to \$500 or more per month (Tape File 1A, sections 43 and 44).

Dwelling Unit Value: The 1980 Census also revealed a variety of housing values within the village. Median specified owner-occupied housing value was \$45,800 with units ranging from less than \$10,000 to more than \$200,000 (Tape File 1A, section 38/39).

Monthly Cost of Owner Occupied Units: Monthly costs of owner-occupied units are presented in Tape File 3A, section 133 for those with and without a mortgage. Approximately half of those with a mortgage were paying less than \$300 per month while slightly over half of those without a mortgage were paying less than \$100 per month.

Rent and Costs to Income Ratios: Well over half of the owner-occupied households had monthly costs to income ratios of less than 20%, and only 15% had ratios of 35% or more in 1980 (tape File 3A, section 139). The federal government generally uses a standard ratio of 30% or under as a measure of affordability.

Just under half of the renters in the village had a monthly rent to income ratio of under 20% while 34% had ratios of 35% or more (tape File 3A, section 132). Thus, the rental housing market in 1980 does not appear to be as affordable as the for sale housing market. This is likely due to the few rental units available.

Selected Comparisons With St. Lucie County As A Whole, 1980

St. Lucie Village has continued to exhibit much different housing and population characteristics than St. Lucie County. Its small rate of growth differs greatly with that of the unincorporated area of the county and the other municipalities of the county as well. Table 3-1 presents the various population and housing counts for each of these communities in 1980. As shown, St. Lucie Village is much smaller than these other areas and thus, would not be expected to exhibit the range and diversity of population and housing characteristics. The comparisons below are based on the data presented in the St. Lucie County Comprehensive Plan, August 1989.

As an example, single family dwelling units county-wide accounted for only 60% of all units while in St. Lucie Village, they accounted for nearly 80%. Further, owner-occupied units accounted for 77% of the total occupied units in St. Lucie Village in 1980 while they accounted for only 67% county-wide.

Median contract rent county-wide was approximately 16% higher than in St. Lucie Village in 1980. However, median housing value was only 4% less county-wide than in the village.

Approximately half of all units in St. Lucie County as a whole in 1980 were built prior to 1960. As discussed previously, this was also true in St. Lucie Village.

TABLE 3-1
TOTAL HOUSING UNIT DISTRIBUTION
ST. LUCIE COUNTY
1980

<u>Location</u>	<u>Number</u>	<u>Percent of County</u>
Fort Pierce	15,169	37.1%
Port St. Lucie	6,410	15.7%
St. Lucie Village	286	.7%
Unincorporated	<u>19,050</u>	<u>46.5%</u>
County-wide	40,915	100.%

Source: 1980 Census

Housing Conditions, 1980 and 1987

The 1980 Census Tape Summary Files 1A and 3A also provide a wealth of information on housing unit facilities. The lack of certain facilities and the number of persons per household can be indicators of substandard units. Physical evidence from windshield surveys can also be used to further identify units and areas in need of maintenance or removal.

In 1980, only 3 (1.2%) occupied year-round units were found to lack complete plumbing facilities for exclusive use, all of which were owner-occupied (Tape File 1A, section 47). In addition, 3 units lacked complete kitchen facilities; however, these were found in a sample of all year-round units, occupied and unoccupied (Tape File 3A, section 115). Heating equipment was also measured by a sample involving all year-round units which found 14 (4%) units without any heating equipment and 11 (33%) units without a central heating system. Finally, only 4 (1.6%) occupied units were found to have over 1.01 persons per room, 3 of which were owner-occupied.

The Census information described above can be interpreted to indicate unites or households that are substandard. However, based on this information alone, it is difficult to determine the exact conditions within any one particular unit. Usually, a unit would have to lack two or more of these facilities or lack at least one facility and have more than 1.01 persons per room in order to be classified as substandard. Unfortunately, the Census information provided in Appendix 3A does not correlate these various characteristics except those units which lack complete plumbing for exclusive use and have more than 1.01 persons per room. In 1980, none of those persons in occupied housing units with more than 1.01 persons per room lived in units which lacked complete plumbing facilities (Tape File 1A, section 51). Thus, from the available Census information, it is not possible to determine if substandard units existed in the village in 1980.

In 1987, Resource Engineering and Planning, Inc., conducted a windshield survey of St. Lucie Village in an attempt to identify general land uses and standard and substandard units using the following definitions:

Standard: a structure with only necessary repair work, minor in nature, such as is usually considered a part of normal maintenance.

Substandard: a structure in need of major repairs beyond the scope of normal maintenance, but which can be rehabilitated economically.

Dilapidated: a structure in need of major repairs to the extent that the structure is unsafe for habitation or is beyond economically feasible rehabilitation.

In all, 264 units were counted in the survey. Of these, 203 (76.9%) were found to be in standard condition, 55 (20.8%) were found in substandard condition, and only 6 (2.3%) were dilapidated. The substandard and dilapidated units were distributed throughout the community. Thus, no areas of high or even moderate concentrations of blighting were found.

It should be noted that the 264 units does not represent a complete sample. Therefore, the percentages found for each condition type may vary from what was found. In addition, the survey did not distinguish between those units which were occupied and those which were vacant. The units which exhibited poor structural conditions may not have been inhabited. Thus, the poor structural conditions do not necessarily indicate poor living conditions.

Alternative Housing Availability

Government Subsidized Housing

None of the rental or for sale units within St. Lucie Village receive federal, state, or local government subsidies.

Group Homes

The Florida Department of Health and Rehabilitative Services (HRS) has not registered any group homes within St. Lucie Village.

Mobile Home Parks

No HRS licensed mobile home parks or approved mobile home subdivisions are located in St. Lucie Village. There is one small mobile park located on Old Dixie Highway; however, its small size does not warrant licensing by the state.

Historically Significant Housing

At the request of Village residents, the Florida Department of State, Division of Historic Resources has designated a 22 home area located in the southeastern portion of the village as an Historic District (see Figure 1). This area contains some of the oldest homes in all of St. Lucie County. The state is currently preparing additional documentation on these homes for submittal to the federal government for recognition as a National Historic District. All of the homes are currently occupied as single family dwelling units. Both the Future Land Use and Coastal Management Elements of this Comprehensive Plan Provide further details on the historic district.

Housing Construction Activity, 1980-1988

Table 3-2 presents the number of demolitions and new unit additions to St. Lucie Village since 1980. In all, a net of 27 units have been added to the Village's housing inventory since the last decennial census. All of these have been single family homes with no mobile homes added or removed.

III. PROJECTED HOUSING CHARACTERISTICS AND NEEDS

Although most of the housing conditions presented in the previous section are from the 1980 Census, they are believed to still accurately represent St. Lucie Village in many ways. The small rate of growth since 1980 and the small size of the village have resulted in few changes over the last eight years. Therefore, this data is relied upon greatly in determining the future needs of the community.

TABLE 3-2

HOUSING ACTIVITY
ST. LUCIE VILLAGE
1980-1988

<u>Year</u>	<u>New Units</u>	<u>Demolitions</u>
1980	2	0
1981	2	0
1982	3	0
1983	4	0
1984	4	0
1985	3	0
1986	3	0
1987	4	0
1988	3	1
	<hr/> 28	<hr/> 1

NOTE: All units are single family.

Source: St. Lucie Village 1989.

The population projections presented in the Future Land Use Element of this Comprehensive Plan are predicted on several of the population and housing factors found in 1980. Specifically, both the occupancy rate of year-round units and the mean number of persons per household were used to estimate the 1988 population and project future population. Thus, these factors are used throughout this element as well.

Projected Households By Size and Income Range: As discussed above, the number of projected households is based on the occupancy rate (86%) and mean number of persons per household (2.39) found in 1980. Table 3-3 presents these projections accordingly.

The size of households in 1980 is provided in Tape File 1A, section 33/34. The same percentages of each size found in 1980 are continued forward through the year 2005 (see Table 3-4). While national trends indicate the size of households to be decreasing, the village has seen an increase over the past few years. Several new families with two and more children have moved into both new and existing units.

As with household size, the distribution of various income groups is also not expected to change from that found in 1980 (Tape File 3A, section 68). Table 3-5 presents these projections through the year 2005 in 1979 dollars.

Projected Housing Needs

Tables 3-6 through 3-8 present various housing characteristics based on the characteristics that existed in 1980. These characteristics include housing types, rents, and tenure. The assumption that the general conditions that prevailed in 1980 will continue to be found in the future is based upon the low

Table 3-3

PROJECTED HOUSING UNITS
ST. LUCIE VILLAGE
1990-2005

<u>Year</u>	<u>Projected Population*</u>	<u>Occupied Households</u>	<u>Total Year-Round Housing Units***</u>
1988	650	272	316
1990	665	278	323
1995	705	295	343
2000	745	312	362
2005	789	330	384

* See Future Land Use Element for projection methodology.

** Assumes a constant of 2.39 persons per household.

*** Assumes a constant 86% occupancy rate.

Source: REP/Inc.

TABLE 3-4

PROJECTED HOUSEHOLDS BY SIZE
ST. LUCIE VILLAGE
1990-2005

<u>Household Size</u>	<u>1988</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>
1 person	73	75	80	84	89
2 persons	103	106	112	119	125
3 persons	47	47	50	54	57
4 persons	30	31	32	34	36
5 persons	11	11	12	12	13
6 or more persons	<u>8</u>	<u>8</u>	<u>9</u>	<u>9</u>	<u>10</u>
TOTAL	272	278	295	312	330

Note: Calculations assume constant percentage share of each size as found in 1980.

TABLE 3-5
PROJECTED HOUSEHOLD INCOME
ST. LUCIE VILLAGE

Income Range	<u>1988</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>
Less than \$4,999	46	47	50	53	56
\$5,000 - \$9,999	54	56	59	62	66
\$10,000 - \$14,999	35	36	38	42	43
\$15,000 - \$19,999	41	42	44	47	50
\$20,000 - \$24,999	11	11	12	12	13
\$25,000 - \$29,999	30	31	32	34	36
\$30,000 - \$39,999	19	19	21	22	23
\$40,000 - \$49,999	11	11	12	12	13
\$50,000 - \$74,999	14	14	15	16	17
\$75,000 and greater	<u>11</u>	<u>11</u>	<u>12</u>	<u>12</u>	<u>13</u>

NOTE: Calculations assume a constant percentage share of each income range as found in 1980. All figures are in 1979 dollars.

Source: 1980 Census Tape File 3A, section 68; REP/Inc. 1989.

TABLE 3-6

PROJECTED YEAR-ROUND HOUSING UNITS BY TYPE
ST. LUCIE VILLAGE
1990 - 2005

<u>Year</u>	<u>Single Family</u>	<u>Multi- Family</u>	<u>Mobile Home</u>	<u>Total Units</u>
1988	256	50	10	316
1990	260	53	10	323
1995	277	56	10	343
2000	293	59	10	362
2005	311	63	10	384

NOTE: Calculations assume a constant percentage share of each type as found in 1988, with no increase in mobile homes.

Source: 1988 Census Tape File 1A, section 55; Town of St. Lucie Village 1989; REP/Inc., 1989.

TABLE 3-7

PROJECTED CONTRACT RENT
ST. LUCIE VILLAGE
1990 - 2005

Monthly Rent	<u>1988</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>
\$50 to \$99	6	6	6	6	7
\$100 to \$149	12	12	13	14	14
\$150 TO \$199	16	17	18	19	20
\$200 to \$249	9	9	9	10	11
\$250 to \$299	6	6	7	7	7
\$300 to \$399	6	6	6	6	7
\$400 to \$499	1	1	1	1	1
No Cash Rent	<u>6</u>	<u>6</u>	<u>7</u>	<u>7</u>	<u>8</u>
Total Rental Units	63	64	68	71	76

NOTE: Calculations assume a constant percentage share of each rent range found in 1980. All figures are in dollars.

Source: 1980 Census Tape File 1A, section 43; REP/Inc., 1989.

TABLE 3-8

PROJECTED HOUSEHOLDS BY TENURE

ST. LUCIE VILLAGE

1990 - 2005

<u>Year</u>	<u>Renter- Occupied</u>	<u>Owner- Occupied</u>	<u>Total Occupied Units</u>
1988	63	209	272
1990	64	214	278
1995	68	227	295
2000	72	240	330

NOTE: Calculations assume a constant percentage share of each tenure as found in 1980.

Source: 1980 Census Tape File 1A, section 26; REP/Inc.

rate of growth experiences in the last eight years and the limited development potential that remains in the community. The Future Land Use Element presents the complete evidence, trends, assumptions and methodology that were used to project the future population. Table 3-6 through 3-8 all incorporate these same factors.

The projected housing needs shown in Table 3-6 through 3-8 are for non-farmworker households and do not include other specialized need populations. Neither the 1980 Census nor any other available source have identified either farmworker units or households within the village. In addition, no other specialized need population groups are present or projected.

Land Requirements for Projected Housing, 2005

The housing projections presented on Table 3-3 indicate a net addition of 58 units between 1988 and 2005, 45 of which are to be single family and 13 of which are to be multi-family. The Future Land Use Element and Map provide for two different residential districts. The Single Family, Low Density Residential (SF) district permits up to 2 single family, detached units per gross acre with a minimum lot size of 0.5 acres. The Medium Density Residential (MF) district permits up to 4 units per gross acre with a minimum lot size of 0.25 acres for detached units.

Because few existing platted lots remain, much of the projected growth is expected to take place in the large vacant areas. However, despite the large number of vacant acres (over 300), there are several environmental and fiscal constraints to development. The Future Land Use Element presents an analysis of the four largest vacant areas within the village. In summary, the element concludes the new development within the single family areas is likely to be built at approximately one unit per one and a half acres development within the medium density areas is expected to be built at 3 units per acre.

At these density levels, approximately 67.5 acres for single family development will be required and 4.3 acres will be required for medium density development. Even with the development constraints, imposed on the vacant areas within the village, these acreage needs should be adequately accommodated. The total development acreage needs for the village for the year 2005 are presented on Table 105 of the Future Land Use Element.

Projected Private Sector Housing Development

St. Lucie Village does not have any full-time staff or full-time paid elected officials. Therefore, the village has no housing development programs in place nor does the county or other governmental agencies provide such services within the village. As a result, all of the projected housing needs for the village presented in this element are expected to be met by the private sector. There may be a potential in the future for the Fort Pierce Housing Authority to extend some of its programs into the village; however, such prospects remain doubtful at this time.

Housing Delivery Process

Housing delivery in St. Lucie County as a whole involves a complex mix of public and private sector interests. Generally, the private sector provides virtually all of the labor and materials required in meeting the diverse needs of a variable housing market. This includes single and multi-family units and owner- and renter-occupied units for all income ranges. Occasionally, land will be made available to the private sector for the provision of lower cost housing; however, the needs of many low- and moderate income individuals within the county continue to go unmet.

In St. Lucie Village, the private sector has and is expected to continue to meet all of the housing needs. New housing is being

developed in the remaining lots of the River Woods subdivision and a small area of the recently constructed Lightlewood Lane. In addition, the village has a tradition of maintaining and reusing older residential structures which adds to the new housing market, opportunities are available to purchase existing units at a "reasonable cost" and to build additional equity through improvements. However, even these opportunities are becoming scarce.

Because of the lack of any staff and very limited funding, there are few programs the village can undertake to supplement or even assist the private sector in providing housing. The village does have a complete set of building and zoning regulations which have all been adopted within the last eight years. Thus, for the most part, these codes are up-to-date. Village officials also try to remain available to prospective builders to answer any questions they may have. Further, the village contracts its own building official to review plans and make inspections as needed. It is believed that this system of local review provides more than adequate service to builders within the village.

Housing Programs

As discussed, the lack of any staff and limited funding severely limit any housing programs the village could undertake. Therefore, the private sector is expected to provide all of the needed housing within the village through the foreseeable future. However, the village will continue to insure all housing is safe and sanitary.

Low- and Moderate-Income Housing Needs

A high percentage of existing housing in the village is within the low- to moderate income range (see Tables 3-5 and 3-7). The needs of future low- and moderate-income households will continue to have to be met on a regional basis. The financial and

development limitations of St. Lucie Village make it impossible to serve such needs at any significant level. The village does not have land available to construct housing at any significant level of density nor does it own any property which could be donated to reduce housing costs. However, the village does recognize the need for housing to be provided and encourages organizations such as the Fort Pierce Housing Authority to expand their programs throughout St. Lucie County. The Section 8 housing subsidy program run by the Authority presents the only feasible opportunity for providing low- to moderate-income housing in the village. The village will also contact the St. Lucie County Housing Task Force about how the village can become involved in the Task Force's programs and activities in order to reaffirm their commitment to making affordable housing available throughout the area.

Housing Codes and Zoning Regulations

Although active housing provision programs are not possible in the village at this time, the development and implementation of appropriate housing standards and zoning regulations is a primary goal of the community. The village is very concerned with maintaining a high quality environment for all existing and future residents.

Toward this end, the village has already adopted several regulations and will strengthen these with additional regulations to be adopted in order to implement this Comprehensive Plan. These include zoning regulations which are in accordance with the Future Land Use Element and Map and environmental standards for the protection of the water supply and other natural resources of the area. Standards will also be set forth in accordance with the recently designated Historic District to insure these homes are adequately maintained and used.

In addition, the town's revised land development regulations will reflect recently passed statutes concerning mobile homes and group homes. For many, these housing types present the only affordable of viable housing opportunity. Thus, the village will review its current regulations for consistency with these new statutes and make amendments as necessary.

However, even though the village will permit these uses, private market forces are likely to have much more of an impact on what actually gets built. As developable land becomes increasingly scarce, land costs will continue to rise. Thus, group homes and mobile homes may be financially precluded from future development in the village. In fact, expectations for new mobile home development are so low that the projected housing types shown on Table 3-6 assume no growth in mobile home development between 1988 and 2005.

IV. GOALS, OBJECTIVES AND POLICIES

GOAL 3.1:THE PROVISION OF AN ADEQUATE MIX OF SAFE AND SANITARY HOUSING WHICH MEETS THE NEEDS OF EXISTING AND FUTURE ST. LUCIE VILLAGE RESIDENTS.

Objective 3.1.1.: Facilitate public and private sector cooperation in the provision of housing to meet the needs of future residents.

Policy 3.1.1.1.: The village shall continue to make available upon request, information and assistance to the private sector to maintain a housing production capacity sufficient to meet the required demand.

Policy 3.1.1.2.: In accordance with section 163.3202, F.S., the village aldermen or their designee shall review ordinances, codes, regulations, and the permitting process for the purpose of eliminating excessive requirements, and amending or adding other

requirements in order to maintain private sector participation in meeting the housing needs, while continuing to insure the health, safety, and welfare of the residents.

Policy 3.1.1.3.: In accordance with section 163.3202, F.S., adopt land development regulations to include site selection criteria for the location of housing for the elderly and mobile homes which shall consider accessibility, convenience, and infrastructure availability.

Policy 3.1.1.4.: In order to provide greater opportunity for affordable housing by 1991, the village shall investigate both the communities' interest and the economic viability of allowing alternative housing opportunities in single family areas such as garage apartments, granny flats or accessory apartments or cottages.

Objective 3.1.2.: By 1994, identify and assess any substandard units located within the village limits and develop a strategy to eliminate them.

Policy 3.1.2.1.: Increase code enforcement activities through regular annual inspections of the housing stock and institute special concentrated code enforcement activities where warranted.

Policy 3.1.2.2.: Perform a study to locate and assess substandard housing units in the village.

Policy 3.1.2.3.: Permit, on a demonstration basis, mixed use and other innovative reuses of existing housing stock which will result in the removal of substandard units.

Policy 3.1.2.4.: See federal, state, and county funding for the demolition or rehabilitation of substandard housing.

Policy 3.1.2.5.: Assist neighborhood improvement projects by providing code enforcement assistance, encouraging neighborhood self-help, and concentrating capital and/or operating budget improvements in such neighborhoods.

Objective 3.1.3.: Make available adequate sites for housing of low- and moderate-income persons through coordination with groups such as the county, the Housing Authority of Fort Pierce and the St. Lucie County Housing Task Force.

Policy 3.1.3.1.: By 1994, investigate having the Housing Authority of Fort Pierce expand its operation to include St. Lucie Village in its Section 8 program in an effort to take responsibility for the village's fair share of Housing low- and moderate-income families.

Policy 3.1.3.2.: Support the efforts of the Housing Authority of Fort Pierce and assist in its efforts to determine and develop sites and programs for housing for low- and moderate-income persons by providing housing and population information to the Authority in a timely manner when it is requested.

Policy 3.1.3.3.: Request annually that the county and Port St. Lucie allow the Housing Authority of Fort Pierce to distribute publicly assisted housing equitably throughout the entire county to provide for a wide variety of neighborhood settings for low and moderate income persons and to avoid undue concentration in single neighborhoods.

Policy 3.1.3.4.: By 1991, the village shall request to participate as a member of the St. Lucie County Housing Task Force in an effort to reaffirm the village's willingness to assist in the provision of housing for low- and moderate-income families.

Objective 3.1.4.: In accordance with section 163.3202, F.S., set standards and criteria for the provision of sites for group homes at suitable locations to ensure that the needs of persons requiring such housing are met.

Policy 3.1.4.1.: Establish non-discriminatory standards and criteria addressing the location of group homes and foster care facilities.

Policy 3.1.4.2: Review the zoning code so that different classes of group homes are permitted in appropriate residential neighborhoods and so that no residential neighborhood is closed to such facilities.

Objective 3.1.5.: Preserve and protect significant housing in terms of history and architecture and encourage reuse of such housing to meet residential needs.

Policy 3.1.5.1: By 1994, identify and assist property owners of historically significant housing in applying for and utilizing state and federal assistance programs.

Objective 3.1.6.: The useful life of the existing housing stock will be conserved and extended, and the neighborhood quality will be improved through the adoption of land development regulations intended to implement this Comprehensive Plan and the provision of infrastructure necessary to support such efforts.

Policy 3.1.6.1.: Review the village's housing and health codes and standards relating to the care and maintenance of residential and neighborhood facilities.

Policy 3.1.6.2.: Schedule and concentrate public infrastructure and supporting facilities and services, consistent with the Capital Improvements Element, to upgrade the quality of existing neighborhoods.

Policy 3.1.6.3.:Encourage individual homeowners to increase private reinvestment in housing by providing information and technical assistance programs.

Objective 3.1.7.: The Village shall treat persons displaced by governmental action on a uniform and equitable basis through the adoption in 1990 of the provisions contained within the Department of Housing and Urban Development Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended, found at 24 Code of Federal Regulations.

Policy 3.1.7.1.: In accordance with section 163.3202, F.S., the Village's land development regulations shall contain provisions found within the "Uniform Act," cited in Objective 1 above, which shall require the location of persons displaced by governmental action within standard housing at affordable costs, prior to their displacement.

APPENDIX 3A

1980 CENSUS SUMMARY TAPE FILE 1A AND PORTIONS OF 3A

CENSUS OF POPULATION AND HOUSING, 1980--SUMMARY TAPE FILE 1A
 (FOR DEFINITION OF ITEMS AND FOOTNOTES, SEE TECHNICAL DOCUMENTATION)

SUMMARY LEVEL: 13 STATE: FLORIDA COUNTY: ST. LUCIE COUNTY MCD/CCD: FORT PIERCE DIVISION
 PLACE: ST. LUCIE VILLAGE TRACT/BNA: BG: ED:
 URBAN/RURAL: CO: URBANIZED AREA: WARD: SMSA:
 INDIAN RESERVATION/ANY: INDIAN SUBRESERVATION: SCSA:

1. PERSONS BY URBAN AND RURAL

TOTAL 593
 INSIDE URBANIZED AREAS 593
 RURAL -

2. FAMILIES 166

3. HOUSEHOLDS [1] 248

4. HOUSING UNITS (INCLUDING VACANT SEASONAL AND MIGRATORY UNITS) BY URBAN AND RURAL [2]

TOTAL 309
 INSIDE URBANIZED AREAS 309
 RURAL -

5. YEAR-ROUND HOUSING UNITS BY OCCUPANCY STATUS [1]

TOTAL 289
 OCCUPIED 248
 VACANT 41

6. PERSONS BY SEX

MALE 302
 FEMALE 291

7. PERSONS BY RACE

WHITE 582
 BLACK 7
 AMERICAN INDIAN, ESKIMO, AND ALEUT: 2
 AMERICAN INDIAN
 ESKIMO
 ALEUT
 ASIAN AND PACIFIC ISLANDER: [4]
 JAPANESE
 CHINESE
 FILIPINO
 KOREAN
 ASIAN INDIAN 1
 VIETNAMESE
 HAWAIIAN 1
 GUAMANIAN
 SAMOAN
 OTHER [3]

8. PERSONS BY SPANISH ORIGIN

NOT OF SPANISH ORIGIN 593
 MEXICAN
 PUERTO RICAN
 CUBAN
 OTHER SPANISH

12. PERSONS BY AGE BY RACE

	UNDER 5 YEARS	5 TO 17 YEARS	18 TO 64 YEARS	65 YEARS AND OVER
TOTAL	28	91	352	122
WHITE	27	89	346	120
BLACK	...	...	...	...
AMERICAN INDIAN, ESKIMO, AND ALEUT	...	...	...	...
ASIAN AND PACIFIC ISLANDER [4]	...	...	...	...

13. PERSONS OF SPANISH ORIGIN BY AGE BY RACE

	UNDER 5 YEARS	5 TO 17 YEARS	18 TO 64 YEARS	65 YEARS AND OVER
TOTAL	-	-	-	-
WHITE	-	-	-	-
BLACK	-	-	-	-

14. PERSONS 15 YEARS AND OVER BY SEX BY MARITAL STATUS

	MALE	FEMALE
SINGLE	65	35
NOW MARRIED, EXCEPT SEPARATED	150	149
SEPARATED	4	2
WIDOWED	13	34
DIVORCED	24	25

9. PERSONS OF SPANISH ORIGIN BY RACE

TOTAL -
 WHITE -
 BLACK -
 AMERICAN INDIAN, ESKIMO, ALEUT, AND ASIAN AND PACIFIC ISLANDER [4]
 OTHER [3]

10. PERSONS BY SEX BY AGE

	TOTAL	FEMALE
UNDER 1 YEAR	7	3
1 AND 2 YEARS	14	7
3 AND 4 YEARS	7	6
5 YEARS	6	3
6 YEARS	5	4
7 TO 9 YEARS	19	6
10 TO 13 YEARS	26	15
14 YEARS	8	2
15 YEARS	7	3
16 YEARS	11	4
17 YEARS	9	6
18 YEARS	10	3
19 YEARS	6	2
20 YEARS	6	2
21 YEARS	7	6
22 TO 24 YEARS	31	13
25 TO 29 YEARS	56	28
30 TO 34 YEARS	35	18
35 TO 44 YEARS	68	32
45 TO 54 YEARS	62	32
55 TO 59 YEARS	41	19
60 AND 61 YEARS	10	6
62 TO 64 YEARS	20	10
65 TO 74 YEARS	67	36
75 TO 84 YEARS	48	23
85 YEARS AND OVER	7	4

11. MEDIAN AGE OF PERSONS BY SEX

TOTAL 38.9
 MALE 37.8
 FEMALE 40.2

19. HOUSEHOLDS WITH ONE OR MORE PERSONS UNDER 18 YEARS BY HOUSEHOLD TYPE

MARRIED-COUPLE FAMILY 49
 OTHER FAMILY:
 MALE HOUSEHOLDER, NO WIFE PRESENT 6
 FEMALE HOUSEHOLDER, NO HUSBAND PRESENT 8
 NONFAMILY HOUSEHOLD 3

15.20. PERSONS BY AGE BY HOUSEHOLD TYPE AND RELATIONSHIP

	TOTAL	65 YEARS AND OVER
IN FAMILY HOUSEHOLD:		
HOUSEHOLDER	166	46
SPOUSE	143	32
OTHER RELATIVES [5]	165	5
NONRELATIVES [6]	14	4
IN NONFAMILY HOUSEHOLD:		
MALE HOUSEHOLDER	51	10
FEMALE HOUSEHOLDER	31	20
NONRELATIVES [6]	23	5
IN GROUP QUARTERS:		
INMATE OF INSTITUTION	-	-
OTHER	-	-

16. HOUSEHOLDS BY PERSONS IN HOUSEHOLD AND HOUSEHOLD TYPE [7]

1 PERSON:
 MALE HOUSEHOLDER 43
 FEMALE HOUSEHOLDER 25
 2 OR MORE PERSONS:
 MARRIED-COUPLE FAMILY 143
 OTHER FAMILY:
 MALE HOUSEHOLDER, NO WIFE PRESENT 9
 FEMALE HOUSEHOLDER, NO HUSBAND PRESENT 14
 NONFAMILY HOUSEHOLD:
 MALE HOUSEHOLDER 8
 FEMALE HOUSEHOLDER 6

17. PERSONS UNDER 18 YEARS BY HOUSEHOLD TYPE AND RELATIONSHIP

IN HOUSEHOLD:
 HOUSEHOLDER OR SPOUSE 1
 OWN CHILD OF HOUSEHOLDER: [8]
 IN MARRIED-COUPLE FAMILY 76
 IN OTHER FAMILY (MALE OR FEMALE HOUSEHOLDER, NO SPOUSE PRESENT) 29
 OTHER RELATIVES [5] 8
 NONRELATIVES [6] 5
 IN GROUP QUARTERS:
 INMATE OF INSTITUTION
 OTHER

18. RELATED CHILDREN BY AGE [8]

UNDER 5 YEARS 26
 5 TO 17 YEARS 87

21. HOUSEHOLDS WITH ONE OR MORE PERSONS 60 YEARS AND OVER BY PERSONS IN HOUSEHOLD AND HOUSEHOLD TYPE [7]

1 PERSON 35
 2 OR MORE PERSONS:
 FAMILY HOUSEHOLD 67
 NONFAMILY HOUSEHOLD 2

22. HOUSEHOLDS WITH ONE OR MORE PERSONS 65 YEARS AND OVER BY PERSONS IN HOUSEHOLD AND HOUSEHOLD TYPE [7]

1 PERSON 25
 2 OR MORE PERSONS:
 FAMILY HOUSEHOLD 54
 NONFAMILY HOUSEHOLD 2

23. OCCUPIED HOUSING UNITS WITH ONE OR MORE PERSONS 65 YEARS AND OVER BY TENURE BY AGE OF HOUSEHOLDER

	TOTAL	RENTER OCCUPIED
HOUSEHOLDER:		
UNDER 65 YEARS	8	-
65 YEARS AND OVER	76	6

24. HOUSEHOLDS WITH ONE OR MORE NONRELATIVES PRESENT

25

25. VACANT HOUSING UNITS BY VACANCY STATUS

FOR SALE ONLY 4
 FOR RENT -
 HELD FOR OCCASIONAL USE 9
 OTHER VACANTS [9] 28

26. OCCUPIED HOUSING UNITS BY TENURE

TOTAL 248
 RENTER OCCUPIED 58

CENSUS OF POPULATION AND HOUSING, 1980 - SUMMARY TAPE FILE 1A
(FOR DEFINITION OF ITEMS AND FOOTNOTES, SEE TECHNICAL DOCUMENTATION)

SUMMARY LEVEL: 13 STATE: FLORIDA COUNTY: ST. LUCIE COUNTY MCD/CCO: FORT PIERCE DIVISION
 PLACE: ST. LUCIE VILLAGE TRACT/BNA: BG: ED:
 URBAN/RURAL: CD: URBANIZED AREA: WARD: SMSA:
 INDIAN RESERVATION/ANV: INDIAN SUBRESERVATION: SCSA:

27. OCCUPIED HOUSING UNITS BY TENURE BY RACE OF HOUSEHOLDER

	TOTAL	RENTER OCCUPIED
WHITE	243	56
BLACK	3	...
AMERICAN INDIAN, ESKIMO, AND ALEUT	2	...
ASIAN AND PACIFIC ISLANDER [4]	-	-
OTHER [3]	-	-

28. OCCUPIED HOUSING UNITS WITH HOUSEHOLDER OF SPANISH ORIGIN BY TENURE BY RACE OF HOUSEHOLDER

	TOTAL	RENTER OCCUPIED
TOTAL	-	-
WHITE	-	-
BLACK	-	-

29. CONDOMINIUM HOUSING UNITS BY TENURE AND VACANCY STATUS

	TOTAL	RENTER OCCUPIED	VACANT FOR SALE ONLY	OTHER VACANTS [9]
TOTAL	-	-	-	-
RENTER OCCUPIED	-	-	-	-
VACANT FOR SALE ONLY	-	-	-	-
OTHER VACANTS [9]	-	-	-	-

30/31. YEAR-ROUND HOUSING UNITS BY ROOMS

ROOMS	TOTAL	RENTER OCCUPIED
1 ROOM	3	9
2 ROOMS	25	66
3 ROOMS	66	67
4 ROOMS	119	5.1
5 ROOMS	119	5.1
6 OR MORE ROOMS	119	5.1
MEDIAN	5.1	5.1

32. MEAN ROOMS IN YEAR-ROUND HOUSING UNITS BY TENURE AND VACANCY STATUS

	TOTAL	RENTER OCCUPIED	VACANT FOR SALE ONLY	OTHER VACANTS [9]
TOTAL	5.3	5.7	4.4	4.8
OWNER OCCUPIED	5.3	5.7	4.4	4.8
RENTER OCCUPIED	5.3	5.7	4.4	4.8
VACANT FOR SALE ONLY	5.3	5.7	4.4	4.8
OTHER VACANTS [9]	5.3	5.7	4.4	4.8

33/34. OCCUPIED HOUSING UNITS BY TENURE BY PERSONS IN UNIT [7]

	TOTAL	RENTER OCCUPIED
1 PERSON	68	21
2 PERSONS	93	15
3 PERSONS	41	11
4 PERSONS	27	6
5 PERSONS	11	1
6 OR MORE PERSONS	8	4
MEDIAN	2.10	N/A

35. PERSONS PER UNIT [7]

	TOTAL	RENTER OCCUPIED
TOTAL	2.39	2.39

36. PERSONS IN OCCUPIED HOUSING UNITS BY TENURE [10]

	TOTAL	RENTER OCCUPIED
TOTAL	593	140
RENTER OCCUPIED	593	140

37. OCCUPIED HOUSING UNITS BY TENURE BY PERSONS PER ROOM

	TOTAL	RENTER OCCUPIED
1.00 OR LESS	245	57
1.01 TO 1.50	3	1
1.51 OR MORE	-	-

38/39. SPECIFIED OWNER-OCCUPIED NONCONDOMINIUM HOUSING UNITS BY VALUE [11]

VALUE	TOTAL	RENTER OCCUPIED
LESS THAN \$10,000	4	4
\$10,000 TO \$14,999	4	4
\$15,000 TO \$19,999	3	3
\$20,000 TO \$24,999	12	12
\$25,000 TO \$29,999	16	16
\$30,000 TO \$34,999	15	15
\$35,000 TO \$39,999	13	13
\$40,000 TO \$49,999	13	13
\$50,000 TO \$79,999	35	35
\$80,000 TO \$99,999	14	14
\$100,000 TO \$149,999	12	12
\$150,000 TO \$199,999	4	4
\$200,000 OR MORE	4	4
MEDIAN	\$45800	\$45800

40/41/42. SPECIFIED OWNER-OCCUPIED AND VACANT-FOR-SALE-ONLY HOUSING UNITS BY OCCUPANCY STATUS BY CONDOMINIUM STATUS [11]

	OWNER OCCUPIED	VACANT FOR SALE ONLY
NONCONDOMINIUM-TOTAL	749	4
MEAN VALUE OR PRICE ASKED	\$60700	\$61300
CONDOMINIUM-TOTAL	-	-
MEAN VALUE OR PRICE ASKED	-	-

43. SPECIFIED RENTER-OCCUPIED HOUSING UNITS BY CONTRACT RENT [12]

	TOTAL	RENTER OCCUPIED	VACANT FOR RENT
WITH CASH RENT:	-	-	-
LESS THAN \$50	5	5	6
\$50 TO \$99	6	6	4
\$100 TO \$119	4	4	1
\$120 TO \$139	1	1	8
\$140 TO \$149	8	8	7
\$150 TO \$159	7	7	8
\$160 TO \$169	6	6	6
\$170 TO \$199	5	5	1
\$200 TO \$249	1	1	6
\$250 TO \$299	6	6	5
\$300 TO \$399	5	5	1
\$400 TO \$499	1	1	6
\$500 OR MORE	1	1	6
NO CASH RENT	6	6	6

44. MEDIAN CONTRACT RENT FOR SPECIFIED RENTER-OCCUPIED HOUSING UNITS PAYING CASH RENT

	TOTAL	RENTER OCCUPIED	VACANT FOR RENT
TOTAL	\$176	\$176	\$176
MEAN CONTRACT RENT OR RENT ASKED	\$193	\$193	\$193

45/46. SPECIFIED RENTER-OCCUPIED PAYING CASH RENT AND VACANT-FOR-RENT HOUSING UNITS BY OCCUPANCY STATUS

	TOTAL	RENTER OCCUPIED	VACANT FOR RENT
TOTAL	51	51	51
MEAN CONTRACT RENT OR RENT ASKED	\$193	\$193	\$193

47. YEAR-ROUND HOUSING UNITS BY TENURE AND OCCUPANCY STATUS BY PLUMBING FACILITIES

	TOTAL	RENTER OCCUPIED	VACANT FOR RENT
TOTAL	286	286	286
COMPLETE PLUMBING FOR EXCLUSIVE USE	3	3	3
LACKING COMPLETE PLUMBING FOR EXCLUSIVE USE [13]	245	245	245
TOTAL OCCUPIED:	3	3	3
COMPLETE PLUMBING FOR EXCLUSIVE USE	58	58	58
LACKING COMPLETE PLUMBING FOR EXCLUSIVE USE [13]	-	-	-

48. OCCUPIED HOUSING UNITS WITH 1.01 OR MORE PERSONS PER ROOM LACKING COMPLETE PLUMBING FACILITIES FOR EXCLUSIVE USE BY TENURE [13]

	TOTAL	RENTER OCCUPIED
TOTAL	-	-

49. PERSONS IN OCCUPIED HOUSING UNITS WITH 1.01 OR MORE PERSONS PER ROOM BY TENURE

	TOTAL	RENTER OCCUPIED
TOTAL	17	8

50. PERSONS IN OCCUPIED HOUSING UNITS LACKING COMPLETE PLUMBING FACILITIES FOR EXCLUSIVE USE [13]

	TOTAL	RENTER OCCUPIED
TOTAL	17	8

51. PERSONS IN OCCUPIED HOUSING UNITS WITH 1.01 OR MORE PERSONS PER ROOM BY PLUMBING FACILITIES

	TOTAL	RENTER OCCUPIED
COMPLETE PLUMBING FOR EXCLUSIVE USE	17	8
LACKING COMPLETE PLUMBING FOR EXCLUSIVE USE [13]	-	-

52. VACANT HOUSING UNITS WHICH ARE BOARDED UP

	TOTAL	RENTER OCCUPIED
TOTAL	-	-

53. VACANT-FOR-RENT HOUSING UNITS WHICH HAVE BEEN VACANT FOR 2 OR MORE MONTHS

	TOTAL	RENTER OCCUPIED
TOTAL	-	-

54. VACANT-FOR-SALE-ONLY HOUSING UNITS WHICH HAVE BEEN VACANT 6 OR MORE MONTHS

	TOTAL	RENTER OCCUPIED
TOTAL	-	-

55. YEAR-ROUND HOUSING UNITS BY UNITS AT ADDRESS

UNITS AT ADDRESS	TOTAL	RENTER OCCUPIED
1	229	49
2 TO 9	49	1
10 OR MORE	1	10
MOBILE HOME OR TRAILER	10	10

56. PERSONS SUBSTITUTED

	TOTAL	RENTER OCCUPIED
TOTAL	12	12

57. PERSONS NOT SUBSTITUTED WITH ONE OR MORE ITEMS ALLOCATED

ITEMS ALLOCATED [15]	TOTAL	RENTER OCCUPIED
RELATIONSHIP ALLOCATED	73	19
SEX ALLOCATED	19	3
AGE ALLOCATED	3	28
RACE ALLOCATED	28	12
ORIGIN ALLOCATED	12	15
MARITAL STATUS ALLOCATED FOR PERSONS 15 YEARS AND OVER	15	5

