FUTURE LAND USE ELEMENT

CITY OF TARPON SPRINGS

Prepared By

THE CITY OF TARPON SPRINGS

PLANNING AND ZONING DEPARTMENT

February 2019

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February 2019

THE CITY OF TARPON SPRINGS
COMPREHENSIVE PLAN
FUTURE LAND USE ELEMENT

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I. INTRODUCTION

The Future Land Use Element is mandated by Chapter 163.3177(6)(a), otherwise known as the Community Planning Act. The content of this element was designed to be consistent with the criteria of those regulations, the Tampa Bay Region's (TBRPC) Comprehensive Regional Policy Plan, and the Countywide Future Land Use Plan and Rules Concerning the Administration of the Countywide Future Land Use Plan as administered by the Pinellas Planning Council (PPC).

This element includes an inventory of existing land use characteristics, and an analysis of future needs based upon projected population, available land, and available infrastructure, supported by a set of goals/objectives/policies and a future land use map. The policies are designed to be specific programs and the objectives are designed to be measurable. The future land use map describes the appropriate location of future development based upon such factors as timing, cost, compatibility, geographic characteristics, and current development trends. Land development regulations adopted subsequent to the Comprehensive Plan must be consistent with the Future Land Use Element and associated maps.

A. Purpose

The purpose of the Future Land Use Element is to serve as a guide to the future development and redevelopment of the City. Essentially, it is a spatial regulation of residential, commercial, industrial, and agricultural land uses. In addition, each land use category is described in terms of both the types of uses allowable as well as specific standards to govern the density or intensity of use.

B. Interrelationship of Other Elements

Each element of the Comprehensive Plan is equally important, and all the different parts of the plan must be internally consistent. While the Future Land Use Element is the most recognizable part of a plan, land development proposals must be consistent with the other divergent elements as well. The Future Land Use Element completes the Comprehensive Plan package by tying together aspects of the other elements which follow:

- Historic Resources
- Coastal Planning Area and Conservation
- Recreation and Open Space
- Intergovernmental Coordination
- Transportation
- Utilities
- Housing
- Capital Improvements
- Public Schools Facilities

II. GENERAL SETTING

The Tarpon Springs Planning Area is shown by Figure 1. Generally, the area is bounded by the Pasco County line on the north, Klosterman Road on the south, the Gulf of Mexico on the west, and Lake Tarpon and the Salt Lakes on the east. This area is referenced as Sector 1 in the Pinellas County Comprehensive Land Use Plan (CLUP), and includes portions of unincorporated Pinellas County. The Tarpon Springs City limits are also shown by Figure 1.

The study area encompasses approximately 14 square miles, 9.2 of which are located in the City. The gross acreage of the study area excluding waterbodies is over 7,200 acres.

The City of Tarpon Springs is in excess of 100 years old. A majority of the south side of the Anclote River is heavily urbanized, and future growth is expected to occur in the form of infill development, redevelopment or

renovation, and growth north of the Anclote River. The City's urban service boundaries for fire protection, emergency services, sanitary sewer, and potable water are coterminus with the study area boundaries.

There are three (3) major waterbodies within the study area:

- Lake Tarpon
- Anclote River
- Gulf of Mexico

Development occurs primarily in the form of single family and low-medium density multi-family residences along the west bank of Lake Tarpon.

The Anclote River and associated bayous cross the northern third (1/3) of the study area. The north bank of the river has traditionally been undeveloped and part of unincorporated Pinellas County. However, urban services (particularly water and sewer) are the responsibility of the City and therefore annexation has occurred. The north bank of the river is characterized by a mix of residential and water dependent uses. The south bank of the river is primarily residential around the bayous westward to the mouth of the river. From the bayous eastward to Alternate U.S. 19 is the City's historic sponge dock area, a mix of water dependent and water related tourist oriented uses. Much of the river's associated floodplain wetlands have been retained east of Alternate U.S. 19.

The Gulf of Mexico shoreline is primarily urbanized with a mix of residential uses.

Six major open spaces are located within the study area. Two are Pinellas County operated parks; Fred Howard Park on the Gulf of Mexico, and Anderson Park on the shoreline of Lake Tarpon. A third park, North Anclote Nature Park, is operated by the City of Tarpon Springs. A fourth passive open space area of approximately 75 acres is owned by Pinellas County. The City owns, operates and maintains the municipal golf course. A sixth major open space area is the now capped landfill that is proposed for re-development as a major park facility for recreation fields. All recreation and open space areas are identified on the existing land use map as well as within the Recreation Open Space Element.

Two (2) Federal aid highways which primarily function to provide regional mobility traverse the study area from north to south; U.S. 19 and Alternate U.S. 19. Both highways have traditionally developed with commercial uses.

The City's economy is directly related to the area's temperate climate, in terms of both the tourist trade and its attractiveness as a residential and retirement community. Several important events occur during the year including the Epiphany Celebration, Spring Art Festival, and Gavel and Grapes.

III. EXISTING LAND USE DATA REQUIREMENTS

A. Existing Land Use Plan

The Existing Land Use Map is shown in Figure 2. The map is based upon the Pinellas County Geographic Information System, which utilizes the Pinellas County Property Appraiser records to identify use. An explanation of the land use categories utilized is provided by Appendix B. Generally, the following land use categories are shown on the Existing Land Use Map:

1. Single Family
2. Mobile Home
3. Duplex/Triplex
4. Multifamily
5. Commercial
6. Industrial
7. Public/Semi-Public
8. Agricultural

9. Recreation/Open Space
10. Vacant
11. Miscellaneous
12. Conservation/Preservation
13. Marinas

Educational uses, public buildings and grounds, and other public facilities have been combined into the Public/Semi-Public land use category. This category includes such facilities as public and private schools, government owned and operated buildings (eg. - City Hall), hospitals, cemeteries, post offices, day care facilities, and railroad facilities.

The residential use category has been broken down into single family, mobile home, duplex/triplex, and multifamily. the multifamily category includes apartments, condominiums, and residential retirement homes. Other land use categories identified for the purposes of this element are Marinas and Miscellaneous. The miscellaneous category includes streets, rivers, lakes, and pipelines.

The historic resource inventory can be found in the Historic Element which is included as a part of this comprehensive plan.

B. Natural Resources

1. Waterwells and Well Head Protection Areas

The City of Tarpon Springs currently owns and operates seven (7) municipal wells identified in Figure 3. Wells 1, 2, & 3 have active Consumptive Use Permits that expire in 2015 and produce an average of .73 MGD. Well 5A is permitted for irrigation with a capacity of .012 MGD. Wells 5B and 5D are permitted through SWFWMD in a standby status with an average daily permitted withdrawal of .252 MGD. Well 5C has higher than allowable iron concentrations.

A wellhead protection area is defined as:

an area designated by local government to provide land use protection for the groundwater source for a potable water wellfield, including the surface and subsurface area surrounding the wellfield. Differing level of protection may be established within the wellhead protection area commensurate with the capacity of the well and an evaluation of the risk to human health and the environment. Wellhead protection areas shall be delineated using professional accepted methodologies based on the best available data and taking into account any zone of contribution described in existing data.

For the purposes of land use planning a wellhead protection area is the area surrounding a waterwell on which a land use activity has the potential to have a negative impact upon the aquifer. In order to have a negative impact, contaminated water must penetrate the aquifer. The purpose of delineating a wellhead protection area is to protect the water supply from a detrimental land use.

There are generally two (2) types of aquifers; unconfined and confined. Unconfined aquifers have no separation between the surface and the aquifer. Water is either drawn down or percolates into the pumping well from the surface. Confined aquifers are characterized by a separation (i.e. - confining bed) between the surface and the aquifer. Surface water must penetrate this "confining bed" in order to reach the aquifer.

In general, much of Pinellas County is underlain by a thick confining bed. However, the upper Floridian Aquifer in the Tarpon Springs area is generally characterized as unconfined to poorly confined. Discontinuous clay layers exist, but only provide localized confinement. A cross-section of the confining bed for the Southwest Florida Water Management District can be found in Figure 4.

Production of a potable water supply from wells 1, 2, & 3 began around 1955. The first consumptive use permit (C.U.P.) granted to the City by the Southwest Florida Water Management District was issued in 1976 for an annual average of 370,000 GPD.

Wellhead protection areas and significant impacts upon wells are shown in Figure 3. Significant impacts include potentially contaminating land uses, such as industrial, landfills, and non-sewered areas.

Well number 1 is located on Grosse Avenue just north of Lemon Street at the site of the old City Waterworks. This is adjacent to the City's traditional downtown (or Main Street), and the area is heavily urbanized with commercial and residential uses. The area is served by central water and sewer. There are no heavy industrial uses in the vicinity, however, there are scattered industrial uses in the form of workshops and storage yards in the area. These uses should be inventoried as potential small quantity hazardous waste generators. The City's Class III landfill is located approximately 3/5 th's of a mile to the south. Output from Well #1 has been traditionally low. Recent drawdown monitoring indicates drawdown of the surface water aquifer to be 1.5 to 2.5 feet within a 300 foot radius

Well Number 2 is located on Tarpon Avenue just east of Jasmine Avenue. The area south of Keystone Road is characterized by single family homes developed in the range of 5 to 6 units to the acre. This area is also not connected to central sewer, and although none has been detected, seepage from faulty septic systems could occur.. The area north of Keystone Road is characterized by scattered development. As this area develops it should be kept below 6 units to the acre and be required to hook up to central sewer. Recent drawdown monitoring of the surface water aquifer indicates a drawdown of 2.5 to 3.5 feet within a 300 foot radius.

Well number 3 is located on Highland Avenue just north of Wegman Drive. The site is located adjacent to Lake Tarpon, a major source of aquifer recharge for the area. Again, this area is single family residential in nature but lacks centralized sewer. Monitoring of septic seepage should occur. Recent drawdown tests indicate a resultant drawdown of the surficial aquifer of 2 to 2.5 feet within a 300 foot radius.

Well site number 5 is located along Disston Avenue just north of Klosterman Road). This wellfield actually consists of four (4) wells (A, B, C, & D) spaced at 200 foot intervals pumping at the rate of 150 gallons per minute (GPM). The area is primarily urbanized, and characterized by low to moderate density residential development. The City owned landfill is located approximately 1/2 mile to the north

Hydrogeologic monitoring and computer modeling utilizing drawdown techniques to calculate the aquifer properties of transmissivity, storativity, and leakance have been performed. These tests confirmed the unequal characteristics of the confining layer.

Two significant land use sites are located within this protection area. One is the City owned landfill which was closed in 1990 and continues to be monitored per FDEP requirements. The second land use is a City owned retention pond adjacent to the wellfield site. Due to its proximity to the wellfield the potential for aquifer penetration from this site is high. Therefore, restricted access to this pond should be considered.

2. Beaches, Shores, and Estuarine Systems

No significant beach or dune areas are located in the study area. There are small manmade beach areas located at Sunset Beach and Fred Howard Park. Anclote Key represent the northern extent of the Gulf Coast barrier island system and is protected through the state park system.
The shoreline and estuarine systems were inventoried as a part of the Coastal Management/Conservation Element and are identified in Figure 19 of that element.

3. Rivers, Bays, Lakes, Floodplains, and Harbors

The major waterbodies located within the boundaries of the study area are shown by Figure 19 of the Coastal and Conservation Element. Almost 3/4's of the study area is located within the 100 year floodplain (Figure 20 of the Coastal and Conservation Element). This area is already predominantly urbanized.

4. Wetlands

Figure 20 of the Coastal and Conservation Element provides a wetlands inventory of the study area taken from the U.S. Department of the Interior National Wetlands Survey as provided by SWFWMD GIS. Descriptions of each category can be found within the Coastal and Conservation Element.

Wetlands occur in and around Tarpon Springs, but are primarily associated with the major waterbodies; Gulf of Mexico, Anclote River, and Lake Tarpon. Isolated wetlands which were once part of a larger system of interconnected wetlands are also present. Wetlands are a type of ecological community which support a variety of plant and wildlife, and are dependent upon water inundation. This inundation may be permanent, seasonal, or temporary. In addition to serving as a wildlife and plant habitat wetlands serve to retain water, regulate the flow of water, filter nutrients, and protect upland areas from flooding and storm surges. Problems associated with the development of wetlands include flooding, loss of aquifer recharge, loss of habitat, loss of impact absorption during storm surges, the undermining of roads, structures, and public facilities, and malfunctioning septic systems. The development of wetlands is subject to the jurisdiction of the Army Corps of Engineers, the State Department of Environmental Protection, and, the Water Management Districts, and can be subject to review by local governments and the Regional Planning Councils. The permitting process is known as dredge and fill. A more detailed inventory of wetland species and wildlife habitat can be found in the Coastal Management/Conservation Element of the Comprehensive Plan.

5. Minerals and Soils

No mineral deposits of commercial value are known to occur within the study area.

Figure 5 provides a map showing soil associations found in the study area. A map showing soil associations can be a useful guide for site selection and planning. However, management of the specific site will depend upon such details as slope, density, depth, storiness, drainage, permeability, and other characteristics. Appendix C contains excerpts and tables from the Pinellas County Soil Survey that provide information regarding suitability for various development types as well as the ability of various soils to support vegetative habitats and wildlife.

Soil limitations are described as slight, moderate, severe, and very severe. Slight limitations are generally minor and can be easily overcome. Properties associated with these soils are favorable for the indicated use and can be expected to provide good performance with low maintenance cost. Moderate limitations can be overcome by careful planning, good design, and special maintenance measures. Soils for the indicated use types that are described as severe are difficult and costly to overcome. Development of these soils requires major soil reclamation, special design, and intensive maintenance. Very severe limitations are so unfavorable that the indicated use is cost prohibitive in most cases. Again, the ratings are not intended to show site specific suitability, but are intended to indicate the degree or intensity of development related problems that can be expected to occur.

Soil characteristics and suitability for the intended use should be examined with each development proposal.

6. Vegetative Cover, Wildlife Habitat and Marine Resources

Figure 19 of the Coastal and Conservation Element identifies undeveloped land areas by the Florida Land Use Cover and Classification System (FLUCCS) designation. The purpose for classifying the land in this manner is to identify those areas that may provide critical wildlife habitat.

It is the intent, through the implementing policies of this Comprehensive Plan, to preserve areas identified as wetlands and to conserve critical upland habitat by setting aside a percentage of upland for preservation while allowing full development rights to be transferred to the remaining upland areas. Development shall be located on the least environmentally sensitive areas.

Environmentally Sensitive areas include, but are not limited to, floodplains, wetlands, rare vegetative communities, listed species habitat, and areas of significant upland habitat as defined in FLU Policy 1.1.12. Property proposed for development that may affect these areas shall also require an endangered and threatened species analysis prior to any development order being issued. Development proposals which may impact wetlands shall be required to adhere to the Goal 1, Objective 1.1, and Policy 1.1.1 of the Coastal Planning and Conservation Element regarding wetland impact and mitigation requirements.

Wetland buffers shall be provided as required in the Land Development Code and as outlined in the Goals, Objectives, and Policies of the Coastal Planning and Conservation Element.

C. General Range, Density, and Intensity of Existing Land Uses

1. Breakdown of Existing Land Uses

Table 1 provides a summary of the existing land use acreage by category for the Tarpon Springs. Table 2 provides the percentage of category usage for the study area, Tarpon Springs City limits, and unincorporated Pinellas County.

Table 1 Existing Land Use, Incorporated City

DESCRIPTION	EXISTING LAND USE ACREAGE	% of Total Land Parcels
Single Family	1,609.940	33%
Mobile Home	190.790	4%
Duplex/Triplex	26.840	1%
Multifamily	290.620	6%
Commercial	285.680	6%
Industrial	139.830	3%
Public/Semi-Public	352.220	7%
Agricultural	8.470	0%
Recreation/Open Space	709.430	14%
Vacant	573.810	12%
Miscellaneous	69.173	1%
Conservation/Preservation	664.180	13%
Marinas	23.850	0%
SUBTOTAL - LAND PARCELS ONLY	**4,944.833**	100%
Submerged Lands	175.665	

ROW	839.850	
SUBTOTAL - LAND PARCELS, ROW, AND SUBMURGED LANDS	**5,960.348**	
Other Water Within Municipal Limits	5,304.295	
TOTAL	**11,264.643**	

Pinellas County Planning Department, January 2007
Pinellas County Property Appraiser's Office, October 2006
Various municipal staff, March through June 2007

Table 2 Existing Land Use, Planning Area

Existing Land Use for Planning Area (1)			Gross Acreage: 7196.806
DESCRIPTION	NET ACRES	% OF NET	% OF GROSS
Agricultural	29.58	0.46	0.41
Commercial	353.58	5.48	4.91
Conservation/Preservation	911.64	14.13	12.67
Duplex / Triplex	54.03	0.84	0.75
Industrial	257.24	3.99	3.57
Marinas	34.61	0.54	0.48
Miscellaneous	478.81	7.42	6.65
Mobile Home	259.06	4.02	3.6
Multi-Family	312.16	4.84	4.34
Public/Semi-Public	344.9	5.35	4.79
Recreation/Open Space	732.95	11.36	10.18
Single Family	1920.75	29.78	26.69
Vacant	761.19	11.8	10.58
TOTAL	6450.51	100	89.63

1. Does not include submerged lands, rights of way.
2. Provided Pinellas County Planning Department, August 2007

2. Adjacent Land Uses

The Greater Tarpon Springs Planning area includes portions of unincorporated Pinellas County. The existing land use map in Figure 2 provides information as to the nature of adjacent unincorporated land uses within Pinellas County. The north boundary of the Planning area is Pasco County. This area is characterized primarily as residentially development land with a central corridor of commercial uses fronting on US Highway 19.

The City of Tarpon Springs is responsible for providing fire service, emergency medical service, sanitary sewer, and potable water to the entire planning area. Portions of unincorporated Pinellas County located within the service area are as follows:

- Residentially designated sector south of Curlew Place (CR 80) and north of Klosterman Road;
- Commercial outparcels along Alternate U.S. 19 south of the Tarpon Springs General Hospital;
- Commercial and mobile home park outparcels in the vicinity of the U.S. 19 and Klosterman Road intersection;
- Areas along the north bank of Lake Tarpon and west of Salt Lake;
- The north bank of the Anclote River.

An enclave is defined as a unit of land completely enclosed within a separate jurisdiction. Figure 1 graphically illustrates the City boundaries and unincorporated territory. County enclaves are identified in Figure 1 also.

A municipal enclave located in Pinellas County is the St. Petersburg Junior College Campus at Tarpon Springs on the south side of Klosterman Road.

Along the north shore of Lake Tarpon there are several residential parcels which are partially located in the City and partially in Pinellas County. These parcels are not technically enclaves but represent an unusual anomaly.

The majority of unincorporated land is located on the north bank of the Anclote River. This area is virtually cut off from the mainstream of Pinellas County by geography and represents a logical future extension of the City boundaries.

With the passage of Ordinance 2006-33 (Appendix D) the City of Tarpon Springs mandates that any unincorporated parcel of land seeking to establish connections to City utilities or increase existing service of City utilities must annex (if contiguous) or agree to an annexation covenant upon contiguity with the City of Tarpon Springs city limits. As a result, the City of Tarpon Springs anticipates a more rapid rate of annexation of the remaining land within the Greater Tarpon Springs Planning Area.