58. YEAR-ROUND HOUSING UNITS SUBSTITUTED

	TOTAL	RENTER OCCUPIED
TOTAL	25	25

59. YEAR-ROUND HOUSING UNITS NOT SUBSTITUTED WITH ONE OR MORE HOUSING ITEMS ALLOCATED

HOUSING ITEMS ALLOCATED [16]	TOTAL	RENTER OCCUPIED
VACANCY STATUS ALLOCATED	55	9
DURATION OF VACANCY ALLOCATED	9	27
UNITS AT ADDRESS ALLOCATED	27	3
ROOMS ALLOCATED	3	2
PLUMBING FACILITIES ALLOCATED	2	4
TENURE ALLOCATED	4	7
VALUE OR PRICE ASKED ALLOCATED [11]	7	-
CONTRACT RENT OR RENT ASKED ALLOCATED [12]	-	-

ST. LUCIE

15. PERSONS BY AGE AND SEX

AGE	TOTAL	FEMALE	AGE	TOTAL	FEMALE
UNDER 1	6	2	20	5	2
1-2	12	3	21	11	7
3-4	8	7	22-24	28	11
5	7	2	25-29	42	13
6	8	8	30-34	34	21
7-9	18	7	35-44	72	36
10-13	18	10	45-54	83	44
14	12	2	55-59	50	25
15	4	2	60-61	12	9
16	17	6	62-64	13	8
17	13	7	65-74	86	42
18	11	2	75-84	42	25
19	2	0	85+	2	0

68. HOUSEHOLDS BY INCOME IN 1979

<\$2500	17	\$2500-\$4999	26
\$5000-\$7499	23	\$7500-\$9999	28
\$10000-\$12499	10	\$12500-\$14999	24
\$15000-\$17499	26	\$17500-\$19999	13
\$20000-\$22499	4	\$22500-\$24999	7
\$25000-\$27499	14	\$27500-\$29999	14
\$30000-\$34999	11	\$35000-\$39999	4
\$40000-\$49999	11	\$50000-\$74999	12
\$75000+	10		

69. MEDIAN HOUSEHOLD INCOME IN 1979 \$ 14896

70. MEAN HOUSEHOLD INCOME IN 1979 \$ 23891

96. VACANT HOUSING UNITS

FOR SALE ONLY	3
FOR RENT	3
HELD FOR OCCASIONAL USE	12
OTHER VACANTS	51

103. STRUCTURE OF VACANT SEASONAL AND MIGRATORY HOUSING UNITS

1, DETACHED	8
1, ATTACHED	0
2	8
3 AND 4	0
5 OR MORE	0
MOBILE HOME OR TRAILER, ETC.	0

109. TENURE AND OCCUPANCY STATUS BY YEAR STRUCTURE BUILT FOR YEAR-ROUND HOUSING UNITS

	TOTAL	TOTAL OCCUPIED	RENTER OCCUPIED
	-----	-----	-----
1979 TO MARCH 1980	27	19	0
1975 TO 1978	12	9	0
1970 TO 1974	54	51	4
1960 TO 1969	74	55	12
1950 TO 1959	71	57	15
1940 TO 1949	39	31	6
1939 OR EARLIER	58	44	14

110. OCCUPIED HOUSING UNITS BY TENURE BY YEAR HOUSEHOLDER MOVED INTO UNIT

	79-MAR80	1975-78	1970-74	1960-69	1950-59	TO 1949
	-----	-----	-----	-----	-----	-----
TOTAL	66	50	79	36	13	22
RENTED	30	10	7	0	3	1

111. HEATING EQUIPMENT IN YEAR-ROUND HOUSING UNITS

STEAM OR HOT WATER SYSTEM	0
CENTRAL WARM-AIR FURNACE	137
ELECTRIC HEAT PUMP	25
OTHER BUILT-IN ELECTRIC UNITS	35
FLOOR, WALL, OR PIPELESS FURNACE	13
ROOM HEATERS WITH FLUE	19
ROOM HEATERS WITHOUT FLUE	36
FIREPLACES, STOVES, OR PORTABLE ROOM	56
NONE	14

115. KITCHEN FACILITIES IN YEAR-ROUND HOUSING UNITS

COMPLETE KITCHEN FACILITIES	332
NO COMPLETE KITCHEN FACILITIES	3

132. HOUSEHOLD INCOME IN 1979 BY GROSS RENT AS PERCENTAGE OF INCOME

	< 20%	20-24%	25-34%	35% OR MORE	NOT COMPUTED
LESS THAN \$5,000	0	0	0	7	2
\$5,000 - \$9,999	0	0	4	8	2
\$10,000-\$14,999	6	2	0	0	0
\$15,000-\$19,999	9	0	0	0	0
\$20,000 OR MORE	5	3	0	0	1

133. MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS FOR OWNER-OCCUPIED NONCONDOMINIUM HOUSING UNITS WITH A MORTGAGE:

LESS THAN \$100	0	\$100 TO \$149	0
\$150 TO \$199	17	\$200 TO \$249	20
\$250 TO \$299	8	\$300 TO \$349	16
\$350 TO \$399	9	\$400 TO \$449	4
\$450 TO \$499	7	\$500 TO \$599	11
\$600 TO \$749	7	\$750 OR MORE	0
NOT MORTGAGED:			
LESS THAN \$50	8	\$50 TO \$74	13
\$75 TO \$99	16	\$100 TO \$124	15
\$125 TO \$149	2	\$150 TO \$199	7
\$200 TO \$249	0	\$250 OR MORE	5

139. PERCENTAGE OF HOUSEHOLD INCOME IN 1979 BY SELECTED MONTHLY OWNER COSTS FOR OWNER-OCCUPIED NONCONDOMINIUM HOUSING UNITS

AS PERCENTAGE OF INCOME

	< 20%	20-24%	25-34%	35% OR MORE	NOT COMPUTED
LESS THAN \$5,000	8	2	3	8	2
\$5,000 - \$9,999	10	2	5	10	0
\$10,000-\$14,999	11	2	0	2	0
\$15,000-\$19,999	26	4	6	5	0
\$20,000 OR MORE	49	5	5	0	0

141. MEAN HOUSEHOLD INCOME IN 1979 BY TENURE FOR OCCUPIED HOUSING UNITS

TOTAL	\$	23115	RENTER OCCUPIED	\$	12912
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TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

**SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND
GROUNDWATER AQUIFER RECHARGE ELEMENT**

Prepared For:

**Town of St. Lucie Village Board of Aldermen
St. Lucie Village, Florida**

Prepared By:

**Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410**

April, 1990

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**ST. LUCIE VILLAGE
INFRASTRUCTURE ELEMENT**

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ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

**SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND GROUND
WATER AQUIFER RECHARGE ELEMENT (INFRASTRUCTURE ELEMENT)**

I. INTRODUCTION

None of the facilities examined by this element are provided in the village in a centralized system except for solid waste removal and a limited drainage network. Instead, each land owner obtains their own potable water through groundwater extraction in the surficial aquifer and provides their own on-site septic systems for waste water disposal. Given the predominance of low density, single family residential and vacant land uses, these systems have adequately served the community.

The Infrastructure Element analyzes existing facilities in the community and provides a direction for accommodation of land uses proposed in the Future Land Use Element and on the Future Land Use Map. The element is prepared pursuant to Rule 9J-5.011, Florida Administrative Code (FAC); however, not all of the requirements of the rule apply to the village. Those that do not apply are listed in Appendix A with supporting justification of their inapplicability.

II. SANITARY SEWER SUB-ELEMENT

Existing Conditions

All sewage treatment within the village is comprised of individual, on-site septic tanks. The village contains approximately 300 permanent and seasonal occupied dwellings and businesses; however, some lots contain two or more dwellings which use the same septic system. Therefore, the number of septic systems is most likely less than 243. There are no "package treatment plants" in the village. The closest centralized system is located approximately one mile south of the village in the City of Ft. Pierce and is operated by the Ft. Pierce Utilities Authority.

According to the Soil Survey of St. Lucie County Area, Florida, (1980) published by the U.S. Department of Agriculture, Soil Conservation Service, the village is generally comprised of two different soils associations (see Figure 3). The Atlantic Coastal Ridge, located along the western boundary of the village, is made up of the St. Lucie-Satellite-Welaka Variant association; and the remainder of the village consists of the Nettles-Ankona-Pepper association. Both of these soils associations were listed as having "severe" limitations for septic tank absorption fields. Severe limitations indicate, "...soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in costs, and possibly increased maintenance are required." In the case of these two soils associations, the severe limitations are primarily a result of the soils being poorly drained and the presence of low-permeability hardpan layers; both of which can be overcome by proper septic system design. A majority of the village is located within the 100 year flood plain and is subject to tidal surge during major storm events thus creating additional constraints on the use of septic systems in the village.

Currently, the Environmental Health Division of the St. Lucie County Health Department issues permits for the installation of new septic tanks. The Health Department has permitted new septic systems to locate in the village, but only when mitigating measures such as septic field elevation and flood protection techniques are applied. Regular maintenance and inspections are encouraged but not required. The village does not impose any additional standards for septic field installation.

Septic system failures have been uncommon in the village. During periods of flooding, however, some system back-up has been experienced on those properties located adjacent to the Indian River shoreline. The flooding and system back-up tend to be only temporary as flood waters generally recede within twenty-four (24) hours after a storm. In light of this fact, the village does suggest that septic drain fields be at least 4 feet above the highest expected groundwater level and the tank at least 50 yards from the Indian River lagoon in order to protect that body's water quality.

The use of septic systems can have an impact on adjacent water bodies and aquifers. Improperly installed or maintained systems can cause untreated sewage to seep into surface and groundwater systems. All septic systems in the village are individually owned and maintained, their current and projected conditions and life expectancies are unknown. However, the relatively few number of failures indicates most are in good working order. Further, no governmental agencies or outside organization have identified specific pollution problems caused by septic systems within St. Lucie Village.

Needs Assessment

The soil associations and floodplains that cover most of St. Lucie Village place severe limitations on the use of septic systems. However, the low density development of the village and

the use of appropriate septic field construction techniques has allowed these limitations to be overcome safely. The village has little history of septic failure, except in periods of flooding, and the continued strengthening of septic field regulations suggests failures in the future will be minimal.

The addition of new septic fields in the next five (5) years will create few problems as the projected rate of population growth during this period is only one and fifteen hundredths percent (1.15%) annually. The large lot requirements for most of the village and the large amount of vacant land indicates the projected rate of growth and uses proposed on the Future Land Use Map can be adequately accommodated through the continued use of on-site sewage disposal systems.

Beyond the next five (5) years, population growth is expected to continue at an annual rate of one and fifteen hundredths percent (1.15%) for the remainder of the 2005 planning horizon. Again, the slow rate of growth and low density uses on the Future Land Use Map indicate the continued suitability of use of on-site septic systems. However, some vacant lots are too small to accommodate the required septic field area and others are unsuitable due to the presence of wetlands. Therefore, lots may have to be combined before they can be developed. Thus, the actual development intensity of the village may actually be lowered. Should this practice occur, it would be consistent with the desires of the current village residents and general goal of the Future Land Use Element to maintain a low growth rate and a low development intensity.

The Ft. Pierce Utilities Authority (FPUA) is currently planning the expansion of their facilities throughout the county. One of the expansion areas for sanitary sewage facilities is immediately south of St. Lucie Village. However, the time period for this extension is yet unknown. In addition, the expense to further extend the system into the village is also unknown.

Extension of the system into the village within the next five (5) years is not likely. The FPUA is primarily interested in serving unincorporated areas which would annex into the City of Ft. Pierce in order to obtain services. Additionally, for such an expansion to be cost effective to the FPUA, each property owner in the village would have to be assessed. The village currently has no taxing mechanisms in place. Further, all of those living in the village have already borne the expense of installing septic fields. Therefore, it is unlikely village residents would elect to tax themselves in the near future in order to receive sanitary sewage facilities from the FPUA.

III. SOLID WASTE SUB-ELEMENT

Existing Conditions

The village annually contracts with a private, licensed, solid waste hauler (currently Sparky's Sanitation, Inc.) who provides pick-up services to all residences and businesses within the village twice weekly. Residences are then billed monthly by the village for the service. All wastes collected by the contractor are taken to the St. Lucie County Landfill located in the unincorporated area of the county. No dump sites, public or private, are located within the village.

The county landfill, located on Glades Road, is operated by the County Public Works Department, which is responsible for insuring the facility is operated in conformance with permit requirements and in compliance with water quality objectives. In 1986, the Solid Waste Management Plan for St. Lucie County, Florida was developed for the county by Barker, Osha, and Anderson, Inc. The following is a brief discussion of the facility based on the management plan and subsequent conversations with the landfill supervisor in September, 1988.

In all, the Glades Road Landfill comprises 251 acres which are to be utilized in six (6) phases. Phase I, consisting of twenty-eight (28) acres, has been closed and Phase II is currently in operation. Phase II consists of 25 acres and has a design capacity of approximately 2.0 million cubic yards of waste and cover. This portion of the landfill is used for disposal of Class I and Class III refuse. Infectious wastes, hazardous waste, and junk vehicles are not accepted. Vehicle tires are accepted and stored in a special area. Asbestos waste is accepted and covered in a specially designed area.

The county is currently developing plans for the closure of Phase II and the development of Phase III. In all, the entire landfill will have 134 acres for waste disposal. The remaining 117 acres will be used for ancillary purposes, including borrow pits and leachate retention areas.

In September 1988, the Glades Road Landfill supervisor estimated 525 tons per day of solid waste were being received by the landfill. He further estimated 8.1 pounds per day per capita were being generated in high growth areas of the county due to construction waste. For St. Lucie Village and other low growth areas, however, the supervisor estimated 6.8 pounds per day per capita were being generated.

Through interlocal agreements, all municipalities have agreed to dispose of their solid waste at the county landfill. The landfill makes no space allocations for municipalities, as the interlocal agreements require the county to accept all Class I and Class III wastes generated in the county. In addition, the landfill is open to all individuals from inside and outside of the county.

Needs Assessment

The practice of using a private solid waste hauler has worked well for the village and is expected to continue through the next five (5) years and for the rest of the 2005 planning horizon. The existing county landfill, however, will need to be fully developed and expanded in order to accommodate the regional demand that will be placed upon it. The landfill supervisor estimates the life expectancy of the existing landfill to be five (5) years, or December, 1993.

According to the county solid waste management plan, 5.54 million tons of Class I waste and 2.73 million tons of Class III wastes are to be generated through the year 2010. A total of 370 additional acres is estimated in excess of the existing 251 acres in order to accommodate the projected waste disposal needs for the next twenty-five (25) years. It should be noted this estimate is based on a moderate rate of growth for the county. St. Lucie County now projects a high rate of growth so these estimates should be adjusted upward accordingly. Thus, closing of the existing landfill is now expected in 1993.

The projected shortage of space in the existing county landfill will become critical if efforts are not immediately undertaken to identify, obtain and finance additional space. The county has begun plans to further develop the existing landfill and identify additional sites. However, since all municipalities, including St. Lucie Village, will be affected by decisions made by the county to overcome this problem, all should become involved. It is recommended the village continue to work with the county in its efforts to provide additional landfill space and develop programs for solid waste reduction and recycling. The village was represented on the St. Lucie County Solid Waste Technical Advisory Committee, which convened during 1989 to evaluate and make recommendations to the county commission on waste reduction and recycling programs

IV. DRAINAGE SUB-ELEMENT

Existing Conditions

St. Lucie Village has no significant natural drainage features within the village's jurisdiction other than the Indian River and does not provide central storm water drainage facilities. Each development is responsible for providing drainage facilities to accommodate run-off in accordance with regulations set forth by the South Florida Water Management District (SFWMD) and the Florida Department of Environmental Regulation (DER). However, since many of the development sites are single family residences of ten (10) acres or less, they have been exempted from compliance with the SFWMD and the DER drainage regulations. Therefore, a majority of the village has been developed without any storm water management regulations.

The long history of the village and the continuing lack of drainage regulations has led to the construction of several drainage ditches throughout the village. Small, overgrown ditches can be found in several areas in the eastern portion of the village. In addition, Old Dixie Highway and the FEC railroad tracks have culverts under them. Unfortunately, the locations and sizes of these ditches and culverts are unknown and, as a result, they have not been maintained. However, the culverts under Old Dixie Highway and the railroad appear to be open to some extent, as the land to the east of the tracks is very wet and has created a mosquito control problem.

Several times over the past twenty years, the St. Lucie County Mosquito Control District has attempted to improve the drainage of the lands immediately east of the railroad tracks in the southern part of the village. Small, discontinuous ditches exist in this area and some have become highly vegetated and silted.

Attempts to obtain permanent easements through properties in this area have been difficult and thus, have stalled improvement efforts. Only three (3) major canals are in operation within the village and all three are currently being maintained by the Mosquito Control District.

Boat Yard Canal

The Mosquito Control District maintains a canal in the southern portion of the village. This canal is labeled as the Boat Yard Canal on Figure 8. The canal begins about one hundred feet south of St. Lucie Lane and runs south along the railroad tracks to the boat yard south of the village limits. Here, it runs east and enters the lagoon. The mouth of the canal has no control structure or tide gate. The canal is generally six (6) feet wide and three (3) feet deep. The total watershed of this canal is approximately 8 acres and it has adequate capacity to accommodate the 5-year, 24 hour storm event (5.5 inches) with an estimated peak discharge of 27 CFS. Impacts, if any, on the lagoon or other natural resources due to this discharge are unknown.

South Chamberlain Canal

The South Chamberlain Canal is an L-shaped canal located several hundred feet south of Chamberlain Boulevard (see Figure 8). This canal is approximately ten (10) feet wide and three (3) feet deep throughout most of its length. The eastern most 300 feet, however, is underground in a twenty-four (24) inch culvert that passes underneath Indian River Drive. The canal does have a tidal control structure but it frequently fails to operate. The culverted part is also in disrepair, with several holes and root penetrations. The total watershed of this canal is estimated to be 17 acres. Its discharge capacity is constrained by the outlet culvert flowing under outlet control conditions. This capacity

is calculated to be 15 CFS at a maximum available head of 5 feet. Under 5-year, 24-hour storm conditions a peak discharge of 32 CFS is calculated for the canal's watershed. Storm flow in excess of the culvert capacity discharges to the Indian River by overland flow on the paved driveway adjacent to the culvert. No samples or studies have been conducted to determine the impact of the canal on the lagoon or other natural resources.

Ft. Capron Canal

The third existing major canal is the Ft. Capron Canal. The canal begins several hundred feet north of Chamberlain Boulevard and extends several hundred feet to the east where it turns in a northeasterly direction and then back east (see Figure 8). Several property owners have culverted the canal and the eastern portion under Indian River Drive consists of a 24 inch diameter concrete culvert, 200 feet in length. The canal was cleaned by the Mosquito Control District in 1989 and is presently in excellent condition. The total watershed of this canal is approximately 14 acres. Discharge from the canal is constrained by the outlet culvert flowing under outlet control conditions. The culvert capacity is calculated to be 18 CFS at a maximum available head of 5 feet. Under 5-year, 24-hour storm conditions, a peak discharge of 25 CFS is calculated for the canal's watershed. Storm flow in excess of culvert capacity is discharged to the adjacent Indian River via overland flow.

Summary of Existing Conditions

In the past, disjointed and poorly maintained canals in the village created a mosquito control problem in the southern portion of the village, immediately east of the railroad tracks. Culverts under Old Dixie Highway and the railroad deposited water in this area, creating pools of standing water. This created a mosquito control problem but has not caused flooding problems. The primary means of storm water discharge in this area of the

Village is by overland flow to the Indian River, as the flow length is relatively short (generally less than 1200 feet) and adequate relief is available. Following a recent (October 1988) storm with a 24-hour rainfall of over 10 inches, only localized yard flooding was evident and these conditions subsided within 24 hours. Similar conditions were observed in the River Woods subdivision and in the Torpy Road and Rouse Road areas. Canals and structures maintained by the Mosquito Control District are for mosquito control purposes only and are not intended to discharge run-off resulting from the 5-year, 24-hour storm event adopted as the level of service standard for future development.

Needs Assessment

Recently, the village has been working with the Mosquito Control District (MCD) to improve existing mosquito control canals. Expansion projects proposed for these canals have been abandoned due to inability to obtain the necessary easements from property owners. The proposed expansions were for mosquito control purposes only and were not determined necessary for flood control. The village maintains an acceptable level of drainage for events up to the 5-year, 24-hour storm event by maintaining and enhancing existing facilities and adoption of the pending stormwater management ordinance presently being drafted by St. Lucie County. The village worked actively on the Stormwater Management Technical committee, which drafted the interim stormwater ordinance and will continue their participation on drafting the final ordinance.

Demand on the facility capacity of drainage facilities in the three major developed areas east of the railroad tracks will not increase significantly, as these areas are very nearly built out. The lack of flooding (except of short-duration, localized yard flooding) observed during the October 1988, 10-inch rainfall event provides a general indication of the performance of the existing drainage facilities and that sufficient reserve capacity is available to accommodate build-out in these areas. The

majority of run-off from incorporated areas west of the railroad tracks and that from the remaining large, undeveloped areas east of the tracks can be managed through stormwater permitting of future subdivision developments in the large eastern parcels.

Due to the linear nature of the village along the Indian River, drainage facilities for the great majority of new development will be separate facilities discharging to the River. These newly-developed drainage facilities for the large undeveloped tracts will not interact with existing drainage facilities serving largely built-out areas. Drainage facilities for new developments will be permitted and constructed in strict conformance with the pending St. Lucie County stormwater management ordinance.

The village shall adopt level of service standards for drainage facilities as recommended by the South Florida Water Management District, as follow:

- 5-year, 24-hour protection for road centerlines; and
- 5-year, 1-hour protection for parking lots served by exfiltration systems.

V. POTABLE WATER SUB-ELEMENT

Existing Conditions

Potable water is obtained by each household and business through individual on-site wells. There are currently about 300 permanent and seasonal dwellings and businesses in St. Lucie Village and each has at least one well. The SFWMD regulates some commercial wells, but wells for private residential use are exempt from SFWMD review. Instead, a general use permit is issued in order to keep track of the number of wells. However, this program did not begin until 1979. Therefore, the majority of wells in the village have been legally drilled and operated

with no governmental review or permits. The nearest potable water system is located in the City of Ft. Pierce and operated by the Ft. Pierce Utilities Authority (FPUA).

Both the Floridan and the Surficial Aquifers underlie the village. All potable water wells use the Surficial Aquifer, as the Floridan has high to moderate concentrations of dissolved salts. Recharge of the Surficial Aquifer is dependent mostly on rain water. Therefore, the quantity of water within it varies from month to month and year to year. No data is available, however, as to the estimated average amount of water available. The water quality and recharge rate of the Surficial Aquifer are further discussed in the Conservation Element of this Comprehensive Plan.

Needs Assessment

Although few problems of salt water intrusion or well contamination have been experienced in the village, continued unregulated drilling and use of wells could lead to serious contamination problems in the future. Improper well locations, use for irrigation, abandonments or serious flooding in wellfields have the potential for contaminating the entire village water supply. Therefore, it is recommended that the village closely monitor the placement of new wells as the state agencies currently provide exemptions from their requirements for most of the development likely to occur within the village.

The FPUA is currently developing several alternative expansion plans, some of which include the extension of potable water facilities up to the southern limits of St. Lucie Village. As with the extension of sanitary sewage facilities, the time period and costs of the expansion are not known at this time. Therefore, it is doubtful the extension will take place within the next five (5) years. Extension of the system beyond the next five (5) years will most likely depend on the costs to each resident, the mechanism used to obtain the funds and the

development desires of the village and the FPUA.

VI. NATURAL GROUNDWATER AQUIFER RECHARGE SUB-ELEMENT

Existing Conditions

The SFWMD has not designated any "prime aquifer recharge areas" within St. Lucie Village. Prime aquifer recharge areas are located further to the west of the village in agricultural areas of the county. The low intensity of development in the village, however, has left large areas of permeable surfaces that undoubtedly contribute to recharge of the shallow aquifer.

Needs Assessment

The land uses proposed in the Future Land Use Element of this Comprehensive Plan will continue to provide large, permeable areas for aquifer recharge. The greatest threat to the aquifer is the unregulated drilling of wells and drawdown rates. The Potable Water Sub-Element and Conservation Element provide greater details on this problem.

VII. SUMMARY OF SIGNIFICANT ISSUES

St. Lucie Village is a small, slow growing community that does not provide or have available centralized sanitary sewage, drainage or potable water facilities. Each property owner is required to provide these facilities on-site in a manner consistent with the needs of the property development. Different review and permitting agencies are charged with implementing regulations concerning some of these facilities.

A private solid waste hauler is contracted by the village for the solid waste removal needs of all village residents and business owners, who are then billed by the village for the service. In

accordance with an interlocal agreement, all solid waste is transported to the county landfill for disposal.

The residents of St. Lucie Village desire a primarily low density, single family residential community with some local and highway oriented commercial businesses. The rate of population growth over the past eight (8) years has been at the rate of one and fifteen-hundredths percent (1.15%) annually which is expected to continue for the next fifteen (16) years. The desires of the community to maintain the type and pace of development is reflected in the Future Land Use Element and Map which designate development of most of the vacant land in the community as Single Family, Low Density Residential.

The projected future land uses and rate of growth are compatible with the infrastructure needs of the village. The large lot development required by the existing Future Land Use Element and zoning code allows for the continued use of on-site sewage disposal, potable water and storm water management in most cases. Likewise, the large area requirements of these systems strengthen the desires of the community to limit growth and development and maintain the natural, low intensity character of the village.

The nearby City of Ft. Pierce is considering the extension of sanitary sewer and potable water facilities to areas near the village. The time period and costs associated with the extension of these facilities into the village are unknown. However, it is reasonable to assume the extensions will not take place in the next five (5) years as the costs to village residents would be quite high and the extensions may not meet the objectives of either the FPUA or the village.

Beyond the direct costs for the extension of these services, several other issues need to be carefully examined to determine the best interest of village residents. Although introduction of these facilities would not conflict with the Future Land Use Element, it could lead to an increase in development activity and

allow development intensities that on-site systems could not accommodate. This, in turn, may lead to challenges of the Future Land Use Element and Map as being too restrictive. Conversely, if constructed and maintained properly, the potential environmental problems associated with centralized systems tend to be far fewer than those associated with on-site systems.

Although centralized sewage and potable water systems may be inappropriate for the village, there is clear need to improve the drainage system. The partnership with the Mosquito Control District to improve and expand the existing canals should continue. However, the potential environmental impacts of the system need to be addressed and incorporated into design of the system. In particular, natural wetlands and the Indian River Lagoon need to be protected. Additionally, the watersheds and capacities of these canals need to be established to prevent problems created by new development.

The largely unregulated development of infrastructure in St. Lucie Village has created few problems in the past. In the future, however, the village must face growing regional concerns, such as availability of space in the county landfill, and local concerns, such as the protection of potable water. The following, then, are the goals, objectives and policies the village will implement to address these concerns to maintain the high quality of life that has become the trademark of the community.

VIII. GOALS, OBJECTIVES AND POLICIES

GOAL 4.1.: SANITARY SEWAGE, SOLID WASTE, STORM DRAINAGE, AND POTABLE WATER FACILITIES SHALL BE PROVIDED IN A MANNER WHICH PROTECTS GROUNDWATER AQUIFER RECHARGE, PROMOTES ORDERLY GROWTH, AND FURTHERS THE GOALS, OBJECTIVES AND POLICIES OF THE FUTURE LAND USE ELEMENT.

OBJECTIVE 4.1.1.: In accordance with section 163.3202, F.S., land development regulations shall be adopted which require all proposed development to present evidence of compliance with local, state and federal regulations concerning the use of on-site wastewater treatment systems.

Policy 4.1.1.1.: Issuance of all building permits shall be conditioned upon demonstration of compliance (e.g. signed permits) with applicable local, state and federal requirements for on-site wastewater treatment systems necessary to service the proposed development.

Policy 4.1.1.2.: Regulations shall be adopted which require all new, replacement, or modified wastewater treatment systems to be registered with the village. The village shall maintain an inventory of all such registrations and may levee or registration fee in order to cover all costs associated with the registration and inventory program.

Policy 4.1.1.3.: In accordance with the Florida Department of Health and Rehabilitative Services, Chapter 10D-6, the village shall not allow subdivision of land resulting in lots measuring less than 1\2 acre and shall not allow septic systems to be located with on-site wells on existing lots measuring less than 1\2 acre and platted after January 1, 1990, unless the lot owner obtains a variance from HRS.

Objective 4.1.2.: Centralized sanitary sewage systems shall be

introduced into St. Lucie Village only in a manner consistent with the financial capabilities of the village; development policies of the village and village residents; and the goals, objectives and policies of this Comprehensive Plan.

Policy 4.1.2.1.: Centralized sanitary sewage facility operators shall obtain a franchise permit from the village.

Policy 4.1.2.2.: Any assessments required for the extension of sanitary sewage facilities into St. Lucie Village shall be placed on a referendum before registered voters of the village indicating the amount of the assessment to be paid by each landowner. A simple majority of those voting shall be required to affirm or deny the levying of the assessment.

Policy 4.1.2.3.: At such date that a central sanitary sewage facility becomes feasible within the village limits, this comprehensive plan shall be amended to specify a sufficient level of service standard for said facility.

Policy 4.1.2.4.: In order to minimize the threat to the water quality of the Indian River Lagoon, the town shall recommend that when developing a parcel within 50 yards of the River, septic drainfields should be at least 4 feet above the highest expected groundwater level. Additionally, septic tanks should be located at least 50 yards from the River.

Objective 4.1.3.: Solid waste removal and disposal shall be accomplished through a coordinated effort.

Policy 4.1.3.1.: The village shall continue to contract with licensed, private, solid waste haulers to serve all residents of the village and assess fees that are commensurate with the costs involved.

Policy 4.1.3.2.: The village shall work with the county in the identification, financing, and development of additional landfill

space.

Objective 4.1.4.: By the year 1995, the village shall develop, adopt, and implement drainage regulations with specific attention paid to the protection of the village's natural drainage feature (the Indian River).

Policy 4.1.4.1.: The village shall develop, adopt and implement drainage system design regulations consistent with SFWMD and DER regulations and those being drafted by St. Lucie County.

Policy 4.1.4.2.: Issuance of a development order or permit for new development or redevelopment shall be conditioned upon demonstration of compliance with applicable federal, state and local drainage system permit requirements.

Policy 4.1.4.3.: The village shall continue its membership and active participation on the drainage advisory committee to draft a county drainage ordinance. The village shall also place a representative on the county-wide drainage authority at such time that one is created.

Policy 4.1.4.4.: The village adopts the following level of service standards for drainage facilities, as stated in this element and recommended by SFWMD:

5-year, 24-hour protection for road centerlines;

5-year, 1-hour protection for parking lots served by exfiltration systems.

These standards shall be superseded by those established in the St. Lucie County Stormwater Management Ordinance when it is completed.

Policy 4.1.4.5.: In accordance with Florida Department of Health and Rehabilitative Services, Chapter 10D-6 and the Future Land Use Element of this plan, the functioning of natural drainage

features shall not be impeded by future development.

Objective 4.1.5.: The village shall assist the Mosquito Control District with the monitoring, maintenance and improvement of the existing drainage canals.

Policy 4.1.5.1.: All drainage canals controlled by the village and/or Mosquito Control District shall have defined watersheds, capacities and levels of service.

Policy 4.1.5.2.: Issuance of a development order or permit for new development or redevelopment having an impact upon the existing Mosquito Control District canals shall be conditioned upon Mosquito Control District approval of drainage system(s) associated with the development.

Policy 4.1.5.3.: The village shall develop, adopt and enforce regulations prohibiting the direct discharge of substances into the drainage canals, other than storm water, or the placement of yard trash or other solid waste and rubbish into the canals and provide for the assessment of fees for violations.

Policy 4.1.5.4.: The village shall meet with the Mosquito Control District a minimum of once a year to discuss needed improvements to the canal system. Any improvement plans shall be agreed to by both parties and the county-wide drainage authority or drainage advisory board once it becomes active.

Objective 4.1.7.: By the year 1995, the village shall develop, adopt and implement regulations for the protection of potable water and groundwater aquifer recharge areas.

Policy 4.1.7.1.: The village shall conduct a study to determine the number of active and open wells, the aquifers being used, the drawdown rates and water quality in the community.

Policy 4.1.7.2: The village shall enlist the assistance of the SFWMD to develop, adopt and implement regulations for the placement, construction techniques, drawdown rates, use and abandonment of wells. All existing and proposed wells shall then be required to conform with the adopted regulations and obtain a permit from the village.

Policy 4.1.7.3.: The village, with the assistance of the SFWMD, shall install permanent groundwater quality and depth monitoring stations.

Policy 4.1.7.4.: The village shall participate in the county-wide wellfield protection program.

Objective 4.1.8.: Centralized potable water systems shall be introduced into St. Lucie Village only in a manner consistent with the financial capabilities and development policies of the village and village residents.

Policy 4.1.8.1.: Centralized potable water facility operators shall obtain a franchise permit from the village.

Policy 4.1.8.2.: Any assessments required for the extension of potable water facilities into St. Lucie Village shall be placed on a referendum before the registered voters of the village indicating the amount of the assessment to be paid by each landowner. A simple majority of those voting shall be required to affirm or deny the levying of the assessment.

Policy 4.1.8.3.: At such date that a central potable water facility becomes feasible within the village limits, this comprehensive plan shall be amended to specify a sufficient level of service standard for said facility.

Objective 4.1.9.: By 1995, the Village shall investigate and implement strategies for conserving potable water resources.

Policy 4.1.9.1: In accordance with Section 163.3202, F.S. the village shall revise land development regulations to include requirements for the use of zeric landscaping in all new development and redevelopment.

Policy 4.1.9.2.: In accordance with Section 163.3202, F.S., the village shall revise land development regulations to include requirements to include requirements for the use of soil water tensiometers, or other similar devices, in all irrigation systems for all new development or redevelopment.

Policy 4.1.9.3.: By 1993, the village shall develop and ordinance requiring the use of water -saving plumbing devices in all new development and redevelopment.

APPENDIX 4-A

SECTIONS OF 9J-5, FAC, NOT APPLICABLE TO ST. LUCIE VILLAGE

9J-5.011(1)(b): St. Lucie Village does not provide facilities to serve areas within other local government jurisdictions. Therefore, the requirement to address these facilities is not applicable to the village.

9J-5.011(2)(b)1: St. Lucie Village does not operate any drainage facilities and the existing natural features and septic systems are not experiencing any deficiencies. Therefore, the requirement to include an objective addressing existing deficiencies in these facilities is not applicable.

9J-5.011(2)(c)1: St. Lucie Village does not operate any drainage facilities. Therefore, the requirement to include policies addressing replacement priorities and existing deficiencies in these facilities is not applicable.

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

COASTAL MANAGEMENT ELEMENT

Prepared For:
The Town of St. Lucie Village, Florida

Prepared By:
Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

April, 1990

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
COASTAL MANAGEMENT ELEMENT**

I. INTRODUCTION

The purpose of this element, as defined in Rule 9J-5.012 Florida Administrative Code (FAC), is to, "plan for and where appropriate restrict development activities where such activities would damage or destroy coastal resources, and protect human life and limit public expenditures in areas that are subject to destruction by natural disaster." The State of Florida has developed criteria for identifying coastal cities and counties and has determined that St. Lucie Village meets the criteria. Therefore, the village must include a Coastal Management Element as part of its Comprehensive Plan. This element has been prepared in a manner consistent with Section 9J-5.012, FAC.

The St. Lucie Village coastal area is defined by this element to be all of the incorporated area east of the Florida East Coast Railroad (FEC) right-of-way (see Figure 2). This area consists primarily of low density, single family homes and a marina and was determined to be "coastal" as it includes the Indian River Lagoon to which the land area is adjacent. The coastal area also defines that portion of the village prone to flooding during severe storms and contains approximately seventy-five percent (75%) of the land area within the city.

Rule 9J-5 FAC, requires coastal area natural resources and infrastructure to be inventoried, analyzed and future infrastructure demands and expenditures be determined. Many cities and counties have small, isolated coastal areas with unique resources and infrastructure. This then provides for the analysis of those resources and infrastructure in the Coastal Management Element to compliment the analysis of the entire city

as completed in the other elements of the comprehensive plan. However, because the coastal area of St. Lucie Village consists of such a large percentage of the entire incorporated area, an in-depth analysis of all resources and infrastructure within the coastal area would be redundant with the analysis completed in the other elements of this plan. The analysis conducted in the other elements of this Comprehensive Plan, though, accounts for the constraints and resources of the coastal area and provides goals, objectives and policies accordingly. Therefore, this element focuses primarily on the resources and infrastructure of the coastal area that are not identified and analyzed in the other elements of this Comprehensive Plan.

Some of the items addressed in the Coastal Management Element include an inventory and analysis of the unique natural resources, land uses, estuarine pollution, archaeological and historical resources, hurricane evacuation, post disaster planning concerns, public access, and some infrastructure of the coastal area. A summary of the significant issues is then given followed by the goals, objectives, and policies that will be used to further the purpose of this element. Any coastal area planning requirements from Rule 9J-5 FAC, that are not applicable to St. Lucie Village are listed in Appendix 5A with the necessary justification.

II. BOUNDARIES OF THE COASTAL AREA

The St. Lucie Village coastal area consists of the entire area bounded by the city limits on the north, south and east, and the FEC railroad right-of-way on the west (see Figure 2). Water resources in the area include the Indian River Lagoon and accessory canals. It is important to note that the coastal area is somewhat fragmented by the existence of a large, unincorporated parcel that divides the area in half.

III. NATURAL RESOURCES

The village coastal area includes approximately 5,000 feet of shoreline along the Indian River Lagoon and several hundred acres of the lagoon itself. Much of the land area is developed into large, single family residential lots with one marina and a small multi-family development. The entire coastal area is within the 100-year floodplain and low-lying vacant parcels contain scattered wetlands.