3. Areas of Critical State Concern

There are no areas designated critical State concern pursuant to Section 380.05, Florida Statutes, located within the study area.

D. Population Projections

From 1990 to 2000, the City's population grew from 17,874 to 21,003, a 17.5% increase. Since 2000, the City of Tarpon Springs has had an estimated growth of approximately 2.1% per year according to annual population estimates by the University of Florida Bureau of Economic and Business Resarch (BEBR). For the purposes of projecting population, the City utilizes projections provided by Pinellas County for the both the City and for the Annexation Planning Area (also referred to as the Greater Tarpon Springs Planning Area as shown in Figure 1). The City's service boundaries for Police and Fire Protection, Sanitary Sewer and Potable are co-terminus with the Greater Tarpon Springs Planning Area. In addition, specific to the Housing Element, the City utilizes population projections provided by the Schimberg Housing Needs Assessment. Projected population is provided below. Methodology for the Shimberg projection is provided in Appendix E. Pinellas County utilizes a Double Exponential Growth Model.

Table 3 Permanent and Seasonal Population Projections

Projection Method and Area	2005	2010	2015	2020	2025
City Population[1]	24465	26108	27361	28306	29012
City Population[2]	23660	25876	28107	30359	32603
City Seasonal Population [3]	2380	2562	2696	2796	2875
Greater Tarpon Springs Planning Area Population [4]	28131	30033	31487	32582	33401
Greater Tarpon Springs Planning Area Seasonal Population [5]	2842	3059	3224	3348	3442

1. Municipal Population Projections, Pinellas County Planning Department
2. Municipal Population, Florida Housing Data Clearing House, Shimberg Housing Needs Assessment
3. Municipal Seasonal Population Projections, Pinellas County Planning Department
4. Annexation Planning Area (Greater Tarpon Springs Planning Area) Population Projections, Pinellas County Planning Department
5. Annexation Planning Area (Greater Tarpon Springs Planning Area Seasonal Population Projections, Pinellas County Planning Department

IV. LAND USE ANALYSIS REQUIREMENTS

A. Availability of Facilities

1. Transportation

Roads located within the study area include those under the responsibility of the Florida Department of Transportation (FDOT), Pinellas County and the City of Tarpon Springs. The major transportation routes serving Tarpon Springs are U.S. 19, U.S. Alternate 19, Tarpon Avenue, and Keystone Road (see Figure 6). All of these roads are the maintenance responsibility of the State of Florida with the exception of Keystone Road, which is a Pinellas County roadway. All four (4) roadways are essential to regional mobility, and a majority of the current congestion levels can be attributed to regional growth in the Pinellas/Pasco/Hillsborough tri-county area.

The Transportation system within Tarpon Springs generally follows a grid pattern. The exception being along the City's Bayous where the roadways follow the natural contour of the waterfront.

The road pattern north of the Anclote River is not developed to a great extent with the exception of the major roadways. If industrial growth is to occur in this area improved access conditions for truck traffic will be necessary. Transportation circulation impacts must be considered with all new development order proposals in this area (as well as Citywide) and access improvements should be with developer participation. Three major road segments are identified within the Transportation Element that are necessary to ensure continued adequate levels of service and completion of the major grid pattern within the city. Those segments are: Meres Blvd from Alternate 19 to US 19; Disston Ave (Belcher Road Extension) from Klosterman Road to the Meres extension; and L&R Industrial Blvd from Anclote Road to Anclote Blvd.

In 2007 the City contracted with a consultant to assist in drafting and gaining approval for a Multi-Modal Transportation District for the urban core of the City of Tarpon Springs. The intent of establishing the MMTD is foster development and redevelopment within the City's adopted Community Redevelopment

Area. The MMTD will require developers to utilize design techniques that foster "livable walkable communities" in exchange for increased densities and intensities. The MMTD also recognizes the limited ability of the City to add new vehicle lanes and instead opts for improved sidewalks, bike lanes, and other improvements to improve modal split toward alternatives to the personal vehicle. It is also the intent of the City, upon adoption of the MMTD to focus increased population density back into the traditional urban area where services already exist. The MMTD boundary is identified in Figure 7.

A more detailed analysis can be found in the Transportation Element of this comprehensive plan.

2. Sanitary Sewer

The City of Tarpon Springs is responsible for providing sanitary sewer to a service area coterminus with the boundaries of the Greater Tarpon Springs Planning Area. This includes portions of unincorporated Pinellas County. Isolated pockets of non-sewered development currently exist at scattered locations throughout the City. (refer to Sewer Sub-Element of the Utilities Element).

The City of Tarpon Springs original sewer system was constructed in 1914. The system served downtown, the Sponge Docks, and associated residential areas east of Spring Bayou, Whitcomb Bayou and Tarpon Bayou. There was no treatment of effluent, but rather direct discharge into the Anclote River and bayous. A more extensive sewage treatment plant and collection system was constructed in 1950 and was upgraded to a "secondary" treatment level utilizing the "contact stabilization" process in 1975. This upgraded sewage treatment plant was designed for a capacity of 1.0 million gallon per day (MGD) and was subsequently modified to achieve a capacity of 1.25 MGD. Over the next several years the treatment process was changed from "contact stabilization" to "complete mix-activated sludge" which increased the capacity to 2.5 MGD. In 1984, the City began construction of a 4.0 MGD Type I Wastewater Treatment Facility. The facility began operation in 1986 and uses the Bardenpho Biological Nutrient Removal (BNR) process. Bardenpho BNR treatment is a five-stage complete mix sludge process designed to provide efficient and economical removal of biochemical oxygen demand (BOD), nitrogen, phosphorus and total suspended solids (TSS) by alternating stages of anoxic and aerobic conditions. The wastewater treatment facility is currently operating above advanced wastewater treatment (AWT) standards and in 2004 won a State of Florida Department of Environmental Protection (DEP) award for Excellence in Operations and Maintenance, and a State of Florida DEP award for Excellence in its Industrial Pretreatment Program. The current average daily flow of the wastewater treatment plant is 2.14 MGD or 53% of capacity. The unicorporated service area generates approximately 8.9% of total flow. The land uses served are a combination of residential, commercial and industrial. The current Level of Service for the plant is 82 gallons per capita per day. Based upon maintaining this standard the City has additional capacity to serve an additional 22,400 persons. This is adequate to accommodate the city's projected planning area population of 33, 401 by year 2025 with no additional capacity requirements.

The City estimates that there are currently 1,267 households within the sewer service area that utilize septic systems. Eight major areas were identified along with prioritization for funding by Parsons Engineering Services, Inc. in 2000.

A more detailed analysis can be found in the sanitary sewer sub-element of the comprehensive plan.

3. Potable Water

The City of Tarpon Springs is responsible for providing potable water to a service area coterminus with the boundaries of the Greater Tarpon Springs Planning Area. This includes portions of undeveloped Pinellas County.

The City of Tarpon Springs is a wholesale water customer of Tampa Bay Water through Pinellas County Utilities. Pinellas County provides approximately 80% of the City's water needs with the remainder generated from wells that are owned and operated by the City.

The City of Tarpon Springs distributed an average of 3.6 MGD in 2006. The population of the water service area is estimated at 30,631 (service area population is based on the number of active water accounts, plus an assumed 5 percent seasonal/transitional, and 3.5 persons per connection). Therefore, the level of service provided is currently 117 gpcd. This level of service is less than the adopted level of service standard for Pinellas County of 125 gpcd. Based on the adopted level of service standard for Pinellas County of 125 gpcd, population growth in the service area is estimated to increase the demand for water to 4.6 MGD by the year 2015 and 6.3 MGD by the year 2030. This is a conservative estimate which assumes 100% connection to potable water and the actual demand will most likely occur at a slower rate. If the City continues to provide 20% of its water needs, the City must produce 920,000 gpcd by the year 2015 and 1.26 MGD by the year 2030. The remainder would have to be purchased from Pinellas County Utilities or secured from an alternative water source.

In a proactive effort to gain water supply independence, the City of Tarpon Springs has begun a feasibility analysis to determine if an adequate water supply can be extracted from the aquifer within the Tarpon Springs municipal boundaries. A preliminary investigation is being performed to assess the feasibility of developing additional groundwater from the area along Disston Avenue. Furthermore, in 2006, the citizens of Tarpon Springs approved a referendum for the financing of a Reverse Osmosis (RO) water plant, the purchase of land/easements and the ability to execute the necessary construction contracts. The RO plant will utilize brackish groundwater as the source of a sustainable water supply for the City. The approach for this project will be a phased one with the most economical groundwater sources developed first, followed by sequentially more brackish sources.

Phase I, when complete, will provide 1.37 MGD of drinking water. Factoring in seasonal variations in fresh groundwater production, approximately 25% of the City's demand can be met with Phase I. An additional 5.0 MGD of supply would provide the additional water needed to meet the City's current and future demand and would provide an additional 1.5 MGD for possible wholesale to Tampa Bay Water. Phase II involves the development of a slightly brackish water supply with membrane treatment. A 5.0 MGD facility is recommended for consideration as a means to supply the City's current and future needs, and the ability to sell surplus water to the region. Upon successful completion of Phase II, a Phase III expansion for an additional 3.0 MGD should be considered for additional supply capacity.

A more detailed analysis can be found in the Potable Water sub-element of the comprehensive plan.

4. Solid Waste

The City of Tarpon Springs previously operated a Class III municipal landfill located at the southern end of Levis Avenue (See Figure 3). The landfill was limited to the disposal of trash, yard clippings and the spreading of sludge from the wastewater treatment facility. Due to escalating financial and environmental concerns, the landfill was closed in 1990 under FDEP closure permit #016-01-YT

Solid waste collection in the City of Tarpon Springs is provided by Waste Management of Pinellas County under a franchise agreement which will expire September 30, 2012. Waste Management disposes of the solid waste at the WTE (Waste to Energy Facility) and also provides curbside recycling services. In 2006, the City of Tarpon Springs generated 10,510 tons of solid waste. The City's solid waste generation is primarily from residential land uses, although commercial and industrial land uses also generate small amounts of solid waste.

The 2006 Pinellas County Concurrency Test Statement stated that the solid waste and resource recovery system is operating at an acceptable level of service. Pinellas County has an adopted level of service standard of 1.30 tons per person per year. The projected demand for 2007 is 1,217,478 tons per year (1,214,082 tons per year plus 3,396 tons (associated with the Service Area population growth). The

projected level of service demand for the solid waste and resource recovery system is 1.08 tons per person per year.

A more detailed analysis can be found in the Solid Waste sub-element of this comprehensive plan.

5. Stormwater Management

Approximately 3/4's of the City of Tarpon Springs lies within the 100 year floodplain. Many of these low-lying areas are heavily urbanized and were developed before current stormwater regulations were put into effect. Frequent flooding of these areas can occur during heavy rains coupled with high tides. In 1990 the City contracted with Dames & Moore to create a Master Drainage Plan. A five phase plan was developed with the following objectives:

- To develop an inventory of the existing stormwater drainage facilities, the watershed drainage basins, and other related hydrologic parameters;
- To evaluate existing and proposed stormwater drainage systems and identify problem areas and deficiencies;
- To establish a desired level of service criteria for the various components of the stormwater drainage system;
- To develop and apply a stormwater management computer model capable of simulating storm runoff and pollutant loadings under existing land use conditions within the City of Tarpon Springs watershed areas;
- To evaluate alternative management plans to meet the service level desired based on major deficiencies identified through data collection and modeling;
- To generate a Master Drainage Plan with established improvement priorities and engineering and construction cost estimates;
- To develop a ten-year Capital Improvement Plan based on system requirements identified in the Master Drainage Plan;
- To identify and develop potential sources of funding for stormwater improvements, including Stormwater Utility; and
- To implement proposed recommended improvements, including detailed design, plans and specifications, and services during bidding and construction

In 1999, the City established a Stormwater Enterprise Fund to support the cost of providing stormwater services on a continuing basis. However, the funds collected under this system only covered a small portion of the operation and maintenance costs and initial National Pollution Discharge Elimination System (NPDES) permit activities. Subsequently in 2002, the City contracted with Parsons Engineering Science, Inc. to perform a Stormwater Utility Impervious Rate Study with the purpose of creating a dependable revenue stream to meet the City's stormwater management responsibilities.

The City of Tarpon Springs regulates drainage through Article IX of the Comprehensive Zoning and Land Development Code (LDC). The LDC requires all new development provide for on-site stormwater retention and treatment. The use of retention ponds, swales, vault systems, etc. are some of the mechanisms that achieve this purpose. An engineering analysis on the quantity, direction of flow and percolation rates for the 25-year frequency storm, 24-hour duration is required. Further, the LDC includes a stormwater retrofit requirement whereby development/redevelopment projects that meet certain thresholds are required to upgrade the entire stormwater system to the current regulations.

A more detailed analysis including prioritization of drainage improvement projects can be found in the Stormwater sub-element of the utilities element.

6. Groundwater Aquifer Recharge

The Southwest Water Management District (SWFWMD) has classified Pinellas County as an area of either generally no recharge, or very low known recharge. Much of the City is heavily urbanized where the surface is impermeable or located where saltwater intrusion has invaded the water table. A 1987 SWFWMD report lists an area west of Lake Tarpon as a location for moderate recharge.

A more detailed analysis can be found in the Groundwater Aquifer Recharge sub-elements of the Utilities Element.

7. Active Development Orders

Generally, a development order will expire within one year unless the City receives an application for a building permit. Table 4 summarizes current development orders that are either under construction or have not otherwise expired:

Table 4 Active Development Orders

		Units	Square Footage	Location	Primary Use
1	Riverwatch Commercial Center, Phase I		89,000	N. US 19	Hard Goods / Retail sales
2	Walmart		225,000	N US 19	Retail Sales
3	Regions Bank		3,820	S. Alt 19	Financial
4	Gulf Breeze Plaza		7, 500	W. Gulf Rd	Retail/Office Spec
5	The Banyans	62		W. Meres Blvd	Single Fam Attached
6	Callista Cay Townhomes	62		S. Alt 19 / Meres BLVD	Single Fam Attached
7	Anclote Bend	17		N. US 19	Single Fam Detached
8	Riverview at Tarpon Townhomes	10		Athens St	Single Fam Attached
9	Riverside Estates	15		N. Florida Ave	Single Fam Detached
10	Rainville Park Rd Townhomes	81		N. Alt 19	Single Fam Attached
11	Hidden Ridge Townhomes	34		Curlew Place	Single Fam Attached
	Total	**281**	**325,320**		

8. Public Facility Summary

A summary of the public facility issues identified by this section of the report is provided as follows:

- Major roads within the study area primarily provide for regional mobility
- These regional roadways will be managed according in accordance with the requirements of Senate Bill 360 effective July 1, 2009.
- The primary transportation issues will relate to the ability of the regional roadways to function and to implement alternative transportation choices within the MMTD.
- Development north of the Anclote River will require improved access and should include a mix of uses to foster shorter travel times to work and secondary trip ends.
- The majority of potable water is purchased from Pinellas County. However the City has begun the process of permitting, financing, and constructing it's own Reverse Osmosis water treatment plant.
- Solid Waste Collection is provided by contract with Waste Management of Pinellas County.
- Solid Waste is disposed of at the Pinellas County resource recovery facility
- Prioritized stormwater retention facilities will need to be constructed to improve existing drainage problems.

The primary active development order issue is the impact of projects north of the river on Alternate 19 and U.S. 19 traffic congestion, however according the 2007 MPO Level of Service Report both of these roadways are operating at an acceptable level of service.

B. Suitability of Undeveloped Land for Development

1. Gross Vacant Land

As shown by Table 2 there is approximately 760 acres of vacant land in the study area. From this inventory of vacant property, growth is expected to primarily occur in two (2) major areas:

- North of the Anclote River
- Within the boundaries of the Community Redevelopment Area.

a) North Anclote

As shown by Table 2, approximately 11% of upland land area is identified as vacant land. Much of this land is located on the north side of the Anclote River. As previously discussed, this area is isolated from the rest of unincorporated Pinellas County and is primarily served by City facilities. Therefore, physically the area represents a logical extension of City boundaries and development activities are expected to require annexation. A significant portion of this land has historically been designated for, but underutilized for industrial development. As municipal water and sewer service becomes more readily available growth is inevitable, however even with improved roadways and utilities, the general location of Tarpon Springs makes industrial development problematic Citywide due to very difficult access to Interstate 75 or a regional airport. For these reasons, the City should consider appropriate complimentary uses to add to the targeted industrial uses. This area is also unique in its historical development of marine industrial uses, commercial fishing related industries, wet and dry slip marinas, and general water dependent uses. The City should coordinate with Pinellas County and Pinellas Planning Council to develop a cohesive development plan in the form of a Special Area Plan for the north side of the Anclote River to ensure proper protection of existing water dependent uses. Residential development of the area will primarily occur east of Alternate U.S. 19.

b) Community Redevelopment Area

The City adopted a Community Redevelopment Area (CRA) in 2001 in conjunction with the Downtown Redevelopment Plan. The CRA is identified in Figure 7. The City intends to adopt a Special Area Plan (SAP) under the Countywide Plan Rules, in conjunction with the Multi-Modal Transportation District (MMTD) intended to focus future development within this area. The SAP will utilize a parallel development code based upon the Smartcode ©. Developers utilizing the Smartcode based plan will gain the benefit of increased density and intensity. The results of the feasibility analysis of the MMTD indicated that the current jobs-to-housing ratio is sufficiently imbalanced to warrant increased residential densities within the MMTD. The City's intent is to further focus that density within the smaller CRA.

2. Soils

Soil suitability is an important consideration in land development activities. Suitability can be a hindrance to septic tank usage, building foundations, facility construction, and recreation areas. Generally, soils with a high water table, low degree of compaction, and slow permeability present limitations for urban uses.

Building sites require stable foundations, and should be reasonably free from flooding. Tarpon Springs is characterized primarily by the Astatula series, which occur on upland ridges. Soil limitations are slight to moderate. However, areas adjoining wetlands, the shoreline, the Bayous, and Lake Tarpon present more severe problems. Development along these areas should be reviewed more closely. The soils map is shown in Figure 5.

Septic tanks are more commonly in use in rural areas but also occur in developed areas where sewer service is nonexistent or inadequate. To function properly, a septic tank must have soils with adequate absorptive capacity and a low water table. Conversely, soils which have rapid permeability and perform well perform well present a hazard to pollution of the ground water. Again, areas near wetlands, Lake Tarpon, and the shoreline present severe limitations. It is recommended that the proliferation of septic systems be discouraged.

Roadway infrastructure requires the preparation of a strong foundation and gentle slopes. High water tables and flood hazards present a severe limitation. The expansion of infrastructure should avoid wet areas with flooding potential.

3. Topography

The northwestern part of Pinellas County is characterized by rolling ridges from 25 to 97 feet above sea level. Although Tarpon Springs has ridges, the majority of the area is low due to the Anclote River drainage basin. Native vegetation consists of pine, turkey oak, and grasses.

A majority of the lowlands are already urbanized. Undeveloped properties are primarily located in upland areas. However, some of the expired development order sites are located adjoining wetlands and should be designed properly, taking the wetland constraints for development into consideration.

4. Natural Resources

Natural resources which characterize the study area and affect the development of vacant land include the following:

- Estuaries
- Wetlands (Marine, Estuarine, Freshwater)
- Transitional Zones
- Uplands
- Surface Water Bodies (Anclote River, Lake Tarpon, Bayous, Gulf of Mexico)
- Groundwater
- Wildlife Habitats
- Soils
- Air Quality

The characteristics of these resources are discussed in detail in the Coastal Management/Conservation Element, and the resources should be managed in accordance with the recommendations found there.

5. Historic Resources

The historic resources which most often affect the suitability of vacant land for development are archeological and prehistoric resources. The locations of these resources have been inventoried and can be found in the Historic Element of this Comprehensive Plan. Generally, prehistoric resources are found in close proximity to a freshwater source and on well drained elevated soils. Often the sites are found in small knolls and ridges. Several of the inventoried sites border vacant parcels and the locations of expired development orders. Therefore, sites which exhibit the known locational characteristics should be inventoried for pre-historical resources prior to development taking place. The Historic District is shown in Figure 7.

C. Amount of Land Needed to Accommodate Projected Population Growth

1. Residential

The results of the 2000 census indicate that the City of Tarpon Springs had a population of 21,003 persons and 10,759 housing units. At that point in time the vacancy rate was 15.7% and the average household size was reported as 2.27 persons. The methodology utilized to project needed land for residential units assumes that the average household size will remain constant through the 2005-2025 planning period. A review of building permit data indicates that a net increase of 1,041 dwelling units (single family and multifamily) were added between 2000 and 2005. Additionally, the Bureau of Business and Economic Research estimates that the City's population increased from 21,003 in year 2000 to 23,660 in year 2005. Two sets of population data are recognized in the Comprehensive Plan. For the purposes of projecting housing needs, the higher estimates of the Shimberg Housing Needs Assessment will be utilized. These population estimates are somewhat lower than the Pinellas County projections up to 2010, however the Shimberg projections are higher from 2015-2025 and will provide a more conservative estimate for planning purposes. Population and Housing Projections are shown in Table 5 below. Interestingly, as Table 5 shows, in 2005 there was an over-supply of housing.

Based upon a net increase of 1041 housing units from 2000-2005 and projected 281 units within active development orders, there is adequate housing stock to accommodate projected population beyond the year 2010. Vacant lands designated for residential development and buildout potential is shown in Table 6. The table includes projections for City and Planning Area lands. A comparison of needs to availability through 2025 indicates a need for approximately 720 additional housing units above what can reasonably be expected through the development of residentially designated vacant lands. While some of these needs can be met through annexation of lands within the Planning Area, it will be necessary to accommodate additional density through 2025 and beyond. The most appropriate location for this density is within the existing urban downtown. As indicated earlier, the City intends to adopt an overlay district for the City's CRA that will increase density and intensity in association with a multi-modal transportation district with a clear focus on creating a more livable walkable downtown and urban core.

Table 5 Population and Housing Needs Projections

	2000 Census	2005 Estimate	Projections 2010	2015	2020	2025
Population (Schimberg) [1.]	21003	23660	25876	28107	30359	32603
Calculated units needed [2.]	10759	10423	11399	12382	13374	14363
Actual Units [3.]	10759	11800	12081	na	na	na
Additional Units needed [4.]	n/a	-1377	-682	301	1293	2282

1. Year 2000 is from US Census, 2005 estimate is from BEBRS, 2010-2025 is Shimberg projections.
2. Calculated units I derived by dividing population by 2.27 persons per household to get projected number of units needed
3. For year 2000 Actual Units is provided from 2000 Census. For 2005 City of Tarpon Springs Building Permit data was added to 2000 data (net increase of 1041 units). For 2010, projected completion of 281 units within active development orders was added to 2005 estimate. No projections are made about actual units beyond 2010.
4. Additional units needed is calculated by subtracting Actual Units from Calculated units. For years 2015-2025, Actual units is based upon 2010 estimate of 12081 units.

Table 6 Residential Land Available for Development

Vacant Residential Land, 2006 by FLUE Designation	Citywide Acres	Planning Area Acres	Density	Total Units, City	Total Units, Planning Area
RR .5 UPA	22.53	97.41	0.5	11.265	48.705
RS 2.5 UPA	0.59	15.44	2.5	1.475	38.6
RL 5 UPA	164.4	195.01	5	822	975.05
RU 7.5 UPA	76.25	108.29	7.5	571.875	812.175
RLM 10 UPA	9.83	11.92	10	98.3	119.2
RM 15 UPA	38.5	68.5	15	577.5	1027.5
Total Projected Build Out				2,082.4	3,021.2
Build-out Assuming 25% reduction for infrastructure				**1,562**	**2,266**

Source: Pinellas County Planning Department, 2005.

2. Commercial

Future commercial land uses are estimated based upon per capita of commercial acreage present in 2005 The per capita approach assumes that the commercial acreage per person present in 2005 is satisfactory for current demand, and will grow at the same per capita rate in the future.

The future demand for commercial acreage is based upon the City of Tarpon Springs permanent population and does not estimate the demand of the unincorporated study area. Table 7 estimates a demand for 106 additional commercial acres to the year 2025. The majority of these future commercial acres are located along the Alternate U.S. 19 and U.S. 19 corridors.

Table 7 Commercial Acreage Needs

	2005	2010	2015	2020	2025
Population (Schimberg)	23660	25876	28107	30359	32603
Per Capita Commercial Acreage [1.]	84.5	84.5	84.5	84.5	84.5
Projected Acreage Needs [2.]	280	306.2	332.6	359.3	385.8
Net New Acreage Needed [3.]		26.2	26.4	26.7	26.6

1. Year 2005 population divided Year 2005 Commercial Acreage (280 acres) = 84.5 per capita commercial acreage.
2. Projected commercial acreage is calculated by dividing the projected population by the constant 84.5 acres from 2005.
3. Net new acreage for each five year increment for a total of 105.6 new acres needed.

Based upon acreage available (Table 8), there is adequate lands designated for commercial development to meet expected needed additional acreage of 106 acres out to year 2025. Only approximately 7 additional acres of commercially designated vacant lands are located within the Planning Area. Given increasing trends toward higher density mixed use developments the City may actually see a decreasing need for commercial lands (on a per capita basis) during the planning period out to 2025. Due to the availability of commercially designated land outside of the CRA it becomes increasingly difficult to attract new development into the CRA especially when floor area ratios are only marginally higher within the CRA compared to locations along US 19. In order to address development inequities and spur commercial and mixed use redevelopment within the CRA the City intends to increase the floor area ratios and total development potential within the CRA. Such increases in density and intensity will require adherence to form based urban design requirements based upon the Smartcode.

Table 8 Commercial Acreage Available

Vacant Land Use by Future Land Use Designation	Acres Available with City of Tarpon Springs
Residential Office Retail	20.91
Commercial Neighborhood	2.94
Commercial Limited	6.68
Commercial General	74.19
Total	104.72

3. Industrial

Vacant acreage currently designated for industrial development in the Planning Area is summarized by Table 9. Of the 188 vacant industrial acres, ninety-five percent (95%) are located north of the Anclote River. The majority of the vacant acreage (70%) is unincorporated.

Table 9 Industrial Land Available

Vacant Land Use by Future Land Use Designation	Acres Available with City of Tarpon Springs	Acres Available within the Planning Area
Industrial Limited	53.21	86.01
Industrial General	1.97	46.53
Total	**55.18**	**132.54**

It is significant that these numbers have remained virtually unchanged since 1990. Lack of adequate infrastructure, most notably transportation access to rail, interstate, shipping, or air freight terminals is non-existent. The designations of industrial use for this area have been held over from the past when Stauffer Chemical was operational and rail access operated through the area. While preservation of industrial lands is important Countywide, continuing to restrict vacant lands to industrial designation in many areas of the City should be evaluated as a policy decision. Further, the City of Tarpon Springs should conduct an evaluation of other suitable uses for these lands. Of particular interest is the future of the industrially designated lands directly adjacent to the Anclote River. These areas (designated as working waterfront in the Coastal Element) have provided for the water dependent uses associated with operating and maintaining a working port. Boat yards, commercial dockage for fishing, etc rely upon the continued availability of these industrially designated lands. Overall, given the lack of industrial development from 1990 to present, there is more than adequate lands designated for industrial use to meet demand.

4. Public/Semi-Public

Growth in this land use category will primarily come from churches, light utility switching stations/antennas, day care schools, and private clubs. The total new acreage will be negligible.

It is anticipated that City will require a new City Hall facility within the next 5 years. There are two potential sites for construction that are already owned by the City and will most likely be utilized.

Expansion of the City's wastewater treatment facility will occur at the present site. Additional public facility needs over and above the capacity of that property currently owned by the City is not anticipated.

The Pinellas County School Board does not estimate the need for an additional public school site in the Tarpon Springs area. Additional rail facilities are not projected as CSX has been in the process of dismantling its existing rail lines in the area. Future industrial uses will be based solely upon roadway transportation facilities.

The City purchased 11 acres in 2007 on the north side of the Anclote River to construct the Reverse Osmosis Water Treatment Plant.

5. Agriculture

This category currently occupies less than one percent (1%) of the total land use mix.

6. Recreation/Open Space

The Recreation and Open Space Element of this comprehensive plan, identifies all City and County parks. Approximately 1,336 acres of land is currently designated in the Recreation / Open Space or Conservation/Preservation Land Use Designation. The sites are currently City or County owned or in some cases, are set aside conservation lands owned by HOA's and comprise approximately 26% of the land area of the City.

7. Conservation/Preservation

Wetlands and areas of significant upland habitat will be managed in accordance with the policies recommended by the Future Land Use Element, the Coastal Planning and Conservation Element and the Countywide Plan.

8. Marinas

Marina sites currently occupying a small percentage of the total land use. As of 2006 there were 1,130 combined wet and dry slips within the City of Tarpon Springs. Conversely to what has occurred elsewhere throughout the County, the City has seen an increase in the number of slips available to the public. Most of the potential marina sites are located on the north side of the Anclote River where access to deep water occurs. A few smaller areas are available in the Lake Lutea area (Roosevelt Blvd) as either new development or redevelopment of existing wetslip marinas. Marina development on the south side of the Anclote River must compete for space with other uses and will be more limited. Marinas traditionally occur within industrial or commercial land use categories.

D. Need for Redevelopment

From 2000 to the present several key planning efforts, both local and countywide, have occurred that have the potential to shape the future redevelopment of the City of Tarpon Springs. In November, 2005, Dan Burden, a senior urban designer with Glatting Jackson, presented a report on the walkability of Tarpon Springs to the Board of Commissioners. Burden walked through the City with a number of citizens as they discussed ideas, general strategies and a potential model to help develop an economically viable and walkable Tarpon Springs. The report gave an overview and made recommendations on the walkability, livability and active living conditions in four (4) Tarpon Springs neighborhoods: public safety building area, industrial and marine area north of the Anclote River, downtown historic district and Lemon Street area, and the Sponge Docks. The following recommendations for improving walkability were made in the report:

- Complete sidewalk system.
- Develop people friendly streets and connectivity in and between each district.
- Intensify and mix land uses by adding density (18-60 du/a) in select areas and allow accessory units in most areas.
- Provide right-sized housing by encouraging developers to build affordable units that are scaled for neighborhoods.
- Provide clear route information to pedestrians with adequate signs and maps.
- Put focus on the Pinellas Trail as more than for recreation and travel, but as a vitalizing backbone to urban development that will offer a place for residents and tourists to gather and share the city.
- Placemaking by aesthetic considerations of built environment.
- Utility and street furniture to be attractive and coordinated.

- Create play areas for children.
- Make sidewalks and other areas barrier-free for the safety of seniors and people with special needs.
- Enhance walkability by connecting the areas of Tarpon Springs.

A countywide study, Pinellas By Design, began in 2000 within the Economic Development Department of Pinellas County Planning and the Board of County Commissioners. The process used the knowledge of consultants in economics, real estate, and urban design, and has included broad participation from all twenty-four local governments, developers, business community, homeowner and neighborhood associations, and interested citizens. Pinellas By Design creates guidelines and standards for redevelopment that supports livable communities and attracts positive economic development.

Lastly, the Metropolitan Planning Organization created and adopted in 2007 a model set of Goals, Objectives and Policies that foster livable, walkable communities and alternative transportation options. The findings acknowledge the near built-out condition of Pinellas County and its cities and encourage a shift toward other modes of transportation. The model Goals, Objectives, and Policies have been incorporated within Goal 4 of this element and are intended for application within the MMTD.

All of these planning efforts support the City's goal of encouraging quality development and redevelopment within the City of Tarpon Springs. The following areas are specifically identified as focus areas for fostering a livable walkable community through redevelopment.

1. Community Redevelopment Area

The Community Redevelopment Area is identified in figure 7 and contains approximately 230 acres. The CRA, associated TIF, and Downtown Redevelopment Plan were adopted in 2001. Subsequently one amendment has occurred which added the Pappas' Restaurant site to the CRA (not to the TIF) and amended the Downtown Redevelopment Plan to allow for a Special Area Plan to be adopted in accordance with the Countywide Plan Rules. There are five key areas identified within the CRA for special redevelopment needs:

a. North Pinellas Avenue: North Pinellas Avenue from Center Street to Live Oak Street is currently designated for general business. The area is characterized by nonconforming service stations and heavy repair shops. Virtually none of the uses along this roadway are neighborhood oriented. North Pinellas Avenue functions as an access corridor for through traffic and tourist oriented trips destined for Tarpon Avenue and the Sponge Dock area. The existing nonconforming uses are unsightly and nonconducive to the tourist oriented economy. This corridor can serve as a tourist oriented link between Tarpon Avenue and the Sponge Docks, and should be designated for redevelopment in this regard, encouraging mixed use development.. Nonconforming uses should be restricted from expansion and eventually phased out as redevelopment occurs. Strong design controls are needed as properties redevelop to foster a more pedestrian friendly link between the Sponge Docks and Tarpon Avenue. Narrow right of way widths along this corridor should limit building heights to no more than three stories, with two being ideal.

b. S. Pinellas Avenue: South Pinellas Avenue from Boyer Street to Meres Boulevard was traditionally developed for auto oriented services. Many of the buildings are at the end of their useful life and are located below the base flood elevation. The most recent new development has also catered to the automobile with drive through facilities and parking lots fronting along the thoroughfare. This area possesses the widest rights of way and can easily accommodate building heights of 4 to 5 stories. This area is envisioned in the Downtown Redevelopment Plan for office/financial/ and community commercial. Ideally, residential above ground floor commercial is desired with an emphasis toward build to lines and strong pedestrian friendly improvements.

c. Tarpon Avenue: The traditional Tarpon Springs downtown is located along Tarpon Avenue and is the heart of the City's National Register Historic District. Major issues that impede adaptive re-use of these buildings include lack of flexibility with regard to parking, excess commercial

(truck) traffic that creates noise and unpleasant pedestrian conditions, and restrictive density and floor area ratios as compared to other downtown areas., Many store fronts are vacant and in need of repair. A better mix of retail uses and residential uses is needed to compliment the predominant use of antique shops. Lastly, Tarpon Avenue is a state maintained right of way which limits local control over streetscape improvements and amenities.

d. Safford Avenue: Safford Avenue, from Meres Boulevard extended to Pine Street, is an underutilized and deteriorated north/south corridor. Traditionally, Safford Avenue served as the rail corridor for passenger train service. The rails have been removed and replaced with the Pinellas Trail, a 38 mile greenway for bicycle and pedestrian use that stretches from Tarpon Springs to St. Petersburg. Scattered along the corridor are several intensive businesses, such as small warehouses and storage yards. Portions of the southernmost and northernmost segments of the corridor are designated for residential development, although many of the parcels are currently vacant. Much of the corridor is currently deteriorated, and is the focus of criminal activity. The Downtown Redevelopment Plan calls for this area to redevelop as a mixed used corridor. Properties between Safford Avenue and Pinellas Avenue are well suited for intensive commercial / residential mixed use with on street parking on the side streets. Parcels on the east side should be of a less intensive use to protect nearby residential. The primary focus is to enhance the multi-modal aspects of the Pinellas Trail and encourage community commercial uses that cater to local residents, "park once" visitors to the area, and cyclists taking advantage of the trail.

e. Lemon Street: Lemon Street from Safford Avenue to Levis Avenue is mainly underutilized with non-conforming uses, structures that are at the end of useful life, and vacant properties. This area is envisioned by the Downtown Redevelopment Plan an arts related district. Right of way widths are good for up to 4-story buildings with on-street parking as well as bike lanes, landscape strips, and sidewalks. As with the general intent of the CRA, redevelopment should emphasize a mix of office, retail and residential uses.

2. Sponge Dock Area

The Sponge Dock Area has long had cultural ties to the sponging industry and Greek settlers who founded the industry. Although the sponging industry has seen resurgence, the economy is primarily tourist oriented. Mixed among the retail and docking facilities are heavy boat works and boatyards. These heavier marine industrial uses are inconsistent with the lighter tourist oriented water related uses. However, the presence of these uses are also an integral part of the uniqueness and eclectic nature of the area. A walk along Dodecanese Blvd, Athens Street and Cross Streets has a unique feeling that is reminiscent the rural Greek Islands from which the local culture of Sponge Docks emerged. Notably lacking in the area are accommodations for overnight guests. As such, the City recently adopted new zoning guidelines for this area that emphasize redevelopment in a context sensitive manner and also amended height limits to accommodate "boutique" hotels. The City should also explore implementation of a Special Area Plan to further guide development and investigate the possibility of increasing allowable floor area ratios to foster two-three story development.

3. Union Academy Neighborhood

The Union Academy Neighborhood is primarily residential, including public housing sites, and has been traditionally a low income and minority population. This area has been the recipient of Community Development funds in the past. Additional Community Development funds, primarily for housing needs, should be concentrated in the area in the future. This area adjoins the Community Redevelopment Area and special attention must be taken to ensure that redevelopment within the CRA does not adversely affect the neighborhood. Since 2002 a local developer, in conjunction with the Tarpon Springs Housing authority has constructed 28 new units of affordable single family detached structures within the Union Academy neighborhood.

4. Pine Street/City Hall

The area bounded by Spruce Street, Grosse Avenue, Center Street, and Huey Avenue is predominantly an older residential neighborhood. The area is primarily stable, and the major redevelopment needs relate to road resurfacings and water/sewer infrastructure improvements.

5. Stauffer Chemical Plant

The Stauffer Chemical Plant is a 60 acre site located on the north side of the Anclote River in unincorporated Pinellas County. The plant itself is no longer in operation and due to age/modern technology is beyond its useful economic life. Efforts should be made to have this site redevelop as a light industrial park or water dependent use such as a major marina and boatyard facility. The site is identified as a "Superfund" site and a clean-up plan is under review by the US Environmental Protection Agency.

E. Flood Prone Areas

As previously stated, almost 3/4's of the study area is located within the 100 year floodplain (see Figure 8). The area is predominantly urbanized and served by public facilities. Additional development in the floodplain will occur on an infill basis, and must conform to current FEMA and Building Code Requirements. Many existing structures located within the 100 year flood plain are located below the minimum base flood elevation and are at the end of useful life. As these structures are replaced compliance with FEMA elevation requirements will be mandated. Of special concern is redevelopment of commercial structures within traditional urban downtown and tourist areas along the Sponge Docks. These areas have well established urban street patterns with buildings at or near grade. When structures are replaced flood-proofing should be required rather than elevating structures to meet FEMA requirements. Residential should only be allowed over ground floor commercial in these areas. Similarly, predominantly residential areas within the 100 year flood-plain (not within a V-zone) located within the historic district should use building techniques that use a combination of fill and partial elevation transitioned from grade with porches and stoops. This building style is very characteristic of historical homes in Tarpon Springs.