Vegetative Cover and Wetlands and Wildlife

Three (3) general ecological communities are found within the St. Lucie Village coastal area (See Figures 4 and 11). Along the coast of the Indian River Lagoon, mangrove swamps and their associated flora and fauna can be found. This community has been disturbed, though, and is not as extensive as it once was. Most of the upland portion of the coastal area is characterized as the South Florida Flatwoods as described in 26 Ecological Communities of Florida, published by the Florida Chapter of the Soil Conservation Society of America. The remaining uplands area contains freshwater marsh communities which are also described in the above publication. The Conservation Element of this Comprehensive Plan provides a summary of the flora and fauna of these communities and the threatened and endangered species that may occur there are listed.

Aquatic Wildlife

The Indian River Lagoon is not a river but, in fact, a large estuarine lagoon that extends from Volusia County on the north into Martin County on the south. That portion of the Lagoon within the village limits is part of the Indian River Aquatic Preserve for which the Indian River Lagoon Aquatic Preserves Management Plan has been prepared by the Florida Department of

Natural Resources (DNR). In addition, an Interim Surface Water Improvement and Management (SWIM) Plan has been prepared for the lagoon by the St. John's River and South Florida Water Management Districts. The DNR is responsible for the preservation, conservation, and management of the lagoon's marine resources through regulations which restrict dredge and fill activities and construction of structures in the preserve. The designation also becomes a consideration in review by the Florida Department of Environmental Regulation (DER) of development on adjacent land which could degrade water quality through improper drainage or waste treatment. Waters within the preserve have been furthered classified by the DER as "Outstanding Florida Waters" (17-3.041 FAC).

Additionally, the Indian River waters adjacent to the village have been classified by the DER as Class III waters for, "Recreation-Propagation and maintenance of a healthy, well balanced population of fish and wildlife", (17-3.121 FAC). However, waters adjacent to the barrier island (North Hutchinson Island) immediately to the east of the village have been classified by the DER as Class II waters for shellfish harvesting and propagation (17-3.111 FAC) and approved by the DNR for harvesting activities. The flora and fauna of the lagoon are detailed in the Indian River Lagoon Aquatic Preserves Management Plan which is hereby referenced and incorporated into this element.

Areas of Special Concern

Endangered and Threatened Species

Undeveloped areas of the village contain coastal habitats that may be used by threatened and/or endangered species, although no species inventory has been specifically conducted for the

village. However, it is important to recognize that these species may exist before development activities are approved that would significantly alter the natural environment. The Aquatic Preserve Management Plans and the Florida Game and Fresh Water Fish Commission (GFWFC) list numerous species of concern in the coastal areas of St. Lucie County. Because of its importance to most of these species, The Indian River Lagoon is an "area of special concern" to the village and mapped accordingly on Figure 11.

ENDANGERED

Reptiles

Atlantic green turtle	(<u>Chelonia mydas mydas</u>)
Atlantic hawksbill turtle	(<u>Eretmochelys imbricata</u> <u>imbricata</u>)
Atlantic ridley turtle	(<u>Lepidochelys kempii</u>)
Leatherback turtle	(<u>Dermochelys coriacea</u>)
Atlantic salt marsh snake	(<u>Nerodia fasciata taeniata</u>)

Birds

Wood Stork	(<u>Mycteria americana</u>)
Peregrine falcon	(<u>Falco peregrinus</u>)

Mammals

West Indian manatee	(<u>Trichechus manatus</u>)
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THREATENED

Reptiles

Atlantic loggerhead turtle	(<u>Caretta caretta caretta</u>)
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Birds

Eastern brown pelican	(<u>Pelecanus occidentalis carolinensis</u>)
Bald eagle	(<u>Haliaeetus leucocephalus</u>)
American kestrel	(<u>Falco sparverius paulus</u>)
Roseate tern	(<u>Sterna dougallii</u>)
Least tern	(<u>Sterna albifrons</u>)

SPECIES OF SPECIAL CONCERN

Fishes

Common snook	(<u>Centropomus undecimalis</u>)
Rivulus	(<u>Rivulus marmoratus</u>)

Reptiles

American alligator	(<u>Alligator mississippiensis</u>)
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Birds

Little blue heron	(<u>Florida caerulea</u>)
Snowy egret	(<u>Egretta thula</u>)
Louisiana heron	(<u>Hydranassa tricolor</u>)
Reddish egret	(<u>Dichromanassa rufescens</u>)
Roseate spoonbill	(<u>Ajaia ajaia</u>)
American oystercatcher	(<u>Haematopus palliatus</u>)

One of the most publicized endangered wading birds in the state is the wood stork. It is endangered because its feeding areas are disrupted by artificial water level management in wetlands. The aquatic preserve will continue to provide feeding grounds, but potential nesting areas may be lost through development.

The GFWFC indicates that wintering Peregrine falcons are occasionally observed in or near the study area and bald eagles are regularly observed feeding along the estuaries, although nests are not located therein. Their declines are attributable to pesticide residues for the falcons and habitat destruction for the eagles. Again, the aquatic preserve will continue to provide feeding grounds, but development of adjacent uplands could cause loss of nesting and/or roosting sites.

The manatee resides in the Indian River Lagoon year-round, but has an increased presence during the wintertime. The principal natural cause of death of manatees is exposure to cold. The most common human-induced causes of manatee deaths are boat collisions and poaching, although poaching has decreased because of strict law enforcement. Protective actions against boat collisions can be taken such as establishing speed zones, posting of manatee congregating areas, and educating the boating public; but, the habitats of the manatee continually place it in vulnerable positions for boat collisions.

The American oystercatcher and least tern are imperiled by a loss of nesting sites. These birds nest on sandy beaches. There is no primary dune habitat within the village and it is not presently known if sandy areas of the Atlantic Coastal Ridge could provide substitute nesting areas. The lack of ocean beaches in the village also precludes the likelihood of finding of any sea turtles.

The herons, egrets, and roseate spoonbills that are listed share similar habitats and loss of habitat is of primary concern in maintaining and/or promoting these bird populations. The aquatic preserve maintains a considerable amount of habitat, but further development of the coastal areas within St. Lucie County could reduce the amount of existing unprotected habitat.

The gopher tortoise and indigo snake share burrows and, as a result, share a common fate. These animals are declining in number mostly due to loss of habitat in upland xeric areas throughout the county. Other threats to these animals include over-harvesting and attempts to destroy another common cohabitant of the burrows, rattlesnakes. Site planning and density controls may help reduce the loss of habitat.

Coastal Flooding

The entire coastal area is within the 100 year floodplain and subject to storm surge. Therefore, the area has been designated as a "A Zone" on the Federal Emergency Management Agency Flood Insurance Rating Maps. Since the village was incorporated in 1961, there have been periodic episodes of flooding. These have generally been the result of tropical storms or hurricanes, spring tides and Nor'easters. Floodwaters usually affect only those residents immediately adjacent to the lagoon. Water rises over Indian River Drive and then ponds in the front yards of the homes. Little significant damage has been reported from these events and flood waters usually recede within twenty-four (24) hours after the storm event has passed.

IV. LAND USE INVENTORY AND ANALYSIS

Existing Land Use

The existing land uses within the coastal area are almost all low density single homes and vacant parcels except for a marina, one small multi-family development and small public open space area (see Figure 1). Generally, the single family homes are located on very large lots although the future Land Use Map and zoning code formerly permitted up to four (4) single family dwelling

units per acre. No central potable water, sanitary sewer or storm drainage systems are available. However, the drainage canals within the village are being proposed to be improved and expanded.

The primary purpose for incorporation of the village was to reserve the area for single family home development. The desire for a low density community is still predominant amongst village residents. Therefore, the entire coastal area, with the exception of the marina, has been designated as Single Family, Low Density Residential (SF) on the Future Land Use Map. The marina has been designated as Commercial (see Figure 6).

The Village Marina, located on a canal off of the Indian River at Torpey Road, has been in operation in some capacity for over ten (10) years. Facilities at the marina include thirty-eight (38) wet slips plus additional storage for boats on trailers. In 1988, the village passed an ordinance which specifies those activities which are permissible at the marina and those that are not. The ordinance limits the number of wetslips to thirty-eight (38) and the number of dry racks and trailer storage to a combined total of twenty (20). Among other restrictions, the ordinance prohibits repair services and retail sales of boats, fuel, and alcoholic beverages. Commercial craft are also excluded from operating out of the marina or unloading seafood. Restrictions of the ordinance are intended to allow the marina to continue operations while protecting the neighboring single family residences.

The small multi-family development within the coastal area consists of cottage-type units which predate incorporation of the village. The development is located off of Chamberlain Boulevard and has a cluster arrangement that is set-back off of the road. The landscape buffer provided by the development in addition to its relative low intensity reduce conflicts with the neighboring single family development. However, both the existing Future

Land Use Map and the zoning code designate this area as SF. The Future Land Use Element of this Comprehensive Plan details the existing land uses within the coastal area and provides a discussion on the projected future land use needs and development for the entire village.

The small open space at the foot of Chamberlain Boulevard consists of the boulevard right-of-way east of Indian River Drive. Although it is only 2,600 square feet in size, it does provide for passive recreation and visual enjoyment of the lagoon. Improvements consist only of a small park bench and rip-rap along the shoreline. The site also has an historic marker for Ft. Capron which once existed near the area.

It should also be noted that no structures, except docks, are located East of Indian River Drive along its entire length. Thus, the entire lagoon waterfront in this area is "open" to view by all users of the Indian River Drive right-of-way. However, except for the Chamberlain Boulevard piece, the land owners on the West side of Indian River Drive retain the riparian rights to the lagoon. Therefore, almost all access to the water is private.

Water-Dependent and Water-Related Uses

The only water-dependent use within the village is the Village Marina. As discussed, the marina provides docking and storage facilities but is limited by local ordinance in the provision of water-related uses. The ordinance also allows for only a minimal amount of expansion which must obtain site plan approval from the village. However, with a total of fifty-eight (58) wet and dry slips, the marina provides slips at a ratio of approximately one (1) per eleven (11) residents.

The only water-related uses were a bait shop located on U.S. Highway 1, which is now closed, and the existing small public open space located at the foot of Chamberlain Boulevard. The prohibition of commercial development in the eastern portion of the village will require all other water-related uses to locate along U.S. Highway 1 as well. Both the Future Land Use Map and zoning map have designated the entire U.S. Highway 1 frontage in the village as commercial and several vacant lots are available for the establishment of additional water-related uses. The village also lacks funding to purchase any additional open space for waterfront access.

Estimate of Need for Water-Dependent and Water-Related Uses

The marina currently has a capacity to service the boat docking and storage needs of the village residents for quite some time. However, other water-dependent activities such as shore fishing and shellfish harvesting will continue to be unmet in the community. The single family designation of the coastal area precludes development other than homes and the village lacks the financial resources to purchase and develop additional parks or access facilities in the area. Therefore, residents of the village will have to rely on the county and nearby municipalities for the provision of water-dependent uses; of which several are located between 0.1 and 3 miles of the village.

Although a small open space area constitutes the sole water-related use, a large amount of vacant land is available and suitable for private water-related uses. The commercial area along U.S. Highway 1 is approved for and could support a variety of water-related uses. However, since the population of the village is relatively small, water-related uses will have to rely on a much larger market area to be operationally feasible. Therefore, while the village may desire the location of water-related uses along U.S. Highway 1, the decisions of individual business owners will control the location of these facilities.

Shoreline Land Use Conflicts

The small, multi-family development on the north side of Chamberlain Boulevard constitutes the only coastal area land use conflict. As discussed, the cottage-type units predate incorporation of the village and are fairly well buffered from the neighboring single family uses. As a nonconforming use, expansion is prohibited and severe destruction or extended vacancies will cause the use to come into conformance with the Future Land Use Map and zoning code.

The marina has a potential to conflict with the surrounding residential area, however its size and location significantly reduce most impacts upon the neighboring residential properties. The marina grounds are almost surrounded by roads and water thus providing a buffer. Only small portions actually abut residential properties. The main entrance to the marina is off of Torpey Road which is directly connected to Old Dixie Highway. As discussed, the recently passed ordinance tightly controls activities and expansion of the marina to insure compatibility with the neighboring single family uses.

The large, unincorporated parcel located in the east-central portion of town is regulated by the St. Lucie County Comprehensive Plan and zoning code, and therefore, has a potential to conflict with coastal land uses in the village. Both the county plan and zoning code designate this parcel as residential suburban with a maximum density of two (2) units per gross acre. Thus, the parcel designations do not conflict with those of adjoining properties in the village. However, a change in these unincorporated designations to a more intense use could have a severe impact upon the village residents. Therefore, the village will need to work closely with the county and carefully monitor any proposed development for this parcel. Annexation of this parcel is recommended in order to insure a consistent development of the coastal area.

Recommendations for Siting Water-Dependent and Water-Related Uses and Minimizing Shoreline Land Use Conflicts

St. Lucie Village is fortunate in that only one nonconformity exists within the coastal area and measures have already been taken to mitigate any future conflicts. The village strictly controls nonconformities to hasten their conformance with current regulations. In addition, an ordinance has been passed which limits the activities of the marina to insure compatibility with neighboring residential uses. Further, the village has held discussions concerning annexation of the large unincorporated pocket. Finally, the complete designation of the coastal area, with the exception of the marina, and small open space area as Single Family, Low Density Residential on the Future Land Use Map will insure low intensity of development of the coastal area is continued and the natural resources of the area are protected.

Although the village has sought to protect the coastal area through the allowance of only low density development, the village should strive to obtain additional public open space and access areas. The lack of a taxing mechanism and the desire of residents to not tax themselves severely limits the amount of revenue that can be used for property acquisition. However, several other funding mechanisms do exist and should be investigated. These include donations of land and/or money and the purchase of land by other governmental agencies or non-profit environmental groups.

Areas Needing Redevelopment

Although some scattered properties within the coastal area were identified in the Housing Element to be deteriorating, there is no concentration of deteriorating uses. The only area in need of redevelopment is the multi-family development on Chamberlain

Boulevard. Local ordinances are already in place to bring about conformity of this development with the Future Land Use Map and zoning code.

Economic Base

Because the village imposes no property taxes, the economic value of the coastal area is limited to the generation of franchise fees, building permit fees, occupational licenses and various zoning and petition fees. The size of the coastal area relative to the rest of the village and the desirability of lots within it indicate the coastal area will likely generate a significant portion of the village's revenue. The true economic value of the coastal area, though, is captured by the land owners within it who have some of the highest land values in St. Lucie County as determined by the county tax appraiser. Since the Future Land Use Map designates most of the coastal area as single family, these land values are expected to rise in the absence of land use conflicts. Correspondingly, St. Lucie County, through their property tax system, is also able to obtain an economic value from the coastal area as the land values on many of the properties far exceed the State Homestead Exemption.

Analysis of the Impact of Projected Development

The projected slow rate of growth, limited utility services and a desire on the part of village residents to maintain a low density, single family residential community have directed the Future Land Use Map to designate all vacant parcels and most of the developed parcels within the entire coastal area as single family residential (see Figure 6). Therefore, the continued low intensity of development should have little impact upon vegetative cover, wildlife habitats and living marine resource. Land development regulations will further minimize development impacts by required use of native vegetation and control site drainage.

The regulation of septic systems by the County Health Unit and the proposed improvement and expansion of the drainage canals for mosquito control should maintain or improve the environmental quality of the village. Although centralized potable water and sanitary sewage disposal facilities generally have less of an environmental impact than on-site facilities, their absence limits the rate and magnitude of growth in the village. Therefore, the overall environmental quality of the village may actually be improved by the use of regulated, on-site water and septic facilities.

Past development in the village has not significantly altered the environment, but additions to land development regulations should be considered. Particularly, land clearing and tree protection regulations should be adopted as well as requirements for the use of native vegetation in landscape buffers. The Infrastructure Element provides a further discussion of the facility regulation needs and objectives and policies for their implementation.

V. COASTAL AREA POLLUTION

Indian River Lagoon

The 1986 Florida Water Quality Assessment 305(b) Technical Report prepared by the DER Bureau of Water Quality Management found the water quality of the Indian River Lagoon from the Fort Pierce Inlet to the Sebastian Inlet to be "Fair". According to the report, this section of the lagoon is heavily influenced by a number of industrial uses and sewage treatment plants in the Vero Beach area. Because Vero Beach is fifteen (15) miles from an inlet, this area of the lagoon experiences little tidal flushing or circulation. Thus, those pollutants from the Vero Beach area tend to remain in the lagoon. The report did indicate, however, that despite the increasing urbanization of the west coast of the

lagoon, overall water quality has remained relatively stable based on data collected since 1970. The report did not identify any point source emitters in St. Lucie Village.

Another report with a great deal of data on the lagoon is the Indian River Water Quality Survey 1984-1985, also published by the DER. This study used a number of sampling points throughout the lagoon's entire length to ascertain the water quality. The closest sampling point to St. Lucie Village is an east-west transect that was setup just north of the North Beach Causeway at the north end of the City of Fort Pierce (see Figure 12). Data collected from these stations indicated a high conductivity for the area relative to other areas of the lagoon. The influence of tidal waters from the inlet were cited by the report for the observed rise in conductivity.

In addition, the report found for those areas north of the Fort Pierce Inlet that nutrient levels decreased from west to east. The likely cause of this phenomena is the run-off from the more developed lands on the mainland. Finally, a third outstanding factor for the Fort Pierce transect was the presence of a high concentration of fecal coliform bacteria. Most likely, this is caused by the Fort Pierce Utilities Authority discharge of treated effluent just to the south of the transect. Overall, the samples taken at the Fort Pierce transect indicated the water quality to be average or better than average for the portion of the lagoon extending from its northern most point to the Fort Pierce Inlet.

Known Point Sources of Coastal Pollution

There are no DER permitted point source pollution discharges in St. Lucie Village. The marina, however, could be considered a point source. Although no fuel is sold at the marina, spills and leaks are possible. In addition, cleaning solvents and paints used on hulls and decks can also contribute pollutants.

Non-Point Sources of Coastal Pollution

Non-point pollution of the lagoon is experienced through storm water run-off from adjacent properties and uplands. All of the waterfront properties slope toward the river. In addition, the existing canals and proposed expansion canals transfer water from upland areas east and west of the FEC railroad to the lagoon (see Figure 10). Pollution is also caused by floods when waters recede from shoreline areas.

Impact of Proposed Land Uses on Coastal Waters

New Point Sources

The Infrastructure Element of this Comprehensive Plan proposes no new point source emitters nor does the Future Land Use Map designate any areas within the coastal area for the location of private commercial or industrial point source generators. The marina is essentially limited to its current size and is prohibited from engaging in possible polluting activities such as fuel sales and repairs.

Non-Point Sources

The Future Land Use Map designates almost the entire coastal area as single family residential. While the low density and high permeability of the area reduce run-off, there is a need for the village to adopt and implement drainage regulations. The SFWMD and DER have drainage regulations, however, most single family development is exempted. The Infrastructure Element of this Comprehensive Plan details the regulations recommended for adoption.

In the absence of a sanitary sewage system for this area, septic seepage could also pose a pollution problem. However, as discussed, the installation of a centralized sewage system could lead to a more intense development of the village than would otherwise occur. In addition, strict siting and construction regulations for on-site waste water disposal systems have been adopted by the state and are enforced by the County Health Department.

Changes to Estuarine Circulation Patterns Due to Proposed Future Land Uses and Facilities

This Comprehensive Plan proposes no new facilities which would measurably affect the water circulation patterns in the coastal area.

Analysis of Remedial Action

Through the designation of the entire coastal area, except the marina, and small public open space as single family on the Future land Use Map, the village has effectively prevented the location of any new point source pollution generators. However, to control non-point source pollution, regulations for controlling run-off will need to be implemented.

State, Regional, and Local Regulatory Programs to Reduce Estuarine Pollution

State pollution regulation is largely vested in the Florida Department of Environmental Regulation (DER). The DER regulates dredge and fill activities of waters of the state and adjacent wetlands. Dredge and fill permitting is done in accordance with similar federal permitting. DER also regulates discharges of pollutants into natural or artificial bodies of water, establishes and enforces water quality standards, sets minimum

treatment requirements, issues permits for the operation of wastewater treatment plants, administers construction grants for sewage treatment plants, and regulates discharges of stormwater. A special permit program can be used to obtain long-term permits for dredging deep water ports.

DER and the water management districts regulate the withdrawal, diversion, storage, and consumption of water, with the water management districts responsible for most of the permitting and operational aspects. DER certifies the siting of any power plants and must consider the cooling water needs and environmental impacts of any proposed power plant.

The Florida Department of Natural Resources (DNR) is also involved in controlling estuarine pollution. The DNR is responsible for selling or leasing state owned submerged lands if the sale or lease is not "contrary to the public interest". The proposed use of the conveyed or leased submerged land must not "interfere with the conservation of fish, marine life, or wildlife, or other natural resources". Deeds or leases may contain restrictions on dredging and filling.

The DNR is the designated lead agency in the Florida Coastal Pollutant Spill Contingency Plan, with nine other departments and the Florida Game and Freshwater Fish Commission (GFWFC) on the state response team. As part of this plan, the DNR is responsible for certification of Terminal Facilities storing pollutants.

The DNR is also responsible for managing the aquatic preserves throughout the state. These preserves are state-owned submerged lands which the state wishes to maintain in "an essentially natural condition". Special requirements pertain to the sale or lease of state owned submerged land within the aquatic preserves. A management plan for each preserve has been prepared. The portion of the Indian River Lagoon adjacent to St. Lucie Village

has aquatic preserve status. The DNR also regulates exploration, drilling, and production of oil, gas, or other petroleum products, including drilling in estuaries.

The DNR is the chief land purchasing agent and land manager for the state. The state, through several land acquisition programs, often purchases environmentally sensitive lands which are vital for estuarine water quality.

The Florida Department of Health and Rehabilitative Services (HRS) administers the mosquito control program. This program sets limits on the types and amounts of oil and chemicals used to control mosquitoes. Special exceptions to state dredge and fill requirements are given to mosquito control projects. The program also provides financial aid to counties or mosquito control districts. The St. Lucie County Mosquito Control District is responsible for managing approximately 4,720 acres of the 5,080 acres of impoundments in the county. Management policy and techniques include the installation of culverts and tidegates for tidal matching and seasonal (winter) tidal exchange, excess cross-flow pumping for water quality improvement and inverted tides for improved impoundment circulation. The County Health Unit, as part of HRS, administers septic tank regulations and utility hook-ups and enforces the state plumbing code.

The principal regional agency involved in controlling estuarine pollution is the South Florida Water Management District (SFWMD). The SFWMD is responsible for the major flood control and drainage structures and therefore responsible for the quantity and timing of much of the freshwater delivered to the lagoon. The District is also responsible for certain regulatory activities delegated from DER. Chief among these is stormwater permitting.

The SFWMD is also assigned responsibility for regulating agricultural activities in wetlands under the Warren Henderson Act. The district has a land acquisition program, the "Save our Rivers Program", which allows the district to purchase environmentally sensitive lands, and by preserving them improve the quality of fresh water entering the lagoon. The current five-year land acquisition plan does not include lands in St. Lucie County.

The Treasure Coast Regional Planning Council (TCRPC), along with the Department of Community Affairs, have some control over land use and development regulations through local comprehensive plan reviews and the Development of Regional Impact (DRI) program. Should the TCRPC comprehensive regional policy plan call for stringent controls of pollution, then the consistency requirements between the regional and local plans would invoke strong local controls of pollution. The DRI process can require reviews of large development impacts on significant state and regional resources such as aquatic preserves or Outstanding Florida Waters. The impacts can be mitigated through conditions in the development order issued by the local government. The TCRPC has appeal rights if the council feels that the development order does not adequately address the regional concerns.

The St. Lucie County Soil and Water Conservation District was established pursuant to state law and is county-wide with its own taxing authority. The District's purpose is to control soil erosion. These erosion prevention efforts assist in maintaining estuarine water quality by reducing the sediment and nutrient loads of waters flowing into the estuary.

St. Lucie Village, through its police power, regulates some activities which impact estuarine water quality. The village controls the disposal of domestic solid waste including yard

debris, regulates land use through zoning and comprehensive planning, and enforces site planning and subdivision requirements.

VI. BEACH AND DUNE SYSTEM

There is no beach or dune system within the corporate limits of St. Lucie Village and none is proposed in this Comprehensive Plan. Therefore, Rule 9J-5 FAC requirements for an analysis of beach and dune systems is inapplicable to St. Lucie Village (see Appendix 5A).

VII. ARCHAEOLOGICAL AND HISTORIC RESOURCES OF THE COASTAL AREA

The area of what is now St. Lucie Village has a long history of settlement by both native indians and white men. The Ais Indians constructed several shell middens and burial mounds which can be found throughout the coastal area of the county. Bones taken from one of the larger burial mounds have been estimated to be at least 1,000 to 2,000 years old. White men first surveyed the area in 1843 and constructed Ft. Capron in 1850. Several homes were then constructed throughout the late nineteenth century and early twentieth century, several of which are still occupied today. In fact, the homes in the southern area of St. Lucie Village are the oldest in the county.

Given this rich diversity of settlement, the southern portion of St. Lucie Village has been nominated as an Historic District for the National Register of Historic Places (see Figure 1). As of September, 1989, the Florida National Register Review Board had recommended the district for inclusion on the National Register and was awaiting action to be taken by the Keeper of the National Register. In all, the district includes twenty (20) contributing

buildings, or buildings of historic significance, and three (3) contributing sites which include an Ais Indian burial mound and shell midden and Ft. Capron.

Impact of Future Land Use on Archaeological and Historic Resources

As discussed, the entire coastal area, except the marina located in the north end of the village, and small public open space areas is designated as Single Family, Low Density Residential on the Future Land Use Map. This designation is consistent with the Historic District which includes single family homes and archaeological sites. The Future Land Use Map also has an Historic Resources overlay district which has been applied to this area. (See Figure 6).

The Historic Resources overlay district uses the underlying land use district to determine general land uses. Land use is then further regulated by the overlay district which requires land uses to be consistent with local, state, and federal regulations and policies for historic districts. It is the intention of this overlay district that the local government adopt development regulations which specifically address the uses, site planning, architecture types and similar design and use criteria for these areas.

The proposed Historic District includes all structures of historic significance within the village. However, other burial mounds and shell middens are known to exist on several other properties in the coastal area. Therefore, as vacant property is proposed for development, the sites will have to be carefully checked for archaeological resources. If found, archaeological sites should be preserved or excavated by the state. All areas that are preserved should then be shown on the Future Land Use

Map. The fact that the coastal area is designated as single family will allow the highest degree of site planning flexibility and most of the archaeological resources to be saved.

VIII. HURRICANE EVACUATION

Current Status

The most recent hurricane evacuation study was prepared by the Treasure Coast Regional Planning Council (TCRPC) in 1983 and is summarized here. Following a summary of the study, the impacts of future population growth on hurricane evacuation will be discussed.

Using the SPLASH computer model, the TCRPC projected storm surges for "category one" through "category five" hurricanes. The area affected by the storm surges are shown within the TCRPC study. Within the hurricane vulnerability zone of a "category five" hurricane, 41,849 people within St. Lucie County are recommended for evacuation (see Table 5-1).

A "category three" storm making landfall perpendicular to the coast of St. Lucie County is projected to create a 10 - 11 foot storm surge. A "category one" storm on the same track would provide a 6 - 7 foot surge.

The evacuees will seek shelter through a variety of means. These include leaving the county, staying with friends and relatives in less vulnerable parts of the county, checking into hotels or motels, or using public shelters. Table 5-2 presents the total number of evacuees in the county requiring public shelter by storm surge height.

The hurricane evacuation study identifies thirteen (13) primary and two (2) auxiliary shelters in the county (see Figure 11 and Table 5-3). These fifteen (15) shelters have a total capacity of 6,447 people, assuming forty (40) square feet per person. There is a deficit of 4,195 shelter spaces in a worst case situation.

The TCRPC study identifies the principle hurricane evacuation routes in St. Lucie County. It should be noted that the population south of the FPL power plant will use the Jensen Beach bridge in Martin County for evacuation. The most critical links identified in the evacuation road network by TCRPC were U.S. Highway 1 south of Seaway Drive and Port St. Lucie Boulevard. Evacuation times may vary from 5.5 to 13.5 hours (see Table 5-4).

Flooding caused by storm surge will require the evacuation of almost all residents in the Village. For the purpose of this Comprehensive Plan, the entire coastal area is considered to be in the hurricane vulnerability zone. In general, hurricane evacuees are expected to seek the nearest shelter, and there are three (3) shelters that are within five (5) miles of St. Lucie Village (see Figure 13). The northern most shelter, Lakewood Park Elementary School, is located on Indrio Road between Kings Highway and Emerson Avenue. This shelter has 277 spaces and is approximately three and one-half (3.5) road miles from the north end of the village and five and one-half (5.5) road miles from the southern end of the village. Primary links in the evacuation route to this shelter from the village are U.S. Highway 1 and Indrio Road, neither of which should experience flooding.

The second nearby shelter is the St. Lucie County Fairgrounds located south of the St. Lucie County International Airport on Airport Road West. This facility, with 500 spaces, is used as an auxiliary shelter and is approximately two (2) road miles from

TABLE 5-1

POPULATION AT RISK
ST. LUCIE COUNTY
1983

STORM SURGE HEIGHT	EVACUEES
3 - 5 FEET	23,181
6 - 8 FEET (Category 1 hurricane)	24,177
9 - 11 FEET (Category 3 hurricane)	32,657
12 - 14 FEET (Category 5 hurricane)	41,849

SOURCE: Treasure Coast Regional Planning Council, Hurricane Evacuation Study.

TABLE 5-2

EVACUEES REQUIRING PUBLIC SHELTER
ST. LUCIE COUNTY
1983

STORM SURGE HEIGHT	PEOPLE
3 - 5 FEET	5,795
6 - 8 FEET	6,044
9 - 11 FEET	8,164
12 - 14 FEET	10,642

SOURCE: Treasure Coast Regional Planning Council, Hurricane Evacuation Study (Based on 25% of Evacuating Population)

TABLE 5-3

**Hurricane Evacuation Shelters
St. Lucie County, 1983**

Primary Shelters

	<u>Name/Address</u>	<u>Location/ Evacuation District</u>	<u>Capacity/ Spaces Available</u>
A.	Morningside Elementary School 2300 S.E. Gowin Drive Fort Pierce	20	277
B.	Lakewood Elementary School 7800 Indrio Road Fort Pierce	4	277
C.	Westwood High School 1810 Angle Road Fort Pierce	5	600
D.	Means Court Center 532 North 13th Street Fort Pierce	8	207
E.	Port St. Lucie Elementary N.W. Marion Avenue Port St. Lucie	17	1,022
F.	Lawnwood Elementary School 1900 South 23rd Street Fort Pierce	11	578
G.	Garden City Elementary School 1801 N. 21st Street Fort Pierce	7	616
H.	Dan McCarty Elementary School 1201 Mississippi Avenue Fort Pierce	9	515
I.	White City Elementary School 905 West 2nd Street White City	17	244
J.	Fort Pierce Elementary School 1100 Delaware Avenue Fort Pierce	11	114
K.	Fort Pierce Central High School 1101 Edwards Road Fort Pierce	14	420

TABLE 5-3 (continued):

Primary Shelters Continued

	<u>Name/Address</u>	<u>Location/ Evacuation District</u>	<u>Capacity/ Spaces Available</u>
L.	C.A. Moore Elementary School 827 N. 29th Street Fort Pierce	6	204
M.	Lincoln Park School 1806 Avenue I. Fort Pierce	8	573

Auxiliary Shelters

	<u>Name/Address</u>	<u>Location/ Evacuation District</u>	<u>Capacity/ Spaces Available</u>
1.	St. Lucie County Fairgrounds Airport Road West Fort Pierce	3	500
2.	United Methodist Church Okeechobee Road & 33rd Street Fort Pierce	12	300

Source: TCRPC Hurricane Evacuation Study Technical Data Report, 1983

Table 5-3

TABLE 5-4

HURRICANE SCENARIOS DEVELOPED FOR TRANSPORTATION ANALYSIS
 ST. LUCIE COUNTY CLEARANCE TIME IN HOURS AFTER EVACUATION ORDER

No.	Category	Track	Weather*	Response**	Time (hr.)
I	I	Paralleling	Z,X	Median	7.5
II	5	Landfalling 90	X	Short	5.5
III	3	Crossing	Y,W	Long	13.5
IVa	4	Landfalling 110	X	Short	5.5
IVb	4	Landfalling 110	X	Long	13.5
IVc	4	Landfalling 110	X	Long	13.3

*Weather Condition	Description	Adjustment to Normal Capacity
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W	High wind with light rainfall	(85% x 85% = 72%)
X	High wind with heavy rainfall	(85% x 70% = 60%)
Y	Low wind with light rainfall	(100% x 85% = 85%)
Z	Low wind with heavy rainfall	(100% x 70% = 70%)

** Response to advance notice (i.e., short = short notice)

SOURCE: TCRPC Hurricane Evacuation Study, 1983

the southern end of the village and four (4) road miles from the northern end of the village. U.S. Highway 1 and St. Lucie Boulevard are the primary road links to this shelter from the village. Both of these roads should remain free from flooding.

Garden City Elementary School, the third nearby hurricane evacuation shelter, is located just north of the city limits of Fort Pierce on 21st Street. The school has 616 spaces and is approximately two and one-half (2.5) road miles from the southern end of St. Lucie Village and four and one-half (4.5) road miles from the northern end of the village. Primary road links to this shelter from the village are U.S. Highway 1, St. Lucie Boulevard and North 25th Street in Fort Pierce. Travelers on these roads are not expected to face flooding while enroute to this shelter.

According to the TCRPC evacuation study, these three shelters will have a total of 1,393 spaces which far exceeds the number of evacuees from St. Lucie Village, (650 in 1988). However, as discussed, during a worst case scenario, St. Lucie County as a whole will have a shortage of spaces. Therefore, it may be possible that not all residents from the village will be able to find space within public shelters. The shelters closest to Fort Pierce in particular are likely to be crowded with city residents and those evacuating off of the barrier islands. Therefore, village residents might best be served by attempting to seek shelter at one of the northern facilities.

Port St. Lucie Elementary School and Means Court Center have been designated as emergency medical facilities. Residents who are handicapped or infirmed are encouraged to seek shelter at these facilities. The Means Court Center is located in the east-central part of Ft. Pierce and is much closer to the village than the elementary school. U.S. Highway 1 would be the primary evacuation route from St. Lucie Village to both of these shelters. An estimate of the number of residents within the village who have special evacuation needs is not available.

Future Situation

According to the TCRPC study, ratios of population at risk and those seeking public shelter during hurricane evacuation, the median 1997 projected county population of 177,700 will have 75,300 people evacuate and 18,800 will seek public shelter. These projections could be changed considerably by implementing the different alternatives presented in the St. Lucie County Barrier Island Study, Analysis of the Growth Management Plan, 1982, prepared by Kimley-Horn and Associates for the St. Lucie County Board of County Commissioners. However, there will continue to be growth in the high hazard coastal zones with concomitant increases in evacuation clearance times and demands for public shelter.

Growth in St. Lucie Village is expected to be slow with only a few additional residents at risk and seeking public shelter. U.S. Highway 1 is the only major evacuation route in the village but was not identified by the TCRPC study to be a "critical link" in this area as the level of service was sufficient to accommodate the expected evacuation traffic. U.S. Highway 1 is currently operating at "Level of Service C" or better and should continue to have excess capacity for the next several years. It is important, however, that the village work closely with the county and regional planning council to provide for additional shelter spaces and improve the overall evacuation traffic circulation network.

IX. POST DISASTER PLANNING CONCERNS AND COASTAL HIGH-HAZARD AREAS

Following a major natural disaster such as a hurricane, there is a period of cleanup and rebuilding. Rebuilding to pre-storm conditions, however, may be imprudent in some areas and result in repeated damage to the same structures. Therefore, in order to

respond quickly after a storm with alternative land use and capital facilities plans, it is necessary to examine in advance the areas, structures, and facilities most likely to be damaged and provide or consider alternatives to current land use plans and facility sites which can be adjusted following a storm event.

Coastal High-Hazard Areas

A coastal high hazard area is defined as an area which has historically experienced destruction or severe damage, or is scientifically predicted to experience destruction or severe damage, from storm surge, waves, erosion or other manifestations of rapidly moving or storm driven water. Much of the area adjacent to the Indian River Lagoon is below five (5) feet NGVD and is subject to flooding and storm surge in category 1 storm as reported in the TCRPC Hurricane Evacuation Study, 1988. Historically there has been little damage due to the low density of development in the town. However, property adjacent to and near the Indian River Lagoon is some of the most sought after and expensive in the county even though those buying are aware of the risks. Therefore, it is critical that development be controlled in the interest of public safety so that loss of life and property are minimized in emergency situations and that public expenditures in these areas are kept to a minimum.

Thus far, the village has controlled growth within the coastal area by permitting only low density, single family residences. However, a marina and small multi-family development do exist that predate the incorporation of the village.

Projected Future Conditions

St. Lucie Village has been incorporated for twenty-seven (27) years, but the area has been settled for over one hundred years. Recently, an Historic District on the southern end of the coastal area was nominated for the National Register of Historic Places.

This district includes twenty (20) historic homes, several of which were built before 1900 with the oldest being constructed in 1875. Many of the original porches of these homes were destroyed in hurricanes and some of the homes have been moved as result of storms. One home had to have holes drilled in the floor to drain flood waters, yet all are occupied and in excellent shape today. However, all of these homes have a potential to be completely destroyed or heavily damaged by a future storm.

Because the coastal area has been identified as a hurricane vulnerability zone, the village has implemented building regulations to reduce damages and increase safety during storm events. These regulations were adopted in accordance with the Federal Flood Insurance Program. While damages can be limited, they cannot be prevented, and yet the demand to build new structures continues to grow. In addition, many of the structures within the area were constructed prior to implementation of these building regulations. Therefore, regardless of the current building practices, all of the properties within the coastal area have some potential for destruction during a major storm event.

In addition to regulating construction techniques, regulation of land uses and development intensities can also work to reduce storm damage susceptibility. With the exception of the marina and small multi-family development, the existing developed land uses within St. Lucie Village are single family. Although the development of the area as single family has historically been more a result of the aesthetic quality of the area, it has also served to maintain a low development intensity which, in turn, has reduced the risk of loss of property and life during storm events. The Future Land Use Map designates the entire coastal area, with the exception of the marina, as single family. Accordingly, the future development of the area will continue to be low density, single family residential which will be constructed using appropriate flood and storm surge damage controls.

Post-Disaster Redevelopment Alternatives

The high demand and expense for coastal area property has contributed to the properties being well maintained. As a result, most property owners would be inclined to repair and rebuild their homes after a storm, regardless of the extent of damage. These properties, with the exception noted below, are consistent with the current zoning regulations and Future Land Use Map and thus, could be rebuilt.

The only exception is the small multi-family development located in the southern end of the coastal area. Under the current zoning regulations, if the development suffers damages in excess of fifty percent (50%) of its assessed value, it must be brought into conformity with the Comprehensive Plan and the zoning code. This represents the only significant property in which a use change would be necessary to accomplish the desired land use goals of the Future Land Use Element. However, some properties contain accessory structures such as docks, boat houses and storage sheds which would have to be removed or significantly altered in order to meet current land development regulations.

X. PUBLIC ACCESS

Inventory of Existing Facilities

Currently, there is only one small point of access to the Indian River Lagoon within St. Lucie Village. A privately owned marina with a boat ramp and wet slips constitutes the only improved facility available to the public for access to the lagoon. However, there are several facilities in the unincorporated area of St. Lucie County and within the City of Fort Pierce which are available for use by village residents (see Figure 14 and Table 5-5).

TABLE 5-5

ST. LUCIE COUNTY PUBLIC ACCESS FACILITIES

<u>PARK NUMBER</u>	<u>NAME AND TYPE*</u>	<u>PARK NUMBER</u>	<u>NAME AND TYPE*</u>
1	Appliance Dump Site BFP	23	Lincoln Park Community Center SA/I
2	Frederick Douglass Memorial Beach BFP	24	Horatio Grisby N
3	South Jetty Park BA	25	Open Space Park N
4	Jaycee Park N SA/F	26	Godwin Botanical PP
5	South Causeway Island SA/F	27	Garden Terrace N
6	Indian River Memorial Park N SA/F	28	Wildwood Terrace SA/F
7	Seventh Street Park PP	29	Lawnwood Terrace SA/F
8	Pinewood Park PP	30	Eldorado Terrace PP
9	Lawnwood Rec. Complex C	31	Park Terrace SA/F
10	Maravilla Park N	32	Port St. Lucie Community Center SA/F
11	29th Street Park PP	33	North 10th Street Site SA/F
12	Dreamland Park N	34	Palm Gardens Park SA/F
13	Indian River Community College SA/F	35	Indian River Estates Site N
14	Elks Park N	36	Indrio School Site N SA/F
15	Savannas Recreation Area R	37	North Causeway Island SA/F
16	White City Park N	38	Coon Island SA/F
17	Walton Community Center SA/F	39	Pepper State Park BFP
18	Paradise Park PP	40	Jack Island State Park R
19	Sportsman's Park (P.S.L.) N	41	Johnson Road Boat Ramp SA/F
20	Old Fort Site (Indian River Drive) SA/F	42	Indian River YMCA N
21	Eighth Street Park SA/F	43	Westwood High School SRA C
22	Fort Pierce City Marina SA/F	44	Port St. Lucie Elementary School SRA N
		45	Chester A. Moore Elementary School SRA N

Source: St. Lucie County, Florida Recreation Facilities Inventory and Plan (1979)

TABLE 5-5 (continued)

<u>PARK NUMBER</u>	<u>NAME AND TYPE*</u>	<u>PARK NUMBER</u>	<u>NAME AND TYPE*</u>
46	St. Lucie Elementary School SRA N	68	St. Lucie Court Beach Access BA
47	Dan McCarty Middle School SRA N	69	Beach Access BA
48	Fort Pierce Elementary School SRA PP	70	Beach Access BA
49	White City Elementary School SRA PP	71	Avalon Avenue Beach Access BA
50	St. Lucie Village Elementary School SRA SA/F	72	Beach Access BA
51	Lawnwood Elementary School SRA N	73	Porpoise Avenue Beach Access BA
52	Francis K. Sweet Elementary School SRA N	74	Gulfstream Avenue Beach Access BA
53	Means Court Elementary School SRA PP	75	Exchange Park BA
54	Garden City Elementary School SRA N	76	Middle Cove Beach Access BA
55	Fairlawn Elementary School SRA PP	77	Blind Creek Beach Access BA
56	Fort Pierce Central High School SRA N	78	Hermans Bay Beach Access BA
57	Lincoln Park School SRA N	79	Normandy Beach Access BA
58	Rotary Park N	80	Hideaway Park PP
59	South Beach Boardwalk BFP	81	Lakewood Park Recreation Site N
60	Surfside Beach BFP	82	Jaycee Field N
61	Avalon Beach Access BA	83	Sheraton Plaza Recreation Site N
62	Unnamed Park BA	84	Holiday Pines SA/F
63	Bryn Mawr Beach Access BA	85	Indian Hills Country Club SA/F
64	Royal Palm Way Beach Access BA	86	Sandpiper Bay SA/F
65	Seminole Blvd. Beach Access BA		
66	Banyan Road Beach Access BA		
67	Fort Pierce Inlet State Recreation Area BFP R		

*TYPE OF PARK

- BFP = Beachfront Park
- BA = Beach Access
- SA/F = Special Area or Facility
- N = Neighborhood Park
- C = Community Park
- R = Regional Park
- PP = Pocket Park
- SRA = School Recreation Area

Future Needs

Although the future needs for public access facilities will continue to grow, the village will most likely be unable to satisfy most, if any, of those needs. Property taxes are not assessed by the village and, therefore, public revenues are scarce and must be prioritized based upon all of the needs of the community. Presently, public access facilities are not perceived by village residents to be an affordable priority. Therefore, if public access facilities are to be obtained by the village in the future, alternative sources of revenue will have to be sought including outright donations of money or property or dedications from major developments.

Demand Analysis for Wetslips

Since the marina cannot expand and no new marinas are permitted within the village, an analysis of wetslips demanded by village residents is unnecessary. However, the marina is currently providing wet and dry slips at a ratio of approximately one (1) per every eleven (11) residents. This far exceeds the state average. Therefore, the marina facilities should be sufficient to accommodate the needs of the village residents for several years. Further, several marine facilities are located within 3 miles from the village.

XI. COASTAL AREA INFRASTRUCTURE

The following section summarizes the existing infrastructure of the coastal area. As discussed in the introduction of this element, the coastal area contains about seventy-five percent (75%) of the village land area. Therefore, for most of the infrastructure items, the Traffic Circulation and Infrastructure

Elements provide the detail and future needs analysis required by Rule 9J-5 FAC. These other elements recognize the coastal area constraints in their analysis of the needed infrastructure improvements.

Existing Facilities

Roads, Bridges, and Causeways: The existing and future traffic circulation patterns and the network of roads are discussed in detail in the Traffic Circulation Element. There are no collector or arterial roads or bridges within the coastal area.

Sanitary Sewage Facilities: The village currently has no sanitary sewage facilities available to it. It may be possible in the future for the Fort Pierce Utilities Authority (FPUA) to extend service to the village. However, the lack of sanitary sewage facilities may be one method the village wishes to use to control growth. Septic fields require a large area and necessitate large lots. Therefore, the subdivision of land could be regulated based on septic suitability. In addition, many home buyers prefer sanitary sewage systems to septic systems and may therefore, choose to locate somewhere else. The Sanitary Sewer Sub-Element elaborates further on the existing septic systems and potential for central sanitary sewer service.

Potable Water Facilities: The village currently has no potable water system available to it. Again, the FPUA may be able to provide service in the future; however, the city could use water availability as another growth control mechanism. Please consult the Potable Water Sub-Element for more detail on existing well systems and the potential for a central potable water system.

Drainage Facilities: A centralized storm drainage system is not available in the village. Throughout the history of the village, several small drainage ditches have been constructed and then left unmaintained. Of these, only three (3) are functional (see

Figure 8). The Boat Yard Canal is maintained by the St. Lucie County Mosquito Control District but much of it is outside the village corporate limits. The South Chamberlain Canal has been maintained to some degree but is in need of repair as the tidal control gate often malfunctions. In addition, the eastern most 300 feet is underground in a culvert which has several holes in it. The Ft. Capron Canal was severely overgrown at the western end as a result of yard trash being thrown in it. However, this canal has recently been cleaned by the Mosquito Control District.

The natural slope of the village is from west to east. Old Dixie Highway and the FEC railroad would be barriers to this flow, but culverts run underneath them to allow the water to continue flowing east to the lagoon. Unfortunately, the locations of these culverts are unknown and are difficult to find as the rights-of-way have become heavily invaded with exotic vegetation, particularly Brazilian pepper. Drainage ditches were once constructed along the eastern side of the railroad, yet these too have become severely overgrown and are no longer functional. Therefore, water that drains from the western portion of the village through the culverts under Old Dixie Highway and the railroad accumulates on the properties east of the railroad. The standing water in this area has created a mosquito control problem. The village is now working with the Mosquito Control District to alleviate some of these problems.

Compounding the village drainage problems are the lack of any local drainage regulations. The SFWMD and the DER both have drainage regulations but most single family homes are exempt from compliance. Therefore, the village has developed with virtually no drainage regulations. This has added to the problems described above as well as possibly affecting the water quality of the lagoon. As growth continues to occur in the village, the need to regulate drainage will become critical. The Drainage Sub-Element of this Comprehensive Plan provides further details on the existing conditions within the village.

Beach Renourishment and Shore Protection Structures: There are no beaches in the town nor are any projected. Individual land owners have installed bulkheads and rip-rap along the Indian River Lagoon and adjoining canals to prevent flooding.

Future Needs

Roads, Bridges, and Causeways: Please consult the Traffic Circulation Element for a detailed analysis.

Sanitary Sewage Facilities: Please consult the Sanitary Sewage Sub-Element for a detailed analysis.

Potable Water Facilities: Please consult the Potable Water Sub-Element for a detailed analysis.

Drainage Facilities: As discussed, the need to improve the drainage in the village has become a priority. The village has recently begun working with the Mosquito Control District to improve and expand the existing drainage system (see Figure 10). The expansions are primarily aimed at draining the lands immediately east of the railroad tracks. As soon as the necessary easements are obtained, the specific engineering details of the canal network will be developed. At this time, however, the ultimate capacity and level of service of the system are unknown. The Drainage Sub-Element of this Comprehensive Plan provides more information on the proposed system and objectives and policies for its further development.

Improving the drainage system will correct many of the existing problems. However, the village needs to implement drainage regulations to insure the system operates correctly once installed and that the water quality of the lagoon is maintained or enhanced. In order to adequately accommodate future

development, storm water run-off will have to be controlled whether it be through a drainage system, on-site retention/detention, or both. The village thus far has developed in a linear fashion along the riverfront. As new development occurs, though, a more compact pattern will emerge which could adversely affect low lying properties if storm water in the uplands is not carefully controlled.

Coastal Shore Protection Structures: The existing bulkheads are useful for preventing flooding but they are unattractive and prevent the growth of natural estuarine shoreline vegetation and attendant marine life. Therefore, as these structures age or become damaged by storms, other methods of shoreline control should be used. This includes the use of natural vegetation or, if necessary, rip-rap and vegetation. Hardening of the shoreline should be permitted only in those instances where the above methods or similar methods cannot be used to control the loss of property from floods.

Special Restrictions on Siting Facilities in the Coastal Area

No new infrastructure or traffic circulation facilities are recommended for the coastal area by this Comprehensive Plan. Traffic facilities are currently adequate to service the projected population and land uses over the next five (5) years. Potable water, wastewater treatment and drainage facilities will continue to be provided on-site with the exception of the improvement of the existing drainage canals which are necessary to control mosquito populations which are to be funded by the county.

The construction of public facilities within the coastal area must be the minimum necessary to accommodate the land uses proposed in the Comprehensive Plan. Former Governor Graham's Coastal Zone Executive Order formulated a coastal infrastructure policy banning the use of state funds to build facilities in

coastal high-hazard areas unless such expenditure was consistent with the local comprehensive plan. The entire St. Lucie Village coastal area is a coastal high-hazard area. Through a series of cross references and consistency requirements, the revised planning laws require local comprehensive plans to limit development in coastal high-hazard areas. Therefore, any new or publicly owned facilities that are proposed in the future will have to be carefully considered. The single family designation of most of the coastal area should require few facility improvements to accommodate the final build-out of the village.

XII. SPECIAL COASTAL PLANNING EFFORTS

The coastal area of the village has been the subject of three special multi-county planning efforts, the Indian River Lagoon Aquatic Preserves Management Plan, The Indian River Lagoon Field Committee's Report to the Governor with Recommendations for Resource Management in the Indian River Lagoon, and the Indian River Interim Surface Water Improvement and Management (SWIM) Plan. These documents bring consistent management and protection to the Indian River Lagoon across county and municipal lines.

It is important to consider these documents because all of the village's coastal resources are related to resources in St. Lucie County and in other counties. Events in other counties or parts of St. Lucie County can have substantial impacts on resources in the village. These documents provide a framework for multi-county resource management. Following is a brief description of each document.

The Indian River Lagoon Aquatic Preserves Management Plan was developed by the DNR to guide decision making in two aquatic preserves in the southern portion of the Indian River Lagoon. The area covered by this plan includes all of the lagoon in St. Lucie County except within the corporate limits of the City of

Fort Pierce. The plan contains 24 major policies. In addition, the DNR intends to classify and map "Resource Protection Areas" within the preserve. The basis of the classification is the quality of the natural resources in the preserve. Management decisions will then be based, in part, on these classifications, with the most pristine areas receiving the greatest protection. This management plan calls upon DNR staff to work with local governments during development of local comprehensive plans and subsequent land development regulations to ensure maximum compatibility with the Aquatic Preserves Management Plan.

The second document entitled The Indian River Lagoon Field Committee's Report to the Governor With Recommendations For Resource Management in the Indian River Lagoon, represents the efforts of state agencies, regional agencies, and several other parties to develop an integrated management of the system of lagoons stretching from Volusia County to Palm Beach County. The general recommendations are listed in the executive summary of the report. Of more specific interest to the development of this comprehensive plan are the nine pages of recommended policies for local government comprehensive plans. It is intended that the approximately fifty (50) local governments along the lagoon each adopt similar policies in their local comprehensive plans, thereby ensuring uniform treatment of the lagoons' problems.

XIII. SUMMARY OF SIGNIFICANT ISSUES

By virtue of its Indian River Lagoon coastline, St. Lucie Village is a coastal community as defined by the state and must therefore, prepare a Coastal Management Element as part of its overall Comprehensive Plan. The purpose of the element is to identify and analyze those resources, services and issues unique to the coastal area to ensure the health, safety and welfare of the coastal area residents and the protection of the area's natural resources. The element further provides an analysis of

future conditions and subsequent goals, objectives and policies to further the purpose of the element.

The coastal area has been defined in this element to be those portions of the village east of the FEC railroad tracks. This includes all areas of the village within the 100 year floodplain and subject to tidal surge during hurricanes. Single family homes predominate the land uses within the coastal area with the exception of a small marina, small public open space area and a small multi-family area. Growth within the entire village is expected to remain at an even pace of one and fifteen-hundredths percent (1.15%) per year for the next sixteen (16) years with the expansion occurring mostly in the development of new single family homes.

The primary natural resource of the coastal area, and in fact the whole village, is the Indian River Lagoon. Reaching from Volusia county on the north to Martin County on the south, the lagoon is a brackish body of water separated from the Atlantic Ocean by a series of barrier islands. Several short canals that run perpendicular to the lagoon are within the village. The water quality of the lagoon varies but has been graded as "fair" for that portion adjacent to the village. In addition, the adjacent portion of the lagoon has been included as part of the Indian River Aquatic Preserve for which the DNR has prepared a management plan. The waters have been designated further as Type II waters for shellfish propagation and harvesting and as "Outstanding Florida Waters" by the DER. The DNR, however, only permits the harvesting of shellfish along the barrier island shoreline east of the city.

The unique nature of the Indian River Lagoon includes several endangered and threatened species and species of special concern. The upland area of the village also contains rare species and contains habitat for those that use the lagoon. Even though a field study for the existence of these species in the village has

not been conducted, the fact the village provides habitat for them indicates their presence is possible. Therefore, development activities should be closely regulated to insure the protection of critical habitat for these species.

Land uses within the coastal area have been and will continue to be dominated by single family homes. The Future Land Use Map designates all of the coastal area as single family with the exception of the marina. The only land use conflict within the area is a small area of multi-family development located on the north side of Chamberlain Boulevard. The use is buffered from neighboring single family uses, however, the strict regulations pertaining to nonconformities should be enforced in the event of prolonged vacancies or severe damage.

A potential for additional land use conflicts exists with the marina and the large unincorporated parcel that divides the coastal area of the village. However, commercial activity at the marina is limited by local ordinance which does not permit retail sales of boats or fuel or repair services. In order to maintain compatibility between the marina and single family land uses that surround it, no expansion of the facility is permitted.

While the unincorporated parcel does not now conflict with adjacent land uses within the village, it is subject to the St. Lucie County comprehensive plan and zoning code. Therefore, the village must closely monitor any proposed development for the parcel and work with the county to ensure continued compatibility with the village comprehensive plan and zoning. However, only through annexation of this parcel can the village be sure of its proper development.

Improved access to the lagoon is afforded to the village residents via the Village Marina which provides thirty-eight (38) wet slips and twenty (20) dry storage spaces and one boat ramp. The village also owns a small piece of property at the foot of

Chamberlain Boulevard but this merely provides a scenic use of the lagoon. Because the village has no oceanic beaches, or improved recreation sites residents will have to satisfy most of their recreational demands in municipalities or unincorporated areas located on the Atlantic.

The revenues of the village have been limited to the collection of franchise fees, zoning and development petition fees, building permit fees and occupational license fees. Therefore, the tax base of the coastal area, while high for a predominately residential area, directly contributes nothing to the village. The county, however, does obtain a benefit as some of the properties are highly appraised and far exceed the State Homestead Exemption. While infill development will take place in the village and therefore, generate some additional revenues for the village, the true economic value of the area is realized most by the area land owners.

Because of the low intensity of development in the village, coastal pollution is not a major problem. The water quality of the lagoon is affected more by the cities of Vero Beach and Fort Pierce than the village. Pollution attributable to the village includes the marina and run-off. Fuel sales at the marina are prohibited but fuel leaks and spills from boats can occur in addition to detergents and paints used on hulls and decks. As the Future Land Use Map designates most of the area as single family, future development should not have an adverse impact on the lagoon if the proper land development regulations are in place. The SFWMD and the DER both regulate drainage but most single family homes are exempt. Therefore, it is recommended the village adopt regulations similar to those of the state agencies and apply them to all development, without exemptions.

Settlement of the St. Lucie Village coastal area occurred over one hundred years ago. As a result, the village is fortunate to

contain historic homes in addition to indian burial mounds that are well over 1,000 years old. A large area in the southern portion of the village has been nominated for the National Register of Historic Places. Should the area not be accepted, the village will still need to adopt and implement development regulations in this area to provide for local protection of these resources. Both the burial mounds and homes are important to the history of the county and are worthy of protection.

All of the residents in the coastal area are expected to evacuate in the case of a hurricane. Some will stay with friends or relatives or check into hotels while others will seek public shelter. Several public shelters are within a short drive of the village and are available to village residents. However, many of these shelters are within the City of Fort Pierce and may be over-crowded with city residents and those evacuating from the barrier islands. The Treasure Coast Regional Planning Council has concluded in its regional hurricane evacuation study that a shortage of public evacuation spaces exists in St. Lucie County. Therefore, it may prove prudent of village residents to seek shelter in the northern county facilities that serve less populated areas.

Because the coastal area contains such a large percentage (75%) of the entire incorporated area of the village, the Coastal Management Element provides only a summary of the area's infrastructure. The Traffic Circulation and Infrastructure Elements of this Comprehensive Plan provide an in-depth analysis of the village infrastructure including that within the coastal area.

The village has no central potable water, sanitary sewer or storm drainage systems. While some of these systems could become available via the Fort Pierce Utilities Authority, the village may choose to use their availability as a method to control growth. In conjunction with the Infrastructure Element, goals

objectives and policies are developed which provide a framework for consistency between the future land use and growth desires of the community with the protection of the environment.

St. Lucie Village faces many challenges in the management of its coastal area. The primary focus of the community is the Indian River Lagoon. Therefore, the village must carefully balance the continued growth of the community around the lagoon without endangering it. The difficulties of managing the coastal area resources and services is compounded by the fact that such a large percentage of the village is within the coastal area. This then provides the town few opportunities to locate uses that may be necessary but are incompatible with those that exist or are projected for the coastal area. In order to protect its resources, the village essentially will have to remain less than a full service community thus requiring its residents to turn elsewhere for the provision of many goods and services. This will require the village to carefully plan those areas outside of the coastal area in an attempt to fulfill as many of the needs of the residents as possible without harming the unique character of the town. The following goals, objectives and policies are designed to insure the perpetuation of the quality resources and lifestyle of the coastal area. The Future Land Use Element compliments this element by incorporating these goals, objectives, and policies and formulating them with those of the rest of the Comprehensive Plan to insure the character of the village is maintained.

XIV. GOALS, OBJECTIVES AND POLICIES

GOAL 5.1.: ENSURE THE SOCIAL, ECONOMIC, AND ENVIRONMENTAL RESOURCES OF THE ST. LUCIE VILLAGE COASTAL AREA ARE MAINTAINED OR ENHANCED THROUGH THE REGULATION OF DEVELOPMENT ACTIVITIES THAT WOULD DAMAGE OR DESTROY SUCH RESOURCES, OR THREATEN HUMAN LIFE AND CAUSE OTHERWISE UNNECESSARY PUBLIC EXPENDITURES IN AREAS SUBJECT TO DESTRUCTION BY NATURAL DISASTERS.

Objective 5.1.1.: In accordance with section 163.3202, F.S., land development regulations shall be adopted which regulate future development in the coastal area and shoreline uses in a manner which preserves, protects and enhances the remaining coastal area wetlands, living marine resources, and wildlife habitat.

Policy 5.1.1.1.: The entire coastal area as defined in this element of the Comprehensive Plan shall be designated as Single Family, Low Density Residential on the Future Land Use Map with the exception of the Village Marina, which shall be designated as Limited Marine Commercial and the small public open space located at the foot of Chamberlain Boulevard, which shall be designated as Recreation/Open Space.

Policy 5.1.1.2.: St. Lucie Village, through use of its code enforcement powers shall regulate activities which may impact esturine water quality and the implementation of the Indian River Lagoon Management Plan. The village shall control the disposal of domestic solid waste including debris, regulate land use through zoning and comprehensive planning and enforce site planning and subdivision requirements which further the goals of the management plan.

Policy 5.1.1.3.: Regulations shall be adopted for the preservation of native flora, including grasses, shrubs and trees.

Policy 5.1.1.4.: All proposed new development and redevelopment activities which propose to alter wetlands, or which cannot preserve the required portion of native vegetation on the site shall submit a mitigation plan with the proposed site plan. The mitigation may take several forms including the creation of new habitat of the same type destroyed, restoration of previous disturbances, and purchase for the purpose of preservation of habitat similar to that destroyed. All mitigation offered to offset development in the coastal area must be performed in the coastal area.

Policy 5.1.1.5.: All proposed new development and redevelopment activities within the coastal area shall use native vegetation to meet the village landscaping requirements for buffers, setbacks, and open spaces.

Policy 5.1.1.6.: All proposed new development and redevelopment activities shall install a twenty-five (25) foot buffer strip adjacent to all wetlands and the Indian River Lagoon.

Policy 5.1.1.7.: All proposed new development and redevelopment activities shall remove nuisance and invasive exotic plant species, particularly Australian pine, Melaleuca, and Brazilian pepper during construction and measures shall be taken to prevent soil erosion.

Policy 5.1.1.8.: Within proposed new development and redevelopment sites, lagoon shorelines lacking wetland vegetation shall be planted with native wetlands vegetation in order to minimize potential flood damage, stabilize the shoreline, and trap sediments and other non-point source pollutants. Hardening of the lagoon shoreline may be used only if erosion is a threat

to life and property and the use of vegetation has failed to stabilize the shoreline. Such shoreline hardening structures shall not be vertical seawalls or bulkheads, but rather, sloping structures of rip-rap or pervious materials combined with vegetation.

Objective 5.1.2.: In accordance with Section 163.3202, F.S. land development regulations shall be adopted for the protection of species with special status.

Policy 5.1.2.1.: All proposed new development or redevelopment activities, other than a single family residence or commercial or multi-family development of two (2) acres or less, shall submit an environmental impact report which shall at a minimum:

- a. Inventory the flora and fauna of the site and identify the presence of any endangered or threatened species and species of special concern and their associated habitats;
- b. Inventory all on-site wetlands;
- c. Inventory all other significant on-site resources; and
- d. Describe impacts of the development on inventoried resources and any mitigating measures to be taken to prevent degradation of those resources.

All development activities which would endanger the continued existence of an endangered or threatened species or species of special concern on the site or in the area shall be prohibited.

Policy 5.1.2.2: In order to protect gopher tortoises and indigo snakes, the use of toxic substances poured in burrows to destroy rattlesnakes shall be prohibited.

Objective 5.1.3.: The village shall enforce regulations adopted by the Department of Natural Resources, Department of Environmental Regulation, Department of Health and Rehabilitative Services, St. Lucie County, SFWMD and other appropriate federal, state and local governments for the improvement of the water quality of the Indian River Lagoon, and shall, in accordance with section 163.3202, F. S., adopt regulations of its own for the same purpose.

Policy 5.1.3.1.: The village shall report all identified point-source pollution emitters to the appropriate federal, state and local governments to identify any existing or for corrective action.

Policy 5.1.3.2.: New marinas shall be prohibited within the village.

Policy 5.1.3.3.: Residential dock permits shall be first approved by the Department of Natural Resources, DER and COE prior to consideration by the village.

Policy 5.1.3.4.: In accordance with section 163.3202, F.S., drainage regulations shall be adopted which are consistent with those of the South Florida Water Management District and Department of Environmental Regulations without exemptions and which at a minimum shall prohibit new point sources of run-off from discharging into the lagoon for less than the 25-year storm event.

Policy 5.1.3.5.: No structures which constrict water circulation in the Indian River Lagoon shall be permitted unless they are in the public interest.

Policy 5.1.3.6: In order to reduce non-point source pollutant loadings and improve the functioning of the city's drainage system, dumping of debris of any kind, including yard clippings

and trimmings, into drainage ditches, stormwater control structures, and the Indian River Lagoon shall be prohibited by land development regulations adopted in accordance with Section 163.3202, F.S.

Policy 5.1.3.7: The town shall request the Treasure Coast Regional Planning Council to convene an Indian River Lagoon Planning Task Force which shall include representatives from the state, regional planning councils and each county and municipality located on the lagoon to discuss those methods to be incorporated into the comprehensive plans and management plans of each organization for the protection of the lagoon flora and fauna and to identify those areas most suited for the development of public access, water-dependent and water-related uses.

Policy 5.1.3.8.: Issuance of a development order or permit for new development or redevelopment shall be conditioned upon demonstration of compliance with applicable federal, state and local drainage system permit requirements.

Policy 5.1.3.9.: The town shall adopt DER Rules 17-3 and 17-25 for stormwater quality and quantity. Drainage facilities shall operate at the following levels of service:

- 5-year, 24-hour protection for road centerlines; and
- 5-year, 1-hour protection for parking lots served by exfiltration systems.

Policy 5.1.3.10: The village shall become a member and actively participate in a county-wide drainage authority or drainage advisory board once it is created.

Policy 5.1.3.11: The village shall meet with the Mosquito Control District a minimum of once a year to discuss needed improvements to the canal system. Any improvement plans shall be

agreed to by both parties and the county-wide drainage authority or drainage advisory board once it becomes active.

Policy 5.1.3.12: Issuance of a development order or permit for new development or redevelopment having an impact upon existing or future Mosquito Control District canals shall be conditioned upon the Mosquito Control District approval of the drainage system(s) associated with the development.

Policy 5.1.3.13.: Issuance of all building permits shall be conditioned upon demonstration of compliance (e.g. signed permits) with applicable local, state and federal requirements for on-site wastewater treatment systems necessary to service the proposed development.

Objective 5.1.4.: In accordance with Section 163.3202, F.S., land development regulations shall be adopted for the protection, preservation and reuse of historic resources.

Policy 5.1.4.1.: As an alternative to preserving historic or archaeological sites, the owner may allow excavation of the site by the Division of Historic Resources or their approved alternate prior to development. Should a site be scientifically excavated, then development may proceed without preserving the site.

Policy 5.1.4.2.: In the case of historic or archaeological sites, vegetation removal shall not be permitted unless the vegetation to be removed is a part of a bona fide scientific excavation, or is a part of an approved development plan.

Policy 5.1.4.3.: The village shall accept donations of historic or archaeological sites.

Policy 5.1.4.4.: In accordance with Section 163.3202, F. S., the village shall:

- a. Adopt criteria for the identification of historic resources; and
- b. Adopt regulations for the protection, preservation and reuse of identified historic sites and structures;

Policy 5.1.4.5.: By August 1, 1991 the Village shall:

- a. Determine if any structures or sites meet the criteria for historic resources and so designated and map those that do;
- b. Submit a list of qualified historic resources to the Florida Department of State Division of Historic Resources for inclusion on State and National lists of historic places; and
- c. Continually update the list of historic resources as appropriate.

Objective 5.1.5.: In accordance with section 163.3202, F. S., land development regulations shall be adopted which ensure that building and development activities are carried out in a manner which minimizes the danger to life and property from hurricanes and floods and which direct population away from coastal high hazard areas.

Policy 5.1.5.1.: All areas east of the Florida East Coast Railroad (FEC) shall be designated as Coastal High Hazard Areas. These areas are depicted on Figure 2 of this Comprehensive Plan.

Policy 5.1.5.2.: Town-funded or supported public facilities shall not be built in the coastal high-hazard area, unless the facility is for public access, resource restoration, or required to ensure the health, safety, and welfare of its residents.

Policy 5.1.5.3: The village shall participate in and coordinate with surrounding local government plans to provide immediate response to post-hurricane situations.

Policy 5.1.5.4.: Land use intensities within the coastal area shall be consistent with:

- a. Directing population concentrations away from Coastal high hazard areas;
- b. The Future Land Use Element and Map;
- c. The hazard mitigation annex of the local peacetime emergency management plan the Treasure Coast Hurricane Evacuation Study;
- d. Vested development rights; and
- e. Those which maintain an acceptable time period for emergency evacuation.

Objective 5.1.6.: The village shall implement county and regional hurricane evacuation plans as they pertain to village residents in an attempt to maintain evacuation times established by such plans.

Policy 5.1.6.1.: The village shall coordinate all hurricane evacuation with the county and adjacent municipalities by implementing the procedures described in county and regional evacuation plans.

Policy 5.1.6.2.: The village shall request all residents to evacuate immediately once an evacuation order is issued.

Policy 5.1.6.3.: The village shall annually notify all residents of hurricane evacuation procedures and shelters and procedures

for those with special needs such as the handicapped and the infirmed.

Policy 5.1.6.4.: The village shall provide all available information regarding population and development within the town to local and state agencies for the purposes of preparing hurricane evacuation plans.

Policy 5.1.6.5.: All hurricane evacuation studies and plans conducted by or for the village shall be provided to the Treasure Coast Regional Planning Council, the county, and all other municipalities within St. Lucie County for consistency with regional and local plans prior to their adoption and implementation. The village shall request these agencies to do likewise.

Objective 5.1.7.: The village shall provide immediate response to post-hurricane situations through the implementation of post-disaster response and redevelopment plans to be prepared and adopted by October 1, 1994.

Policy 5.1.7.1.: After a hurricane, but before re-entry of the population into evacuated areas, the Village Board of Aldermen shall convene the Recovery Task Force, hear preliminary damage assessments and consider a temporary moratorium on building activities not necessary for the public health, safety and welfare.

Policy 5.1.7.2.: The Recovery Task Force shall consist of the mayor, all five aldermen, the town marshal, town building inspector and others as deemed necessary to assess the extent of damages within the village and to coordinate with other governmental agencies.

Policy 5.1.7.3.: The Recovery Task Force shall: review and decide upon emergency building permits; coordinate with state,

county, and federal officials to prepare disaster assistance applications, analyze and recommend to the Board of Aldermen hazard mitigation options including reconstruction or relocation of damaged public facilities; develop a redevelopment plan; and recommend amendments to the Comprehensive Plan, Local Peacetime Emergency Management Plan, and other appropriate policies and procedures.

Policy 5.1.7.4.: Immediate repair and cleanup actions needed to protect the public health and safety include 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. These actions shall receive first priority in permitting decisions. Long term redevelopment activities shall be postponed until the Recovery Task Force has completed its tasks.

Policy 5.1.7.5.: If rebuilt, structures which suffer damage in excess of fifty percent (50%) of their appraised value shall be rebuilt to meet all current requirements, including those enacted since construction of the structure.

Policy 5.1.7.6.: Structures which suffer repeated damage to pilings, foundations, or loadbearing walls shall be modified to delete the areas most prone to damage.

Policy 5.1.7.7.: Repair or reconstruction of seawalls shall utilize the techniques addressed in Policy 5.1.1.7.

Policy 5.1.7.8.: The Recovery Task Force shall inventory all structures which suffer in excess of fifty percent (50%) of their assessed value, judge the utility of the land for public access, and make recommendations for acquisitions to the Board of Aldermen.

Objective 5.1.8.: The village shall not experience a loss of public access to the Indian River Lagoon and alternative programs for the acquisition of additional public access facilities shall be developed and implemented by 1994.

Policy 5.1.8.1.: The small public open space located at the foot of Chamberlain Boulevard shall remain in public ownership, be available for public pedestrian access to the Indian River Lagoon, and be designated as Recreation/Open Space on the the Future Land Use Map.

Policy 5.1.8.2.: Parking for those using the Chamberlain Boulevard public access area shall be permitted within the Chamberlain Boulevard right-of-way located west of Indian River Drive.

Policy 5.1.8.3.: Structures other than docks or private utility poles shall not be permitted east of the Indian River Drive right-of-way in order that an unobstructed view of the Indian River Lagoon be maintained along the length of Indian River Drive.

Policy 5.1.8.4.: The village shall develop a trust for the receiving of land and/or monetary donations and implement a program to actively pursue contributions.

Policy 5.1.8.5.: The village shall, in a manner consistent with the Future Land Use Element of this Comprehensive Plan, develop and implement land development regulations which encourage the dedication of public access facilities from new development or redevelopment activities.

Policy 5.1.8.6.: The village shall investigate available state, federal and private non-profit programs for the purchase of public lands and submit applications to those for which the village is eligible.

Objective 5.1.9.: The level of service standards adopted for the entire village in the Capital Improvements Element and other elements of this Comprehensive Plan shall be applied to the traffic circulation and infrastructure facilities of the coastal area whenever development orders or permits are requested the provision of infrastructure in the coastal area shall take place in a manner which is financially acceptable, ensures the health, public funds in high-hazard coastal areas.

Policy 5.1.9.1.: Public funds shall not be used for infrastructure expansion or improvements in high-hazard coastal areas unless such funds are necessary to:

- a. provide services to existing development (structures approved for development prior to the implementation of this policy);
- b. provide adequate evacuation in the event of emergency;
- c. provide for recreational needs and other appropriate water dependent uses.

Policy 5.1.9.2.: The level of service standards established elsewhere is this Comprehensive Plan for traffic circulation, sanitary sewer, solid waste, drainage, potable water, and recreation are hereby established and adopted for all coastal area facilities of the same type.

Policy 5.1.9.3.: Developments which would impact existing facilities by reducing the level of service below adopted levels, and which are to be built prior to the availability of scheduled facility improvements shall pay for such impacts or shall provide their own facilities constructed to agency standards.

Objective 5.1.10.: In accordance with the goals, objectives and policies of the Future Land Use Element and uses depicted on the Future Land Use Map, Single Family Low Density Residential shall be the only form of new private development permitted within the coastal area of St. Lucie Village, and existing non-conforming uses shall be regulated through land development regulations adopted in accordance with section 163.3202, F.S.

Policy 5.1.10.1.: All proposed development in the coastal area shall be consistent with the land uses shown on the Future Land Use Map (Figure 6 of this Comprehensive Plan) and the goals, objectives and policies of the Future Land Use Element.

Policy 5.1.10.2.: All land acquired in the coastal area by governmental agencies or private organizations for the purpose of public use or conservation shall be redesignated on the Future Land Use Map as either Conservation or Recreation/Open Space, depending upon its intended use.

Policy 5.1.10.3.: All private requests for changes to the Future Land Use Map within the coastal area or changes to the future land categories which are shown in the Coastal area on the Future Land Use Map which would permit development at intensities or densities greater than those permitted by the adoption of this Comprehensive shall at a minimum, provide the following documentation for consideration by the Village Board of Aldermen:

- a. A market study which demonstrates the existing need for the proposed intensity or density within the coastal area;
- b. Data and analysis which state the locational advantage of the St. Lucie Village coastal area over other areas within the Treasure Coast Region which already permit the proposed intensity or density;
- c. The potential impacts of the proposed intensity or density

on the natural, historic and social resources of the coastal area;

- d. The potential impacts on the property values of existing uses and those which are expected under the existing future land designations;
- e. The additional needs for the public facilities for which levels of service have been adopted by this plan;
- f. Data and analysis which state the proposed intensities or density can be supported by existing public facilities at the adopted levels of service or that such facilities will be provided privately and be available concurrent with the impacts of the proposed development; and
- g. Data and analysis which state the proposed intensities or densities serve the general public interest of the community and provide for an overall net public benefit, monetary and otherwise.

Policy 5.1.10.3.: In accordance with section 163.3202, F.S., and the goals, objectives and policies of the Future Land Use Element, land development regulations shall be adopted for the buffering, improvements and elimination of non-conforming uses.

APPENDIX 5A

SECTIONS OF 9J-5, NOT APPLICABLE TO ST. LUCIE VILLAGE

APPENDIX 5A

SECTIONS OF 9J-5, FAC, NOT APPLICABLE TO ST. LUCIE VILLAGE

9J-5.012(2)(e)3.(f): St. Lucie Village does not have any beach or dune systems within its boundaries. Therefore, the requirement to inventory and analyze such systems is not applicable to the village.

9J-5.012(3)(b)4: St. Lucie Village does not have any beach or dune systems within its boundaries nor are any projected for inclusion. Therefore, the requirement to include an objective for the protection of such systems is not applicable to the village.

9J-5.012(3)(c)2.: St. Lucie Village does not have any beach or dune systems within its boundaries nor are any proposed for inclusion. Therefore, the requirement to include a policy for the restoration of such systems is not applicable to the village.

TOWN OF ST. LUCIE VILLAGE

**COMPREHENSIVE PLAN
CONSERVATION ELEMENT**

Prepared for:
The Town of St. Lucie Village, Florida

Prepared by:
Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
CONSERVATION ELEMENT**

I. INTRODUCTION

Purpose

The Conservation Element is intended to provide a guide for the conservation, use and protection of the natural resources located in St. Lucie Village. The element provides a framework for the protection and enhancement of the public health, safety and welfare and the quality of the environment.

In this element, the village's natural resources are identified and analyzed and their importance to the village and the region is addressed. The element then establishes a plan and policy direction concerning the conservation of natural resources and provides a basis for decision-making by village officials. As growth and redevelopment take place in the village, the need for the protection and management of the village's natural resources will increase.

Environmental Setting

St. Lucie Village is a 490 acre, predominately residential community located on the western shore of the Indian River Lagoon in the north half of St. Lucie County. Significant features of the village include the Indian River and accessory canals, the coastal ridge and U.S. Highway 1 (see Figure 2). Much of the village is undeveloped with most of the existing structures lying on or near the Indian River shore. The general village area has been settled for over one hundred years although the village did not incorporate until 1961.

The climate of St. Lucie County is subtropical with average temperatures ranging from a high of 81.9 F in the month of August to a low of 64.8 F in the month of January. The annual temperature averages 73.8 F and the mean annual rainfall is 55.27 inches (see Table 6-1). Prevailing winds are from the Southeast.