Mobile home parks and subdivisions located in the 100 year floodplain are shown in Figure 8. Mobile home parks located within the 100 year special flood hazard area should not be permitted to expand and unit replacements, additions, and improvements must meet FEMA requirements.

F. Dredge Spoil Disposal Sites

The City is responsible for maintenance dredging of the recreational channels within the City's bayous and those parts of the Anlcote River that are not within the federal channel maintained by the USACOE. The City has an approved permit for the local maintenance dredge activities and has an active dredge disposal site located on City owned property on the south side of the Anclote River. The permit establishes minimum dredge depth requirements and will allow for continued maintenance dredging to those depths in the future. The disposal site is temporary until completion of the project and will reverted to open space upon completion. The site is sufficient for the existing dredge requirements. The temporary dredge spoil disposal site is shown in Figure 7.

G. Hazard Mitigation Reports

The City will review any applicable future hazard mitigation reports and implement appropriate review of development proposals.

H. Multi-Modal Transportation District

Like much of Pinellas County, the City of Tarpon Springs is faced with the challenge of encouraging quality redevelopment that fits the desired community character while also ensuring adequate mobility for residents,

employers and visitors. That is no small challenge for any community. Widening roads to meet those needs in the nearly built-out environment of coastal Pinellas County, with its associated right-of-way costs, impacts to historic buildings and cultural resources, community opposition and lack of financial resources, is an increasingly impractical solution. The City of Tarpon Springs is proposing to adopt a Multimodal Transportation District (Figure 7), as allowed by Florida Statutes, as the financially feasible concurrency management system supporting future development in the City's designated redevelopment area.

A multimodal approach must make a stronger connection between urban form, development character and transportation to ensure an improved array of choices for personal mobility and accessibility that can support desired redevelopment in the City. A Multimodal Transportation District (MMTD) – which requires minimum densities, human scaled design, and a mix of uses that encourage and support transit use, walking, and bicycling – will simultaneously encourage desired redevelopment while improving mobility for both residents and visitors.
The principal roadways providing access to Tarpon Springs' historic downtown – Pinellas Avenue (Alternate US 19) and Tarpon Avenue (SR 582) – are constrained roadways that cannot be widened to meet the existing traffic levels or future demand generated by redevelopment and growth in other areas. US 19, located about one mile east of downtown Tarpon Springs, is on the Strategic Intermodal System (SIS). Tarpon Springs is also a connecting point for Pasco County and Pinellas County fixed-route transit service. Within that transportation context, Tarpon Springs is seeking to revitalize its downtown core areas and encourage redevelopment that provides for a vibrant, thriving destination with a wide range of travel options. Rather than viewing this situation as an inherent conflict, it presents an opportunity to link land use and transportation objectives in a way that promotes more compatible, resource-efficient mobility options at the local level, while supporting countywide and regional mobility and livability initiatives.

To support those objectives, the City is in the process of adopting a Smartcode that will change the zoning code to require that all new development will have an urban form that is pedestrian friendly. The City has also evaluated its pedestrian, bicycle, and transit facilities to determine what capital improvements are needed to transform the Community Redevelopment Area (CRA) to a walkable, transit friendly community. The analysis has also evaluated street connectivity conditions and needs. Tarpon Springs and the Florida Department of Transportation have spent more than $16 million on streetscaping and related improvements for Pinellas and Tarpon Avenues to make the pedestrian experience more pleasant, but a complementary strategy for density, diversity, and design is needed to complete the redevelopment and mobility goals of the City.

In short, the purpose of the MMTD is to link the CRA with important destinations in the vicinity, including the Helen Ellis Memorial Hospital, a major employment center for the City; Saint Petersburg College, a proposed recreational complex located south of Meres Boulevard between Pinellas Avenue and Disston Avenue, tourist destination such as the Sponge Docks and the Greek Village, and the Tarpon Mall. Effective multimodal linkages between these destinations make it easier for a student or professor to get a cup of coffee downtown or Greek food downtown between classes, a visitor to leave the sponge docks and stroll through the "Hibiscus Walk" artist district, or a resident of the historic district to go to the grocery store, all without traveling in a single-occupant vehicle. The following graphic illustrates the City's vision, the proposed MMTD boundary, and the proposed linkages between these and other key destinations. The MMTD boundary is larger than the CRA to capture a better mix of land uses and enable better connectivity between the redevelopment area and surrounding trip origins and destinations.

I. Energy Efficient Land Use Patterns & Reduction of Green House Gas Emissions

The City of Tarpon Springs is committed to the long-term goal of reducing greenhouse gas emissions. The Policy Guide On Planning and Climate Change, published by the American Planning Association April 27, 2008, identifies 18 findings related to Climate Change Policy. These findings serve as the basis for the City's approach to reducing greenhouse gases through the methods listed below with references to applicable Goals, Objectives and Polices (new and existing) that address each strategy. Where appropriate, these strategies are included in Figure 10 of the Future Land Use Map Series.

1. Reducing Vehicle Miles Traveled

The MMTD serves as the "spine" for the City's approach to reducing VMT. It is the goal of the City to promote future residential growth into the City's MMTD in order to improve upon the jobs to housing ratio (see MMTD Quality of Service Analysis, Appendix B of Transportation Element). The MMTD requires improved cycling, pedestrian and transit levels of services and reduces emphasis on traditional vehicle levels of service. Improvement of the jobs to housing ratio, along with improved alternative transportation modes will reduce overall VMT within the district. The central location of the MMTD allows it to conveniently serve as a major employment and shopping district for the entire City. A key implementation strategy is the completion of a bicycle and pedestrian masterplan which focuses on using these alternative modes to bring residents to the central MMTD. A second strategy to reduce VMT is to allow limited neighborhood commercial nodes at key intersections in predominantly residential districts. This would apply to the western ½ of the City. These uses must be well designed to integrate with the residential character of the area. A third strategy to reduce VMT is to promote Transit Oriented Redevelopment (TORD) at key intersections on US Highway 19 (SIS Facility) which has been identified on the TBARTA (Tampa Bay Area Regional Transit Authority) Master Plan as an Express Bus route. Lastly, it is important to protect the City's existing and future employment centers so that residents who wish to live and work locally may continue to do so. The industrially designated area on the north side of the Anclote River is a prime area for future employment opportunities and should be protected from conversion to residential uses. Goals, Objectives, and Policies found in the Future Land Use Element and in the Transportation Element of this Plan address reduction of VMT.

2. Protection of existing "carbon sink" areas (lands designated as Preservation, Conservation, and/or Recreation / Open Space)

The City has a long history of protecting open space and recreation spaces from conversion to other uses. The City currently has approximately 25% of its land (not including waterways and water bodies) designated as Preservation or Recreation Open Space as provided for in the Future Land Use Element of this Plan.

3. Shortening the food supply chain.

The City is currently limited in its ability to grow food locally. However, there are several "roadside" markets that offer alternatives to the traditional grocery store. Many of these sell produce from neighboring counties that remain in agricultural use. Agricultural uses such as hydroponics are proposed for inclusion, on a limited basis, in the City's under-utilized industrial areas. Community gardens are also proposed for inclusion in all residential districts, after conditional use review. The City, by nature of its location, is a producer of local wild-caught seafood. The City has recently identified that a lack of available properties for commercial seafood processing. This has the unwanted effect of requiring local seafood to be transported out of the area for processing and packaging and back into the City for sale at local retailers. In an effort to shorten supply lines, the city has proposed allowing this use within designated waterfront industrial lands as provided for in the Future Land Use Element of this Plan.

4. Renewable Energy Resources

The only local, viable option to traditional electric power generation, supplied by Progress Energy, is that of solar power. For a wider discussion of promoting solar power, see the Housing Element and Coastal/Conservation Element.

V. FUTURE LAND USE GOALS, OBJECTIVES AND POLICIES

Goal 1.
Protect the cultural heritage, historic resources, tourist economy and environmental setting of Tarpon Springs.

Objective 1.1
Ensure that all development is reviewed for compatibility with the cultural heritage, historic resources, tourist oriented economy, and impact upon natural resources and the environmental setting of Tarpon Springs;

Policy 1.1.1 Restrict the future expansion of nonconforming uses, and the establishment/expansion of uses not compatible with the established character of adjoining uses and the surrounding neighborhood

Policy 1.1.2 Protect the use of the City's natural resources including waterwells and wellhead protection area, beaches, shores, estuarine systems and wetlands in accordance with the recommendations and policies of the this element and of the Coastal Planning Area and Conservation Element.

Policy 1.1.3 Protect the use of historic resources in accordance with the recommendations and policies of the Historic Element

Policy 1.1.4. Require development proposals in the Coastal Planning Area to comply with the local and regional hurricane evacuation plan and the policies of the Coastal/Conservation Element

Policy 1.1.5 Require infill development, redevelopment and new development to take into account the natural floodplain functions in order to minimize disruption

Policy 1.1.6 Regulate development proposals in accordance with the requirements of the Future Land Use Map Section of this element;

Policy 1.1.7 Restrict the encroachment of incompatible, institutional, commercial, industrial and other uses with non residential characteristics into residential areas, and require their development where the use of existing facilities are maximized;

Policy 1.1.8 Utilize the Planned Development performance zoning regulations to buffer or separate residential development from high traffic areas, areas prone to flooding or natural disasters, and incompatible uses which may cause problems with noxious odors and noise

Policy 1.1.9 Prioritize light industrial uses over more potentially polluting heavier industries;

Policy 1.1.10 Where appropriate, require development proposals to evaluate and preserve wetlands and areas of significant upland habitat.

Policy 1.1.11 Require large scale development / redevelopment (40 acres or more) to adhere to mixed use and livable community objectives and policies set out in Goal 4 of this element.

Policy 1.1.12 Density and Intensity Standards for Development of areas of significant upland habitat:

a) Maximum Impervious Surface: .50
b) Minimum Open Space .30; Open Space shall be defined as any land or water in its natural condition and set aside for the use and enjoyment of the owners and occupants of such land or the public if so designated. Open space shall be reserved adjacent to wetlands to the maximum extent practicable.

c) These standards are in addition to the density and intensity standards of the underlying future land use designation.

For purposes of this Policy significant upland habitat shall be defined as high quality Scrub and Brushlands, Pine Flatwoods, Longleaf Pine/Xeric Oak, or Hardwood Conifer Mix as defined by the Florida Land Use, Cover and Forms Classification System (FLUCCS) and as determined by a qualified professional. Qualified professionals shall be approved by City Staff and shall be confirmed by the Board of Commissioners during the public hearing process.

Policy 1.1.13 For all non-residential uses a minimum of 50% of the parking stalls provided which exceed the required number of spaces (overflow parking) as outlined in the Land Development Code must be in the form of pervious surface.

Policy 1.1.14 Where existing zoning classifications prohibit a development from complying with the standards of Objective 1.1, the Board of Commissioners may waive such zoning criteria during the development review process without the need for a variance.

Objective 1.2
Encourage redevelopment and renewal of the City's designated Community Redevelopment Area and promote the Sponge Docks as a tourist area.

Policy 1.2.1 Adopt a Special Area Plan, in accordance with the Countywide Future Land Use Plan Rules for the Community Redevelopment Area and establish a future land use designation of CRD, Community Redevelopment District.

Policy 1.2.2 Review all site plans and conditional uses for conformance with the adopted Downtown Redevelopment Plan.

Policy 1.2.3 Allow the use of clustering and mixed uses under the Countywide Plan Rules Planned Re-Development Districts and Special Area Plans, (Objectives 8, 10, and 14)

Policy 1.2.4 Provide for the diversification of uses in the downtown area; (Objectives 8, 10, &14)

Policy 1.2.5 Conduct a market study for the Sponge Dock Area with the intent of:

a) diversifying uses
b) expanding the tourist base
c) integrating the needs of the sponging industry with the tourist economy
d) integrating the cultural heritage with the tourist economy
e) preserving the local commercial fishing and shrimping industry
f) addressing parking and access

Policy 1.2.6 Limit the use Eminent Domain for projects deemed to have a beneficial interest to the general public, such as parks, government buildings, and other public uses.

Goal 2.
Land use designations are intended to protect community character, discourage urban sprawl, promote economic growth and promote compatibility between uses. The Future Land Use Map shall be the guiding mechanism that directs development through general category locations, descriptions, densities and intensities of future land use.

Objective 2.1
The City of Tarpon Springs Future Land Use Map 2025 (FLUM) included in Appendix A of this Element characterizes the long term end toward which land use patterns in the City are ultimately directed. The FLUM also displays Future Land Use categories for unincorporated areas in order to depict the relationship of the City's FLUM with other relevant jurisdictional areas.

Objective 2.2
Residential Land Use Categories accommodate residential growth clustered in and around urbanized areas and those areas that maximize the efficient use of infrastructure contained in the long-range facilities plans of the City.

Policy 2.2.1 **Residential Very Low** (RVL) (0-1 unit/acre): The Residential Very Low Land Use category is intended for areas that are to be developed in a very low density residential manner. This category is generally intended to serve as a transition between open space/largely undeveloped areas and suburban residential areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Transportation/Utility; Institutional; Recreation/Open Space; Ancillary Non-Residential; Public Educational Facilities; Community Gardens.
(c) Density / Intensity Standards
- Residential Use shall not exceed one (1) dwelling unit per acre.
- Residential Equivalent use shall not exceed an equivalent of 3.0 beds per permitted dwelling unit at one dwelling unit per acre.
- Non-Residential use shall not exceed a floor area ratio of .30 nor an impervious surface ratio of .60.
- All Secondary uses will be evaluated to determine the potential for increased trip generation and the impact of the use on the mobility management system.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any contiguous use or combination of uses subject to the same acreage threshold specified below, alone or when added together, exceeding the applicable acreage maximum, shall require a map amendment to another land use category that permits the use(s):
- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three acres.
- Institutional Use (except Public Educational Facilities, which are not subject to this threshold): Shall not exceed a maximum area of five acres.

Policy 2.2.2 **Residential Suburban** (RS) (0-2.5 units/gross acre): The Residential Suburban Land Use Category is intended for areas that are to be developed in a low density residential manner. This category is generally intended to serve as a transition between rural and urban residential areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary Non-Residential; Public Educational Facilities; Community Gardens.
(c) Density / Intensity Standards
- Residential Use shall not exceed two and one-half (2.5) dwelling units per acre.
- Residential Equivalent use shall not exceed and equivalent of 3.0 bed per permitted dwelling unit at 2.5 dwelling units per acre.
- Non-Residential use shall not exceed a floor area ration of .30, nor an impervious surface ratio of .60.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:
- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres.

Policy 2.2.3 **Residential Low** (RL) (0-5 units/gross acre): The Residential Low Land Use Category is intended for areas outside urban activity centers, and is generally intended for areas that are to be developed in a low density residential manner. This category is generally intended to serve as a transition between suburban and rural residential areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary Non-Residential; Public Educational Facilities; Community Gardens.
(c) Density / Intensity Standards

- Residential Use shall not exceed five (5) dwelling units per acre.
- Residential Equivalent use shall not exceed and equivalent of 3.0 bed per permitted dwelling unit at 5 dwelling units per acre.
- Non-Residential use shall not exceed a floor area ration of .40, nor an impervious surface ratio of .65.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres.

Policy 2.2.4 **Residential Urban** (RU) (0-7.5 units/gross acre): The Residential Urban Land Use Category is intended for areas in close proximity urban activity centers, and is generally intended for areas that are to be developed in an urban low density residential manner. This category is generally intended to serve as a transition between suburban and urban residential areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary Non-Residential; Public Educational Facilities; Community Gardens.
(c) Density / Intensity Standards

- Residential Use shall not exceed seven and one-half (7.5) dwelling units per acre.
- Residential Equivalent use shall not exceed and equivalent of 3.0 bed per permitted dwelling unit at 7.5 dwelling units per acre.
- Non-Residential use shall not exceed a floor area ration of .40, nor an impervious surface ratio of .65.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres

Policy 2.2.5 **Residential Low Medium** (RLM) (0-10 units/gross acre): The Residential Low Medium Land Use Category is intended for areas in close proximity urban activity centers, and is generally intended for areas that are to be developed in a low medium density residential manner. This category is generally intended to serve as a transition between low density and high density residential areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary

Non-Residential; Public Educational Facilities; Community Gardens.

(c) Density / Intensity Standards

- Residential Use shall not exceed ten (10) dwelling units per acre.
- Residential Equivalent use shall not exceed and equivalent of 3.0 bed per permitted dwelling unit at 10 dwelling units per acre.
- Non-Residential use shall not exceed a floor area ration of .50, nor an impervious surface ratio of .75.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres

Policy 2.2.6 **Residential Medium** (RM) (0-15 units/gross acre): The Residential Medium Land Use Category is intended for areas in close proximity urban activity centers, and is generally intended for areas that are to be developed in a medium density residential manner. This category is generally intended to serve as a transition between less urban and more urban residential and mixed use areas.

(a) Primary Uses - Residential
(b) Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary Non-Residential; Public Educational Facilities; Community Gardens.
(c) Density / Intensity Standards

- Residential Use shall not exceed fifteen (15) dwelling units per acre.
- Residential Equivalent use shall not exceed and equivalent of 3.0 bed per permitted dwelling unit at 15 dwelling units per acre.
- Non-Residential use shall not exceed a floor area ration of .50, nor an impervious surface ratio of .75.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres

Objective 2.3

Mixed Use Land Use Categories: The Mixed Land Use categories are provided to allow and encourage a range of complimentary uses in close proximity to facilitate shorter vehicle trips and alternative transportation choices such as walking and cycling. All mixed use land categories shall require a mixture of uses distributed as follows within each category: Residential (5 percent to 30 percent), and Non-residential (70 percent to 95 percent). This requirement may be waived for parcels less than one acre.

Policy 2.3.1 **Residential/Office General** (R/OG): This category is generally appropriate to locations where it would serve as a transition from and urban activity center or more intensive non-residential use to low-density residential or public/semi-public use; and in areas where the size and scale of office and residential use is appropriate to free standing office, medium density residential or a combination thereof.

(a) The primary uses shall be business/professional offices and residential uses;

(b) The secondary uses shall include public educational facilities, institutional, transportation utility, recreation open space, ancillary non-residential, residential equivalent; Community Gardens

(c) Density / Intensity Standards
Residential uses may be permitted up to a maximum of 15 dwelling units per acre
- Residential equivalent shall not exceed 3 bed per residential unit at 15 units per acre.
- Non-residential uses shall not exceed a floor area ratio of .40, nor an impervious surface ratio of .75
- Mixed use – shall not exceed, in combination, the respective of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

(d) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:
- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres
- Personal Services/Office Support Use: Shall not exceed a floor area of 5,000 square feet; and no combination of such uses in any single multi-tenant building, or in the alternative, in any group of buildings that are integral to and function as part of a unified project, shall exceed 10 percent (10%) of the gross floor area of said buildings.

Policy 2.3.2 **Residential/Office/Retail** (R/OR)

(a) Primary Uses: Office, Retail, Personal Services, Transient accommodation, Residential.
Secondary Uses: Public/Semi-Public, Research and Development.