The natural terrain of the village is characterized by gently sloping lands in the east with the Atlantic Coastal Ridge accentuating the western corporate limits. Most of the land east of the Florida East Coast Railroad tracks (FEC) is below five (5) feet NGVD. The land then begins to rise up slowly to the FEC tracks to ten (10) feet NGVD. The FEC then lies at the foot of the Atlantic Coastal Ridge which ranges in elevation from twenty-five (25) NGVD to fifty (50) feet NGVD. Therefore, drainage for the entire village flows east to the lagoon (see Figure 2).

Current Conditions

The 1988 functional population of St. Lucie Village was 700 persons. Population growth has been steady averaging one and fifteen-tenths percent (1.15%) over the past eight (8) years. Growth in the next sixteen (16) years is expected to continue at this rate bringing the total population to 839 persons by the year 2005.

The portion of the village east of the FEC railroad tracks consists primarily of single family residences and vacant property with the exception of a marina and a small multi-family development. This entire area has been designated as the village "coastal area" for the purposes of preparing the Coastal Management Element of this Comprehensive Plan. The Coastal Management Element is referenced throughout this element where the inventory of natural features and resources overlaps with this element.

TABLE 6-1

Temperatures and Precipitation

[Data were recorded at Fort Pierce, Florida]

Month	Temperature					Precipitation		
	Normal monthly mean	Normal daily maximum	Normal daily minimum	Mean number of days with temperature of--		Normal total	Mean number of days with rainfall of--	
				90° F or higher	32° F or lower		0.10 inch or more	0.50 inch or more
	of	of	of			Inches		
January-----	64.8	72.3	52.1	0	1	1.90	4	1
February-----	65.7	74.0	55.5	0	(*)	2.44	5	2
March-----	68.4	76.8	56.9	(*)	0	3.49	6	3
April-----	72.6	80.0	63.3	(*)	0	4.32	6	3
May-----	76.7	83.8	68.1	1	0	4.19	8	3
June-----	80.0	87.1	71.2	6	0	6.07	9	5
July-----	81.6	88.7	72.5	10	0	5.23	10	3
August-----	81.9	89.5	73.1	15	0	6.01	10	4
September-----	81.0	87.6	73.2	6	0	8.46	12	5
October-----	76.7	83.0	68.1	1	0	8.27	8	4
November-----	70.4	78.4	61.2	(*)	0	2.75	4	1
December-----	66.3	73.7	54.7	0	(*)	2.14	5	1
Year-----	73.8	81.2	64.2	39	1	55.27	87	35

*Less than half a day.

Source: Soil Survey of St. Lucie County Area, Florida
 USDA, Soil Conservation Service (1980)

The western portion of the village consists of those properties located along Old Dixie Highway and U.S. Highway 1. This area consists of a variety of residential and commercial uses. The Future Land Use Element of this Comprehensive Plan provides an inventory of existing land uses throughout the village and a summary of their conditions (see Figure 1). Generally, the village is characterized by low density, single family residential uses and vacant land with some support commercial. Much of the natural ecological systems are still intact with very good representative species remaining in some areas.

II. INVENTORY AND ANALYSIS

Surface Water

The Indian River and upland, dead-end canals that feed into it constitute the extent of the surface water within the village except for some low-lying areas that may hold water for part of the year. Although called the Indian River, the water body is, in fact, a lagoon that extends from Volusia County on the north into Martin County on the south. The village corporate limits are defined on the east as the west bank of the Intracoastal Waterway channel. The village is heavily dependent upon and influenced by the lagoon. Thus, the Coastal Management Element of this Comprehensive Plan details the lagoonal system and provides future developmental policies for the village accordingly.

Floodplains

The Federal Emergency Management Agency has prepared Federal Insurance Rating Maps that identify various flood prone areas of the village. Areas prone to the 100 year flood event are classified as "A Zones" and those subject to the 100 year flood event and experience wave velocity during storms are classified

as "V Zones". The coastal area of the village, all areas east of the FEC railroad tracks, is within an "A Zone" and thus subject to 100 year flood events.

Flora and Fauna

Inventory

St. Lucie Village consists of four (4) general terrestrial ecological communities that result primarily from the underlying soils (see Figure 11). Along the undeveloped portions of the shoreline of the Indian River Lagoon, the Mangrove Swamp predominates. The flat, eastern end of the village consists primarily of South Florida Flatwoods with a significant area of Freshwater Marsh. Sand Pine Scrub is then found along the Atlantic Coastal Ridge on the western boundary of the village.

Summarized below are the dominate vegetation and animals of these communities according to 26 Ecological Communities of Florida, a 1987 publication promulgated by the Florida Chapter of the Soil Conservation Society of America. A field study for species in St. Lucie Village has not been conducted. The following provides a list of species that are generally located within these habitats and may be present in the village.

Mangrove Swamp: The Mangrove Swamp predominates along both the eastern and western shore of the Indian Rive Lagoon, although the community is more common along the barrier island as there has been less development. The Red mangrove (Rhizophora mangle) is found closest to the shore. These are then followed by Black mangroves (Avicennia germinans), Button mangroves (Conocarpus erectus), and White mangroves (Languncularia racemosa). Dominate herbaceous plants include Leather fern (Acrostichum aureum), Sea oxeye (Borrichia arborescens), and Sea purslane (Sesuvium portulacastrum).

The Mangrove Swamp can provide habitat which supports mammals such as the manatee, everglades mink and raccoon and birds such as boat-tailed grackle, blue heron, belted kingfisher, gulls, hawks, great white heron, brown pelican. wood stork, southern bald eagle and several others. Reptiles include the american alligator, crocodile and rat snake.

South Florida Flatwoods: The South Florida Flatwoods predominate over much of the village. The low lying, flat topography of the village coupled with poorly drained soils supports this diverse community. Trees which can be found in this ecological community are Live oak (Quercus virginiana), Slash pine (Pinus elliottii), and the South Florida Slash pine (Pinus elliottii var. densa). Shrubs of this community include Ground blueberry (Vaccinium myrsinites), Gallberry, (Ilex glabra), Sawpalmetto (Serenoa repens), Tarflower (Befaria racemosa), Shining sumac Rhus copallina), and Waxmyrtle (Myrica cerifera). There are also a number of grasses associated with this community including Chalky bluestem (Andropogon capoillipes), Creeping blustem (Schizachyrium stoloniferum), Lopsided indiagrass (Sorghastrum secundum), and South Florida bluestem (Schizachyrium rhizomatum).

Typically, there are a number of animals that may be found within the South Florida Flatwoods. However, the degree of development can have an impact on the frequency of occurrence of some of these animals. Mammals that may be present include armadillo, eastern cottontail rabbit, cotton rat, deer, skunks, raccoon and opossum. Birds of the community include Bachman's sparrow, Bobwhite quail, brown-headed nuthatch, meadowlark, pileated woodpecker, pine warblers, red-bellied woodpecker, rufous-sided towhee and yellow-throated warblers. The eastern diamondback rattlesnake, pygmy rattlesnake and yellow ratsnake are some of the reptiles of the community. Amphibians include the oak toad, chorus frog and pinewoods tree frog.

Freshwater Marsh: In the more undeveloped portions of the village between the FEC tracks and the homes located along the lagoon, small isolated wetlands exist that support the Freshwater Marsh ecological community. Some of these wetlands are relatively pristine while others have been filled or drained. Vegetation of the marsh consists mostly of grasses or grasslike plants including Beak rushes (Rhynchospora spp.), Blue maidencane (Amphicarpum mulenbergianum), Bottlebrush threeawn (Aristida spiciformis), Bulrushes (Scirpus spp.), Caric sedges (Carex spp.), Clubhead cutgrass (Leersia hexandra) and several others. Herbaceous plants include Arrowhead (Sagittaris spp.), Blue flag (Iris hexagona savannarum), Cattail (Typha spp.), Fire flag (Thalia geniculata), and Smartweed (Polygonum spp.). In addition, there are a number of shrubs including St. John's wort (Hypericum spp.), Primrose willow (Ludwigia spp.) and Elderberry (Sambucus canadensis).

The Freshwater Marsh also supports a variety of animals. Those that are commonly associated with this ecological community are mammals such as the otter, mink, raccoon, marsh rabbit, white-tailed deer and Florida water rat. Birds include herons, egrets, bitterns, ibis, sandhill crane, rails and limpkin. Dwarf salamander, sirens, frogs, turtles and snakes represent some of the more prevalent reptiles.

Sand Pine Scrub: This community is found on the western end of town along the Atlantic Coastal Ridge. The predominant trees of the community are Bluejack oak (Quercus incana), Myrtle oak (Quercus myrtifolia), Sand live oak (Quercus virginiana var. geminata) and Sand pine (Pinus clausa). Shrubs of the Sand Pine Scrub include Dwarf huckleberry (Gaylussacia dumosa), Gopher apple (Chrysobalanus oblongifolius) and Prickly pear (Opuntia spp.). In addition, the following herbaceous plants and vines may

be found Grassleaf goldenaster (Heterotheca graminifolia), Deermoss (Cladonia spp.) and Cat greenbriar (Smilax glauca). Grasses include Yellow indiagrass (Sorghastrum nutans) and Low panicum (Panicum spp.)

Wildlife food production is generally low in the Sand Pine Scrub community but several animals have adapted to this environment. Some of the animals which can be supported by the community are deer and birds such as the towhee, great crested flycatcher, scrub jay and Bachman's sparrow. Reptiles such as the gopher tortoise, scrub lizard and slink may be present. Amphibians include the gopher frog.

The incorporated area of St. Lucie Village also includes approximately 350 acres of the Indian River Lagoon. That portion of the lagoon within the Village is rather shallow and contains extensive seagrass habitat. The St. John's River Water Management District's (SJRWMD) and the South Florida Water Management District's (SFWMD), Indian River Lagoon Joint Reconnaissance Report, 1987 (IRLJRR) is a comprehensive document that describes the lagoon. The joint description of the Seagrass habitat found throughout St. Lucie County is excerpted below:

Seagrass Habitat: Seagrasses are totally submerged higher plants evolved from land plants. They derive their nutrients from the sediment, not from the water column as do algae. Flowers, pollen, fruits and seeds are all produced underwater. Because of their sediment trapping ability, the protection they provide from erosion, their high primary productivity, and the vast quantities of trophically and commercially important consumers, for which they provide food and shelter, seagrasses are extremely important to the ecology and economy of the lagoon.

In the Indian River Lagoon, most commercial and sports fisheries species depend on seagrass beds at some stage of their life cycle, e.g., snook. Commercial landings from the four-county area had a dockside value of \$40 million in 1984. In 1985, landings of hard clams alone, which are more abundant in seagrass, may approach this total figure. A roughly equal amount is spent on direct sales for recreational fishing.

As rooted plants, seagrasses require high levels of light (more than most algae). Thus, they are restricted to shallow water, with water clarity determining the maximum depth to which sufficient light penetrates for seagrass growth. The main mechanism of seagrass spreading and propagation is by lateral growth of underground rhizomes. It appears that successful recruitment by seeds is a rare event in the Indian River Lagoon, except for Ruppia and Halophila spp. All seven species of seagrasses that occur in the state of Florida are found in Indian River Lagoon. In approximate order of decreasing abundance, these are: manatee grass (Syringodium filiforme), shoal grass (Halodule wrightii), turtle grass (Thalassia testudinum), Johnson's seagrass (Halophila johnsonii), paddle grass (Halophila decipiens), star grass (Halophila englemanni) and widgeon grass (Ruppia maritima). Johnson's seagrass is not found more than 1 to 2 km north of Sebastian Inlet. Turtle grass, whose northern limit on the east coast is Sebastian Inlet, and paddle grass also are more abundant in the southern portions of the Indian River Lagoon, while stargrass is more abundant in northern portions. Except for Ruppia, which can grow in freshwater, none of the seagrasses grow well in salinities below about half that of full seawater. Halodule is the next most tolerant of low salinity.

However, patterns of distribution are more obvious with respect to water depth and clarity than to any north-south pattern or to any pattern of distance from an inlet. Halodule, the second most abundant seagrass, generally dominates in the shallowest zone -- from just below intertidal at depth of 30 to 40 cm. Syringodium, the most abundant seagrass, generally dominates at depths of 40 cm. to 1 m. If seagrasses are present below 1 m., Halophila spp. typically dominate. Sediment type apparently plays little role in determining seagrass distribution. Little difference between the sediments found in beds of three species of seagrass and bare sand in terms of grain size characteristics have been found.

The Indian River Aquatic Preserve Management Plan lists the following fishes and invertebrates as being present within the seagrass bed areas of the lagoon:

Fishes

bullshark	ladyfish
tarpon	scaled sardine
striped anchovy	sea catfish
rainwater killifish	gulf killifish
longnose killifish	sheepshead minnow
sailfin molly	gulf pipefish
gray snapper	pigfish
spotfin mojarra	silver jenny
silver perch	spotted seatrout
spot	southern kingfish
red drum	sheepshead
pinfish	striped mullet
white mullet	tidewater
silverside	snook
lined sole	

Invertebrates

Northern quahog

Southern quahog

Analysis

The lists of species above represents a generalized description of the ecological communities within St. Lucie Village. The degree of development within the village as well as the type of neighboring ecological communities and their development will have a significant impact on the type and number of species found within the village. However, each of the communities identified may have associated with it a number of endangered or threatened species or Species of Special Concern. While a comprehensive field check for the existence of these species within the village has not been conducted, it is important to recognize their potential existence when development activities are considered. Listed below are the endangered and threatened species generally associated with the habitats found in the village.

Mangrove Swamp:

Herbaceous Plants - Powdery catopsis (Catopsis berteronianau), Prickly apple (Cereus gracilis), Worm-vine orchid (Vanilla barbellata)

Birds - Arctic Peregrine falcon (Falco peregrinus tundrius), Bald eagle (Haliaeetus leucocephalus), White-crowned pigeon (Columba leucocephala), Wood stork (Mycteria americana)

Reptiles - American crocodile (Crocodylus acutus), American alligator (Alligator mississippiensis), Florida ribbon snake (Thamnophis sauritus sackeni)

South Florida Flatwoods:

Herbaceous Plants - Beautiful pawpaw (Deeringothamnus pulchellus)

Mammals - Florida panther (Felis concolor coryi), Mangrove fox squirrel (Sciurus niger avicennia)

Birds - Crested Caracara (Polyborus plancus), Florida grasshopper sparrow (Ammodramus savannarum floridanus), Southeastern kestrel (Falco sparverius paulus), Red-cockaded woodpecker (Picoides borealis), Bald eagle (Haliaeetus leucocephalus), Florida sandhill crane (Grus canadensis pratensis)

Reptiles - Eastern indigo snake (Drymarchon cforais couperi)

Freshwater Marsh:

Mammals - Everglades mink (Mustela vison evergladensis), Silver rice rat (Oryzomys argentatus)

Birds - Cape Sable seaside sparrow (Ammodramus maritimus mirabilis), Crested caracara (Polyborus plancus audubonni), Florida sandhill crane (Grus canadensis pratensis), Snail kite (Rostrhamus sociabilis), Wood stork (Mycteria americana)

Reptiles - American alligator (Alligator mississippiensis)

Sand Pine Scrub:

Shrubs - Four-petal pawpaw (Asimina tetramera), Pygmy fringetree (Chionanthus pygmaea)

Herbaceous Plants and Vines - Curtis milkweed (Asclepias curtissii), Dancing-lady orchid (Oncidium variegatum), Florida bonamia (Bonamia grandiflora)

Mammals - Goff's pocket gopher (Geomys pinetis goffi)

Birds - Florida scrub jay (Aphelocoma coerulescens coerulescens)

Reptiles - Blue-tailed mole skink (Eumeces egregius lividus), Sand skink (Neoseps reynoldsi), Short-tailed snake (Stilosoma extenuatum)

Seagrass Habitat:

Fishes - Snook, rivulus

Mammals - Manatee

Air Quality

The definition of total suspended particulates (TSP) includes all particulate material released into the atmosphere. Typical sources within St. Lucie County include dust from open fields and construction and smoke from open burning or industrial processes. Pollen is also a component of the particulates, but is generally seasonal and represents only a small proportion of the total particulate matter.

The Florida Department of Environmental Regulation (DER) currently maintains three stations in Fort Pierce for the measurement of the county's TSP. Data have been tabulated for these for the years 1979-1985. These stations are located at the Fort Pierce Water Treatment Plant, the former police station at 435 North 7th Street, and the intersection of Selvitz Road and

Glades Cut-off. The station at the Water Treatment Plant showed the primary ambient air quality to be standard (annual geometric mean of 75 ug/m³) in 1979. The station at Selvitz Road and Glades Cut-off reported that the secondary ambient air quality standard (Maximum of 150 ug/m³, not to be exceeded more than once per year) was exceeded in 1980, 1981, 1982 and 1983. Additional stations in St. Lucie County were not monitored in 1981 and 1982. However, these stations did not show exceedances of standards during the period for which data were provided.

Sulfur dioxide was measured at five stations in Fort Pierce and nitrogen oxide was measured at one station (the Fort Pierce Police Station) until 1982. All measurements for these parameters were well within the ambient air quality standards. A statistical summary of DER air quality data for St. Lucie County is presented in Appendix 6A.

The Grace Chemical plant located just to the south of the village had the potential to impact on the air quality within the village. However, the plant closed in 1988 and will not reopen. Other possible point source emitters within the area include the Tarmac Concrete plant, expanded airport and the new cement silos located at the Port of Fort Pierce.

Soil Erosion

The low intensity of development and the lack of agriculture within the village have prevented soil erosion problems from occurring.

Commercially Valuable Minerals

Sand for fill is the only known source of commercially valuable minerals in St. Lucie Village. (see Figure 3) However, no mining has ever been conducted in the village and the current zoning regulations do not permit mining.

Commercial Use of Natural Resources

The Village Marina constitutes the only commercial use of natural resources within the village. Details of this facility are provided in the Coastal Management and Future Land Use Elements of this Comprehensive Plan.

Conservation and Recreation Uses of Natural Resources

The Indian River Lagoon is used for both recreation and for conservation. As part of an Aquatic Preserve, the Florida Department of Natural Resources has prepared a multi-objective management plan for the lagoon. The plan encourages recreational uses which will not have an adverse impact on the natural lagoonal system. The details of the plan are discussed further in the Coastal Management Element of this Comprehensive Plan. The entire village shoreline of the Indian River is under private ownership with the exception of a small public open space located at the foot of Chamberlain Boulevard.

Presently, a small strip of land located between the FEC tracks and Old Dixie Highway represents the only upland, undeveloped publicly owned land within the village. The land has been disturbed and is, therefore, unsuitable for conservation and the village lacks the funding resources for recreational improvements.

The town has purchased a building for use as a town hall. The site includes a small park with benches and a backstop; however, this function does not involve the use of a primary natural resource except the land.

III. DEVELOPMENT PRESSURES AND POLLUTION

Development Pressures

Development along the lagoon, while low in intensity, has had a major impact on the natural shoreline. In an effort to stabilize the shore against flooding of Indian River Drive and adjacent lots, rip-rap and/or bulkheads have been put in place. This has lead to a loss of much of the natural shallow water flora including mangroves.

Most of the development in the upland portion of the village has been the construction of single family homes and under the proposed Future Land Use Map, this trend should continue (see Figure 6). In general, the home sites have been selected for their natural appearance. Therefore, most of the construction has been sensitive to the natural landscape and has preserved many of the trees. On many lats, however, the natural understory has been removed and replaced with sod. Mining or heavy agriculture have never been practiced within the village. therefore, the accompanying problems with such practices are not present.

Because the village has very little land under public ownership, land development regulations should be adopted to protect against significant vegetation losses. Regulations for the protection of native trees and the preservation of the natural understory are recommended. Likewise, all invasive exotic plants and trees, particularly Brazilian Pepper, Casuarina and Melaleuca, should be removed and native vegetation required in all landscape buffers. Although much of the native vegetation in the area has been well preserved, several areas of the village have been inundated with exotics which have replaced the natural forest and understory.

Pollution

Sources of pollution in the village have been relatively few. the main sources of water pollution are run-off, septic tanks and, to some extent, the marina. The village has no drainage regulations and most single family homes are exempt from state drainage requirements. the village slopes from west to east, therefore, the Indian River Lagoon receives a great deal of run-off.

Four (4) drainage ditches are still in operation while others have become overgrown and non-functional. The Coastal Management and Infrastructure Elements of this Comprehensive Plan detail the existing drainage system and recently proposed improvements and extensions to correct some of the existing problems. The Indian River Water Quality Survey, 1984-1985, published by the DER did not indicate any outstanding pollution problems in the lagoon in the area of the village.

All of St. Lucie Village is without central potable water and sanitary sewage systems. Therefore, each development provides its own on-site potable water and septic system. Thus far, residents have experienced few problems with these systems. The County Health Department regulates the location and installation of septic systems to insure consistency with state requirements. However, in periods of flooding, some of the septic tanks have been backed-up. In addition, the Ft. Capron Canal, located north of Chamberlain Boulevard, has experienced seepage from nearby septic fields. Again, the Infrastructure Element of this comprehensive Plan details the problems of these systems and solutions to them.

Hazardous Waste

Legislation

The federal government has taken a lead role in passing legislation concerning the disposal of hazardous wastes. The Federal Clean Water Act, Clean Air Act, Resources Conservation and Recovery Act, Toxic Substances Control Act, Comprehensive Response and Cleanup Liability Act (Superfund), and the Superfund Amendments and Reauthorization Acts have all been codified into state rules by the DER in Chapters 17-2, 17-28, 17-30, 17-32, 17-34, 17-35, 17-61, 17-70, and 17-71, FAC.

Management Programs

In 1986, St. Lucie County prepared a county-wide Hazardous Waste Management Assessment. This assessment provides a detailed inventory of hazardous waste generators and analyzes current management practices. As required by state legislation passed in 1980, and using DER guidelines promulgated in 1983, the assessment included an identification of large quantity generators which produce in excess of 2,200 pounds of hazardous waste per month. Small quantity generators were those identified as producing between 200 and 2,000 pounds of hazardous waste per month. Generators were identified through the use of a survey sent to 988 potential generators throughout the county. Of these, 507 (or 53%) responded.

Since completing the assessment, the St. Lucie County Planning Department has contracted with the County Health Department to conduct field checks of all uses which received the initial survey whether they responded or not. All new potential hazardous waste generators must register with the County Health Department prior to receiving an occupational license. St. Lucie Village has agreed to participate in this program.

Large Quantity Generators

The St. Lucie county Hazardous Waste Assessment did not identify any large quantity generators in St. Lucie Village.

Small Quantity Generators

The assessment identified several small quantity hazardous waste generators in St. Lucie County. The Health Department is currently developing a list of generators by municipality. Few, if any, generators are thought to exist in St. Lucie Village.

Storage and Disposal Methods

The hazardous waste materials identified by the survey included mixed solvents, greases, oils, etc., metal waste, lead-acid storage batteries, toxic metal sludge, and spent plating waste. Ninety percent (90%) of these wastes were found to be properly managed. As for the continuing disposal of hazardous waste materials, the assessment concluded:

"As St. Lucie County has no hazardous waste facility, there is a definite deficiency in this area. The [nearest] storage and transfer facility...has sufficient capacity to handle the county's small quantity generators daily waste production; unfortunately, [this facility] is located [in Pompano] approximately 80 miles to the south of the county. A facility near the county would be an asset to the entire Treasure Coast Region. By resolution of the Board of County Commissioners, two (2) sites have been designated within St. Lucie County to be suitable for the possible location of a temporary storage and transfer facility. The designated sites are located at the county landfill and the St. Lucie County International Airport."

The problem of hazardous waste disposal is a regional concern. Even though no known generators exist in St. Lucie Village, it would be of a great benefit to the village to work closely with the county and other governmental units within the region to develop hazardous waste transfer, storage and disposal facilities. The Highway Oriented Commercial Zoning District on U.S. Highway 1 does permit uses that could be small quantity generators.

Abandoned Sites and DER Sites List

The County Hazardous Waste Management Assessment identifies several former dumpsites, none of which were in St. Lucie Village. The management assessment summarized:

"A total of ten former dumpsites have been identified in the county. Of these, at least four are located at the present site of the County Airport, two of which are under investigation by the DER for known potential groundwater contamination. In the future, the public or the media could be utilized, as in other counties, to uncover other sites which may be unknown to present sources.

The Current practices at the county's landfill are in compliance with the DER regulations. The greatest threat of contamination stems from public naivete regarding the products [being disposed of] in their everyday garbage. It is known that over 190,000 pounds of hazardous waste are delivered to the landfill each year. This figure, most likely a conservative one, still [represents a potentially] serious contamination problem to the public's health, as well as the environment. Ground water monitoring in and around abandoned landfills and increasing public awareness are strongly recommended and encouraged."

Although none of the dump sites are within the village, the village needs to work with the community to increase awareness of the hazardous nature of some everyday wastes and to help identify unknown, abandoned dumpsites. The village can also play an important role in stringently enforcing codes to prevent vacant and unoccupied properties from being used as illegal dumpsites.

Radon Pollution

Geonet Technologies of Maryland conducted a study throughout the State of Florida to detect the presence of radon gases within the soil. For St. Lucie County, the study concluded radon pollution did not pose a problem although all Florida residents are encouraged to have their homes tested.

IV. GROUND WATER RESOURCE SUPPLY AND USE

All of St. Lucie County is within the South Florida Water Management District (SFWMD). In February 1987, the SFWMD released a document entitled Data Documentation for St. Lucie County, which provides information on water resources and use in St. Lucie County. According to this report, St. Lucie Village has two (2) underlying aquifers, the Surficial and the Floridan. All potable water wells within the village use the Surficial Aquifer System. It is not known whether the Floridan Aquifer System is used in the village, The marginal water quality of the Floridan would restrict use to irrigation only unless extensive treatment was employed.

Surficial Aquifer System

According to the SFWMD report cited above:

"The Surficial Aquifer System is the source of most of the potable water used in St. Lucie County. In most of the county the aquifer system is bounded below by the impermeable sediments of the Hawthorn Group and is unconfined above. Water within this type of aquifer exists under water table conditions. Rain, irrigation water, canal water and saline estuary water percolate vertically and horizontally through the surface sediments to the water table and recharge the aquifer system. Rain is by far the most significant source of recharge water in the county.

The most productive Surficial Aquifer System wells are completed in the Anastasia Formation. Zones of good water production occur in coarse shelly sands or where the calcium carbonate cement of the sandstones and limestones has been partially dissolved. These zones occur at depths between 60 and 130 feet in eastern St. Lucie County and 40 and 100 feet in western St. Lucie County (Bearden, 1972). Wells completed in these zones are usually screened or gravel packed to prevent collapse or plugging with sand.

The ability of a zone to produce water is measured as transmissivity. Transmissivity measurements have units of gallons per day per foot of aquifer thickness (GPD/FT). Although the Anastasia Formation is by far the most productive unit of the Surficial Aquifer System, transmissivity values of the producing zones are low to moderate. Values range from less than 10,000 GPD/FT to over 100,000 GPD/FT with the mean being about 30,000 GPD/FT.

Due to the low transmissivities of the Surficial Aquifer System, water supply wells have low yields compared to

similar wells in Martin and Palm Beach Counties. Wells pumping large amounts of water for extended periods of time can severely stress the Surficial Aquifer System causing large declines in the local water table. Well locations for industrial and public water supply wells must be carefully evaluated prior to development to prevent long-term adverse impacts on other users of the Surficial Aquifer System."

Water Quantity:

"The amount of water stored in the Surficial Aquifer System is directly related to the amount of rain that has fallen in the area. Once the rainwater has percolated down to the water table, it slowly flows down-gradient from areas of high water table elevations to areas of low water table elevations. In St. Lucie County the low water table elevation areas correspond to the rivers, estuaries and drainage canals. Due to their extensiveness and variable capacities, the drainage canals are the most important regulators of water table elevations....

Not all water in the canals is lost by discharge to the Indian or St. Lucie rivers. A large percentage is pumped back onto land for irrigation purposes. The small percentage of this water not lost to evaporation or used by plants is returned to the Surficial Aquifer System.

A significant amount of water from the Surficial Aquifer System is allocated for municipal water supply use. Some of this water is eventually returned to the system through small irrigation networks, leaky transmission mains, and percolation and retention ponds.

Many of the dwellings in St. Lucie County are in rural areas where municipal water supply services are not available. In most of these areas, water is obtained from shallow domestic

water supply wells and wastewater is disposed of through septic tank systems. While this type of supply-disposal network returns a large percentage of the withdrawn water back to the Surficial aquifer, improper location of wells relative to septic tank drainfields can cause local contamination problems. A knowledge of the local groundwater flow patterns prior to installing a well or drainfield is important in preventing this type of problem. Special problems with using Surficial Aquifer System water exist in areas where the water table is at or very close to the surface. Environmentally sensitive areas such as wetlands can easily be adversely affected by excessive water withdrawal from nearby wells. To prevent significant lowering of the water table in these areas, the South Florida Water Management District has restricted the average daily withdrawal amounts for general water use permits in the Savannahs and Jensen Beach Peninsula areas to 10,000 gallons per day. In these areas, applications for groundwater use permits for amounts greater than 10,000 gallons per day require in depth analysis of plans to protect the sensitive environment."

Water Quality:

"The quality of Surficial Aquifer System waters in St. Lucie County is considered to be good. However, several factors may influence water quality locally. Type of recharge water, location of waste disposal sites, and distance from saline estuaries are the three most important.

There are several sources of poor quality recharge water. The most significant are Floridan Aquifer wells. Water from the Floridan Aquifer System is characterized by high levels of dissolved salts. This water is used extensively in agricultural areas of the county as irrigation water especially during the dry season. Dissolved salts from

irrigation waters migrate down into the surficial soils or are carried with irrigation runoff water into the canal systems. While attempts are made to keep the dissolved salt content of the Surficial Aquifer System low by "flushing" irrigated lands with potable water, some contamination does occur through percolation...

Further degradation of Surficial Water Aquifer System waters may occur as the salty irrigation waters are carried through the canal systems to discharge areas. If canal waters pass through an area influenced by a well, some of the contaminated water may be drawn through the ground from the canal towards the well. The City of Fort Pierce has experienced this problem with their wells bordering the Belcher Canal....

Withdrawal rates, well depths, local groundwater flow patterns and aquifer transmissivities all influence the movement of the underground salt water-fresh water interference. Shallow, low volume wells located in areas of maximum water table elevation and completed in the most transmissive zones are least susceptible to salt water intrusion."

Floridan Aquifer System

Also according to the SFWMD Data Documentation for St. Lucie County:

"The Floridan Aquifer System is the primary source of irrigation groundwater in St. Lucie County. Floridan waters are of poor quality containing moderate to high concentrations of dissolved salts. These waters are not potable without desalinization....

The Floridan Aquifer System in St. Lucie County is confined above by the clays and slits of the Hawthorn confining zone and below by the thick, anhydrite sequences of the Cedar Keys Limestone. The top of the aquifer system occurs at depths ranging from 350 feet below sea level in the northern part of the county to over 650 feet below sea level in the southeast and southwest corners. Since no local water wells fully penetrate the Floridan Aquifer System, its thickness throughout most of St. Lucie County is unknown.

Transmissivities in the upper portion of the Floridan Aquifer System are high ranging from less than 50,000 GPD/FT to over 300,000 GPD/FT. According to Trost (in press)"...the Floridan Aquifer System is highly (transmissive) due to the fractured nature of the limestone units as well as the high degree of secondary porosity derived from dolomitization and dissolution. Producing zones occur...where the limestone is dense or where dolomitization has occurred.

Because the boulder zone is well confined, highly transmissive, and contains water of very poor quality, it is used as a disposal zone for secondary treated sewage. Treated liquid effluent is pumped into the boulder zone through carefully constructed and monitored injection wells systems.

There is currently only one injection well system operating in St. Lucie County. The development of a second system is presently under review."

Water Quantity:

"Water in the Floridan Aquifer System originates from two sources, relic sea water and rainwater from recharge areas. Remnant sea water deposited along with the marine limestones

of the Floridan is characterized by very high concentrations of dissolved salts.

Rainwater is recharge water for the Floridan Aquifer System. Recharge of the Floridan occurs in the northern part of Polk County where Hawthorne confining beds are thin or absent (Stringfield, 1936). Rainwater in Polk County percolates down into the Floridan. From there it flows down-gradient towards the southern and central counties of Florida. As this water moves, it mixes with the relic seawater. This mixed water continues to move down-gradient until it is discharged through well or aquifer outcrops on the ocean floor...

The quality of water in the upper portion of the Floridan Aquifer System in St. Lucie County is fair to poor. Waters usually contain more than 250 milligrams per liter of chloride ions and are therefore classified as non-potable."

Water Quality:

"Because the Floridan Aquifer System is well confined, contamination of these waters from sources located in St. Lucie County is not probable. Of more significance is contamination of the Surficial Aquifer System by Floridan water coming from abandoned, damaged or improperly constructed wells....

Waters in some zones of the Floridan have concentrations of dissolved salts low enough to be tolerated by several important agricultural plant species. These waters are used exclusively for irrigation.

In some areas of the county, the concentration of dissolved salts in Floridan waters are low enough to make desalinization economical. Coastal communities or areas

where the surficial aquifer cannot provide an adequate supply of fresh water have found the development of a desalinization facility in conjunction with one or more Floridan wells to be a practical long term solution to water supply problems.

Producing zones with good transmissivities and low to moderate levels of dissolved salts may be good places to store and recover excess fresh surface water. During the wet season, excess fresh water is carried through the canal system and discharged into rivers and estuaries. The storage and recovery of this water for use in the dry season may prove to be economical in the future."

Future Potable Water Demand

All potable water wells in the village use the Surficial Aquifer. There are no agricultural uses in the village so use of the Floridan Aquifer is limited if it is used at all. A survey of the number, location, depth, or rate of withdraw of wells in St. Lucie Village has not been conducted. Therefore, the current use of water can only be estimated based on potable well water use averages calculated by the South Florida Water Management District (SFWMD). A SFWMD Memorandum Report entitled, Non-Agricultural Water Use in the Upper East Coast Planning Area, revised September, 1980, found per capita consumption of water by residential self-suppliers in St. Lucie County to average 167.3 gallons per day. This average was then used in the 1980 SFWMD publication Summary Status Report, Upper East Coast Planning Area Water Use and Supply Development Plan Which stated in its water demand projection methodology, "No change was projected for water consumption by the present population (present water consumption factors are relatively fixed as to type of dwelling, lawn size, habits of present residents, etc.)", and that additional future populations would consume water at the same rate as those in 1978. Therefore, an average of 167.3 gallons per person per day

TABLE 6-2

FUTURE GROUNDWATER NEEDS
ST. LUCIE VILLAGE

<u>Year</u>	<u>Functional Population</u>	<u>Per Capita Use in Gal./Day</u>	<u>Total Use in Gal./Day</u>
1988	700	167.3	117,110.0
1990	707	167.3	118,281.1
1995	755	167.3	126,311.5
2000	795	167.3	133,003.5
2005	839	167.3	140,364.7

is to be used for the water use projections throughout the planning horizon, as shown on Table 6-2.

In an effort to maintain the residential character of the village, the Future Land Use Map has precluded industrial development and agriculture entirely and has limited commercial development. Although several commercial uses are permitted in the village, none would require a heavy use of water. Neither of the above references cited an average commercial water use as it varies greatly between use types. Therefore, Table 6-2 incorporates only domestic water use. A 1972 study by the DNR entitled Water Available in Canals and Shallow Sediments in St.

Lucie County, Florida, did not include the St. Lucie Village area. Therefore, the amount of water available in the aquifer is unknown.

Water Conservation

St. Lucie Village does not have an officially adopted water conservation program; however, the Water Resources Act of 1972 mandated each water management district to "promote conservation, development, and proper utilization of surface and groundwater" (Section 373.013, F.S.). The SFWMD provides considerable information regarding water conservation techniques for homeowners and other users.

The village is participating in SFWMD's Abandoned Well Program (mandated by Section 373.207 F.S.). This is an ongoing program to identify and plug abandoned, free-flowing artesian wells and restore them to the original hydrologic conditions. Plugging these wells prevents wasting water resources while preventing contamination of the Surficial Aquifer.

As of 1987, approximately 80 abandoned wells had been located within St. Lucie County and 34 of these had been plugged. SFWMD estimates that 900 to 1,000 abandoned wells currently exist in St. Lucie County. The water management district has entered into a cooperative agreement with the U.S. Geological Survey to help locate these wells.

V. SUMMARY OF SIGNIFICANT ISSUES

St. Lucie Village is a small coastal town located on the eastern shore of the Indian River Lagoon consisting primarily of single family homes and vacant land. The low development intensity and slow rate of growth have left many of the village's natural resources unharmed. In fact, the village was incorporated to prevent much of the area from becoming industrialized. As a

result, the village has maintained a natural setting causing home sites to become very desirable and expensive.

Within the village, four (4) distinct terrestrial ecological communities and one marine community can be found. These include: the Mangrove Swamp, located along the bank of the Indian River Lagoon; the South Florida Flatwoods, which dominates the flat eastern portion of the village; the Freshwater Marsh, located in the isolated wetland areas of the village; and the Sand Pine Scrub, which runs along the slopes of the Atlantic Coastal Ridge on the western boundary of the village; and the Seagrass Habitat which is located on the open waters of the lagoon. Each of these communities is host to a variety of plant and animal species.

The types and abundance of species found within each community is dependent upon several factors including the extent of the habitat, the type of neighboring habitats, and the degree of development of the habitat. These factors also have an impact on the presence of endangered or threatened species or species of special concern that are generally associated with these various ecological communities. Since a field study for the presence of wildlife has not been conducted, it is important that local development regulations recognize the potential for the existence of species of special status. Therefore, the village will implement regulations requiring the preparation of an environmental impact study before approving large developments.

Although the terrestrial landscape has been attractive for the construction of single family homes, the primary attraction of the village is the Indian River Lagoon. In fact, development of the village up to this point has been split between those lots (primarily single family) located immediately adjacent to the Indian River Lagoon and those lots (primarily commercial) located along U.S. Highway 1. Therefore, the need of the village to protect the lagoon is critical.

The portion of the lagoon that is within the village is part of the Indian River Aquatic Preserve, for which a multi-objective management plan has been prepared by the Florida Department of Natural Resources (DNR). The plan details those uses and management techniques that are appropriate for the preservation of the water quality and habitats of the preserve. Since the lagoon spans such a large area and passes by and through several counties and municipalities, the management of the lagoon must participate and develop appropriate land development regulations to further the management objectives. As A result, a Coastal Management Element has been prepared for St. Lucie Village which focuses on the constraints of the coastal area resources and provides direction on the proper management and use of those resources.

In addition to preserving much of the native woodlands of the village, the low intensity of development has lead to few environmental problems. The lack of any industry or commercial agriculture has maintained a high level of air quality and soil stability. This high quality is maintained by the transportation of all solid wastes out of the village to the county landfill located in the unincorporated area. Sand is the only known commercially valuable resource, yet the village has no history of mining and current regulations prohibit mining.

Thus far, protection of the environment has been accomplished by regulations and the desires of private land owners to maintain a high environmental quality. Excluding the town hall site, a small strip of land located between the FEC tracks and Old Dixie Highway, and a small public open space located at the foot of Chamberlain Boulevard, the entire village is under private ownership. The town has recently purchased a town hall with a small park; however, no conservation areas are considered for purchase. Through land development regulations, donations and other methods, though, the village could have an opportunity to obtain conservations areas.