(b) Access to abutting major roadways shall be limited in accordance with FDOT access management standards;

(c) Cross-access to adjoining uses or parcels shall be required;

(d) This category is intended to be consistent with the R/O/R category of the Countywide Future Land Use Plan;

(e) Residential use – shall not exceed fifteen (15) dwelling units per gross acre;

(f) Transient Accommodations shall not exceed 30 units per acre.

(g) Residential equivalent use – shall not exceed an equivalent of 3 beds per unit at a maximum of 15 units per acre;

(h) Nonresidential use – shall not exceed a floor area ratio (FAR) of 0.20 for commercial uses and 0.30 for office uses. The impervious surface ratio (ISR) shall not exceed 0.75;

(i) Mixed use – shall not exceed, in combination, the respective of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area.

(j) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:
- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.

- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres

(k) Research/Development shall require review of the following standards prior to site plan approval:
- Compatibility with neighboring uses and the character of the commercial area in which it is to be located
- Noise, solid waste and air quality emissions
- Hours of operation
- Traffic Generation
- Parking, loading, storing, and service provisions

Policy 2.3.3 **Resort Facilities Overlay** (RFO) The Resort Facilities Overlay Land Use Category is intended for areas where it would identify existing low to moderately intensive mixed residential and small scale transient accommodation use in and adjacent to the tourist oriented areas of the city.

Principal Uses - Residential; Transient Accommodations
Secondary Uses - Residential Equivalent; Public/Semi-Public; Ancillary Non-Residential

(a) The Resort Facilities Overlay may be used to designate transient tourist accommodations in residential areas;
- Residential uses shall not exceed the density of the underlying residential category
- Residential equivalent uses shall not exceed 3.0 beds per permitted dwelling unit at the underlying residential density
- Transient Accommodation Use shall not exceed 1.67 units per unit of the underlying residential density.
- Non-Residential Use shall not exceed the maximum FAR or ISR of the underlying residential land use category.
- Mixed Use shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

(b) Other tourist oriented commercial uses (eg. restaurants, retail) shall not be permitted;
(c) Appropriate locations shall be on the fringe of the Central Business District, in designated historic areas or structures, and along areas designated a scenic open space;
(d) The design and scale shall be compatible with adjoining uses.
(e) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:
- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres

Policy 2.3.4 **Residential/Office Limited** (R/OL)

(a) Primary Uses - Residential; Office
(b) Secondary Uses - Residential Equivalent; Institutional; Transportation/Utility; Public Education Facility; Personal Service/Office Support; Ancillary Non-Residential; Recreation/Open Space
(c) Residential/Office Limited is generally appropriate where it would serve as a transition from more intensive non-residential use to low density residential or less intensive public/semi-public uses; and in areas where a combination of office and residential use

is established or is determined appropriate as a means of encouraging reuse and neighborhood scale conversion.

(d) Density of Residential Use - Shall not exceed 7.5 dwelling units per acre.

(e) Density of Residential Equivalent Use - Shall not exceed an equivalent of 2.0 to 3.0 beds per permitted dwelling unit at 7.5 dwelling units per acre.

(f) Intensity of Non-Residential Use - Shall not exceed a floor area ratio (FAR) of 0.40, nor an impervious surface ratio (ISR) of 0.75.

(g) Intensity of Mixed Use - Shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area.

(h) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use (except Public Educational Facilities which are not subject to this threshold): Shall not exceed a maximum area of five acres
- Personal Services/Office Support Use: Shall not exceed a floor area of 3,600 square feet; and no combination of such uses in any single multi-tenant building, or in the alternative, in any group of buildings that are integral to and function as part of a unified project, shall exceed 10 percent (10%) of the gross floor area of said buildings.

Policy 2.3.5 **Resort Facilities Medium (RFM**) It is the purpose of this category to depict those areas that are now developed or appropriate to be developed in medium density residential and resort, tourist facility use; and to recognize such areas as well-suited for the combination of residential and transient accommodation use consistent with their location, surrounding uses, transportation facilities, and natural resource characteristics of such areas. Primary areas for consideration include areas within or in close proximity to the Sponge Docks, the Historic District, and the north bank of the Anclote River.

a. Primary uses: Transient Accommodation

b. Secondary uses: Residential, Tourist Facilities, Office, Personal Service; Commercial Recreation, Institutional; Transportation Utility; Ancillary Non-Residential; Recreation – Open Space.

c. This category is generally appropriate to locations where it would identify existing moderately intensive mixed hotel/motel use and residential use in the tourist areas of the City as well as locations where unique recreational assets warrant the combination of permanent and temporary accommodations in close proximity to and served by the arterial and major thoroughfare network as well as by mass transit.

d. Density/Intensity Standards

- Residential Use – Shall not exceed 15 units per acre and must be in combination with a transient use (minimum 75% transient). Properties located within the Coastal High Hazard Area shall not exceed 5 units per acre.
- Temporary Lodging shall not exceed 30 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.

- Non-Residential Use; Shall not exceed a FAR of .35 and an ISR of .65.
- Mixed Use – Shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

(e) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use: Shall not exceed a maximum area of five acres

Policy 2.3.6 **Resort Facilities High (RFH**) It is the purpose of this category to depict those areas that are now developed or appropriate to be developed in high density residential and resort, tourist facility use; and to recognize such areas as well-suited for the combination of residential and transient accommodation use consistent with their location, surrounding uses, transportation facilities, and natural resource characteristics of such areas. Primary areas for consideration include areas within or in close proximity to the Sponge Docks, Community Redevelopment Area, and the north bank of the Anclote River.

a. Primary uses: Transient Accommodation

b. Secondary uses: Residential, Tourist Facilities, Retail Commercial, Commercial/Business Service, Office, Personal Service; Commercial Recreation, Institutional; Transportation Utility; Ancillary Non-Residential; Recreation – Open Space.

c. This category is generally appropriate to locations where it would identify existing high intensive mixed hotel/motel use and residential use in the tourist areas of the City as well as locations where unique recreational assets warrant the combination of permanent and temporary accommodations in close proximity to and served by the arterial and major thoroughfare network as well as by mass transit.

d. Density/Intensity Standards

- Residential Use – Shall not exceed 15 units per acre and must be in combination with a transient use (minimum 75% transient). Properties located within the Coastal High Hazard Area shall not exceed 5 units per acre.
- Temporary Lodging shall not exceed 50 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.
- Non-Residential Use; Shall not exceed a FAR of .35 and an ISR of .65.
- Mixed Use – Shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

(e) Acreage Limitations: The following uses shall not exceed the respective acreage threshold designated for such uses. Any such use, alone or when added to existing contiguous like use(s), which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous like uses:

- Ancillary Non-Residential; Transportation Utility use: Shall not exceed a maximum area of three (3) acres.
- Institutional Use: Shall not exceed a maximum area of five acres

Policy 2.3.7 **Commercial Recreation** (CR) The purpose is to establish a waterfront development pattern on the north side of the Anclote River consistent with the River's natural character and function;

a. The primary uses shall be limited to the following:
    1. Wet and Dry Slip Marinas

b. Secondary Uses shall be limited to:
    1. Residential
    2. Residential Equivalent
    3. Transient Accommodations
    4. Personal Service/Office Support
    5. Retail Commercial
    6. Institutional
    7. Recreation Open Space

c. Marine repair shall be limited to minor repair services and does not include major mechanical or structural repair;
d. Retail sales accessory to the primary use of the property may be permitted up to a maximum rate of 15% of the total gross floor area;
e. Use of the Planned Development process shall be preferred;
f. Recreational Vehicle Parks may be permitted as a secondary use requiring conditional use review for compatibility;
g. Density / Intensity Standards
    - Residential Use shall not exceed 10 units per acre
    - Residential Equivalent use shall not exceed an equivalent of 3 beds per permitted dwelling unit at 10 dwelling units per acre.
    - Temporary Lodging Use shall not exceed 30 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.
      Non-Residential use shall not exceed a floor area ratio of .45, nor an impervious surface ratio of .85
    - Mixed Use shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.
h. Acreage Limitations: Institutional and Transportation/Utility Use shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like use(s), which exceeds this threshold shall require a plan map amendment which shall include such use and all contiguous like uses.

Objective 2.4
Commercial Land Use Categories provide for commercial uses including products and services along major corridors and at roadway intersections to serve residents and visitors on both a localized and regionalized basis. Commercial categories recognize major commercial corridors along portions of U.S. Highway 19 and Alternate Highway 19 along with existing specialized and traditional commercial sections of the City.

Policy 2.4.1 **Commercial Neighborhood** (CN)

(a) Primary uses: Office, convenience shopping, and personal services oriented to a particular neighborhood or geographic segment of the community;
(b) Secondary uses: Residential, mixed use
(c) The maximum floor area ratio shall be .20; the maximum impervious surface ratio shall be .60
(d) Residential uses may be permitted up to a maximum density of 10 units per acre.
(e) The design shall include accommodations for bicycle and pedestrian access.
(f) Acreage Limitations: Institutional and Transportation/Utility Use shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing

contiguous like use(s), which exceeds this threshold shall require a plan map amendment which shall include such use and all contiguous like uses.

(g) Mixed Use – Shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

Policy 2.4.2 **Commercial Limited** (CL) The primary use shall be to designate areas for the development of commercial uses, attractions, and accommodations for the tourist oriented economy;

a. Primary uses: Retail Commercial; Commercial/Business Service; Transient Accommodation
b. Secondary Uses: Residential uses after a conditional use review ; Residential Equivalent
c. Density/Intensity Standards

- Residential Use shall not exceed 15 units per acre
- Residential Equivalent use shall not exceed an equivalent of 3 beds per permitted dwelling unit at 15 dwelling units per acre.
- Temporary Lodging Use shall not exceed 30 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.
- Non-Residential use shall not exceed a floor area ratio of .45, nor an impervious surface ratio of .85.

(a) Acreage Limitations: Institutional and Transportation/Utility Use shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like use(s), which exceeds this threshold shall require a plan map amendment which shall include such use and all contiguous like uses.

Policy 2.4.3 **Commercial General** (CG)

(a) The primary use shall be to designate existing commercial areas which may be either highway or commercial oriented and include uses of varying degree and intensity;

(b) Strip commercial development in areas not currently characterized as such shall be restricted. Infill of existing strip commercial may be permitted after an examination of the associated transportation impact;

(c) Intensive commercial uses may be permitted provided they are reviewed for land use compatibility and outdoor storage is restricted or opaquely screened. Screening shall include landscaping techniques;

(d) Primary Uses shall include Office, Personal Service/Office Support, Retail Commercial, Commercial/Business Service, Transient Accommodation, Wholesale/Distribution, Storage/Warehouse

(e) Secondary Uses shall include Commercial Recreation, Residential (requires conditional use review for compatibility), Residential Equivalent, Institutional, Transportation/Utility, Recreation/Open Space, Research/Development, Light manufacturing/assembly.

(f) Density / Intensity Standards

- Residential Use shall not exceed 15 units per acre
- Residential Equivalent use shall not exceed an equivalent of 3 beds per permitted dwelling unit at 15 dwelling units per acre.
- Transient Lodging: Use shall not exceed 30 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.
  Non-Residential use shall not exceed a floor area ratio of .45, nor an impervious surface ratio of .85

- Mixed Use shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property.

(g) Acreage Limitations: Institutional and Transportation/Utility Use shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like use(s), which exceeds this threshold shall require a plan map amendment which shall include such use and all contiguous like uses.

Policy 2.4.4 **Commercial General - Fishing** (CG-F)

(a) The primary use shall be restricted to commercial fishing establishments and canning/packing warehouses; Secondary uses may include marina facilities.
(b) Secondary uses are single family detached dwellings;
(c) Density / Intensity Standards
- Residential Use shall not exceed 7.5 units per acre.
- Residential Equivalent use shall not exceed an equivalent of 3 beds per permitted dwelling unit at 15 dwelling units per acre.
- Transient Accommodation Use shall not exceed 40 units per acre.
Non-Residential use shall not exceed a floor area ratio of .40, nor an impervious surface ratio of .85
- Mixed Use shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the gross land area of the property

Objective 2.5
Industrial Land use Categories provide for the concentration of industrial activity at locations with appropriate infrastructure and relatively low impact to surrounding land uses. Industrial categories recognize and preserve existing industrial properties and traditional industrial concentrations within the City, such as the area north of the Anclote River, and seek to maintain the integrity of these areas important to the economic diversity and growth of the City.

Policy 2.5.1 **Industrial Limited** (IL)

(a) The primary use shall be light industrial, and business/research parks; Secondary uses shall be limited to the uses identified in (e) below.
(b) Use of the Planned Development process shall be preferred;
(c) The maximum floor area ratio shall be .50; the maximum impervious surface ratio shall be .85
(d) Transient Accommodation Use shall not exceed 40 units per acre unless the alternate temporary lodging facilities densities and intensities standards are elected as outlined in Goal 6 and the subsequent objectives and policies.
(e) Public/Semi-Public; Retail Commercial; Personal/Business; Commercial/Business Service; Food Crop Production; and Transient Accommodation Use - Shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like uses, which exceeds this threshold shall require a plan amendment which shall include such uses and all contiguous like uses.
(f) Buffering shall be required between industrial development and non-industrial development as per standards set out in the City of Tarpon Springs Comprehensive Land Development Code.

Policy 2.5.2 **Industrial General** (IG)

(a) The primary use shall be light industrial, and business/research parks;

(b) Heavy industrial uses may be permitted after a conditional use review for compatibility; Secondary uses shall be limited to those uses identified in (e) below.
(c) Use of the Planned Development process shall be preferred;
(d) The maximum floor area ratio shall be .60; the maximum impervious surface ratio shall be .90
(e) Public/Semi-Public; Retail Commercial; Personal/Business; Commercial/Business Service; Food Crop Production; Transient Accommodations; - Shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like uses, which exceeds this threshold shall require a plan amendment which shall include such uses and all contiguous like uses.
(f) Buffering shall be required between industrial development and non-industrial development as per standards set out in the City of Tarpon Springs Comprehensive Land Development Code.
(g) Office, Retail Commercial, Personal Services/Office Support and Commercial/Business Service uses may be permitted as accessory uses in industrial areas, but shall be secondary in nature, subject to (e) above and in no event shall exceed 25% of the floor area of the principle use to which it is accessory.

Policy 2.5.3 **Industrial General-Waterfront** (IG-WF)

(a) The primary use shall be marine related industrial as follows:

1. Boat Yards and Ways
2. Boat Building
3. Marine Salvage/Construction
4. Commercial seafood processing

(b) Light industrial and intensive commercial use may be permitted subject to (f) below;
(c) Commercial fishing establishments may be permitted subject to (f) below;
(d) Office, Retail Commercial, Personal Services/Office Support and Commercial/Business Service uses may be permitted as accessory uses in industrial areas, but shall be secondary in nature, subject to (e) below and in no event shall exceed 25% of the floor area of the principle use to which it is accessory.
(e) The maximum floor area ratio shall be .60;
(f) Public/Semi-Public; Retail Commercial; Personal/Business; Commercial/Business Service; - Shall not exceed a maximum area of five (5) acres. Any such use, alone or when added to existing contiguous like uses, which exceeds this threshold shall require a plan amendment which shall include such uses and all contiguous like uses.
(g) Buffering shall be required between industrial development and non-industrial development as per standards set out in the City of Tarpon Springs Comprehensive Land Development Code.

Objective 2.6
Public/Semi-Public Land Use Categories provide for land areas that serve a public purpose for the citizens at large including preservation of critical natural areas, provision of major public facilities such as parks, utilities, drainage, and provision of public or private institutions such as churches or schools. Public/Semi-Public categories may be located on land under public or private ownership.

Policy 2.6.1 **Preservation** (P) The Preservation Land Use Category is intended for areas that are now categorized or appropriate to be characterized as a natural resource feature worthy of preservation and to recognize the significance of preserving such major environmental features and their functions.

Primary Uses - Open and undeveloped consistent with the following natural resource features and considerations; Tidal Wetlands, Non-Tidal Wetlands; Undeveloped Barrier Islands and Spoil Islands; 25 year Floodplain; Natural Drainageways; Land Seaward of the Coastal Construction Control Line; Dune Systems; Habitat for endangered or threatened species as designated; and such additional areas as determined by the City.

Secondary Uses - Use Characteristics provided for and located in adjoining Categories which are accessory to or are the incidental extension of the permitted adjoining use.

Density/Intensity Standards: No use shall exceed a floor area ratio of .10 nor an impervious surface of .20.

Policy 2.6.2 **Recreation/Open Space** (R/OS) The Recreation/Open Space Land Use Category is intended for areas appropriate to be used for open space and/or recreational purposes. These uses can be public or private, natural or man-made, active or passive. The maximum Floor Area Ratio shall be .25. The maximum impervious surface ratio shall be .45

Primary Uses - Public/Private Open Space; Public/Private Park; Public Recreation Facility; Public Beach/Water Access; Golf Course/Clubhouse.

Secondary Uses - None.

Policy 2.6.3 **Institutional** (I) The Institutional Land Use Category is intended for areas appropriate for educational, health, public safety, civic, religious and like institutional uses which are required to serve the community. The maximum Floor Area Ratio shall be .25. The maximum impervious surface ratio shall be .85.

Primary Use - Public/Private Schools, Colleges; Hospitals, Medical Clinic; Churches, Religious Institution, Cemetery; Social/Public Service Agency; Child Day Care; Fraternal, Civic Organization; Municipal Office Building, Courthouse; Library; Public Safety Facility, Emergency Service Building; Convention Center.

Secondary Uses - Residential; Residential Equivalent.

* Residential uses shall not exceed 12.5 dwelling units per acre or the parcel's zoning category density.
* Residential Equivalent Uses shall not exceed an equivalent of 2.0 to 3.0 beds per permitted dwelling unit at 12.5 dwelling units per acre.

Policy 2.6.4 **Transportation/Utility** (T/U) The Transportation/Utility Land Use Category is intended for areas appropriate for transport and public/private utility services serving the City. The maximum Floor Area Ratio shall be .70. The maximum impervious surface ratio shall be .70.

Primary Uses - Airport, Seaport, Marina; Coast Guard, Customs Facility; Electric Power Generating Plan; Utility Transmission Lines; Municipal Water Supply, Wastewater Disposal Facility; Solid Waste/Refuse Disposal, Transfer, Recycling Facility; Public Works Garage/ Storage; Electric Power Substation; Telephone Switching Station.

Secondary Uses - Storage Warehouse.

Other Standards - Where a utility transmission line otherwise included within this category is located in a utility easement, not used as a right-of-way, this category shall be shown as an overlay, superimposed over, and applicable in addition to, the otherwise applicable underlying plan category.

An appropriate buffer shall be provided within and between the Transportation/Utility Category and any other adjoining plan classification, other than Industrial.

Policy 2.6.5 **Water/Drainage Feature** (W/DF) The Water/Drainage Feature Land Use Category is intended to depict those water and drainage features, now committed or proposed.

Principal Uses - Open and Undeveloped consistent with the water and/or drainage feature(s) which characterize these locations.

Secondary Uses - Use Characteristics provided for in the underlying FLUP Category in the case of the drainage feature overlay; and use characteristics provided for and located in the adjoining FLUP Category which are accessory to or are extensions of the permitted adjoining use in the case of a water feature.