Although the village has experienced few environmental problems in the past, it is important that regulations are adopted to insure the continued existence of high quality resources. In particular, there is a need to adopt drainage regulations for the continues protection of the isolated wetlands located between the riverfront lots and the FEC tracks. At present, this area is mostly vacant but will begin to face development pressures as riverfront lots become increasingly scarce and expensive. In addition, drainage regulations are important for the protection of water quality within the lagoon.

The protection of groundwater resources is another area in which development regulations need to be adopted by the village for the protection of the resource. The low water table, use of septic systems and vulnerability to flooding create a situation throughout much of the village that could lead to groundwater contamination. It is therefore important that the village continue to participate in the county's Wellfield Protection Program and review it's own regulations concerning well locations and intrusion mitigation requirements.

The natural character of St. Lucie Village has, and should continue to be, the strength and attraction of the community. The village was founded on the premise of environmental protection and has successfully maintained a high level of resource preservation. However, the steady rate of growth, though small, and the high percentage of private land ownership warrant the adoption, implementation and enforcement of comprehensive plans. Through these plans, the continued existence of high quality resources and the high quality lifestyle that is dependent upon those resources can be insured. The following goals, objectives and policies provide an outline as to how the village should manage their resources and future growth.

VI. GOALS, OBJECTIVES AND POLICIES

GOAL 6.1: THE NATURAL RESOURCES OF ST. LUCIE VILLAGE SHALL BE PRESERVED OR MANAGED IN A MANNER WHICH INSURES THEIR PROTECTION AND MAXIMIZES THEIR FUNCTIONS AND VALUES.

Objective 6.1.1.: Air quality in the village shall continue to meet or exceed the minimum air quality levels established by DER.

Policy 6.1.1.1.: The village shall obtain the DER Annual Report and compare it with existing air quality standards to establish the level(s) of compliance attainment.

Policy 6.1.1.2.: The village shall cooperate with other local and state agencies to reduce air pollutants on a regional level.

Policy 6.1.1.3.: All proposed point sources of pollution shall present evidence of compliance with Objective 6.1.1. prior to being approved. No proposed point sources of pollution shall be approved which exceeds the level of air quality established by the State Implementation Plan.

Objective 6.1.2.: Surface and sub-surface water resources in the village shall be managed in a manner which insures their viability as natural habitats and utility for recreational and potable water uses.

Policy 6.1.2.1.: In accordance with section 163.3202. F.S., drainage system design regulations shall be adopted consistent with SFWMD and DER regulations.

Policy 6.1.2.2.: In accordance with Section 163.3202, F.S., land development regulations shall be adopted which require:

- a. Site plans for new development to identify the location and extent of wetlands located on the property;
- b. Site plans to provide measures to assure that normal flows and quality of water will be provided to maintain wetlands after development;
- c. Where alteration of wetlands is necessary in order to allow reasonable use of property, either the restoration of disturbed wetlands to be provided or an additional wetlands to be created to mitigate any wetland destruction;
- d. Proposed developments comply with the wellfield protection program adopted by the county.

Policy 6.1.2.3.: The village shall require compliance with Florida DER, Florida DNR, SFWMD, TCRPC, and the U.S. Army Corps of Engineers regulations with regard to dredge and fill permitting processes and the Indian River Aquatic Preserve Management Plan.

Policy 6.1.2.4.: In accordance with Section 163.3202, F.S., land development regulations shall be adopted which require a buffer zone of native upland (i.e. transitional) vegetation and littoral zones to be provided and maintained in and around wetland, retention, and deepwater habitats which are constructed or preserved on new development sites.

Objective 6.1.3.: By 1994, the village, with the assistance of the SFWMD, shall develop, adopt, and enforce provisions for monitoring and regulating water use in order to prolong freshwater availability.

Policy 6.1.3.1.: The village shall request in writing a copy of the Model Water Shortage Ordinance prepared by the SFWMD for adaptation and/or adoption.

Policy 6.1.3.2.: The village shall work towards the further education of the public regarding various methods of water conservation at the household and small business level by requesting the FPUA to provide water conservation information with billings for garbage and electrical services.

Objective 6.1.4.: In accordance with Section 163.3202, F.S., land development regulations shall be adopted for the control of soil erosion.

Policy 6.1.4.1.: The village shall utilize the St. Lucie County Soil and Water Conservation District guidelines in the development of regulations for minimizing soil erosion.

Policy 6.1.4.2.: All mining activities shall be prohibited.

Objective 6.1.5.: All ecological communities, wildlife, marine habitat, fisheries, and endangered and rare species, shall be identified, managed, and protected.

Policy 6.1.5.1.: In accordance with Section 163.3202, F.S., land development regulations shall be adopted which ensure that:

- a. All endangered and threatened plant and animal populations are protected;
- b. All habitat identified by professionally accepted methods as being of significant value to existing populations of endangered and threatened species is preserved;
- c. All nuisance and invasive exotic vegetation (e.g. Australian Pine, Brazilian Pepper and Melaleuca) is removed by the developer at the time of development or redevelopment of a site;

- d. All native woody vegetation of a significant size is preserved or replaced; and
- e. A written environmental assessment is prepared for all proposed development, rezonings, and land use amendments considered by the Board of Alderman and/or city development review boards that are currently or were previously undeveloped with urban uses. The assessment shall include, at a minimum, impacts on flora, fauna, air quality, and water quantity and quality.

Policy 6.1.5.3.: The town shall request the Treasure Coast Regional Planning Council to convene an Indian River Lagoon Planning Task Force which shall include representatives from the state, regional planning councils and each county and municipality located on the lagoon to discuss those methods to be incorporated into the comprehensive plan and management plans of each organization for the protection of the lagoon flora and fauna and to identify those areas most suited for the development of public access, water-dependent and water-related uses.

Policy 6.1.5.4.: The village shall assist the SFWMD, Florida DNR, Florida Game and Freshwater Fish Commission, and other local, state and federal agencies with the maintenance and enhancement of the Indian River fisheries through compliance with and enforcement of regulations promulgated by these agencies for such purpose.

Policy 6.1.5.5.: The village shall continue to conserve and protect its floodplains by maintaining the policy of low density development with strict environmental controls implemented by utilization and enforcement of land development regulations.

Objective 6.1.6.: The village shall provide all available population, land use, and waste sanitation data to St. Lucie County or other agencies for use in developing and implementing hazardous waste identification and hazardous work disposal programs.

Policy 6.1.6.2.: The village shall assist St. Lucie County as requested in implementing programs for the proper storage, collection, recycling and disposal of hazardous waste.

Objective 6.1.7.: By 1994, the village shall develop a trust for the receiving of land and/or monetary donations and implement a program to actively pursue contributions.

Policy 6.1.7.1.: The village shall, in a manner consistent with the Future Land Use Element of this Comprehensive Plan, develop and implement land development regulations which encourage the dedication of conservation areas for new development or redevelopment activities.

Policy 6.1.7.2.: The village shall investigate state, federal, and non-profit public land ownership programs and submit applications for those which the village is eligible.

APPENDIX 6A

AIR QUALITY SUMMARY, ST. LUCIE COUNTY

APPENDIX 6A

SUMMARY OF AIR QUALITY DATA

NITROGEN DIOXIDE

<u>Sampling</u>		No. of <u>**24-Max**</u>			Arith	Geom		
<u>Year</u>	<u>Period</u>	<u>Meth.</u>	<u>Obs.</u>	<u>1st</u>	<u>2nd</u>	<u>Mean</u>	<u>Mean</u>	<u>GSD</u>
Station 1320 005 FO2								
1979	Apr-Nov	84	37	42	32	21	20	1.57
1980	Jan-Dec	84	42	59	47	25	23	1.52
1981	Jan-Dec	84	57	73	52	23	21	1.51
1982	Jan-Nov	84	51	37	32	19	18	1.40
Station 1320 005 FO9								
1979	Apr-Dec	84	40	38	31	21	20	1.56
1980	Jan-Dec	84	52	56	45	24	22	1.54
1981	Jan-Dec	84	56	77	57	24	22	1.52
1982	Jan-Nov	84	54	34	31	21	20	1.36
Ambeint Air Quality Standard						100		

Station Locations:

1320 005 FO2 Fort Pierce Police Station, 435 N. 7th Street
 1320 005 FO9 Fort Pierce Police Station, 435 N. 7th Street

Source: DER, 1986.

APPENDIX 6A (CONT.)

SUMMARY OF AIR QUALITY DATA

SULFUR DIOXIDE

<u>Sampling</u>		<u>No. of</u>	<u>**24-Max**</u>		<u>Arith</u>	<u>Geom</u>	<u>GSD</u>
<u>Year</u>	<u>Period</u>		<u>Meth.</u>	<u>Obs.</u>				1st	2nd	Mean	Mean
Station 1320 005 FO2							
1979	Apr-Jul	91	11	5	5	3	1.32
1979	Mar-Nov	97	26	7	6	3	1.40
1980	Jan-Dec	97	48	9	6	3	1.29
1981	Jan-Dec	97	55	11	9	3	1.33
1982	Jan-Nov	97	54	11	9	3	1.52
Station 1320 005 FO9							
1979	Apr-Jul	91	13	3	2	2	1.00
1979	Mar-Dec	97	33	6	6	3	1.42
1980	Jan-Dec	97	49	7	6	3	1.29
1981	Jan-Dec	97	57	13	8	3	1.40
1982	Jan-Nov	97	55	12	10	3	1.52

APPENDIX 6A (CONT.)

SUMMARY OF AIR QUALITY DATA

SULFUR DIOXIDE

<u>Sampling</u>			<u>No. of</u>	<u>**24-Max**</u>		<u>Arith</u>	<u>Geom</u>	<u>GSD</u>
<u>Year</u>	<u>Period</u>	<u>Meth.</u>		<u>Obs.</u>	<u>1st</u>				2nd	Mean	Mean
Station 1320 006 J03								
1979	Jan-Dec	97	22	9	9	4		1.65
1980	Jan-Dec	97	51	12	5	3		1.33
1980	Nov	91	5	1	1	2		1.00
1981	Jan-Dec	97	49	18	7			1.58
1981	Jan-Jul	97	33	6	6	3		1.40
Station 1320 007 J03								
1979	Jan-Dec	97	47	11	9	3		1.49
1980	Jan-Aug	97	36	10	5	3		1.40
Station 1320 007 J03								
1979	Jan-Dec	97	37	13	12	3		1.56
1980	Jan-Dec	97	59	6	5	3		1.28
1980	Jan-Dec	97	53	19	10	4		1.60
1982	Jan-Jul	97	31	6	6	3		1.44

APPENDIX 6A (CONT.)

SUMMARY OF AIR QUALITY DATA

SULFUR DIOXIDE

<u>Year</u>	<u>Period</u>	<u>Meth.</u>	<u>No. of</u>	<u>**24-Max**</u>		<u>Arith</u>	<u>Geom</u>	
			<u>Obs.</u>	<u>1st</u>	<u>2nd</u>	<u>Mean</u>	<u>Mean</u>	<u>GSD</u>
Station 1320 011 J03								
1980	Oct-Dec	97	14	6	5	3		1.33
1981	Jan-Dec	97	47	10	8	4		1.53
1982	Jan-Jul	97	31	6	6	4		1.45
Ambient Air Quality				260		60		
Standard								

Station Locations:

1320 005 F02 Fort Pierce Police Station, 435 N. 7th Street

1320 005 F09 Fort Pierce Police Station, 435 N. 7th Street

1320 006 J03 500 Boston Avenue, Fort Pierce

1320 007 J03 707 N. 7th Street, Fort Pierce

1320 008 J03 Seaway Drive Causeway, Fort Pierce

1320 011 J03 Fort Pierce Police Station, 435 N. 7th Street

Source: DER, 1986.

APPENDIX 6A (CONT.)

SUMMARY OF AIR QUALITY DATA

TOTAL SUSPENDED PARTICLES

<u>Sampling</u>		<u>No. of</u>	<u>***Maxima***</u>			<u>Arith</u>		<u>Geom</u>		<u>GSD</u>
<u>Year</u>	<u>Period</u>		<u>Meth.</u>	<u>Obs.</u>	<u>Min.</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>Mean</u>		Mean
Station 1320 003 FO5										
1979	Jan-Dec		59	14	82	75	70	45	42	1.45
1980	Jan-Dec		58	16	83	82	76	46	44	1.42
1981	Jan-Dec		59	21	108	104	95	48	44	1.48
1982	Jan-Nov		51	13	92	78	61	36	33	1.53
Station 1320 004 FO1										
1979	Jan-Dec		52	24	138	108	107	60	56	1.46
1980	Jan-Dec		57	26	108	108	106	58	54	1.45
1981	Jan-Dec		56	28	148	144	134	61	56	1.53
1982	Jan-Dec		61	15	76	74	71	41	39	1.38
1983	Jan-Dec		53	19	152	98	87	49	45	1.48
1984	Jan-Dec		54	21	93	89	86	49	45	1.46
1985	Jan-Dec		55	17	213	71	71	49	45	1.48

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

RECREATION AND OPEN SPACE ELEMENT

Prepared For:
The Town of St. Lucie Village, Florida

Prepared By:
Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

April, 1990

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
RECREATION AND OPEN SPACE ELEMENT**

I. INTRODUCTION

The Town of St. Lucie Village is a 490 acre community located on the shores of the Indian River Lagoon Aquatic Preserve. The town has not experienced the development pressures which have been common in other parts of Florida and has been able to maintain its pastoral lifestyle. More than one half of the total acreage of the town (266.15 acres) remains vacant. A majority of the residential development which has occurred is of very low density. The entire town has been designated as a bird sanctuary by the Board of Aldermen. The vacant areas adjacent to the Indian River provide important habitat for many species of small mammals and birds and contributes positively to the pastoral quality of the town.

II. EXISTING RECREATION FACILITIES AND OPEN SPACE

Recreational facilities are usually classified as either resource-based facilities or user-based facilities. Resource-based facilities are centered around a particular natural resource like a forest or body of water. These facilities are associated with passive recreation opportunities and are pursued in a leisurely fashion. Examples of resource-based facilities which involve passive recreation include picnicking, walking, bird watching and other nature studies.

The town currently owns a total of 3.59 acres of land which would fall under this classification. The sites include a 0.06 acre site located at the foot of Chamberlain Boulevard, the 0.86 acre Town Hall site, and a centrally-located wedge-shaped piece bounded by the FEC railroad tracks and Old Dixie Highway. These sites are indicated on the existing Land Use Map (Figure 1). State and county facilities within a 3 mile radius of the Town of St. Lucie Village that provide camping, fishing, water sport and other outdoor activities are indicated on Table 7-1 and shown on Figure 15.

User-based facilities are usually well structured and program oriented. These facilities involve some form of direct participation by the user and are normally associated with active recreation opportunities. Examples of user-based facilities include basketball, softball, baseball, racquet sports, football and golf. The distinction between resource-based and user-based facilities is not always clear, since some resource-based sites may contain active facilities. Currently, the town has no user-based facilities located within its jurisdiction. Table 7-1 and Figure 15 show the large number of adequate user-based facilities provided by the state and county within a 3 mile radius of the town.

Open space can be defined as undeveloped land which can be used for passive and conservation uses. Pastoral open space is the most common type of open space. It provides resource-based and user-based recreation. It includes parks, forest, historic sites and other areas established for the protection of natural resources.

TABLE 7-1
 INVENTORY OF EXISTING RECREATIONAL FACILITIES AND OPEN SPACE AREAS
 TOWN OF ST. LUCIE VILLAGE

MAP REF.	FACILITY	ACRES	BALL FIELDS	COURTSPACES	PAVED PRKING	REST ROOMS	PLAY EQUIP.	SHEL-TERS	PICNIC TABLES	GRILLS	BENCHES	SHOWER	COMM. CNTR	REC. CNTR	MUSE-UM	AMPI-THER	BOAT RAMP	CAMP SITES	TRAILS	FEET BEACH	
	Village Facilities																				
	Town Hall	0.86				2															
	Chamberlin Blvd.	0.06																			
	Central Open Space	2.47																			
	State Facilities (w/in 4 mile radius)																				
F1	Jack Island	958.00																			
	Regional Parks (w/in 4 mile radius)																				
R2	Pepper Beach	52.40			254	4		12	92	16	2	6			1					1,380	
R3	North Savannahs	65.10																			
	Community Parks (w/in 4 mile radius)																				
C3	Horatio Grisby	6.30	2			2															
C5	Lincoln Park Comm. Cntr.	1.40		2	6	2	4				2		1								
C6	Open Space Baseball Area	15.70	1	2	1	2			3												
	Neighborhood Parks (w/in 4 mile radius)																				
N3	Paradise Neighborhood Park	1.70	1	1	1	2	2					2		1							
N4	Sheraton Plaza Rec. Park	5.70	1	1		2	9	3	4	4											
N5	Taylor Creek Outfall	7.30	1					2	2												
	Beach Access Facilities (w/in 4 mile radius)																				
B3	Avalon Access	0.20																		60	
B4	Banyan Road Access	0.40																		70	
B9	Bryn Mar	1.30																		300	
B15	Royal Palm Way	0.60																		40	
B16	Seminole Blvd.	0.40																		70	
	Special Facilities (w/in 4 mile radius)																				
S6	North Causeway Island	11.50			30	4	4				7							2			
	TOTALS	1,131.39	6	6	2	290	20	15	21	101	20	11	8	1	1	1	0	2	0	0	1,920

SOURCE: ST. LUCIE COUNTY 1989

Utilitarian open space includes lands not suitable for development due to environmental constraints. This type of open space is limited by wetlands, lakes, rivers, flood plains, drainage ditches and sink holes. Most of the vacant lands east of the FEC would fall into this category.

III. FUTURE NEEDS FOR RECREATION FACILITIES AND OPEN SPACE

Recreation and open space resources make a significant contribution to the quality of an individual's life. They offer opportunities for persons to enjoy settings and activities that contrast with the routine demands of life, and therefore, can make life more diverse and interesting. The town is committed to continue to provide its residents, through cooperation with various county and state agencies, the best and most efficient availability of recreation and open space resources.

Currently, the Town of St. Lucie Village has 3.59 acres to serve the passive recreation and open space needs of the peak season population of 700 people. This yields a level of service of 5.13 acres per 1,000 residents, a level which is twice the national recommended standard of 2.5 acres per 1,000 residents (National Recreation and Parks Association).

At an adopted standard of 3.5 acres per 1,000 residents, the village will continue to have a surplus of open space through the year 2005. Table 7-2 presents the projected open space needs of the community through the year 2005 and the projected surpluses. While the adopted level is lower than the existing level, it is appropriate for the village and still above the recommended standard.

TABLE 7-2

PROJECTED RECREATION AND OPEN SPACE NEEDS
 ST. LUCIE VILLAGE
 1990 - 2005

Year	Functional Population	Existing Recreation & Open Space	Acres Needed*	Excess (Deficient) Acre's
1990	715	3.59	2.50	+1.09
1995	755	3.59	2.64	+0.95
2000	795	3.59	2.78	+0.81
2005	839	3.59	2.94	+0.65

* Based on a level of service standard of 3.50 acres per 1,000 residents.

Given the availability of several improved recreation areas within a 3 mile radius of the village, there is little need for the village to provide these services. The very small revenue sources available to the village are much better spent on other items which are not as readily available in the surrounding area. In addition, the Town Hall building and site were purchased with the expectation that they would serve the needs of the town for many years to come. Thus, the village considers the existing open space areas to be in surplus and does not foresee a need to purchase additional lands.

Although the existing level of open space exceeds the standard to be adopted, future donations and dedications are not precluded. On the contrary, new subdivisions will be required to dedicate lands or fees in lieu of to serve the recreation and open space needs of their residents. Further, other governmental agencies will be encouraged to purchase land in the village for conservation purposes and to increase the level of access to the lagoon. Therefore, public open space areas should continue to run at surplus levels through buildout of the community.

IV. GOALS, OBJECTIVES AND POLICIES

GOAL 7.1.: ENSURE THE PASTORAL QUALITY OF LIFE BY PROVIDING PASSIVE RECREATION FACILITIES AND OPEN SPACE TO MEET THE NEEDS OF PRESENT AND FUTURE VILLAGE RESIDENTS.

Objective 7.1.1.: Use and access to all passive recreation facilities and open spaces areas shall be provided to residents in a timely and fiscally reasonable manner.

Policy 7.1.1.1.: The Town of St. Lucie Village shall adopt and maintain a minimum level of service standard of 3.5 acres of passive recreation and open space per 1,000 peak season residents.

Policy 7.1.1.2.: In accordance with section 163.3202, F.S., land development regulations shall be adopted which include requirements and incentives to provide for public use passive recreation and open spaces within future developed areas.

Policy 7.1.1.3.: By the end of 1991, the town will conduct a resident survey to determine the needs and desires of town residents for recreation and open space improvements.

Policy 7.1.1.4.: By the end of 1994, the town will ensure that Town Hall facilities are accessible to all handicapped and wheelchair bound residents.

Policy 7.1.1.5.: In accordance with Section 163.3202, F.S., the village shall adopt specific open space definitions in the pending land development regulations.

Objective 7.1.2.: The town recognizes and supports efforts to provide recreation facilities and open space areas on a regional (county) wide basis and to maintain access to the Indian River Lagoon.

Policy 7.1.2.1.: The town recognizes and supports the efforts made by state, county and private providers of recreational facilities.

Policy 7.1.2.2.: The town will continue to cooperate with state authorities to protect the Indian River Lagoon Aquatic Preserve as a source of open space, passive recreation, nature study and personal enrichment.

Policy 7.1.2.3.: Upon adoption of this plan, the town will appoint a member of the Board of Aldermen to represent the town's residents recreational needs before all county and state recreational planning boards and committees.

Policy 7.1.2.4.: The level of access to the Indian River Lagoon currently provided by the town in the form of the parcel located at the foot of Chamberlain Boulevard shall be maintained.

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

INTERGOVERNMENTAL COORDINATION ELEMENT

Prepared For:
The Town of St. Lucie Village, Florida

Prepared By:
Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

April, 1990

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**ST. LUCIE VILLAGE
COMPREHENSIVE PLAN
INTERGOVERNMENTAL COORDINATION**

I. INTRODUCTION

The purpose of the Intergovernmental Coordination Element, as identified by Chapter 163, F.S. and Chapter 9J-5.015, FAC, is to "identify and resolve incompatible goals, objectives, and policies, and development proposed in comprehensive plans and to determine and respond to the needs for coordination processes and procedures with adjacent local, regional, and state agencies." St. Lucie Village believes that a well-developed communication network among all applicable public and quasi-public entities will enhance the long-range growth and prosperity of the village.

St. Lucie Village is a small, linear municipality along the western banks of the Indian River in central St. Lucie County. The village was incorporated on May 6, 1961 and is governed by a Mayor and five Aldermen. The Mayor and Aldermen serve two year terms without pay. The Board of Aldermen elects one of its members to serve as Vice Mayor.

The population of St. Lucie Village is approximately 650 permanent residents. Seasonal population is low and the projected population is expected to increase at a very slow rate.

St. Lucie Village is located immediately east of the St. Lucie County International Airport. The airport is proposing an aggressive expansion plan that could have a tremendous negative impact on the village. The village welcomes this Intergovernmental Coordination Element as an opportunity to ensure future coordination between the airport plans and the village.

II. INVENTORY

There are numerous independent governmental agencies which affect the quality of life in St. Lucie Village. Table 8-1 provides a listing of all the public and quasi-public entities with which the village does or needs to coordinate. Table 8-1 also relates plan elements with affected or involved agencies. Following is a brief discussion of some of the most influential of the coordinating agencies.

St. Lucie County Public School System

The St. Lucie County Public School System is an autonomous board established under Chapter 230, Florida Statutes. The district school system is controlled by a school board consisting of five members elected at large and an appointed superintendent. The school board has the power to levy taxes, own land, and constitutes a corporate body under the laws of Florida.

According to representatives of the School Board, the county and the school administration work closely together in reviewing new developments and community growth which affects the efficient operation of their respective agencies. There has been little need to actively coordinate efforts between the School Board and the village.

South Florida Water Management District

The South Florida Water Management District (SFWMD) was created by the 1976 Legislature. Prior to being redesignated as the SFWMD in 1976, the District operated as the Central and Southern Flood Control District by authorization of the 1949 Legislature.

The SFWMD issues permits and has control of all water users in St. Lucie County, including St. Lucie Village which uses over 117,000 gallons of water per day.

Table 1

Fort Pierce/St. Lucie County Fire District

The Fire District was established in 1959 to provide full-time fire protection for all of St. Lucie County. The Fire District operates 13 stations throughout the county and provides service to the village. The Fire District is governed by a board comprised of two members from each of the following: the County Commission, the Fort Pierce City Commission, and the Port St. Lucie City Council. In addition, since the Fire District is a special taxing district, with taxing authority, there is also one member at large who is appointed to the board by the governor. The State Department of Forestry also assists with fire control efforts for all wild fires and brush fires throughout the county.

St. Lucie County Mosquito Control District

The St. Lucie County Mosquito Control District is an autonomous agency created by the Legislature in 1927. The district is controlled by the Board of County Commissioners acting as the Mosquito Control Board. The district serves the area from the Atlantic Ocean to approximately 10 miles west of the coast, just west of the I-95/Turnpike transportation corridor.

The function of the St. Lucie County Mosquito Control District is to manage the mosquito population in all of St. Lucie County including the village. To fulfill this function, the department is funded by a special tax district and funds from the state.

Treasure Coast Regional Planning Council

The Treasure Coast Regional Planning Council (TCRPC) was created in October, 1976, by interlocal agreement pursuant to Chapter 163, Florida Statutes. The council's principal goal is to assure that future growth within the Indian River, St. Lucie, Martin,

and Palm Beach County region occurs in a manner consistent with state and regional planning objectives and that a high quality of life will be achieved for all the regional citizens. Toward accomplishing this goal, the Treasure Coast Regional Planning Council maintains a forum for identifying, as well as promoting, public understanding of local and regional issues and problems. To promote the implementation of plans and programs which address regional issues and problems, the council acts as a regional information clearinghouse and intergovernmental data source; conducts research for the purpose of developing and maintaining regional goals, objectives, and policies; and assists in the implementation of a number of local, state, and federal programs.

St. Lucie County Metropolitan Planning Organization

In 1983, a Metropolitan Planning Organization (MPO) Interlocal Agreement was executed between St. Lucie County, the cities of Fort Pierce and Port St. Lucie, and the Florida Department of Transportation. The authority and responsibility of the MPO is for the management of a continuing, cooperative, and comprehensive transportation planning process and the re-programming of transportation improvements for the St. Lucie County urbanized area. The MPO is composed of nine voting members: five St. Lucie County Commissioners, two Port St. Lucie City Councilmen; and two Fort Pierce City Commissioners.

St. Lucie County and Airport Authority

The St. Lucie County Port and Airport Authority is composed of the five elected members of the St. Lucie County Board of County Commissioners. The Authority oversees the operations and planning for the Port of Fort Pierce and the St. Lucie County International Airport.

The Authority is currently reviewing plans prepared by a consultant for expansion of the airport. The plans are to be approved by the Authority and sent to the Federal Aviation Administration. The village objects to the airport expansion plan and the associated negative impact on the village. It is hoped that through this element and plan, the village's opinion will be properly heard.

Other Governmental Agencies

In addition to the governmental agencies described above, there are city, county, state, and federal agencies with which the village coordinates and cooperates on matters of mutual interest and concern. Table 8-1 contains listings of the various local, regional, state, and federal agencies interacting with St. Lucie Village.

III. PARTICIPATION IN PLANNING FOR ST. LUCIE COUNTY INTERNATIONAL AIRPORT EXPANSION

As discussed throughout this Comprehensive Plan, the St. Lucie County Port and Airport Authority is currently planning to expand the St. Lucie County International Airport to a regional jetport. The impacts created by the extension of the east-west runway and types of aircraft that would use the facility will conflict greatly with the predominately residential land use of the village. As a result, the village has continued to provide input to the county concerning the proposed impacts and has attended and participated in every public hearing concerning the airport expansion and the portions of the proposed county's comprehensive plan which support the proposed expansion. All of the input given by the village has been from the standpoint of an affected party as the village has no official representatives or standing on any of the review or decision-making bodies that will ultimately determine the future of the airport.

In order to clarify its stance on the airport expansion issue, the village has undertaken a number of extraordinary efforts. No less than five resolutions have been adopted by the Board of Aldermen objecting to the proposed expansion and its impact on the village's land uses (existing and future) and general quality of life. In addition, the village obtained outside legal counsel to review the environmental assessment regarding the 1,500 foot runway extension and to prepare comments and objections accordingly. The village also requested the Florida Department of Community Affairs (DCA) to review the binding letter exempting the 1,500 foot runway extension from the Development of Regional Impact process. Further, the village has been actively involved in the county's comprehensive planning process and has provided input at every meeting and public hearing concerning the Ports, Aviation and Related Facilities Element of the county's plan.

To date, not all of these efforts have been successful. The DCA denied the request to review the binding letter and the Federal Aviation Administration issued a Finding of No Significant Impact concerning the runway extension. The village, however, will continue to object to the airport through all available channels including the comprehensive planning process.

Representatives from the village have attended every public hearing and advertised meeting held by the county concerning the Ports, Aviation and Related Facilities Element of the county's proposed comprehensive plan. The village also sent representatives to the Treasure Coast Regional Planning Council (TCRPC) hearing concerning the county's proposed plan. At that meeting, the village submitted extensive oral and written comments and objections concerning the county's plan, primarily the Ports, Aviation and Related Facilities Element. These same comments were also sent to DCA by the village. Upon hearing the comments, the TCRPC decided to incorporate several of them into their comments as well.

The village has also requested the TCRPC to provide mediation between the village and the county concerning the airport. However, the county has refused to participate. Further, in September, 1989, the village requested a meeting with county staff to discuss the potential land use conflicts which. To date (October 24, 1989), this request has gone unanswered.

While the village has made every effort to participate in meaningful intergovernmental coordination concerning the proposed airport expansion, it has been continually rebuffed by the county concerning the proposed airport expansion. However, the decision of the village Board of Aldermen to transmit this plan to the DCA and the plan's eventual adoption present a clear inconsistency between the county's and village's comprehensive plans that must be solved if the state statutes and rules regarding comprehensive plans are to be properly implemented.

IV. ANALYSIS

In addition to the matrix provided in Table 8-1, an analysis of the local and regional coordinating entities identified in Table 8-1 is provided in Appendix 8A. Those agencies listed in Table 8-1 which were not specifically analyzed either serve in a regulatory function or currently have limited coordination which should expand in the future. This analysis examines St. Lucie Village's relationship with those entities with which it currently coordinates. The analysis also looks at which issues or problems the two entities most often coordinate on, the method of coordination, the effectiveness of this coordination, and any perceived deficiencies in this system of coordination.

Below is a sample analysis worksheet.

Sample Analysis Worksheet

Coordinating Agency:

Participating Entities:

Existing Issues or Problems:

Affected Comprehensive Plan Element(s):

Existing Method of Coordination:

Nature of Relationship (i.e. Authority):

Office with Primary Responsibility:

Effectiveness of Coordination Mechanisms:

Deficiencies and Needs:

Additional Coordinating Entities:

Recommendations:

V. COMPREHENSIVE REGIONAL POLICY PLAN

The Treasure Coast Regional Planning Council's Regional Comprehensive Policy Plan addresses the provision of public services and facilities on topics ranging from "Improving Student Performance" to "Expanding Agricultural Opportunities". The plan focuses on 25 goals as they have been identified in the comprehensive plan for the entire state. The regional plan furthers these goals with 75 policy clusters. The policy clusters identify specific issues within the Treasure Coast Region in relationship to the overall state goal. The Regional Comprehensive Policy Plan:

1. provides background on each issue;
2. lists significant resources applicable to the specific issue that are available within the region;
3. identifies the agencies and organizations that are directly involved; and
4. specifies the regional goal, the corresponding policies, and the measures by which the effectiveness or success of the policy will be compared.

The intergovernmental coordination cluster of the Regional Comprehensive Policy Plan seeks to eliminate unnecessary duplication of programs and activities. Coordination currently takes place between St. Lucie Village and TCRPC in the form of Developments of Regional Impact (DRI) reviews and local comprehensive plan reviews. A consistency review, in accordance with Chapter 163 FAC, will also be conducted by St. Lucie Village to ensure that the village plan is consistent with the Regional Comprehensive Policy Plan.

VI. GOALS, OBJECTIVES, AND POLICIES

GOAL 8.1.: ESTABLISH EFFECTIVE COORDINATION MEASURES AMONG ALL PERTINENT PUBLIC AND QUASI-PUBLIC ENTITIES SO TO BEST MAINTAIN ST. LUCIE VILLAGE'S QUALITY OF LIFE AND EFFICIENT USE OF RESOURCES.

Objective 8.1.1.: By 1991, St. Lucie Village shall formally establish specific means of coordination with adjacent municipalities; with local, state, and federal agencies who have permitting and regulating authority; and with quasi-public entities which provide services but lack regulatory authority in St. Lucie Village.

Policy 8.1.1.1.: Notify in writing St. Lucie County of all applications for rezoning and land use amendments which are contiguous to their borders.

Policy 8.1.1.2.: Request in writing the creation of liaisons between the state regulatory agencies and the village. A recently established program of this type by SFWMD has proven highly successful in improving relations and information flow and shall be used as a model for other agencies.

Policy 8.1.1.3.: Charge the village Mayor with the responsibility for developing and enforcing an effective intergovernmental coordination program for St. Lucie Village.

Policy 8.1.1.4.: Request in writing the Regional Planning Council to play a more active role on issues between the village and St. Lucie County.

Policy 8.1.1.5.: Encourage cooperative education programs between the county, the village and regulatory agencies to inform the public and development community about applicable laws and regulations. This could be accomplished by including brief informational pamphlets in utility bills or other means of widespread general circulation.

Policy 8.1.1.6.: Encourage Fort Pierce and Port St. Lucie to designate their anticipated future annexation areas so that any territorial issues that may arise can be addressed wither through local forums or with the assistance or TCRPC.

Policy 8.1.1.7.: Review village transportation service volumes and levels of service as they relate to state roads and coordinate with the FDOT relative to state level of service standards.

Objective 8.1.2.: The village shall work with the St. Lucie County Administrator or his designee to ensure, that by August, 1990, all performance standards for county-provided services are met.

Policy 8.1.2.1.: Coordinate the timing, location, and capacity of public facilities to ensure that required services will be available when needed and are economically feasible.

Policy 8.1.2.2.: Coordinate programs of infrastructure development and improvement between the county and the village so that mutually agreed upon levels of service can be maintained throughout the village.

Policy 8.1.2.3.: Use the TCRPC for informal mediation purposes when issues cannot be resolved on the local level.

Objective 8.1.3.: By August, 1990, the Mayor shall be appointed to coordinate village activities with the St. Lucie County comprehensive plan, and other plans from units of local government such as the School Board providing services but not having regulatory authority over the use of land.

Policy 8.1.3.1.: File a written request with St. Lucie County to receive and review copies of all proposed plans or rezoning amendments for areas adjacent to St. Lucie Village boundaries.

Policy 8.1.3.2.: Request liaison regarding proposed plans or plan amendments from the St. Lucie County School Board, Chamber of Commerce, South Florida Water Management District, Treasure Coast Regional Planning Council, Fort Pierce Utility Company, Florida Power and Light, and St. Lucie County.

Policy 8.1.3.3.: In conjunction with other affected parties, evaluate existing interlocal agreements when the Capital Improvements Element is undergoing annual review to determine if current funding is proportional to services rendered.

Policy 8.1.3.4.: Coordinate closely with the School Board on the location of future school locations in relation to the projected population and land use.

Objective 8.1.4.: By August, 1990, the village, shall establish an intergovernmental coordination process to ensure full consideration is given to the impacts of developments proposed in the village's Comprehensive Plan on other governmental entities.

Policy 8.1.4.1.: Support the development and adoption of interlocal agreements with the affected municipalities to coordinate the management of the St. Lucie River, Intracostal Waterway, Indian River Lagoon, and Savannahs.

Policy 8.1.4.2.: Continue to work with the Treasure Coast Regional Planning Council to identify regional issues and to assist in the periodic updating of the Comprehensive Regional Policy Plan.

Policy 8.1.4.3.: The village shall continue to coordinate and cooperate with adjacent governments and organizations such as the SFWMD, the Marine Resource Council and the DNR to coordinate the management of the Indian River Lagoon.

Objective 8.1.5.: Work closely with St. Lucie County and the St. Lucie County Port and Airport Authority to ensure that the village is heard and represented on issues pertaining to the airport expansion.

Policy 8.1.5.1.: By April 1, 1990 formally request that the St. Lucie County Port and Airport Authority designate one or more of its staff members to meet with the village Mayor and Aldermen to discuss airport expansion plans.

Policy 8.1.5.2.: By April 1, 1990 formally request that the Chairman of the St. Lucie County Port and Airport Authority meet with the village Mayor and Aldermen to discuss airport expansion plans.

Policy 8.1.5.3.: Immediately upon the adoption of this Comprehensive Plan, request the St. Lucie County Port and Airport Authority to notify the village in writing of all documents, meetings, decisions, and actions produced or taken regarding the proposed airport expansion.

Policy 8.1.5.4.: If the St. Lucie County Port and Airport Authority continues its present course of action to develop St. Lucie County International Airport into a regional jetport, the Village Mayor and Board of Aldermen shall pursue all available means to assure that the residential character and quality of life within St. Lucie Village is preserved.

APPENDIX 8-A

ANALYSIS WORKSHEETS

ANALYSIS WORKSHEET

Coordinating Agency: St. Lucie County Port and Airport Authority

Participating Entities:

St. Lucie Village
St. Lucie County
City of Fort Pierce

Existing Issues or Problems:

Airport Expansion

Affected Comprehensive Plan Element(s): All

Existing Method of Coordination:

The Authority consists of the St. Lucie Board of County Commissioners and holds hearings and workshops on Authority business including airport expansion plans. The only opportunity for village input on the expansion plans has been during public hearings or workshops.

Nature of Relationship (i.e. Authority):

The village is in an advisory capacity to the Authority. The village has provided comments to the Authority during public meetings but has no other formal standing.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Coordination between the Authority and the village has not been satisfactory.

Deficiencies and Needs:

Communication has only occurred by the village Mayor and Aldermen attending public meetings held by the Authority. This is not an appropriate forum to hear comments from the village concerning airport expansion. The Authority should allow a less formal approach to getting the village's input.

Additional Coordinating Entities:

St. Lucie County Board of County Commissioners, FAA, TCRPC, FDOT.

Recommendations:

The Authority should direct its staff to meet directly with the Mayor and Aldermen to discuss airport expansion plans and their impact on the village. St. Lucie Village shall be an active participant in evaluation of alternate sites for regional jetport facilities.

ANALYSIS WORKSHEET

Coordinating Agency: St. Lucie County

Participating Entities:

St. Lucie Village
St. Lucie County

Existing Issues or Problems:

- Adjacent land uses
- Traffic flow
- Extension of services
- Airport Expansion
- Administration and collection of impact fees
- Annexation

Affected Comprehensive Plan Element(s):

Future Land Use, Transportation, Infrastructure, Housing, Conservation, Coastal Management, Capital Improvements.