Density/Intensity Standards - shall be as follows:

- Submerged land- no density/intensity allocated;
- Drainage overlay - as for the underlying plan category.

Policy 2.6.6 **Location and Plan Consistency Criteria For Public Educational Facilities** The location of new public educational facilities, the expansion or significant change of program of an existing site, shall be allowed upon a determination by the Board of Commissioners that the proposed site is consistent with the Tarpon Springs Comprehensive Plan. In addition to general consistency with the Comprehensive Plan, new or expanded public educational facilities shall be reviewed and considered with the following criteria:

(a) The proposed location is compatible with present and projected uses of the adjacent property.

(b) The site is adequate for its intended use based on State Requirements for Educational Facilities and provides sufficient area to accommodate all necessary utilities and support facilities and allow for effective buffering of surrounding land uses. Minimum transportation requirements are as follows:

Elementary Schools and Special Educational Facilities - direct access to at least a minor collector road or as otherwise approved after a determination of traffic impacts on adjacent roads of lesser functional classification.

Middle Schools - direct access to at least a minor collector road or as otherwise approved after a determination of traffic impacts on adjacent roads of lesser functional classification.

High and Vocational-Technical Schools - direct access to at least a major collector road or as otherwise approved after a determination of traffic impacts on adjacent roads of lesser functional classification.

(c) Based on the adopted Five Year Capital Improvement Program of the School Board and/or City, there will be adequate public facilities and services to support the public educational facility.

(d) There will be no adverse impact on archaeological or historic sites listed in the National Register or designated by the City as a locally significant historic, cultural or archaeological resource.

(e) Drainage, soil types and flood hazard zone are suitable for development or are adaptable for development and outdoor educational purposes.

(f) The site can accommodate the required transit needs of the student population and/or provides adequate parking and vehicular stacking areas.

Objective 2.7
Planned Redevelopment categories provide for coordinated planning of new development and/or redevelopment with proposed multiple uses or types, or that have specialized or unique characteristics that would benefit from a high level of planning control and coordination.

Policy 2.7.1 **Mixed Use (MU)**
The Purpose of this category is to depict those areas that are developed with a collection of residential, office, commercial and tourism uses, along corridors, adjacent to neighborhoods or within distinct areas that are interrelated and complimentary. This category should facilitate infill and redevelopment of these areas to create a desirable mix of non-residential and residential uses by promoting aesthetically pleasing, safe environments, and buildings that are compatible with the area's character, uses, and transportation facilities.

a. Use Characteristics- Uses allowed in this category must be set forth in the required special area plan (Paragraph I of this Section) and shall be selected from the and limited to the uses found within the Mixed Use Classification of Section 2.3.3.4 of the Countywide Plan Rules of Pinellas County.

b. Density/Intensity/Distribution of Uses Standards: Shall be designated within the Special Area Plan but at a minimum shall meet the percentage distribution of uses required as set forth in this Element. Maximum residential density shall not exceed 40 units per acre. The maximum F.A.R shall not exceed 2.0.

c. Other Standards:

1. Area Requirements: This plan category shall be a minimum of 10 acres in size, must include residential, office, and/or commercial/tourism uses, along corridors, adjacent to neighborhoods or within distinct areas that are interrelated and complimentary.

2. Acreage Limitations: Ancillary Non-Residential and Transportation Utility uses shall not exceed a maximum of three acres. Institutional uses (except Public Education facilities) shall not exceed a maximum of five acres. Any such use, along or when added to existing contiguous like uses, which exceeds the designated threshold shall require a plan map amendment that shall include such use and all contiguous uses. These uses shall be compatible with and limit the negative impacts on surrounding mixed use areas. Development standards for such uses shall be identified and referenced in the special area plan.

A Special Area Plan is required.

Policy 2.7.2 **Industrial (IND)** It is the purpose of this category to depict those areas of the County that are developed with intensive businesses generating extensive employment activity. These areas consist of a collection of manufacturing, office, institutional (i.e. higher educational or training facilities), and high-tech light industrial uses in areas that are interrelated and complimentary. This category should help to create a desirable employment district by promoting aesthetically pleasing, safe environments, interrelated uses, and buildings that are compatible with the stated character for the area.

a. Use Characteristics – Those uses allowed in this category must be set forth in the required special area plan and shall be selected from and limited to the uses found in the Industrial Classification in the Countywide Plan Rules; Public Educational Facilities; Private Schools; Colleges; and Public Service Agencies that offer training and education for targeted industries.

b. Density/Intensity Standards – Shall be specified in the special area plan (see paragraph H). Maximum F.A.R shall not exceed 1.0.

c. A Special Area Plan is required.

Objective 2.8
Urban infill and redevelopment land use categories provide for specialized districts of the City that cover a character or functional area warranting special consideration or protection with respect to use or form including, but not limited to, historic and cultural resources; traditional land uses; land configuration or layout patterns of lots, streets, and waterways; operation of or deficiencies in transportation or other major infrastructure; or other considerations.

Policy 2.8.1 **Community Redevelopment District (CRD)**

The City of Tarpon Springs Community Redevelopment Area (CRA), established by Resolution 2001-22 of the City of Tarpon Springs, Florida and amended by Resolution 2003-21 is identified in Figure 7. The City of Tarpon Springs Downtown Redevelopment Plan for the CRA was adopted by Ordinance 2001-23 and amended by Ordinance 2006-08. The CRA provided the primary impetus for, and is included within, the FLUM Category of Community Redevelopment District (CRD).

Within the Community Redevelopment Area there are two development options identified within the adopted Downtown Redevelopment Plan:

A. Utilize the existing designated future land use and zoning with the following allowable increases in F.A.R.
   1. Parcels designated as CG on the Future Land Use map may increase the allowable F.A.R. from .40 to .55
   2. Parcels designated as CL on the Future Land Use map may increase the allowable F.A.R from .3 to .45

B. Adoption of the CRD Future Land Use Designation pursuant to the following criteria:
   Purpose – It is the purpose of this category to depict those areas of the county that are now designated, or appropriate to be designated, as community centers and neighborhoods for redevelopment in accord with a special area plan.

   CRD Use Characteristics
   Those uses appropriate to and consistent with this category include:
   a. Primary Uses - Residential; Office; Commercial; Industrial; Institutional; and Transportation/Utility uses as enumerated in the approved special area plan for an area so designated.

   b. Locational Characteristics – This category is generally appropriate to those community areas designed to serve as local retail, financial, governmental, residential, and employment focal points for a community; and to specified target neighborhoods designed to encourage redevelopment in one or a combination of uses as identified above and set forth in the special area plan thereof.

c. Density/Intensity/Distribution of Use Standards – Shall be as set forth for each classification of use and location in the approved special area plan. Densities/intensities shall be consistent with the redevelopment strategy for this category and shall generally parallel the medium to high density/intensity standards of the conventional categories for the respective types of use characteristics provided for thereunder. Minimum mix of uses shall be provided as per this Element. The maximum residential density shall not exceed 40 units per acre. The maximum F.A.R. shall not exceed 2.0.

d. Special Area Plan Required – The utilization of this category shall require a special area plan as set forth in this element.

Policy 2.8.2 **Central Business District** –(CBD)

(a) Development shall be consistent with the unique and historic character of the area;
(b) Mixed residential/commercial use of structures shall be permitted;
(c) Primary Uses shall include Residential, Office, Commercial, Industrial, Institutional and Transportation/Utility uses as approved by a Special Area Plan.
(d) Flexible parking regulations shall be instituted;
(e) On-street parking shall be retained and expanded where possible;
(f) Density / Intensity Standards Shall be set forth in the Special Area Plan in accordance with the Countywide Plan Rules.

Policy 2.8.3 **Special Area Plans** Special Area Plans shall be required for Future Land Use Designations of CRD (Community Redevelopment District) and Planned Redevelopment Mixed Use (MU) and Planned Redevelopment Industrial (IND). Such special area plan shall be approved by Board of Commissioners in support of the proposed category, in a form sufficient to ensure compliance with the special area plan. The special area plan shall include, at a minimum, information addressing the following:

A. Plan Issues and Objectives

1. Existing land use and related characteristics of the area;
2. Issues to be addressed by the plan; and
3. Plan objectives in relationship to the local government comprehensive plan and Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community.

B. Plan Composition

1. Permitted uses and any differentiation by location;
2. Density/intensity standards for permitted uses;
3. Design guidelines, if any, appropriate to the plan;
4. Affordable housing provisions, if any, appropriate to the plan;
5. Mixed-use provisions, if any, appropriate to the plan;
6. Special provision for mobility and circulation, including mass transit, access management, parking, pedestrians, and bicycles;
7. Identification of and reference to land development regulations that implement the plan;

8. Public and/or private improvements, contributions and/or incentives, if any, appropriate to the plan; and
9. The City of Tarpon Springs Special Area Plan approval process.

C. Plan Impacts

1. Identification of water, sewer, and stormwater drainage impacts that may be anticipated based on the plan, identification of overall system capacities, and an analysis of the difference between these anticipated impacts on the systems as compared to the impacts based on the current Countywide Plan Map designations; and
2. Relevant Countywide Consideration, as enumerated in Sections 5.5.3.1.1 through 5.5.3.1.6.

The special area plan must address the above items in one document, however references other documents (e.g., the City of Tarpon Springs Comprehensive Plan or Comprehensive Land Development Code) may be permitted as appropriate. The proposed Countywide Plan Map amendment, along with the special area plan, shall be reviewed in accordance with the provisions of Article 5 of the Countywide Plan Rules of Pinellas County.

Progress Assessment. The local government shall provide an assessment of the special area plan's progress with respect to its enumerated objectives five years from the effective date of a Countywide Plan Map amendment for such special area plan, which report shall be submitted to the PPC and CPA for receipt and acceptance.

Changes to Approved Special Area Plans. Substantive changes to an approved special area plan shall be reviewed according to the provisions of Article 5 of these Countywide Rules which require recommendation by the PPC and approval by the CPA in the same manner as for new special area plans accompanying Countywide Plan Map amendments. Substantive changes include:

1. Expansion or contraction of the geographic area of the plan;
2. Changes to the permitted uses, or their location within the plan area, if specified;
3. Increase in density/intensity or to projected traffic, water, sewer, or stormwater drainage impacting public infrastructure improvements;
4. Changes affecting the Relevant Countywide Considerations; and
5. Any other change determined by the local government, the PPC or CPA to be a material change to the approved plan, affecting the plan issues and objectives, plan composition or plan impacts that is relevant and fundamental to the basis on which the special area plan was approved and is to be administered under the Countywide Plan and Rules.

Minor plan changes that are not considered substantive shall not constitute an amendment to the Countywide Plan Map, and shall be submitted to the PPC and CPA for receipt and acceptance.

Relationship of Special Area Plans to Community Redevelopment Area Plans: In the event that a community redevelopment plan per Chapter 163, Part III, Florida Statutes, is prepared for the same area as the special area plan, all applicable provisions of the community redevelopment plan approval process shall be complied with prior to processing of the special area plan for Countywide Plan Map amendment.

Goal 3.
Ensure that new development and redevelopment is consistent with the public facility needs of current and future residents and discourages the proliferation of urban sprawl

Objective 3.1
Protect the City's municipal water supply from encroachment by incompatible land uses and coordinate future land uses appropriate topography and soil conditions.

Policy 3.1.1 Review the detrimental impact of high water tables, flooding, and low soil compaction at the time of development proposal through the review of standards and regulations in the Land Development Code

Policy 3.1.2 Require the issuance of development orders to review the impact of the intended use upon well head protection areas for all municipal well sites;

Policy 3.1.3 Require the review of soil suitability for the intended use with each development proposal

Policy 3.1.4 Monitor municipal wells for septic and agricultural seepage

Policy 3.1.5 Restrict industrial uses in the cone of influence of municipal Well #2;

Policy 3.1.6 Restrict new development to residential below 6 du/acre and require hookup to central sewage in the well head protection area of Well #2 (North of Keystone Road)

Policy 3.1.7 Manage municipal Well site #4 as follows:
a) monitor the capped landfill per Florida Department of Environmental Protection standards
b) monitor the Oakleaf Retention Pond for possible stormwater contamination
c) restrict access to the Oakleaf Retention Pond

Objective 3.2
Eliminate or reduce land uses that are inconsistent with interagency hazard report recommendations, where applicable.

Policy 3.2.1 Periodically review applicable interagency hazard reports and implement recommendations where appropriate.

Objective 3.3
Limit coastal planning area population densities to what can be safely sheltered or evacuated in accordance with county and regional hurricane evacuation plans.

Policy 3.3.1 In order to restrict permanent population density increases within the Coastal High Hazard Area (CHHA), as defined in the Coastal Planning and Conservation Element, the City shall deny Future Land Use Map amendment proposals which would result in an increase of residential density/intensity and/or non-residential intensity, except that the City may, at their sole discretion, consider approving such amendment based upon a balancing of the following criteria, as are determined to be applicable and significant to the subject amendment:

a) The uses associated with the proposed amendment will have access to adequate emergency shelter space and to evacuation routes that have adequate capacities and evacuation clearance times as specified in the Coastal Planning Area and Conservation Element;

b) The proposed amendment will utilize existing infrastructure without necessitating the expenditure of public funds for the construction or future maintenance of new, unplanned infrastructure subject to potential damage by coastal storms;
c) The proposed amendment will result in the utilization of existing disturbed areas as opposed to natural areas that buffer existing development from coastal storms or that provide coastal storm floodplain capacity for existing development;
d) The proposed amendment will result in the maintenance of scenic qualities, and the improvement of public access, to the Gulf of Mexico, Anclote River, bayous and other significant and identified scenic resources associated with the City's coast and waterways, and their viewsheds;
e) The proposed amendment is for uses which are water dependent;
f) The proposed amendment is included in a Community Redevelopment Plan, as defined by Florida Statutes for a downtown or other designated redevelopment area, and meets the intent of that plan;
g) The proposed amendment would result in an increase in density or intensity on a single parcel, in concert with corollary amendments which result in the overall reduction of development density or intensity in the surrounding CHHA, as implemented in concert with the underlying zoning to be made a part of the amendment, as necessary;
h) The proposed amendment within the CHHA provides for the clustering of uses on a portion of the site outside the CHHA.

Nothing in this section should be construed as superseding or otherwise modifying the local plan amendment requirements of Chapter 163.3178, Florida Statutes, as amended.

Policy 3.3.2 The City shall prohibit future land use density increases within the Coastal High Hazard Area. Within the Community Redevelopment Area, or an area designated with an approved Special Area Plan, a density increase within the CHHA for mixed use projects may be considered subject to meeting one of the following criteria identified below. Such mixed use projects may only allow residential above the ground floor.

1. There is adequate public shelter space to accommodate the increased density when considering the entire Tarpon Springs Planning Area.
2. There is a demonstrated "no net increase" in density over the entire CHHA considering all land use amendments that have occurred since 2000. The City of Tarpon Springs shall maintain a tracking mechanism to ensure compliance.
3. There is an acceptable mitigation plan approved by the City of Tarpon Springs and Pinellas County Emergency Management.

Policy 3.3.3 Require development proposals to comply with the local hurricane evacuation needs, shelter space, and local/regional disaster preparedness plans;

Policy 3.3.4 The City has the right to permit and the Developer has the right to construct up to 362 dwelling units on the 16.61 acre parcel located at the southeast corner of the intersection of Meres Boulevard and South Pinellas Avenue. 215 residential units may be permitted and constructed on that site upon this Policy becoming effective. The remaining 147 residential units reflected in the Special Area Plan may be permitted and developed after the residential portion of the site as described in areas marked D and E of attachment C-01 of the Special Area Plan attached hereto is above the elevation of the Category 1 storm surge elevation model output published by the Tampa Bay Regional Planning Council in 2010.

Objective 3.4
Ensure the availability of suitable land for utility facilities necessary to support proposed development, discourages urban sprawl, and meets established Level of Service standards.

Policy 3.4.1 Require the issuance of development orders to comply with adopted levels of service found in the Capital Improvements Element

Policy 3.4.2 Prohibit development proposals which promote the proliferation of urban sprawl. Urban sprawl shall be contained through the use of the infill development of vacant properties, compact growth contiguous to the existing developed area, and the provision of public services and facilities in a cost effective manner which maximizes the use of existing facilities that are in place

Policy 3.4.3 Retain City owned property for future public facility use in accordance with the recommendations and policies of the Recreation and Open Space, Transportation, Sanitary Sewer, Potable Water, Solid Waste, Drainage, Groundwater Aquifer Recharge, and Capital Improvements Elements

Policy 3.4.4 Utilize the Planned Re-Development future land use and zoning concept where use and design control is necessary to assure land use compatibility, prevent urban sprawl, promote the infill development of vacant properties, and maximize the efficient cost effective provision of public services and facilities

Policy 3.4.5 Manage all development along U.S. 19 and Alternate 19 north of the Anclote River as follows:

a. utilize the Planned Development review procedure (within the Land Development Code) where designated which allows the City more flexibility in terms of use selection and design
b. .20 to .40 maximum floor area ratio, depending upon the need to retain consistency with the Pinellas Planning Council Countywide Land Use Plan and interlocal planning agreement with Pinellas County unless otherwise approved as a Special Area Plan.
c. require controlled access
d. require cross access
e. require side street access
f. cluster development in activity centers
g. utilize mixed use zoning districts and land use categories where necessary to enhance the potential for activity centers and reduce the need for external vehicle trips

Policy 3.4.6 Restrict commercial uses from developing along Keystone Road, and other County, State, and local roadway corridors where commercial uses are not presently dominant

Policy 3.4.7 Ensure that all development is reviewed for consistency with the requirements of the Transportation and Utility Elements of the Comprehensive Plan.

Policy 3.4.8 Recreation and park sites shall be held inviolate against diversion to other uses except in instances of overriding public need

Policy 3.4.9 Issue development orders where compliance with the locally established level of service standards has been demonstrated, where facilities and services are available concurrent with the impacts of the development order, where development orders can be conditioned upon the availability of the necessary facilities and services to serve the proposed development, and where utility services are authorized at the time the development is authorized

Objective 3.5
Ensure that dredge spoil disposal sites are coordinated and managed by the City of Tarpon Springs when required for intermittent recreational dredge projects and dredging of the federal channel within the Anclote River.

Policy 3.5.1 The City of Tarpon Springs shall utilize existing City owned property, where practical, as temporary dredge spoil disposal sites for intermittent recreational dredge projects.

Policy 3.5.2 The City of Tarpon Springs will coordinate and assist the Army Corps of Engineers in procuring suitable temporary dredge spoil disposal site for the federal channel within the Anclote River.

Goal 4.
To comply with Chapter 88-464, Laws of Florida, as amended, by participating in the Countywide planning process through representation on and coordination with the Pinellas Planning Council, to ensure consistency between the City and the Countywide Comprehensive Plans.

Objective 4.1
The Future Land Use Element of the City of Tarpon Springs Comprehensive Plan shall be consistent with the Countywide Future Land Use Plan and Rules

Policy 4.1.1. Through its Future Land Use Element, the City shall maintain consistency with the Countywide Future Land Use Plan by requiring the following:

a. Identification of any inconsistencies between the Future Land Use Element and Plan Maps of the City of Tarpon Springs and the Countywide Future Land Use Plan and Rules.
b. Processing for action by the Pinellas Planning Council and the Board of County Commissioners, acting in their capacity as the Countywide Planning Authority, all land use plan amendments required to reconcile outstanding inconsistencies between respective land use plans, such processing to be initiated by the City.