Existing Method of Coordination:

No formal mechanism currently exists on a general level. On the department level, informal coordination takes place.

Nature of Relationship (i.e. Authority):

This is basically an advisory relationship except that the village's comprehensive and the county's plan must be in compliance with each other.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Generally, coordination efforts need improvement.

Deficiencies and Needs:

Existing coordination is generally found to be lacking.

Additional Coordinating Entities:

MPO, TCRPC, SLC-FP Fire District, DOT, Airport Authority.

Recommendations:

Actively request participation by the village Mayor and Aldermen concerning issues related to airport expansion. Participation by a representative from the village on a county advisory board (LPA) would be appropriate. The village Mayor and Aldermen shall be active participants in evaluation of alternate sites for regional jetport facilities.

ANALYSIS WORKSHEET

Coordinating Agency: City of Fort Pierce

Participating Entities:

St. Lucie Village
St. Lucie County
City of Fort Pierce

Existing Issues or Problems:

- Adjacent Annexation Land Uses
- Beach Access
- Extension of Services
- Traffic Flow

Affected Comprehensive Plan Element(s): All

Existing Method of Coordination:

No formal mechanism currently exists other than that required by Chapter 163, F.S. At the department level, informal coordination regularly takes place. A more formal relationship exists between the village and county with the administration of impact fees, and regarding recreation facilities.

Nature of Relationship (i.e. Authority):

No formal lines of authority exist except for the need for consistency between the city and village comprehensive plans. Informal communication exists for the purpose of informational exchange.

Office with Primary Responsibility:

Differs by issue.

Effectiveness of Coordination Mechanisms:

Generally, coordination between the city and village is adequate. However, this measure may differ by issue and office.

Deficiencies and Needs:

Existing coordination is generally satisfactory. However, a lack of formal meetings or channels of communication result in occasional conflicting goals and objectives.

Additional Coordinating Entities:

FPUA, MPO, TCRPC, SLC-FP Fire District, Erosion Control Board, Port/Airport Authority.

Recommendations:

Closer coordination is needed on all issues between the city and village, especially concerning matters of annexation, utility service, and the Port of Fort Pierce.

ANALYSIS WORKSHEET

Coordinating Agency: City of Port St. Lucie

Participating Entities:

St. Lucie Village
St. Lucie County
City of Port St. Lucie

Existing Issues or Problems:

- Traffic flow

Affected Comprehensive Plan Element(s): Traffic Circulation

Existing Method of Coordination:

No formal mechanism currently exist on a general level. On the department level, informal and formal coordination regularly takes place.

Nature of Relationship (i.e. Authority):

This is basically an advisory relationship.

Office with Primary Responsibility:

Varies.

Effectiveness of Coordination Mechanisms:

Generally, coordination efforts are good, however, improvement is always welcome.

Deficiencies and Needs:

Existing coordination is generally found to be satisfactory.

Additional Coordinating Entities:

FPL, MPO, TCRPC, SLC-FP Fire District, DOT.

Recommendations:

Encourage Port St. Lucie to identify their ultimate annexation areas.

ANALYSIS WORKSHEET

Coordinating Agency: Marine Resources Council

Participating Entities:
Marine Resources Council
St. Lucie Village

Existing Issues or Problems:
-Indian River Lagoon
-Watershed Action Committees Issues

Affected Comprehensive Plan Element(s):
Coastal Management
Conservation

Existing Method of Coordination:
The Marine Resource Council is an independent organization that strives toward providing coordination among all the municipalities bordering the Indian River Lagoon. The Council provides a forum where individuals, interest groups, and governmental and educational entities may be heard on equal ground.

Nature of Relationship (i.e. Authority):
The Council is purely an advisory forum.

Office with Primary Responsibility:
Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:
The Council sufficiently fulfills its purpose.

Deficiencies and Needs:
No deficiencies are found in the present system.

Additional Coordinating Entities:
None

Recommendations:
Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: St. Lucie County Mosquito Control District

Participating Entities:

St. Lucie Village

St. Lucie County Mosquito Control District

Department of Environmental Regulation

Department of Natural Resources

Existing Issues or Problems:

- Effects of mosquito impoundments on the Indian River Lagoon.
- Mosquito control within St. Lucie Village and adjacent county lands.

Affected Comprehensive Plan Element(s):

Conservation

Coastal Management

Existing Method of Coordination:

The Mosquito Control Board is comprised of the five St. Lucie County Commissioners.

Nature of Relationship (i.e. Authority):

This is not an authoritarian relationship. Information is exchanged mutually between members as needed.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be excellent.

Deficiencies and Needs:

No deficiencies are noted at the present time.

Additional Coordinating Entities:

None

Recommendations:

Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: Fort Pierce - St. Lucie County Fire District.

Participating Entities:

Port St. Lucie
Fort Pierce
St. Lucie Village
St. Lucie County

Existing Issues or Problems:

Maintenance of adequate LOS for a growing population

Affected Comprehensive Plan Element(s):

Infrastructure Land Use
Capital Improvement Programs
Transportation

Existing Method of Coordination:

Two county commissioners are members of the Fire District Board of Directors. The Fire Marshal reviews development and construction plans submitted to him by the village.

Nature of Relationship (i.e. Authority):

Fire District has separate taxing authority. Although no specific authority exists, the relationship between the village and the Fire District is good.

Office with Primary Responsibility:

Mayor and Board of Aldermen.
Building Inspector

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be sufficient.

Deficiencies and Needs:

The fire district requires the expansion of infrastructure so to be able to provide the services to growth areas (i.e., water mains, roads.)

Additional Coordinating Entities:

Department of Forestry.

Recommendations:

Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency St. Lucie County School Board.

Participating Entities

St. Lucie Village
St. Lucie County
St. Lucie County School Board.

Existing Issues or Problems

- Land Use
- Busing Zones
- Location of new facilities
- Program funding

Affected Comprehensive Plan Element(s)

Future Land Use Housing Coastal Management
Transportation Infrastructure Capital Improvement Programs
Recreation

Existing Method of Coordination:

Coordination currently takes place on a monthly informal level except for the collection of school impact fees by the village.

Nature of Relationship (i.e. Authority):

At the present time, the relationship between the School Board and the county is mainly advisory.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be sufficient.

Deficiencies and Needs:

No deficiencies or needs have been identified at the present time.

Additional Coordinating Entities:

None.

Recommendations:

Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: St. Lucie Metropolitan Planning Organization (MPO).

Participating Entities:

St. Lucie Village
St. Lucie County
City of Port St. Lucie
City of Fort Pierce.

Existing Issues or Problems:

- Traffic Circulation.
- Mass Transit.

Affected Comprehensive Plan Element(s):

Transportation
Capital Improvement Programs

Existing Method of Coordination:

MPO membership jointly determines how federal and state transportation dollars are to be spent locally.

Nature of Relationship (i.e. Authority):

The village has no authority to require that roadway improvements be made except to recommend changes to the MPO.

Office with Primary Responsibility:

Community Development.

Effectiveness of Coordination Mechanisms:

Generally acceptable

Deficiencies and Needs:

The existing system is found to be generally insufficient as village is not represented.

Additional Coordinating Entities:

FDOT
FHWA

Recommendations:

Revise membership to more accurately reflect the populations of the municipalities represented and to place village representative on MPO.

ANALYSIS WORKSHEET

Coordinating Agency: Housing Authority of the City of Fort Pierce.

Participating Entities:

St. Lucie Village
City of Fort Pierce
St. Lucie County
Port St. Lucie
City of Port St. Lucie

Existing Issues or Problems:

- Very low to moderate income housing.

Affected Comprehensive Plan Element(s):

Housing

Existing Method of Coordination:

Very little coordination exists.

Nature of Relationship (i.e. Authority):

There is no formal connection between the village and the Housing Authority.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Housing issues in Ft. Pierce and county have been well defined. However, finding sufficient funding for solutions has become increasingly difficult.

Deficiencies and Needs:

Housing for very low to moderate income persons needs to be addressed on a county-wide basis.

Additional Coordinating Entities:

DCA TCRPC
HUD St. Lucie County Housing Finance Authority

Recommendations:

Encourage the Housing Authority of the City of Fort Pierce to operate throughout the county.

ANALYSIS WORKSHEET

Coordinating Agency: Treasure Coast Regional Planning Council
(TCRPC)

Participating Entities:

St. Lucie Village
Palm Beach County
Martin County
St. Lucie County
Indian River County

Existing Issues or Problems:

- Developments of Regional Impact - Environmental
- Comprehensive plans
- Intergovernmental coordination review

Affected Comprehensive Plan Element(s): All

Existing Method of Coordination:

Formal notification through DRI procedure and comprehensive plan requirements. Formal requirements are submitted through the Village Aldermen before all aspects of TCRPC responsibility.

Nature of Relationship (i.e. Authority):

TCRPC has review authority over DRI's and the comprehensive plan as well as on a variety of environmental issues.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

The existing method of coordination is found to be acceptable.

Deficiencies and Needs:

Existing coordination is satisfactory. However, it would be beneficial if the RPC became more aware of the details of local issues.

Additional Coordinating Entities:

All municipalities in the above mentioned counties.

Recommendations:

TCRPC should take a more active role in coordinating activities between individual counties. In addition, it would be beneficial if the TCRPC could act as an information clearinghouse or data source/library for the region. A more aggressive role needs to be played by the TCRPC on issues between the counties, cities and between federal and state agencies, particularly with regard to the current conflict between St. Lucie County's airport plans and land use in the village.

ANALYSIS WORKSHEET

Coordinating Agency: South Florida Water Management District
(SFWMD)

Participating Entities:
All municipalities in South Florida

Existing Issues or Problems:

- Drainage permits
- Implementation of SWIM bill and its effect on the Indian River Lagoon.
- Water quality
- Wetland protection (including inland isolated wetlands).

Affected Comprehensive Plan Element(s):

Infrastructure	Future Land use	Conservation
Transportation	Capital Improvement	Coastal Management
Recreation		

Existing Method of Coordination:
Local Government Assistance Program

- Manual
- Liaison
- Permitting through district

Nature of Relationship (i.e. Authority):
Review DRI's
Any development greater than 10 acres

Office with Primary Responsibility:
Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:
Coordination between the village and SFWMD has been greatly improved since the district has provided a full-time liaison for St. Lucie County and the municipalities.

Deficiencies and Needs:
Existing methods of coordination are found to be sufficient.

Additional Coordinating Entities:
DER - jurisdictional wetlands

Recommendations:
Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: U.S. Soil Conservation Service

Participating Entities:

St. Lucie Village
St. Lucie County
Soil Conservation Service

Existing Issues or Problems:

- Soil stabilization
- Agricultural best management practices
- Protection of SLR shoreline

Affected Comprehensive Plan Element(s):

Infrastructure Coastal Management
Conservation

Existing Method of Coordination:

The Soil Conservation Service is a semi-autonomous entity; coordination with the village is informal and infrequent.

Nature of Relationship (i.e. Authority):

The existing relationship is adequate.

Office with Primary Responsibility

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be sufficient.

Deficiencies and Needs:

No deficiencies are noted at present.

Additional Coordinating Entities:

SFWMD Game and Freshwater Fish Commission
DER Drainage districts
DNR

Recommendations:

Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: Florida Department of Health & Rehabilitative Services (HRS)

Participating Entities:

St. Lucie Village
Department of Health and Rehabilitative Services
St. Lucie County

Existing Issues or Problems:

- Hazardous Waste
- Social Issues
- Groundwater
- Septic Tanks

Affected Comprehensive Plan Element(s):

Infrastructure Future Land Use
Conservation Housing

Existing Method of Coordination:

Very informal coordination exists between HRS and St. Lucie Village. What coordination does take place is primarily with the HRS Environmental Health Unit concerning hazardous waste and septic tank issues.

Nature of Relationship (i.e. Authority):

This is an advisory relationship.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Coordination efforts are found to be sufficient at the present time.

Deficiencies and Needs:

No deficiencies are found at the present in coordination between St. Lucie Village and HRS.

Additional Coordinating Entities:

DER

Recommendations:

A cooperative education program informing the public of issues (such as household hazardous wastes, proper disposal methods and less environmentally harmful substitutes for these products) needs to be undertaken.

ANALYSIS WORKSHEET

Coordinating Agency Florida Game and Freshwater Fish Commission

Participating Entities

St. Lucie Village
Florida Game and Freshwater Fish Commission
St. Lucie County

Existing Issues or Problems

Protection of endangered species.

Affected Comprehensive Plan Element(s)

Coastal Management
Conservation

Existing Method of Coordination:

Infrequent, informal communications for the purpose of exchanging information.

Nature of Relationship (i.e. Authority):

The Game and Freshwater Fish Commission conducts a periodic survey to determine endangered or threatened species. However, the village is not actively involved in this.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

The existing methods of coordination are found to be sufficient in meeting the present needs.

Deficiencies and Needs:

No deficiencies are presently found in the methods of coordination.

Additional Coordinating Entities:

None

Recommendations:

Existing coordination is found to be sufficient.

ANALYSIS WORKSHEET

Coordinating Agency: Florida Department of Environmental Regulation (DER)

Participating Entities:

St. Lucie Village
DER
St. Lucie County

Existing Issues or Problems:

- Mangrove Protection
- Hazardous Waste
- Water Quality
(Tidal/NonTidal; Potable/Nonpotable)
- Dredge & Fill
- Wetlands Encroachments
(tidal & Non-tidal)
- Waste Disposal
- Sewage Disposal

Affected Comprehensive Plan Element(s):

Coastal Management Infrastructure Future Land Use
Conservation

Existing Method of Coordination:

Coordination between DER and St. Lucie Village is generally informal.

Nature of Relationship (i.e. Authority):

This is basically an advisory relationship, however, new developments must meet DER regulations.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be generally sufficient.

Deficiencies and Needs:

Deficiencies are found in consistent enforcement of regulations. It would help if DER was a bit more responsive to the public and other government agencies.

Additional Coordinating Entities:

Army Corps of Engineers U.S. Wildlife Service
EPA SFWMD HRS
Fort Pierce Utility Authority
Florida Game and Freshwater Fish Commission

Recommendations:

A cooperative education and public relations program informing the public of environmental regulations & programs would be beneficial. In addition, a local government liaison, such as provided by SFWMD, might be beneficial in improving the relationship.

ANALYSIS WORKSHEET

Coordinating Agency: Florida Department of Natural Resources
(DNR)

Participating Entities:
DNR
St. Lucie Village

Existing Issues or Problems:

- Beach Access
- Beach Renourishment
- Endangered/Threatened Species
- Mosquito Impoundments (3)
- Spoil Islands
- Aquatic Preserves
- Park Land
- Indian River Lagoon
- Coastal Spills

Affected Comprehensive Plan Element(s):

Coastal Management Conservation Land Use

Existing Method of Coordination:

Informal coordination exists with the local office for the purpose of exchanging information.

Nature of Relationship (i.e. Authority):

DNR has permitting authority over the various preserves.

Office with Primary Responsibility:

Mayor and Alderman.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination are found to be sufficiently effective.

Deficiencies and Needs:

A method of negotiating conflicts between the development community and the enforcement arm of DER needs to be investigated.

Additional Coordinating Entities:

Army Corps of Engineers
EPA U.S. Wildlife
Marine Resource Council
Florida Game and Freshwater Fish Commission

Recommendations:

DNR should establish a local government liaison using the program piloted by SFWMD as an example.

ANALYSIS WORKSHEET

Coordinating Agency: Florida Department of Community Affairs
(DCA)

Participating Entities:

DCA
St. Lucie Village

Existing Issues or Problems:

- Update of Comprehensive Plan
- DRI
- Community Development
- Areas of Critical State Concern

Affected Comprehensive Plan Element(s): All.

Existing Method of Coordination:

The village is required to coordinate its comprehensive plan, development regulations, and DRIs with DCA.

Nature of Relationship (i.e. Authority):

DCA has review and approval authority over the village's comprehensive plan and DRI's. The DCA's attention to local affairs seems to be lacking.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Existing methods of coordination between the village and DCA are somewhat distant not only in terms of miles, but also in the misunderstanding of local needs and issues that a large distance of between parties creates.

Deficiencies and Needs:

Need for greater understanding of local concerns. DCA needs to be more responsive to the local government structure and issues.

Additional Coordinating Entities:

TCRPC
All adjacent municipalities and the county.

Recommendations:

DCA should establish a local government liaison using the program piloted by SFWMD as an example.

ANALYSIS WORKSHEET

Coordinating Agency: Florida Department of Transportation

Participating Entities:

St. Lucie Village

FDOT

St. Lucie County

Existing Issues or Problems:

- Expansion of the transportation network
- High speed rail
- Bureau of Aviation
- Airport expansion
- Port expansion

Affected Comprehensive Plan Element(s):

Transportation Future Land Use

Capital Improvement

Existing Method of Coordination:

- Through MPO and county for regional transportation planning.
- Through county public works for construction and design
- Through the Port and Airport Authority for issues pertaining to them.

Nature of Relationship (i.e. Authority):

DOT has authority over MPO and is responsible for the primary transportation facilities affecting the village.

Office with Primary Responsibility:

Mayor and Aldermen.

Effectiveness of Coordination Mechanisms:

Coordination is found to be lacking at times due to FDOT unresponsiveness to local issues.

Deficiencies and Needs:

The allocation of funds for improvements and the timing of construction is unresponsive to local needs.

Additional Coordinating Entities:

MPO

Recommendations:

Improved communication.

TOWN OF ST. LUCIE VILLAGE

COMPREHENSIVE PLAN

CAPITAL IMPROVEMENTS ELEMENT

Prepared For:
The Town of St. Lucie Village, Florida

Prepared By:
Resource Engineering and Planning, Inc.
Palm Beach Gardens, Florida 33410

April, 1990

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**COMPREHENSIVE PLAN
CAPITAL IMPROVEMENTS ELEMENT
ST. LUCIE VILLAGE**

I. INTRODUCTION

The Town of St. Lucie Village is required to prepare in accordance with section 9J-5.0016, Florida Administrative Code; a Capital Improvements Element as part of kits Comprehensive Plan Update. The purpose of this Element is to evaluate the need for public facilities as identified in other elements of the Comprehensive Plan, to estimate the cost of improvements for which the Town of St. Lucie Village has fiscal responsibility, to analyze fiscal capability of the town to finance its daily operations and any such improvements identified in the plan.

II. CAPITAL IMPROVEMENTS DATA

Planning Timeframe

It is anticipated that the Comprehensive Plan for the Town of St. Lucie Village will be adopted in mid October 1989. The first fiscal year following the adoption of the plan will be beginning October 1, 1990. The five fiscal years included within this element would extend through September 30, 1995. Table 9-1 identifies the five fiscal years within the period immediately following adoption of the plan. Table 9-1 includes projected permanent population, total number of residential units, and occupied residential units for the five fiscal years.

TABLE 9-1
TOWN OF ST. LUCIE VILLAGE

	Fiscal Year				
	90/91	91/92	92/93	93/94	94/95
Permanent Population	665	673	681	689	697
Total Residential Units	323	328	331	335	339
Occupied Residential Units	278	282	285	288	292

Existing Facilities

Recreation and Open Space

The Recreation and Open Space Element of this plan states that the village provides 3.39 acres of open space. Included in this total is a 0.86 Acre site which was purchased for \$45,000 in January 1989. Beside the acreage, the site contains the Town Hall which may be used for civic and cultural presentations. The operation and maintenance of the Town Hall facility is funded from the General Operating Fund.

The village does not own or operate any active recreational facility. However, within a three mile radius of the village there are a large number of county and state facilities which meet the recreational needs of a population much larger than that of the residents of the village.

The adopted level of service for open space is 2.5 acres per 1,000 persons. This level of service standard is expected to be maintained by the town through the five fiscal years identified in this plan. Therefore, no Recreational and Open Space improvements are identified as being needed.

Transportation

As outlined in the Transportation Element of this plan, the transportation system in the village adequately meets the needs of its residents. It is expected, given the projected population, that all future land use and associated trips can be accommodated by existing traffic circulation network. No additional collection roads nor limited access facilities are anticipated. The existing system will be maintained using funds from the general operating budget.

Infrastructure

The village because of its small size, low density/intensity, and slow growing character does not provide or have available centralized sanitary sewer, drainage or potable water facilities. Each property owner is responsible for providing these facilities on-site in a manner consistent with the needs of property development. Various state and county agencies are charged with reviewing and permitting such facilities. Because the independent and adequate nature of facility provision, no deficiencies have been identified and no capital improvements are scheduled for the planning period.

Solid Waste

The village contracts with a solid waste hauler for the solid waste removal needs of its residents. Businesses within the village contract independently for solid waste disposal. In accordance with interlocal agreement, all solid waste is transported to the St. Lucie County land fill for disposal. The provisions of service and land fill capacity are adequate to meet the needs of village residents, therefore no deficiencies exist and no improvement are needed.

Education and Public Health

There are no Education or Public Health Facilities located in the village. These types of facilities are provided by agencies of St. Lucie County. The current level of service provided by the county are adequate to meet the current and projected needs of the village's residents.

Revenue Sources

The village has a limited number of current revenue sources. The largest revenue generates from the village are the franchise fees levied on revenues of electrical sales, cable television, telephone services, and garbage pick-up within the village limits. These franchise fees compose approximately 64 percent of the village's operating budget. Fees charged for the issuance of building permits and occupational licenses make up from 5 to 7 percent of the annual budget. Use of these revenues are discretionary and may be used at the direction of the Board of Aldermen for whatever purpose deemed appropriate. Table 9-2 lists current revenue sources for the village and their projected revenues for the planning time period.

The Town of St. Lucie Village is authorized by Florida statutes, Chapters 192 through 197 to levy and collect an ad-valorem property tax on real and personal property within its jurisdiction. The maximum rate, unless approved by note referendum, is 10 mills per \$1,000 property valuation. Based on 1989/90 property appraisal of \$18,313,941 taxable value, the town could raise an additional \$183,139 annually based on a maximum millage. Currently the town levies no property tax. However, within one year of the adoption of this plan, the Board of Aldermen will review the practicality of adopting a property tax to fund the expanding operating budget.

Borrowing is a revenue source frequently used by governmental agencies to fund large scale or capital improvements projects. Borrowing usually takes the form of issuing bonds. These may be either general obligation bonds, which are backed by the full faith and credit of the local government and may be issued only if approved by voter referendum. Or, they may take the form of revenue bonds which are repaid by those who receive the direct benefits from the funded project. To date, St. Lucie Village has not availed itself to the use of either of these funding mechanisms.

TABLE 9-2

TOWN OF ST. LUCIE VILLAGE

PROJECTED REVENUES FISCAL YEARS 1987/88 - 1994/95

	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95
FRANCHISE FEES	\$54,649	\$63,550	\$64,234	\$71,820	\$76,722	\$83,083	\$90,948	\$99,761
BUILDING PERMITS	\$4,832	\$7,000	\$8,050	\$9,260	\$10,646	\$11,710	\$12,880	\$14,710
LICENSES	\$4,144	\$7,000	\$7,500	\$7,875	\$9,050	\$9,955	\$10,950	\$12,045
FINES & FORFEITURES	\$145	\$200	\$200	\$320	\$410	\$495	\$565	\$620
PLAT FILE FEES	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
STATE LIQUIOR LICENSE	\$1,140	\$1,200	\$1,200	\$1,260	\$1,320	\$1,390	\$1,460	\$1,530
REVENUE SHARING								
COUNTY ROAD IMPACT FEES	\$1,400	\$1,400	\$1,400	\$1,736	\$1,825	\$1,825	\$1,825	\$1,825
INTEREST	\$1,095	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
OTHER	-	\$450	\$500	\$625	\$775	\$960	\$1,050	\$1,155
STATE COMP. PLAN	\$12,863	\$13,000	-	-	-	-	-	-
TOTAL	\$81,268	\$96,300	\$85,584	\$95,396	\$103,248	\$111,918	\$122,178	\$134,146

A third form of borrowing is the third party loan. In January of 1989, the Town of St. Lucie Village obtained a \$37,500 loan from a private bank for the purchase of the Town Hall property and building. The annual repayment of \$5,047 is reflected in Table 9-3 which projects future town expenditures.

Expenditures

The village also has limited number of operating expenditures. The town marshal and, clerk are part-time employees. The town's attorney and building inspector are on retainers and their fees are determined on an as-needed basis. The county road impact is collected at the time of issuance of development orders and transferred to the county periodically. Maintenance activities on town roads and Town Hall facilities are performed by private contractors on an as needed basis to ensure the longevity of existing facilities. Annual projected expenditures are listed on Table 9-3.

Table 9-4 list relevant debt ratios. The first ratio (debt/capita) indicated the net amount of debt per person in the town. Per capita debt ratios of \$300 to \$500 are considered acceptable by national standards.

Debt to total operating Expenditures compares debt payment including principal and interest to the total operating expenditures. Ratios less than 10% are considered acceptable.

The final ratio, debt to taxable property values indicates the proportion of general debt. Ratios in the range of 3 to 5 percent are considered acceptable.

TABLE 9-3
 TOWN OF ST. LUCIE VILLAGE
 PROJECTED OPERATING EXPENSES FISCAL YEARS 1987/88 -1994/95

	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95
GENERAL GOVERNMENT OPERATING EXPENSES	\$39,588	\$40,300	\$44,330	\$48,763	\$53,639	\$59,003	\$64,903	\$71,394
ROAD MAINTENANCE	\$9,223	\$6,000	\$6,480	\$7,000	\$7,560	\$8,165	\$8,815	\$9,520
VILLAGE MAINTENANCE	\$2,081	\$2,000	\$2,200	\$2,420	\$2,465	\$2,930	\$3,220	\$3,545
COUNTY ROAD IMPACT FEE TRANSFER	\$1,062	\$1,000	\$1,062	\$1,312	\$1,380	\$1,380	\$1,380	\$1,380
GARBAGE PICKUP	\$23,790	\$24,000	\$26,400	\$29,090	\$31,944	\$35,184	\$38,652	\$42,517
DEBT PAYMENT (VILLAGE HALL)	-	\$10,000	\$5,047	\$5,047	\$5,047	\$5,047	\$5,047	\$5,047
COMP.PLAN	\$4,110	\$13,000	-	-	-	-	-	-
TOTAL	\$79,854	\$96,300	\$85,519	\$93,632	\$102,035	\$111,709	\$122,017	\$133,403

SOURCE: TOWN OF ST. LUCIE VILLAGE; REP/INC. 1989

TABLE 9-4
 DEBT RATIOS
 TOWN OF ST. LUCIE VILLAGE

	1989	1990	1991	1992	1993	1994	1995
PERMANENT POPULATION	650	657	665	673	681	689	697
DEBT	\$75,699	\$70,652	\$65,605	\$60,558	\$55,511	\$50,464	\$45,417
DEBT/CAPITA	\$116.46	\$107.53	\$98.65	\$89.98	\$81.51	\$73.24	\$65.16
DEBT AS PERCENT OF ANNUAL OPERATING BUDGET	10.38%	5.90%	5.39%	4.94%	4.94%	4.13%	3.78%
TAXABLE VALUE	\$17,336,710	\$18,028,020	\$18,749,141	\$19,499,106	\$20,474,062	\$21,497,674	\$22,357,675
RATIO OF DEBT TO TAXABLE VALUE	0.43%	0.39%	0.34%	0.31%	0.27%	0.23%	0.20%

SOURCE: TOWN OF ST. LUCIE VILLAGE; REP/INC. 1989

III. LOCAL BUDGETING PRACTICES

In July of each year a Budget Committee is appointed by the Board of Aldermen to prepare a budget and recommendations for the upcoming fiscal year. The committee consist of one Aldermen and two Town residents. This committee reviews the previous years budget and expenditures, reviews current and projected needs and presents a proposed budget and recommendation to the full Board of Aldermen at a minimum of two public meetings held in August and September. Prior to October 1 of each year, the full Board of Aldermen will adopts the final budget by resolution for the next fiscal year. Changes to the budget require a majority vote of the Board of Aldermen.

The town does not currently adopt a capital budget as a part of the annual budgeting process. Besides the acquisition of the Town Hall and the surrounding property, the town has never had need for a capital budget in the past. As a part of future annual reviews performed by the Budget Committee, a list projected capital needs and expenditures for the following five-year period shall be included.

IV. FISCAL IMPLICATION OF EXISTING DEFICIENCIES AND FUTURE NEEDS

As explained in other element of this Comprehensive Plan, no existing deficiencies or needs associated with the projected population have been identified. The town has just purchased the Town Hall. With proper maintenance of this structure and existing roadway network both will be adequate to serve the needs of the Town's residents in the future.

New or Improved Public Education and Health Care Systems

No new or improved public education and health care systems and facilities are anticipated within the Town during the Capital Improvement Element planning time frame. The facilities which currently serve the needs of the town's residents are expected to meet all existing and projected needs.

V. IMPLEMENTATION

This section addresses the requirements of 9J-5.016 (4) requirements for capital improvements implementation. As stated throughout this plan and in the previous section of this element, no capital improvements other than maintenance of the existing infrastructure, is anticipated for the town during the five-year planning period of this element. Therefore, the requirements of Section 4 do not pertain to the Town of St. Lucie Village.

The level of service standards addressed in this Comprehensive Plan are anticipated to be maintained throughout the planning timeframe using the existing infrastructure and maintenance programs in place by the town. All maintenance programs and other expenditures identified in the budget of the town are consistent with the overall goals, objectives and policies of this plan.

GOALS, OBJECTIVES AND POLICIES

GOAL 9.1.: THE TOWN OF ST. LUCIE VILLAGE SHALL RECOGNIZE AND IMPLEMENT SOUND FISCAL POLICIES TO IDENTIFY AND PROVIDE FOR THE PUBLIC SAFETY AND NEEDS OF ITS RESIDENTS.

Objective 9.1.1.: When reviewing expenditures for inclusion in the annual budget, the Board of Aldermen shall review all expenditures in the following order of priority:

- a. elimination of public hazards;
- b. financial feasibility;
- c. preservation of existing facilities;
- d. furthering the goals of the Comprehensive Plan; and
- e. changes in demographics or land use patterns.

Policy 9.1.1.1.: Within one year following the adoption of this Comprehensive Plan, the town will establish debt policies to:

1. limit the debt services to 10% of annual operating revenues;
2. limit the maximum ratio of outstanding capital indebtedness to property tax base; and
3. limit the use of future bonds as a percent of total debt.

Policy 9.1.1.2.: The Town will continue to inspect and maintain all current town facilities and make necessary repairs and replacements in a timely manner.

Policy 9.1.1.3.: Immediately following the adoption of this Comprehensive Plan, the Board of Aldermen shall undertake a study of alternative revenue sources.

Objective 9.1.2.: The Town of St. Lucie Village will not expend public funds for infrastructure or service facilities in coastal high hazard areas, except to insure public safety or to acquire or enhance natural resources.

Policy 9.1.2.1.: The town shall designate the coastal high hazard areas as that area east of the FEC railroad tracks which is within the Federal Emergency Management Agency Velocity (V) Zones.

Policy 9.1.2.2.: Pursuant to Section 163.3202, F.S., the town will adopt land use development regulations which require that all public facilities, except those used for recreation, shall not be located by the town within the coastal high hazard area.

Policy 9.1.2.3: Densities within the coastal high hazard area shall not exceed 2 units per net acre with minimum lot size of one-half acre.

Objective 9.1.3.: All future development will bear its proportionate share of costs for facility improvements necessitated by the development in order to maintain the adopted levels of service (LOS) standards.

Policy 9.1.3.1.: The Town of St. Lucie Village shall continue to collect the county's Road Impact Fee from all new development within its jurisdiction. The monies from this fee will be turned-over to the county to fund necessary transportation improvements.

Policy 9.1.3.2.: Prior to subdivision approval, the town shall require that the developer designate for open space and/or conservation with public access, not less than 3.5 acres/1,000 person subdivision population.

Policy 9.1.3.3.: The town will evaluate all applications for new development to assure that public facilities provided by the developer accommodate public facility demands based upon adopted levels of service standards.

Objective 9.1.4.: The village will adopt the following level of service standards (LOS) to review all future development.

Policy 9.1.4.1.: Traffic Circulation:

- a. Principal Arterial Roadways - LOS standard C (LOS D - peak hour)
- b. Collector Roadways - LOS standard C (LOS D - peak hour)
- c. Local Roadways - LOS standard C (LOS D - peak hour)

Policy 9.1.4.2.: The adopted Recreation and Open Space level of service standard shall be 3.50 acres per 1,000 persons.

Policy 9.1.4.3.: Potable Water Treatment - currently not applicable. The town shall amend its plan and adopt adequate LOS standards at the time the facilities become necessary.

Policy 9.1.4.4.: Sanitary Service - currently not applicable. The town shall amend its plan and adopt adequate LOS standards at the time the facilities become necessary.

Policy 9.1.4.5.: The town shall adopt DER Rules 17-3 and 17-25 F.A.C., as referenced by SFWMD, Rules 40E-40 for stormwater drainage quality and quantity. These standards shall apply to all development and redevelopment without exception or exemption.

MONITORING AND EVALUATION

Chapter 163 of the Florida Status requires the Capital Improvement Element to be continuously monitored and evaluated. Therefore, the village will review this element prior to the submission of the annual budget. The purpose of the review is to

ensure that the required fiscal resources will be available to provide for the needs and public safety of the village's residents.

The annual review will be the responsibility of the Mayor or his/her designee and a Board of Aldermen appointed Citizen Advisory Committee. This groups findings and recommendations will be presented to the Board of Aldermen at a public meeting. The Board will direct appropriate actions based upon the review committee's findings and recommendation.

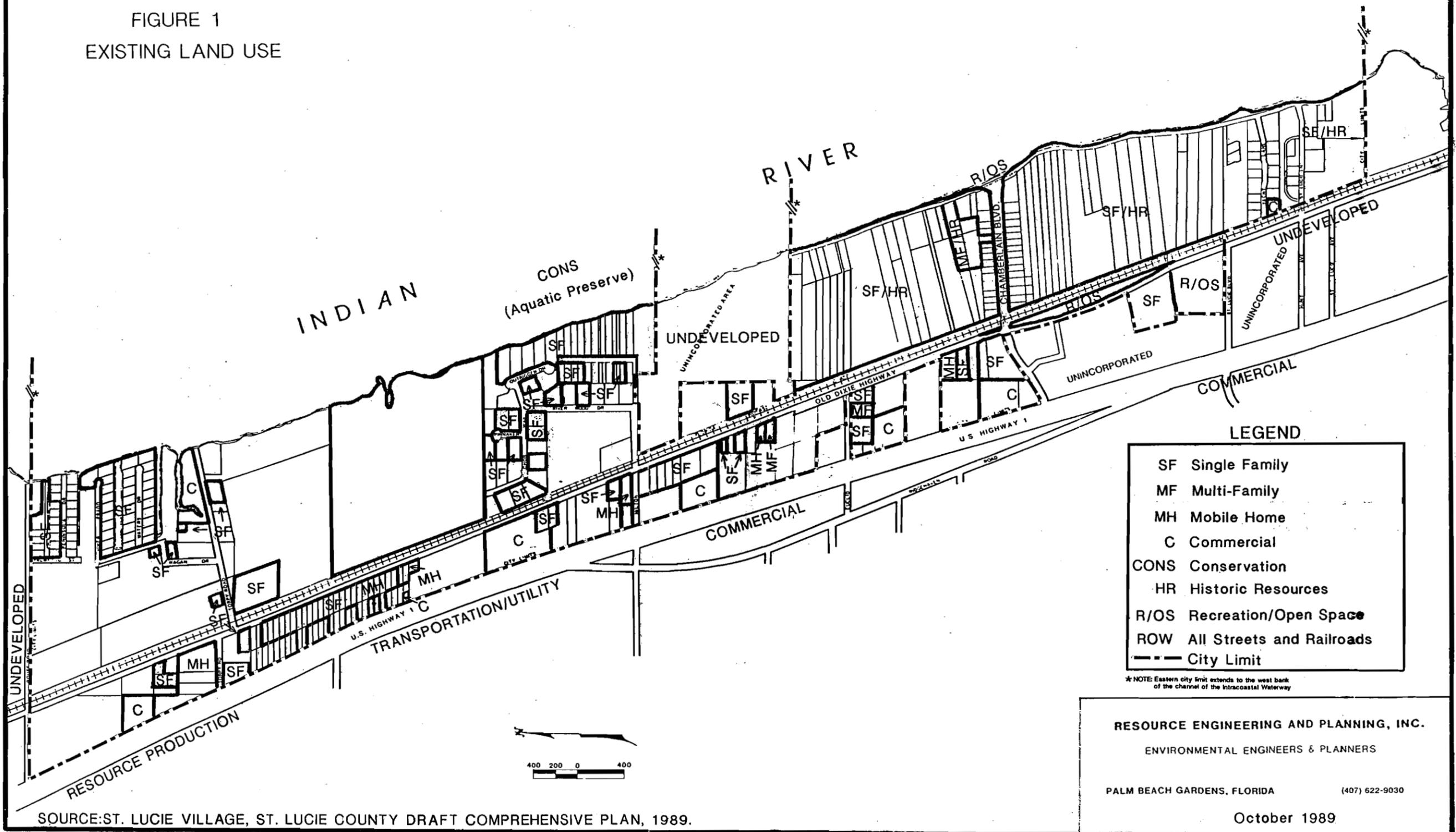
The town, in conducting its annual review of the Capital Improvements Element, will consider the following factors and will amend the element accordingly:

1. any corrections, updates, and modification concerning costs; services; acceptance of facilities pursuant to dedications which are consistent with the element;
2. the Capital Improvements Element's consistency with other elements and its support of the Future Land Use Element;
3. the criteria used to evaluate the priority after funding;
4. the town's effectiveness in maintaining the adopted LOS standards;
5. the town's effectiveness in reviewing the impacts of plans and programs of county and state agencies and the water management district that provide public facilities and services within the town's jurisdiction;
6. the town's effectiveness in assessing new development its pro ratio share of cost for needed improvements which they generate;

7. efforts made to secure grants or private funds, whenever available, to finance the provision of public facilities;
8. the transfer of any unexpected account balances;
9. the criteria used to evaluate proposed plan amendments and request for new development or redevelopment; and
10. capital improvements needed for the latter part of the planning period, for inclusion in a Schedule of Improvements.

ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 1
EXISTING LAND USE



LEGEND

SF	Single Family
MF	Multi-Family
MH	Mobile Home
C	Commercial
CONS	Conservation
HR	Historic Resources
R/OS	Recreation/Open Space
ROW	All Streets and Railroads
- - -	City Limit

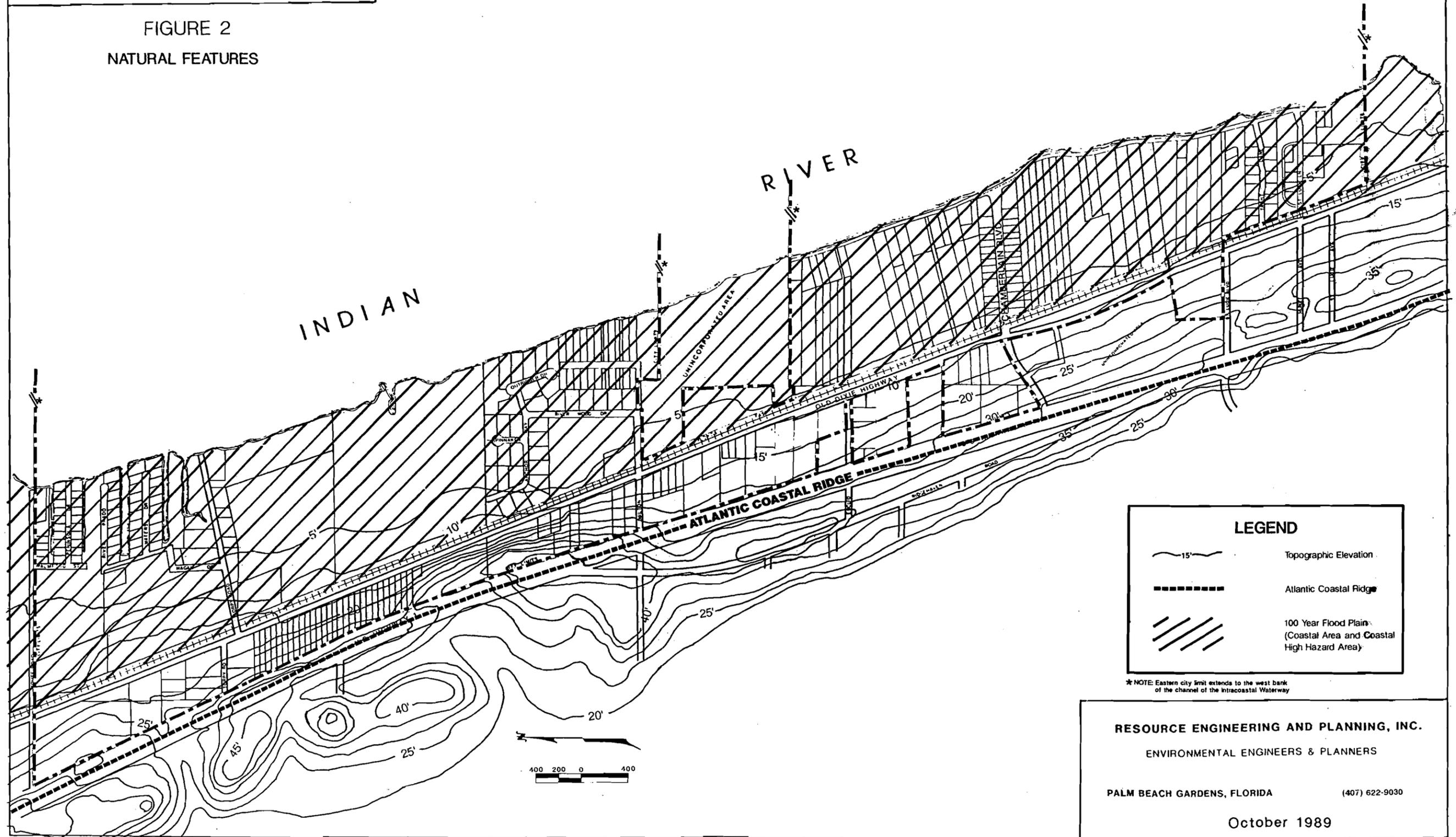
*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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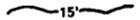
SOURCE: ST. LUCIE VILLAGE, ST. LUCIE COUNTY DRAFT COMPREHENSIVE PLAN, 1989.

ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 2
NATURAL FEATURES



LEGEND

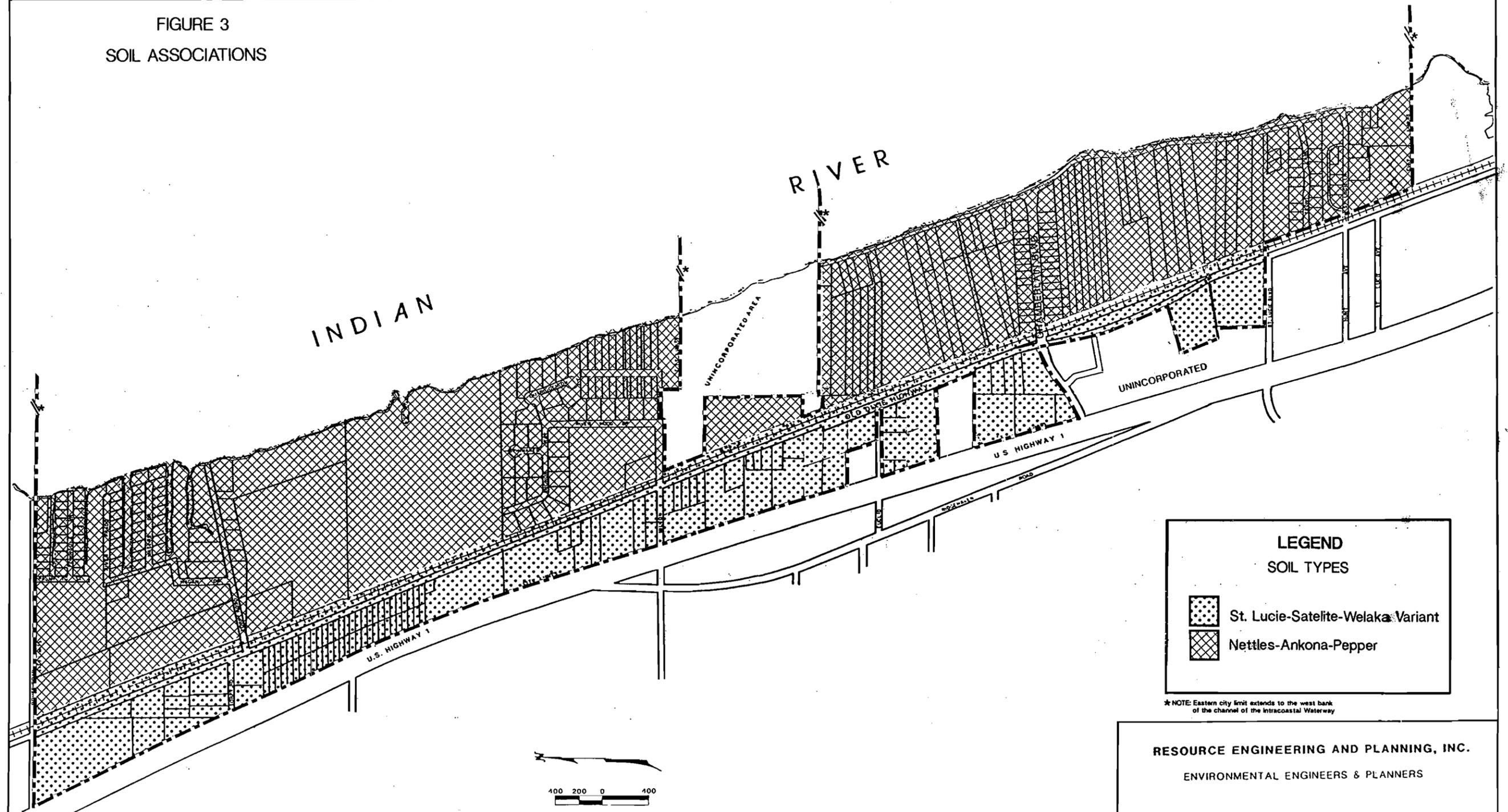
-  15' Topographic Elevation
-  Atlantic Coastal Ridge
-  100 Year Flood Plain (Coastal Area and Coastal High Hazard Area)

*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 3
SOIL ASSOCIATIONS



LEGEND
SOIL TYPES

	St. Lucie-Satelite-Welaka Variant
	Nettles-Ankona-Pepper

*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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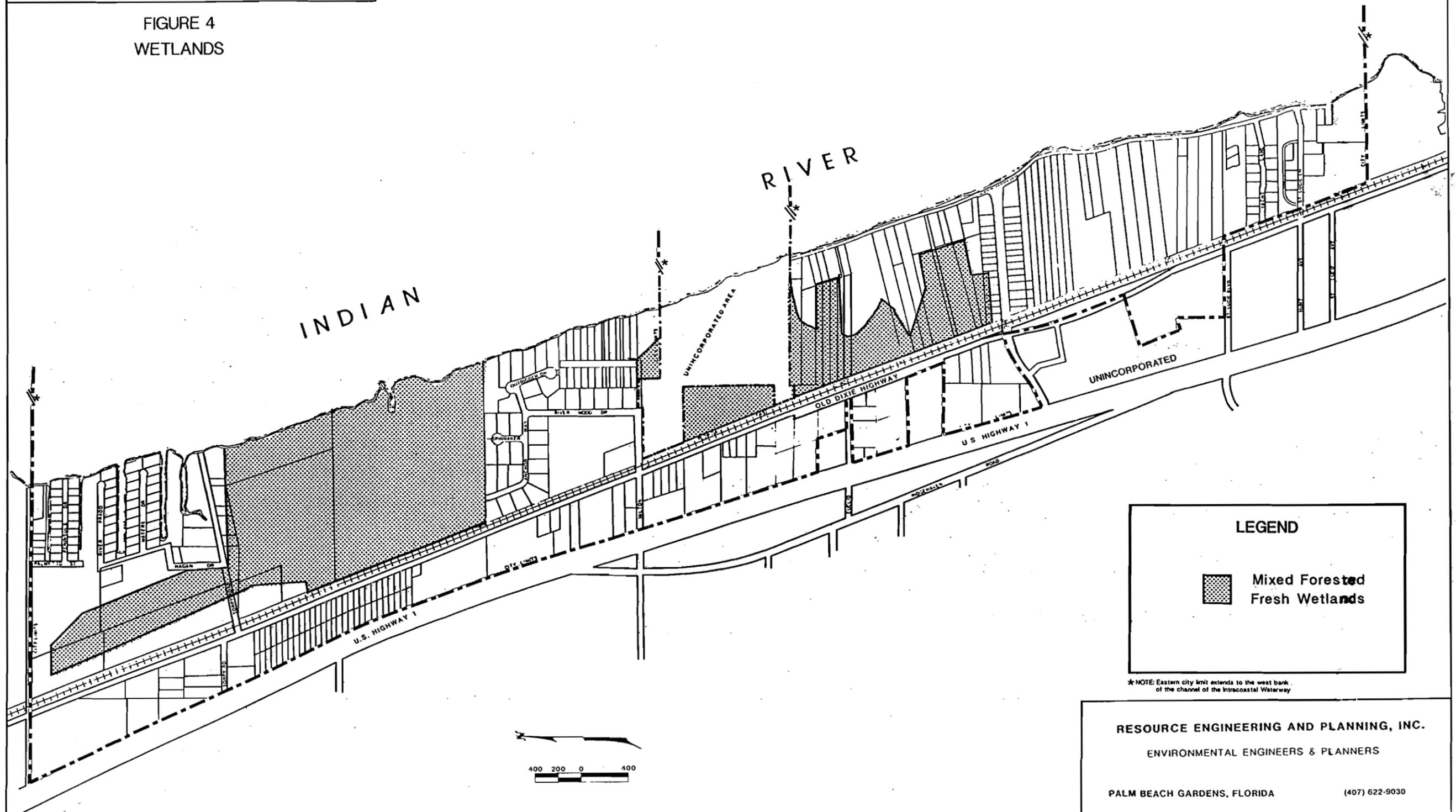
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Source: U.S Department of Agriculture.

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ST. LUCIE COUNTY, FLORIDA

FIGURE 4
WETLANDS



LEGEND

 Mixed Forested
Fresh Wetlands

*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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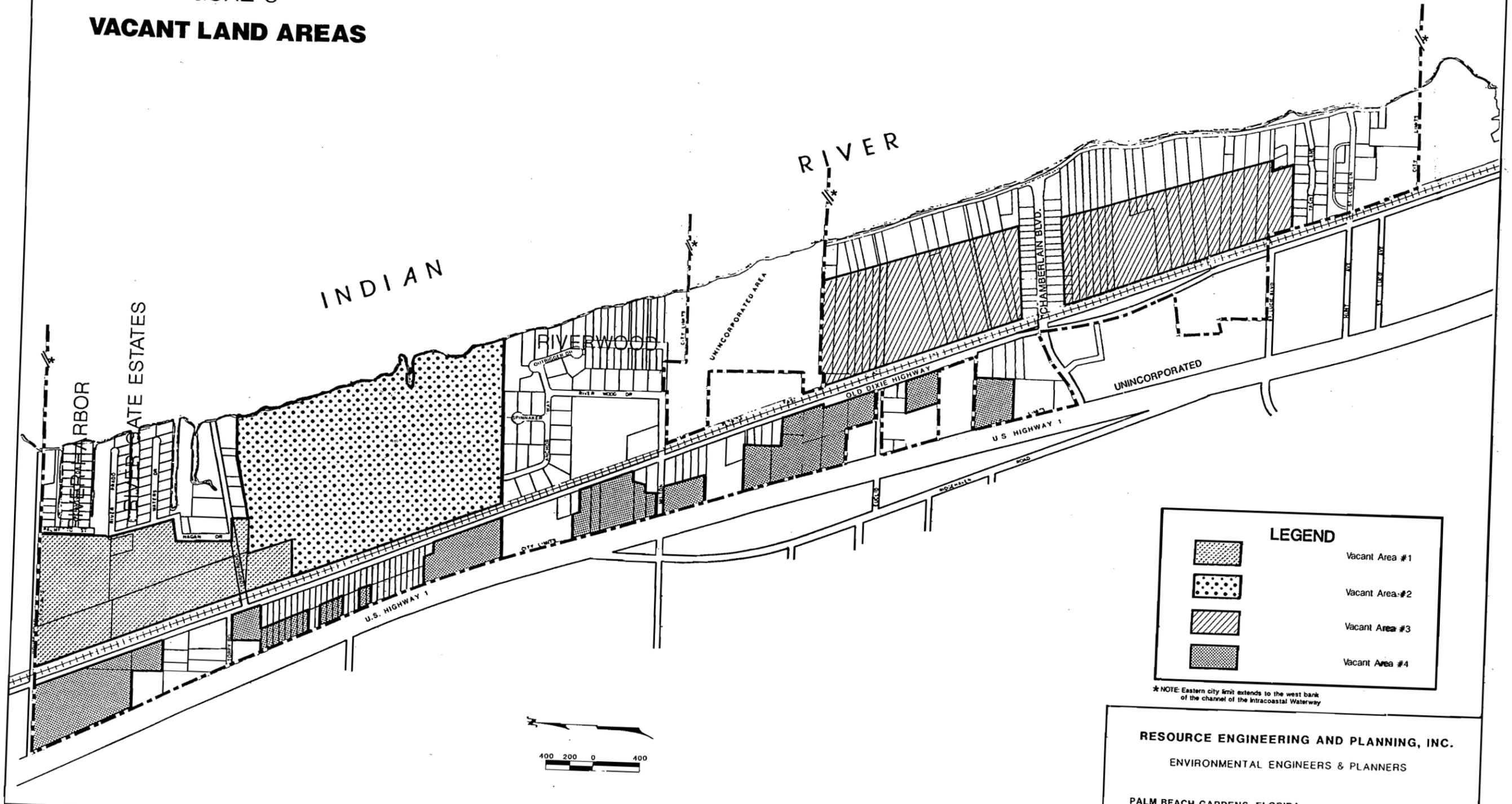
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SEPTEMBER, 1988

Source: South Florida Water Management District

ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 5
VACANT LAND AREAS



LEGEND

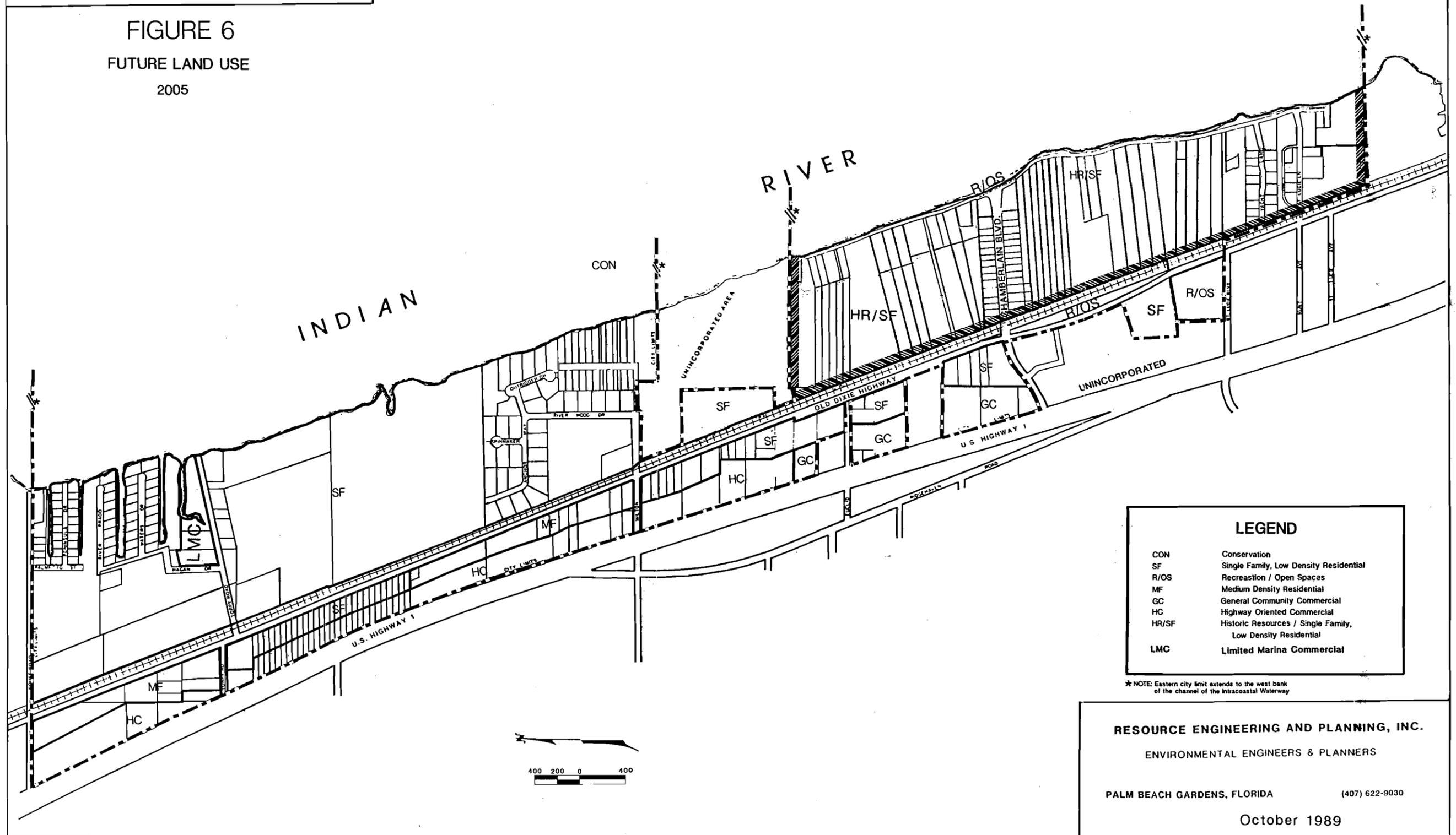
	Vacant Area #1
	Vacant Area #2
	Vacant Area #3
	Vacant Area #4

*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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ST. LUCIE COUNTY, FLORIDA

FIGURE 6
FUTURE LAND USE
2005



LEGEND	
CON	Conservation
SF	Single Family, Low Density Residential
R/OS	Recreation / Open Spaces
MF	Medium Density Residential
GC	General Community Commercial
HC	Highway Oriented Commercial
HR/SF	Historic Resources / Single Family, Low Density Residential
LMC	Limited Marina Commercial

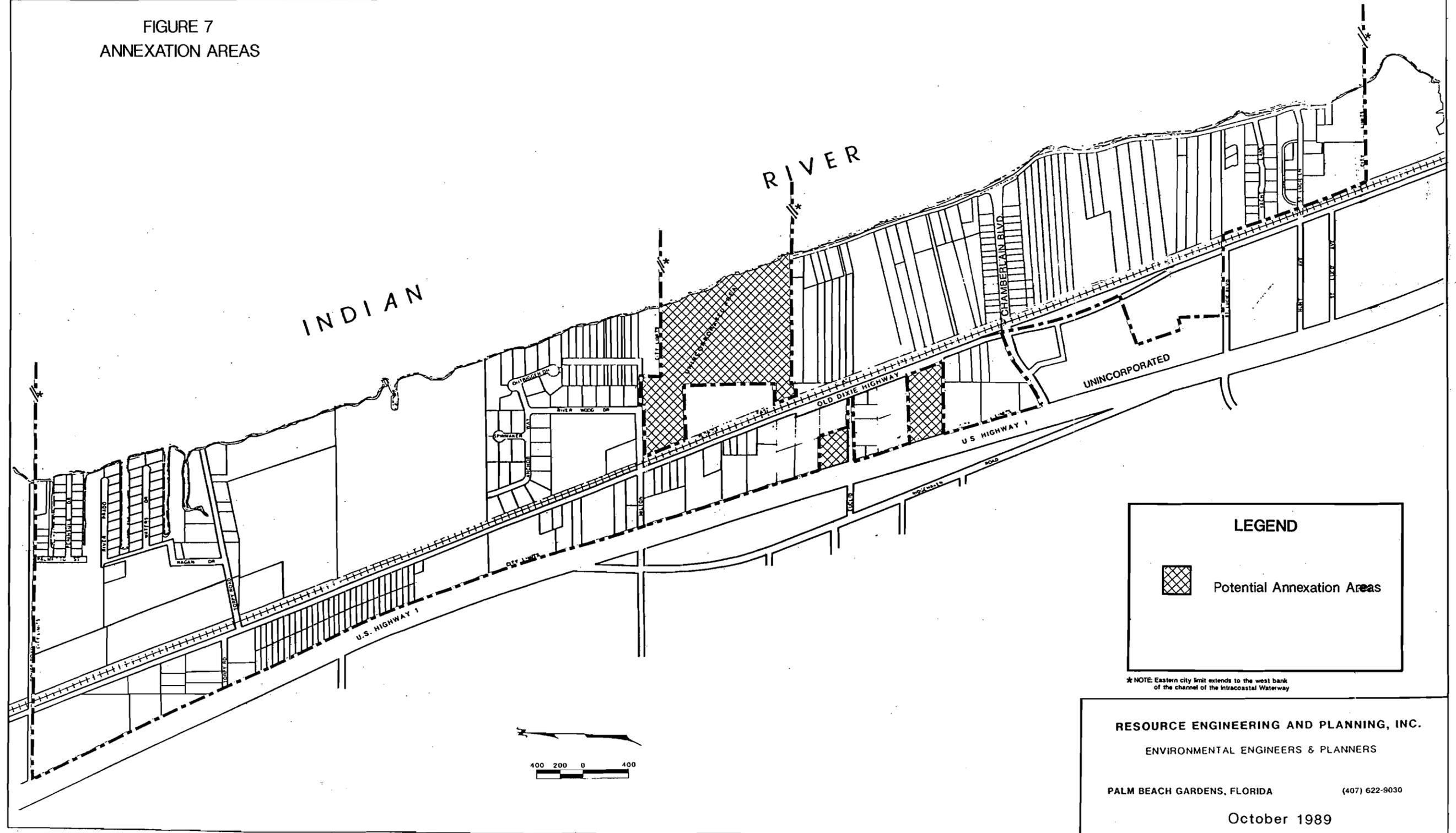
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ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 7
ANNEXATION AREAS



LEGEND

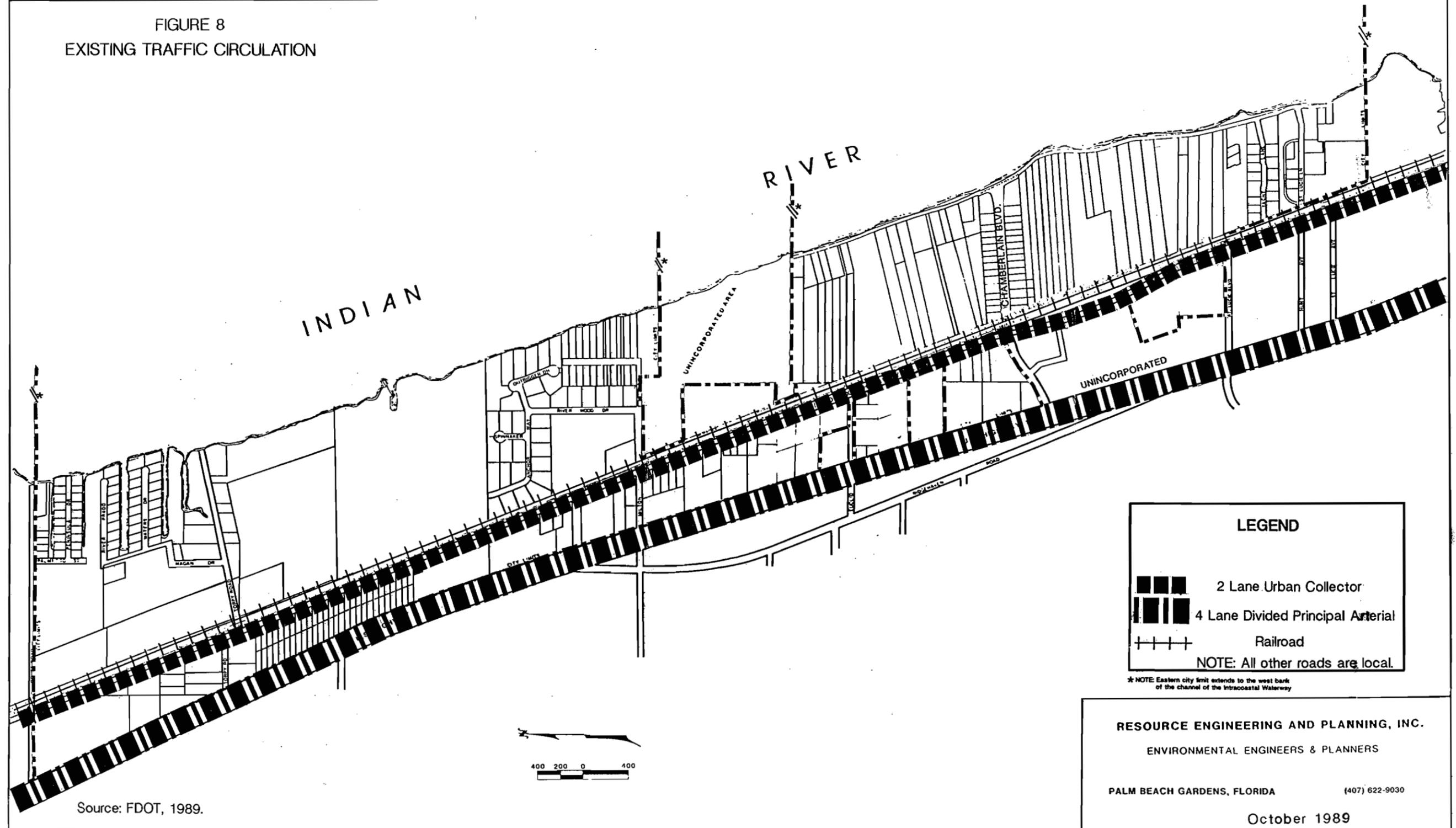
 Potential Annexation Areas

*NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 8
EXISTING TRAFFIC CIRCULATION



LEGEND

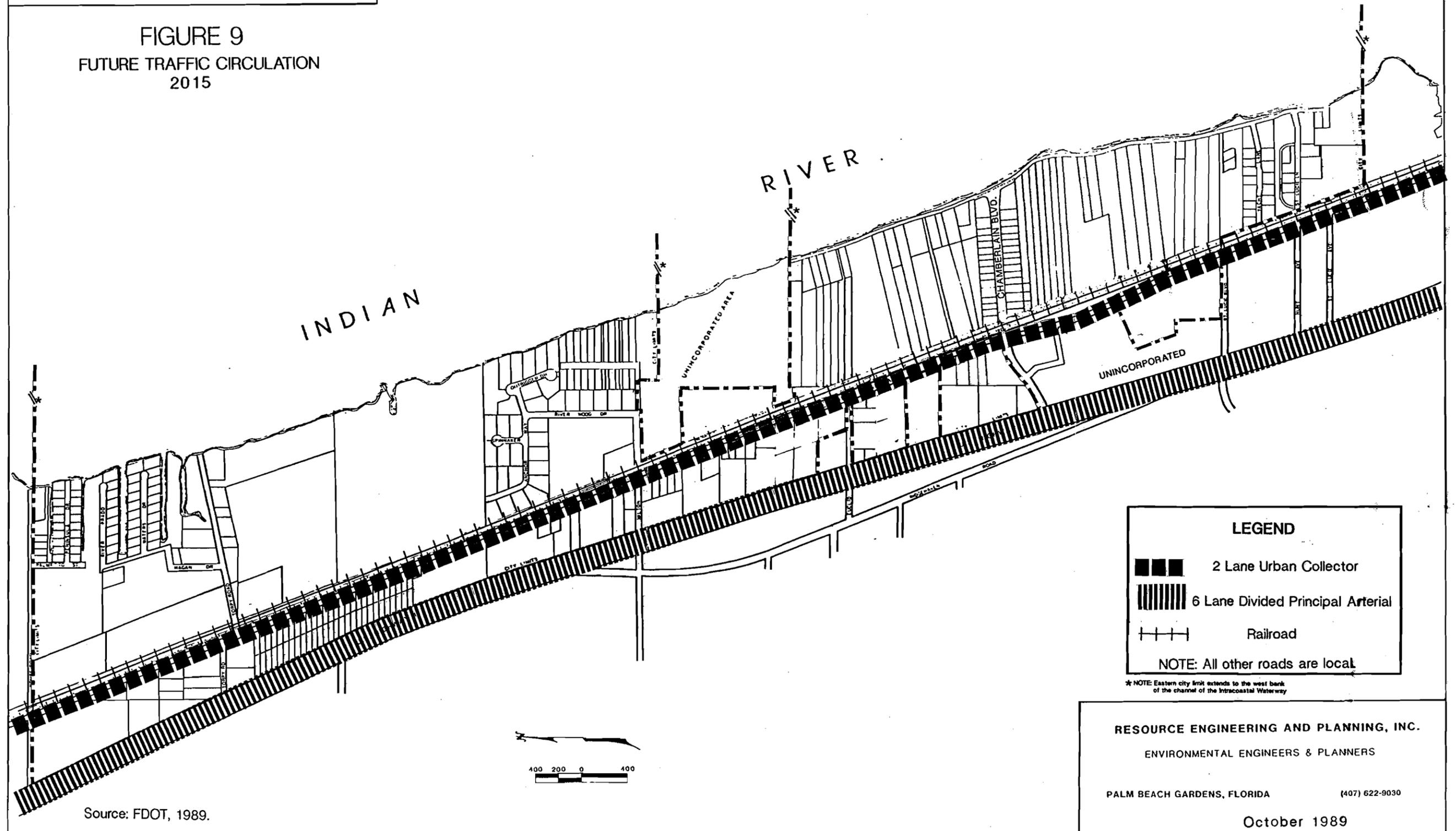
- 2 Lane Urban Collector
- 4 Lane Divided Principal Arterial
- Railroad

NOTE: All other roads are local.

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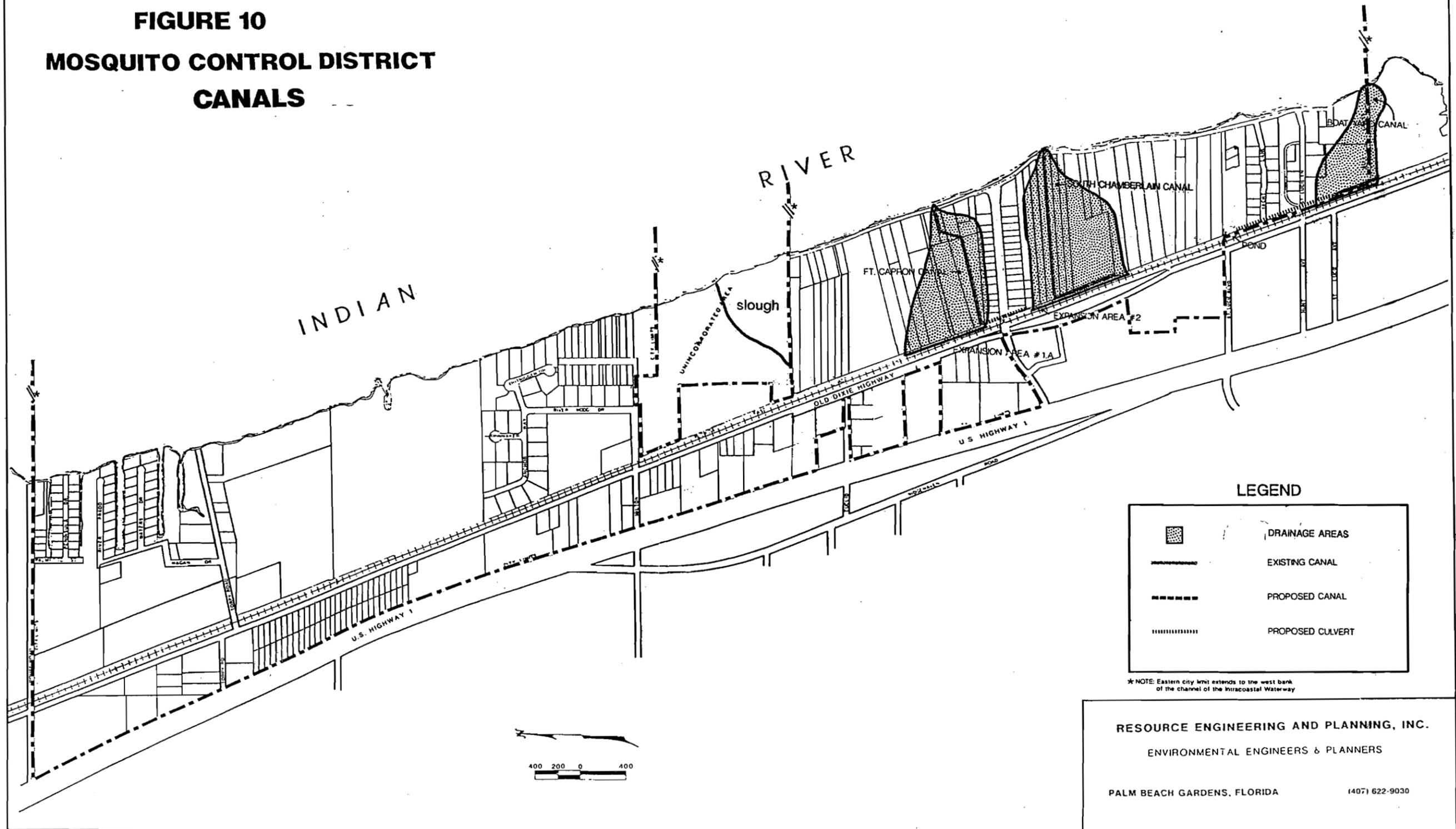
ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 9
FUTURE TRAFFIC CIRCULATION
2015



ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 10
MOSQUITO CONTROL DISTRICT
CANALS



LEGEND

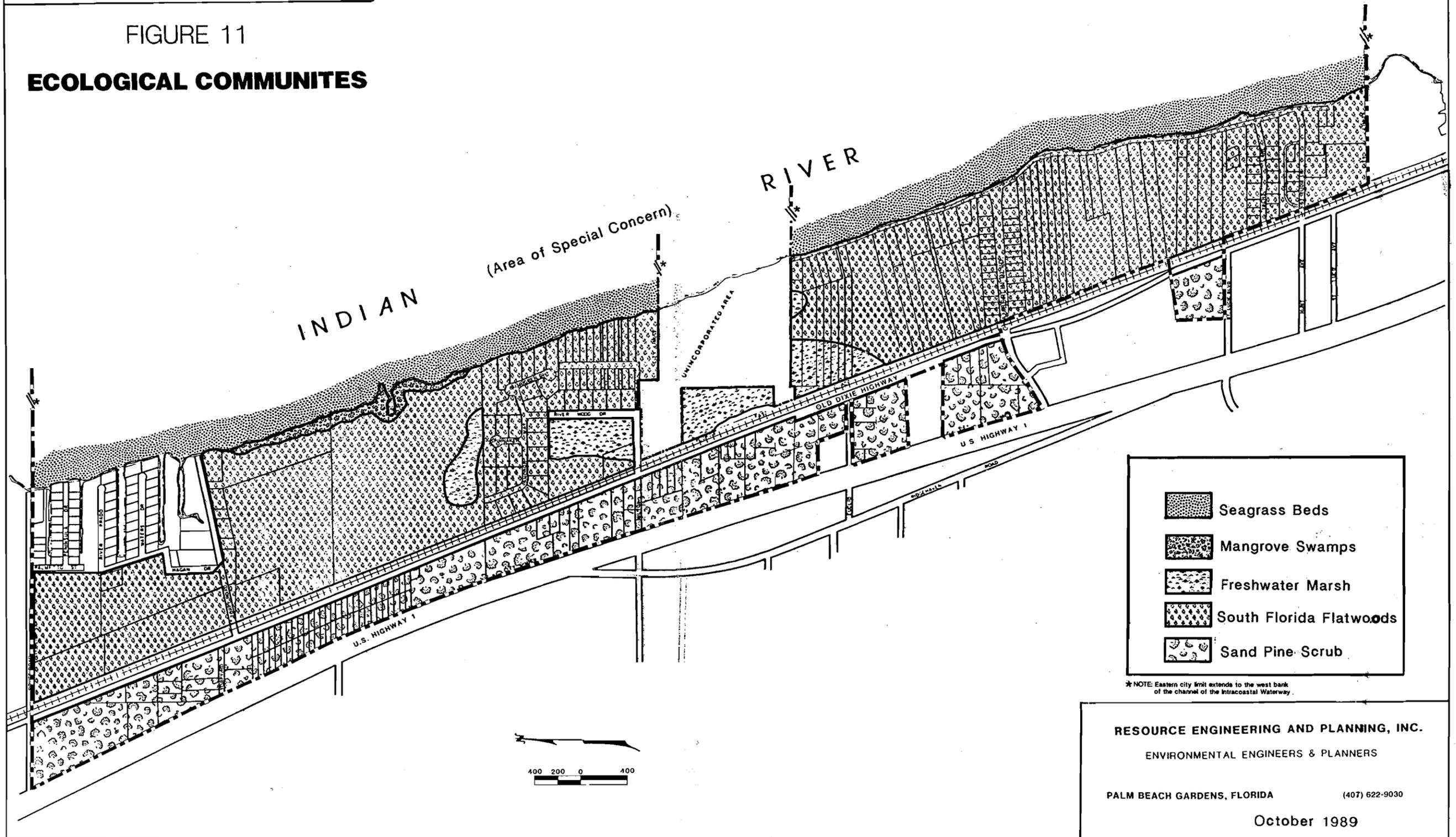
	DRAINAGE AREAS
	EXISTING CANAL
	PROPOSED CANAL
	PROPOSED CULVERT

* NOTE: Eastern city limit extends to the west bank of the channel of the Intracoastal Waterway

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ST. LUCIE VILLAGE
ST. LUCIE COUNTY, FLORIDA

FIGURE 11
ECOLOGICAL COMMUNITIES



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