Policy 4.1.2 Per Chapter 88-464, Laws of Florida, as amended, the City's Land Development Regulations shall contain density/intensity standards and "other standards" consistent with the Rules Concerning the Administration of the Countywide Future Land Use Plan, As Amended, ("Countywide Plan Rules") including criteria and standards for nomenclature, continuum of plan classifications and categories, use and locational characteristics, map delineation, other standards, and special rules. Where certain standards are not identified or may be in conflict with the minimum criteria established in the Countywide Plan Rules, the standards of the Countywide Plan Rules shall be applied.

Policy 4.1.3 The City of Tarpon Springs shall review and amend all Future Land Use categories to establish/maintain consistency with the Countywide Plan Rules during the 2017 EAR based amendment cycle.

Policy 4.1.4 Per Article 4 of The Countywide Rules, (effective date August 7, 2015) the following Table 10 is provided showing the City's Future Land Use Categories corresponding to appropriate Countywide Plan Map Categories.

Table 10: Corresponding Future Land Use Categories and Countywide Map Categories

Plan Symbol	City Future Land Use Categories	Corresponding Countywide Map Categories
RVL	Residential Very Low	RVL
RS	Residential Suburban	RLM
RL	Residential Low	RLM
RU	Residential Urban	RLM
RLM	Residential Low Medium	RLM
RM	Residential Medium	RM
R/OG	Residential/Office General	O
R/OR	Residential/Office Retail	R&S
RFO	Resort Facilities Overlay	R
R/OL	Residential/Office Limited	O
RFM	Resort Facilities Medium	R
RFH	Resort Facilities High	R

CN	Commercial Neighborhood	R&S
CL	Commercial Limited	R&S
CR	Commercial Recreation	R
CG	Commercial General	R&S
CG-F	Commercial General-Fishing	R&S
IL	Industrial Limited	E
IG	Industrial General	I
IG-WF	Industrial General-Waterfront	I
P	Preservation	P
R/OS	Recreation/Open Space	R/OS
I	Institutional	P/SP
T/U	Transportation/Utility	P/SP
MU	Mixed Use	AC, MMC
IND	Industrial	I
W/DF	Water/Drainage Feature	
CRD	Community Redevelopment District	AC
CBD	Central Business District	AC

Objective 4.2
Transferable Development Rights are to be allowed within the City consistent with Article 5, Section 5.2.1, Rule 5.2.1.1 of Forward Pinellas' Countywide Rules as amended through May 31, 2016.

Goal 5.
Improve the quality of life in Tarpon Springs by providing diverse, well designed and walkable destinations by creating and maintaining choices in housing, offices, workplaces and travel choices. The primary implementation of this goal shall be through the adoption of the Multi-Modal Transportation District (MMTD) shown in Figure 7.

Objective 5.1
Create livable, walkable streets that are designed and oriented toward pedestrians, bicycles, and transit. The primary focus for this application shall be within the Multi-Modal Transportation District, however large scale development / redevelopment projects shall also consider application of these standards.

Policy 5.1.1 Design pedestrian-oriented streets to include continuous sidewalks with a minimum width of five feet, buffered from traffic by on-street parking and/or landscaping, and that include pedestrian amenities such as benches, trash receptacles, bus / transit shelters, and lighting.

Policy 5.1.2 Provide a sense of vertical enclosure on streets through minimal front setbacks, similar building heights, and street trees. Building heights should be proportional to the width of the street, preferably a ratio of 1:1 to 1:3. Heights in excess of a ratio of 1:1 shall be required to setback proportionally above the first story.

Policy 5.1.3 Buildings shall be served by walkways that directly link the building's main entryway to the street. These primary walkways must be visually distinct from parking lot and driveway surfaces and may include textured or colored materials. Paint or striping along will not suffice to meet this requirement.

Policy 5.1.4 Prohibit the location of permanent structures such as utility poles, traffic control poles and associated equipment boxes within the sidewalk.

Policy 5.1.5 Provide direct routes between destinations, minimizing potential conflicts between pedestrians and motor vehicles

Policy 5.1.6 Locate sidewalks along both sides of all public streets, particularly along routes that attract high volumes of pedestrian activity such as those leading to schools, recreational facilities, activity centers and employment districts.

Policy 5.1.7 Provide a clear passage zone of 5 feet in areas with movable obstructions, such as outdoor seating. Place benches on a separate pad behind the back of sidewalk or between the sidewalk and street to avoid clear passage zone obstruction.

Policy 5.1.8 Drive-through windows shall not be permitted along building façades facing the public right-of-way.

Policy 5.1.9 Require access across property lines that allow vehicular and pedestrian movement between properties without returning to the street.

Policy 5.1.10 Require site plans for new development and redevelopment of mixed use and non-residential sites to show any gaps or barriers to the pedestrian or bicycle network within ¼ mile of the proposed development.

Objective 5.2
Encourage the development of pedestrian-scale centers that offer a variety of retail and services with varying scales that compliment neighborhood character.

Policy 5.2.1 Two types of mixed use centers are appropriate for the City of Tarpon Springs: The Neighborhood Center and the Town Center. Definitions of each center are as follows:

Town Center Town Centers are characterized by a significant area of development that is smaller than an Urban Center but provides convenient daily retail and personal service within walking distance of surrounding residential areas. Town centers consist of short, compact blocks that contain a variety of uses, mixed both horizontally and vertically, generally within a five square mile area.

Neighborhood Center Neighborhood Centers are characterized as traditional "Main Street" communities organized around a focal point with a sense of community identity. Neighborhood Centers typically consist of a limited number of commercial establishments that fulfill the basic needs of residents within one mile of the center. This category is typically applied to historic neighborhood or smaller town environments with a main street, but is also appropriate for neighborhoods with higher levels of connectivity that may have commercial areas that can be redeveloped to be more transit and pedestrian friendly.

General Standards for all Mixed-Use Centers:

Policy 5.2.2 Mixed-use centers shall be permitted in areas defined as redevelopment areas, as well as in proximity to existing activity centers, such as employment centers, large scale commercial developments, recreational facilities, and transit stops.

Policy 5.2.3 Mixed-use centers shall be well defined through the creation of focal points, as well as transition in scale, density, and intensity from center to edge.

Policy 5.2.4 Mixed-use centers shall have integrated infrastructure, vertical and/or horizontal integration of different land uses and coordinated access.

Policy 5.2.5 For all mixed-use centers, land uses that can be included in the vertical and horizontal mix are:

a. Residential;
b. Food services (including neighborhood grocery stores; bakeries; cafes; coffee shops; neighborhood bars or pubs; restaurants, not including drive-throughs);
c. Retail uses (including florists or nurseries; hardware stores; stationery stores; book stores, studios and shops of artists and artisans);
d. Services (day care centers; music, dance or exercise studios; offices, including
e. professional and medical offices; banks, barber; hair salon; dry cleaning);
f. Accommodations (bed and breakfast establishments, small hotels or inns).

Additional uses that can be included in a horizontal mix are:

a. Civic uses (government buildings, community theatres, museums, churches);
b. Open space (linear parks, pocket parks, plazas, trails)

Policy 5.2.6 All mixed use centers shall have a maximum build-to line of 15 feet from the right-of-way (ROW). Building heights should be proportional to the width of the street, preferably a ratio of 1:1 to 1:3.

Policy 5.2.7 At least 50 percent of the development shall front the public ROW, and all parking shall be located to the rear of structures that front the ROW.

Policy 5.2.8 All uses must be within a one-half mile of each other, and must be interconnected with sidewalks. In order to prevent long, circuitous routes, the sidewalk facility between each use may not be more than 1.2 times the straight line or "as the crow flies" distance.

Policy 5.2.9 In order to encourage mixed use centers, the City of Tarpon Springs shall amend its Land Development Code to reduce parking requirements and create maximum parking standards.

Policy 5.2.10 Specific requirements for each mixed use center are exhibited in Table 11 below:

Center Type	Minimum % Mix of Uses				Density		FAR
	Office	Comm	Res	Civic	Min	Max	Max
Town Center	15%	20%	35%	5%	10	40	2.0
Neighborhood Center	10%	10%	45%	10%	8	15	1.0

Table 11: Mixed Use Center Requirements

Notes: Density is expressed in units per acre. Commercial uses include retail. Civic uses include open space, and residential uses include all residential types, excluding accessory dwelling units.

Policy 5.2.12 Mixed Use centers shall adhere to the requirements of the City's Multi-Modal Transportation District, where applicable.

Policy 5.2.13 Proposed Mixed Use Centers that exceed the maximum allowable density/intensity allowed within the standard Future Land Use designations shall require a Special Area Plan in accordance with the Countywide Plan Rules of Pinellas County and an amendment to an appropriate Future Land Use Designation.

Objective 5.3
Promote high quality design standards that support the community's image and contribute to its identity and unique sense of place.

Policy 5.3.1 Encourage building design to provide an ordered variety of entries, porches, windows, bays and balconies along public rights of ways where it is consistent with neighborhood character.

Policy 5.3.2 Buildings with facades greater than 50 feet in length should be broken down in scale by means of the articulation of well-proportioned and separate areas. Strategic elements include the variation of architectural treatment and elements such as colors, materials, and heights.

Policy 5.3.3 For any ground-level façade that faces a right-of-way, a minimum of 50% to a maximum of 80% of the ground level façade shall be transparent (including windows and door openings) for any building containing non-residential uses. This requirement shall apply to both facades of a building on a corner lot.

Policy 5.3.4 Buildings shall include street level elements oriented to the pedestrian, such as awnings, arcades, and signage.

Policy 5.3.5 Within the National Register Historic District new development shall be designed to maintain and support existing character.

Policy 5.3.6 The City of Tarpon Springs shall preserve the character of existing residential neighborhoods by requiring infill or remodeled structures to be compatible with the neighborhood and adjacent structures.

Policy 5.3.7 To promote housing diversity and to avoid creation of monotonous developments, the City of Tarpon Springs shall promote the inclusions of a variety of housing types in all residential communities through the City of Tarpon Springs Comprehensive Land Development Code.

Policy 5.3.8 The City of Tarpon Springs shall revise setback requirements to allow porch easements in subdivision design and require living areas of the structure to be closer to the street than garage areas.

Policy 5.3.9 The City of Tarpon Springs shall amend its Comprehensive Land Development Code to require that single family attached and multi-family developments be designed to include orientation of the front door to a neighborhood sidewalk and street.

Policy 5.3.10 Open vistas and open spaces shall be integrated into the design of all mixed use centers.

Objective 5.4
Increase workforce housing opportunities, particularly within proximity to places of employment and transit facilities.

Policy 5.4.1 Workforce housing shall be defined as the housing needs of households whose median income is between 80% and 120% of the area's median income, with no more than 30% of their income spent on housing costs.

Policy 5.4.2. Priority shall be given to assisting affordable work force housing projects which are proximate to employment concentrations, public transportation, or with easy access to a range of public services.

Policy 5.4.3 Within two years, the City of Tarpon Springs shall establish the necessary affordable housing plan / Special Area Plan to implement a policy allowing residential and mixed-use developments within ¼ mile of an existing or planned transit stop or station or a major employment

center with a minimum of 50 employees per acre to be eligible for a density bonus of one market rate unit for every affordable unit, or an intensity bonus of up to 1.0 Floor Area Ratio. The City of Tarpon Springs shall amend its Comprehensive Land Development Code to establish criteria and a point system for the bonus. The primary application of this policy shall be within the Multi-Modal Transportation District.

Policy 5.4.4 The City of Tarpon Springs shall permit granny flats or other accessory dwelling units in residential or mixed use districts and shall not count such units against the allowable designated density established by future land use or zoning.

Objective 5.5
Parking lots and driveways shall be designed to support pedestrian safety, connections and comfort by reducing the number of curb cuts and providing interconnectivity between and through sites.

Policy 5.5.1 The City of Tarpon Springs shall allow a parking requirement reduction for properties that share both cross access and a common entrance drive.

Policy 5.5.2 New commercial, office and retail buildings and centers shall be planned to reduce the number of curb cuts and driveways. Where possible, projects should share driveways and parking access with adjacent sites to provide an interconnected system of auto and service access points.

Policy 5.5.3 When redevelopment or re-use of a site results in the combination of one or more parcels of land that had previously operated as separate uses with separate driveways and parking, which are now proposed to operate jointly or to share parking facilities, the total number and location and width of driveways shall be reviewed. In order to reduce access points on the street system, driveways shall be eliminated when the area served can be connected within the site.

Policy 5.5.4 Parking lots and driveways shall provide pedestrian connections to storefronts. Dedicated walkways through parking lots and sidewalks should be included in the design of access roadways.

Policy 5.5.5 Parking lots shall include trees to provide shade and reduce temperature.

Policy 5.5.6 Service windows and stacking lanes for drive-through business shall not face public streets.

Policy 5.5.7 Mid-block and rear alleys should be utilized where feasible for access to parking, utilities, serve and unloading areas in order to minimize the number of required curb cuts along primary access routes.

Objective 5.6
The City of Tarpon Springs shall promote transportation choice through construction of well designed pedestrian, bicycle and transit facilities.

Policy 5.6.1 In road construction and reconstruction projects, roadway designs shall protect and promote pedestrian comfort, safety and attractiveness in the Multi-Modal Transportation District and other large-scale redevelopments which may occur along road frontages. Such measures should include, where feasible, on-street parking, wide sidewalks, and abundant landscaping at the street edge.

Policy 5.6.2 The City of Tarpon Springs shall prioritize street segments with sidewalk gaps. The following criteria shall be used in prioritizing sidewalk gap improvements:
(1) proximity to public schools;
(2) proximity to major public parks or cultural facilities;

(3) proximity to high density residential and commercial areas, or any area exhibiting (or potentially exhibiting) a high volume of walking;
(4) arterial and collector streets;
(5) proximity to transit routes; and
(6) proximity to identified redevelopment areas.

Policy 5.6.3 Future arterial and collector road constructions, widening, or reconstruction projects shall require accommodation of bicycle travel and pedestrian needs.

Policy 5.6.4 In the planning and design of transit sites and stations, high priority shall be given to providing a safe, attractive, and comfortable environment for pedestrian and transit user; such amenities shall include weather protection, ample paved walkways, sidewalks, lighting and landscaping and may include ancillary uses that provide conveniences to transit patrons such as cafés, new stands, and food kiosks/vendors. Buildings shall be served by walkways that directly link the building's main entryway to the street and to the transit stop. These primary walkways must be visually distinct from parking lot and driveway surfaces and may include textured or colored materials. Paint or striping alone will not suffice to meet this requirement.

Policy 5.6.5 The provision of landscaping near the transit stop in the form of shade or ornamental / palm trees is encouraged to maximize passenger comfort.

Policy 5.6.6 City of Tarpon Springs shall consider travel lane width reductions or reducing the number of lanes in order to provide wider sidewalks, bike lanes, landscaping medians and/or on-street parking. Streets with right-of-way widths of 40 feet or less shall be evaluated for consideration as one-way streets.

Goal 6.
Promote sustainable economic development, energy efficient land use patterns and responsible job growth within the City of Tarpon Springs

Objective 6.1
Evaluate various potential growth patterns for impacts upon the City's ability to provide long term sustainable services to the City's residents

Policy 6.1.1 The City will conduct a "cost of growth" analysis to determine the most beneficial future growth patterns and review and amend as necessary the City's Comprehensive Plan to implement the recommendations of the study.

Objective 6.2
Ensure that small, locally owned independent businesses, unique to Tarpon Springs are able to compete with large retail chains.

Policy 6.2.1 The City will evaluate the impact of formula based businesses upon locally owned establishments and implement regulations or other incentives to ensure that locally owned businesses are able to fairly compete.

Objective 6.3
Encourage development / re-development that promotes sustainable urban development patterns.

Policy 6.3.1 Allow urban agriculture uses such as hydroponic crop production, self-sustainable urban farming, and local food production within the City's industrially designated lands.

Policy 6.3.2 Allow community gardens and cooperatives, after conditional use review, within residentially designated areas.

Policy 6.3.3 Allow vegetable/produce stands, after conditional use review in residentially designated areas.

Policy 6.3.4 Provide incentives to attract the types of businesses needed to provide a well-rounded mix of complimentary uses in the City's core business areas (industrial areas, downtown, tourist areas and highway business areas)

Objective 6.4
Encourage local job growth so that residents may choose to work, shop and play close to home and reduce vehicle miles traveled.

Policy 6.4.1 Protect the City's remaining industrially designated lands from incremental land use amendments to non-industrial uses.

Policy 6.4.2 Evaluate the permitted and conditional uses within the City's industrial districts and amend, where necessary, to protect the integrity of the industrial designations and priority use of these areas for primary job creation.

Policy 6.4.3 Encourage mixed use development patterns, where appropriate, to reduce commuting costs and vehicle miles traveled.

Objective 6.5
Promote transit oriented redevelopment along current / future transit routes

Policy 6.5.1 Identify current and future planned transit routes on Figure 10 of the Future Land Use Map Series. Transit routes shall be reviewed bi-annually for inclusion on the map.

Policy 6.5.2 Identify locations for future Transit Oriented Re-Development (TORD). Priority shall be given where multiple modes of transportation (bus, rail, cycling, and pedestrian-friendly) are in close proximity. TORD areas shall be evaluated bi-annually in conjunction with transit route evaluations and the map (Figure 10) updated as required.

Policy 6.5.3 Re-development projects located within a TORD location shall comply with minimum density to support transit (10-12 units per acre) and shall meet the mix of uses required for a Neighborhood Center as identified in Policy 4.2.10 of this element and the General Standards for all Mixed-Use Centers (Policies 4.2.2 through 4.2.13

Objective 6.6
Promote energy efficient land use patterns through diversification of uses

Policy 6.6.1 Identify those areas of the City currently developed as a singular land use (completely residential, or commercial, for example) on Figure 10 of the Future Land Use Map Series. These areas shall be evaluated bi-annually and the map updated as required.

Policy 6.6.2Within the larger singular land use areas, identify on Figure 10 the major intersections where appropriately scaled, compatible retail/commercial nodes may be considered. These transportation nodes shall be evaluated bi-annually and the map (Figure 10) updated as required.

Policy 6.6.3 Future Land Use Amendments supporting appropriately scaled and designed mixed use development shall be supported within or adjacent to nodes identified in Policy 6.6.2. Specific

development projects shall be reviewed for compliance with the General Standards for all Mixed Use Centers and well as Policies 4.1.1 through 4.1.10

Objective 6.7
Promote energy conservation by encouraging rehabilitation of existing structures and new construction to utilize energy efficient design

Policy 6.7.1 Promote sustainable communities by encouraging green building that conserves natural resources and reduces monthly operating costs

Policy 6.7.2The City of Tarpon Springs will encourage construction that uses the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) principles or the Florida Green Building Coalitions' Green land development and building standards

Policy 6.7.3 By 2010, determine a threshold and criteria for requiring LEED standards/certification in development and redevelopment projects, and implement through update to the Land Development Code. In addition, consider an incentives program to encourage green building, development, and rehabilitation. Such incentives should include flexibility of zoning dimensional criteria and F.A.R. bonuses for minimum LEED compliance.

Goal 7.
Promote development of temporary lodging facilities within the City to serve the growing tourist industry within the City of Tarpon Springs

Objective 7.1
The City of Tarpon Springs shall encourage the development of temporary lodging facilities by providing the alternate temporary lodging densities and intensities allowed by Article 5 of the Countywide Rule with the following restriction:

Policy 7.1.1 Table 12 shows the densities and intensities for temporary lodging facilities:

Table 12 Temporary Lodging Densities and Intensities

		Maximum Density/Intensity Standards		
Plan Category	**Temporary Lodging on Property That is:**	**Units/Acres**	**FAR**	**ISR**
CR, RFM, RFH	Less than one (1) Acre	75	2.0	0.95
	Between one (1) and three (3) Acres	100	3.0	0.95
	Greater than three (3) Acres	125	4.0	0.95
CG, CL	No Property Size Limitation	60	1.2	0.90
IL	Subject to 5-Acre Property Size Limitation	75	1.5	0.85

Policy 7.1.2: A Development Agreement proposing to utilize the higher densities and intensities identified in Table 12 and authorized by this Section shall address, at a minimum, the following:

a. The ability of the local government, or the applicable service provider, to meet the concurrency management standards for sanitary sewer, solid waste, drainage, and potable water, as required pursuant to Section 163.3180, F.S., and the applicable local government or service provider plan and regulations.
b. Provision for all temporary lodging uses to comply with all county and local hurricane evacuation plans and procedures to ensure orderly evacuation of guests and visitors pursuant to the Pinellas County Code, Chapter 34, Article III. In particular, all temporary lodging uses

which are located in Hurricane Evacuation Level A, as identified by the Pinellas County Comprehensive Emergency Management Plan, shall prepare a legally enforceable mandatory evacuation/closure covenant, stating that the temporary lodging use will be closed as soon as practicable after a hurricane watch is posted for Pinellas County by the National Hurricane Center. Further, a plan implementing the closure and evacuation procedures shall be prepared and submitted to the county or municipal emergency management coordinator, whichever is applicable, within 90 days of the issuance of a certificate of occupancy. This plan will be updated and sent for review when there is a change of ownership or substantive change to the plan or as required by the county or municipal emergency management coordinator, whichever is applicable.

c. Design considerations in the mobility management provisions and the restrictions on temporary lodging use, all as provided for in this Element.

Policy 7.1.3: A Development Agreement prepared pursuant to this Section shall be approved by the local government governing body, recorded with the Clerk of the Circuit Court pursuant to Section 163.3239, F.S., a copy filed with the Property Appraiser's Office, and a copy submitted to the PPC and CPA for receipt and filing within fourteen days after recording. The development limitations set forth in the Development Agreement shall be memorialized in a deed restriction, which shall be recorded in the Official Records of Pinellas County prior to the issuance of a building permit for the temporary lodging use.

Policy 7.1.4: Design Considerations. The purpose of the design considerations is to enable the local government to authorize the increased density and intensity provided for in Table 12, subject to a determination that the project is compatible with the size, location, configuration and character of the site, its relationship to the Countywide Plan Map category in which it is located, and to adjoining uses; and that the overall principles of quality urban design as set forth in Pinellas By Design: An Economic Development and Redevelopment Plan for the Pinellas Community are furthered.

In particular, design considerations applicable to the proposed use shall address the following in the Development Agreement so as to ensure compatibility in terms of context-sensitive design, and the scale and placement of the proposed use so as to achieve a harmonious relationship and fit relative to its location and surroundings:

a. Building scale, including height, width, location, alignment, and spacing.
b. Building design, including elevations, façade treatment, entrance and porch or balcony projections, window patterns and roof forms.
c. Site improvements, including building and site coverage, accessory structures, service and amenity features, walkway and parking areas, open space, and view corridors.
d. Adjoining property use, including density/intensity, and building location, setbacks, and height.

Policy 7.1.5: Mobility Management. The applicant shall ensure that a project authorized to use the increased density and intensity provided for in Table 12 adequately addresses its impacts on the surrounding road network through the implementation of mobility improvements or strategies consistent with the Pinellas County Mobility Plan, as implemented by the countywide Multimodal Impact Fee Ordinance.

Policy 7.1.6: Operating Characteristics and Restrictions. The purpose of this provision is to ensure that a project authorized to use any portion of the increased density and intensity provided for in Table 12 is built, functions, operates, and is occupied exclusively as temporary lodging.

In particular, temporary lodging uses at the densities/intensities in Table 12, or any density higher than the standard density provided for such use in each applicable Countywide Plan Map category, or the local future land use plan designation where it may be more restrictive, shall comply with the following restrictions:

a. No temporary lodging unit shall be occupied as a residential dwelling unit, and a locally-determined maximum length of stay for any consecutive period of time shall be established in the required developer agreement by the local government to ensure that any temporary lodging use does not function as a residential use.
b. Temporary lodging units shall not qualify or be used for homestead or home occupation purposes.
c. All temporary lodging units must be included in the inventory of units that are available within a temporary lodging use.
d. No conversion of temporary lodging units to residential dwelling units shall be permitted unless the conversion is in compliance with the Countywide Rules with respect to the permitted residential density and, where applicable, the intensity for associated nonresidential uses.
e. A temporary lodging use may include accessory uses, such as recreational facilities, restaurants, bars, personal service uses, retail uses, meeting space, fitness centers, spa facilities, parking structures and other uses commonly associated with temporary lodging uses. All such uses shall be included in the calculation of allowable floor area ratio.
f. Any license required of a temporary lodging use by the local government, county, or state agency shall be obtained and kept current.
g. Temporary lodging uses shall be subject to all applicable tourist development tax collections.
h. A reservation system shall be required as an integral part of the temporary lodging use, and there shall be a lobby/front desk area that must be operated as a typical lobby/front desk area for temporary lodging would be operated.
i. Temporary lodging uses must have sufficient signage that complies with local codes and is viewable by the public designating the use as a temporary lodging use.
j. The books and records pertaining to use of each temporary lodging unit shall be open for inspection by authorized representatives of the applicable local government, upon reasonable notice, in order to confirm compliance with these regulations as allowed by general law.
k. The applicable local government may require affidavits of compliance with this Section from each temporary lodging use and/or unit owner.

VI. Definitions

1. Accessory Uses - A use of land incidental and subordinate to the primary use.

2. Buffer - A reserved area attractively landscaped and perpetually maintained as common open space, free of structures, impervious surface, roadways, storage, and other enclosures or appurtenances.

3. Commercial Recreation - A recreation facility operated as a business and open to the public for a fee or membership. For the purposes of this element a commercial recreation facility does not include golf courses.

4. Conditional Use - An approval permit granted by the governing body which includes a review of land use compatibility subject to specific conditions or criteria set forth in the Land Development Code.

5. Floor Area Ratio - The gross floor area of all buildings on a site divided by the site area.

6. Intensive Commercial - Commercial uses which typically involve major repair services, extensive outdoor storage, or the display of heavy equipment, vehicles, or materials.

7. Light Industrial - A land use which primarily involves the assembly, packaging, cleaning, servicing, testing and repairing of materials, products, or equipment inside the principal structure, without the need for large accessory structures.

8. Heavy Industrial - A land use engaged in the mechanical or chemical transformation of materials or substances into new products, and which may involve significant air, water, noise, radiation, visual, odorous or other pollution, and which would have significant impacting on surrounding land uses.

9. Primary Use - The predominant land use.

10. Public Educational Facilities - Elementary schools, special educational facilities, middle schools, high schools and area vocational-technical schools of the Pinellas County School District.

11. Secondary Use - Secondary uses typically serve support functions to the primary land uses and are of secondary importance in terms of the area having zoning approval.

12. Recreational Vehicle Park - A land use designed for temporary or transient living accommodations for recreational, camping, and travel related purposes.

13. Single Family Attached - A one-family dwelling on a single lot attached to two or more one family dwellings by common vertical walls.

14. Single Family Cluster - A form of development for single family detached dwellings whereby conventional lot areas are reduced to allow the concentration of units in specific areas in order to preserve open space.

15. Single Family Detached - A dwelling which is designed for and occupied by not more than one family and surrounded by open space or yards and which is not attached to any other dwelling by any means.

16. Single Family Semidetached - A one-family dwelling attached to one other one family dwelling by a common vertical wall, and each dwelling located on a separate lot.

17. Transient Accommodation Unit – An individual room, rooms or suite within a Transient Accommodation Use designed to be occupied as a single unit for temporary lodging or living quarters.

18. Transient Accommodation Use – A facility containing one or more transient accommodation units, the occupancy of which occurs, or is offered or advertised as being available, for a term of less than one 91) month, more than three (3) times in any consecutive twelve (12) month period. In determining whether a property is used as a transient accommodation use, such determination shall be made without regard to the form of ownership of the property or unit, or whether the occupant ahs a direct or an indirect ownership interest in the property or unit; and without regard to whether the right of occupancy arises from a rental agreement, other agreement, or the payment of consideration.

VII. UNINCORPORATED AREAS

A. Chapter 163.3171(3)

The Future Land Use Map includes areas of unincorporated Pinellas County known as Sector 1 under the Pinellas Countywide Land Use Plan. It is the intent of this Element to be consistent with the objectives of that Plan and that this Plan will have no force and effect until annexation occurs. Annexations and associated development permits shall be consistent with the Pinellas Countywide Land Use Plan as well as the City of Tarpon Springs Comprehensive Plan.

Under Chapter 163.3171, Florida Statutes, a municipality is only permitted to plan for future growth in areas under its jurisdiction. However, unincorporated municipalities may be included in the plan if the affected governing bodies agree upon the boundaries of the affected area. Chapter 163.3171 (3) provides the mechanism for the adoption of an interlocal agreement. This agreement is provided in Appendix E.

B. Land Development Regulations

The regulating of land development activities in unincorporated areas of Sector 1 shall be the responsibility of Pinellas County until such time as proper annexation occurs.

VIII. PINELLAS COUNTY COUNTYWIDE COMPREHENSIVE PLAN

Chapter 73-594, Laws of Florida, as amended, requires all local government comprehensive plans and land development regulations in Pinellas County to be consistent with the Countywide Comprehensive Plan. The Countywide Comprehensive Plan, as amended, was adopted by the Board of County Commissioners, acting in their capacity as Countywide Planning Authority (CPA), by Ordinance 89-4 effective February 6, 1989.

It shall be the policy of the City of Tarpon Springs, and a specific requirement of this Comprehensive Plan, to comply with the requirements of Chapter 73-594, F.S., as amended, and to be consistent with the Countywide Comprehensive Plan, and as such Plan may be subsequently amended.

The City shall, as a component of its Land Use Element, establish and maintain consistency with the Countywide Future Land Use Plan, by requiring the following:

Identification of all inconsistencies between the plan maps of the City and countywide land use plans and coordination with the Pinellas Planning Council (PPC) so as to establish a definitive list of any such inconsistencies and establish a schedule for rectifying inconsistencies.

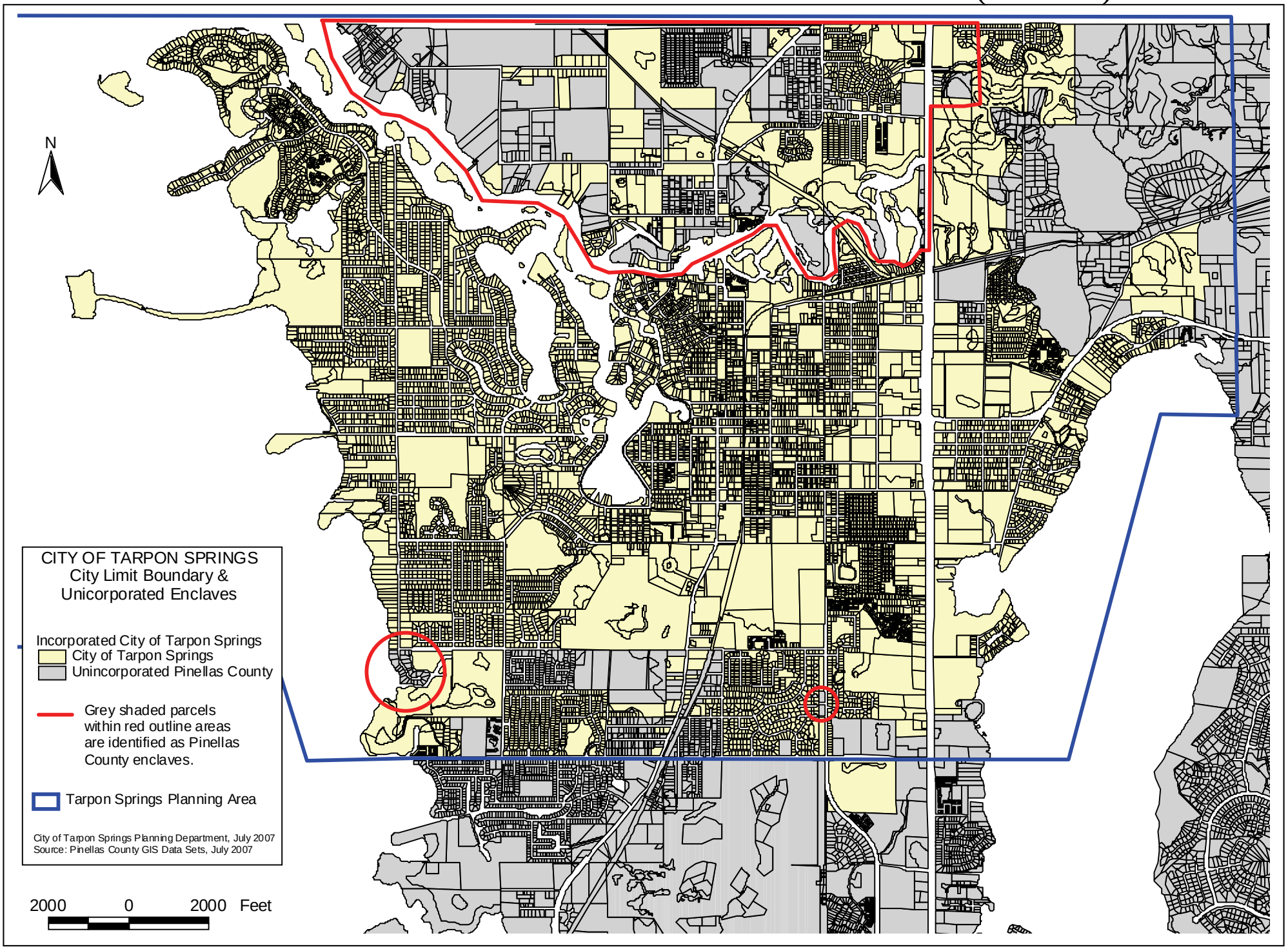
Process for action by the Pinellas Planning Council (PPC) and the Board of County Commissioners, in their capacity as Countywide Planning Authority (CPA), all land use plan amendments required to reconcile any outstanding inconsistencies between the respective land use plans, such process to be formally initiated by the City.

Transitional land uses shall be deemed consistent with the Tarpon Springs Land Use Plan after a compatibility review. However, consistency with the Pinellas Countywide Land Use Plan where an amendment is necessary shall be required prior to the issuance of development permits. Transitional areas shall be re-evaluated as a primary character is established or begins developing.

APPENDIX A
EXISTING AND FUTURE LAND USE MAP SERIES

FIGURE 1 FUTURE LAND USE ELEMENT, 2025

INCORPORATED CITY & TARPON SPRINGS PLANNING (STUDY) AREA



EXISTING LAND USE MAP

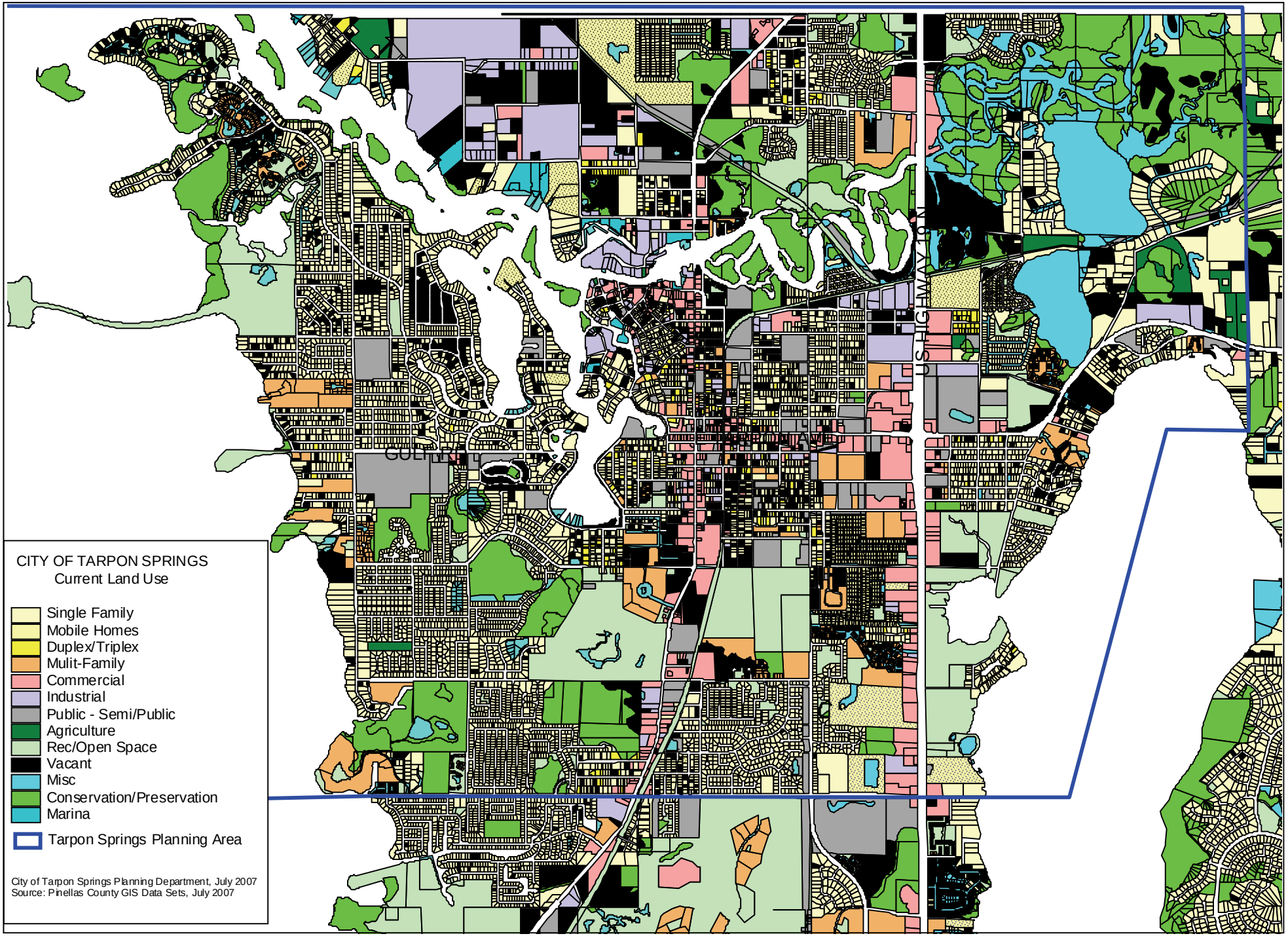
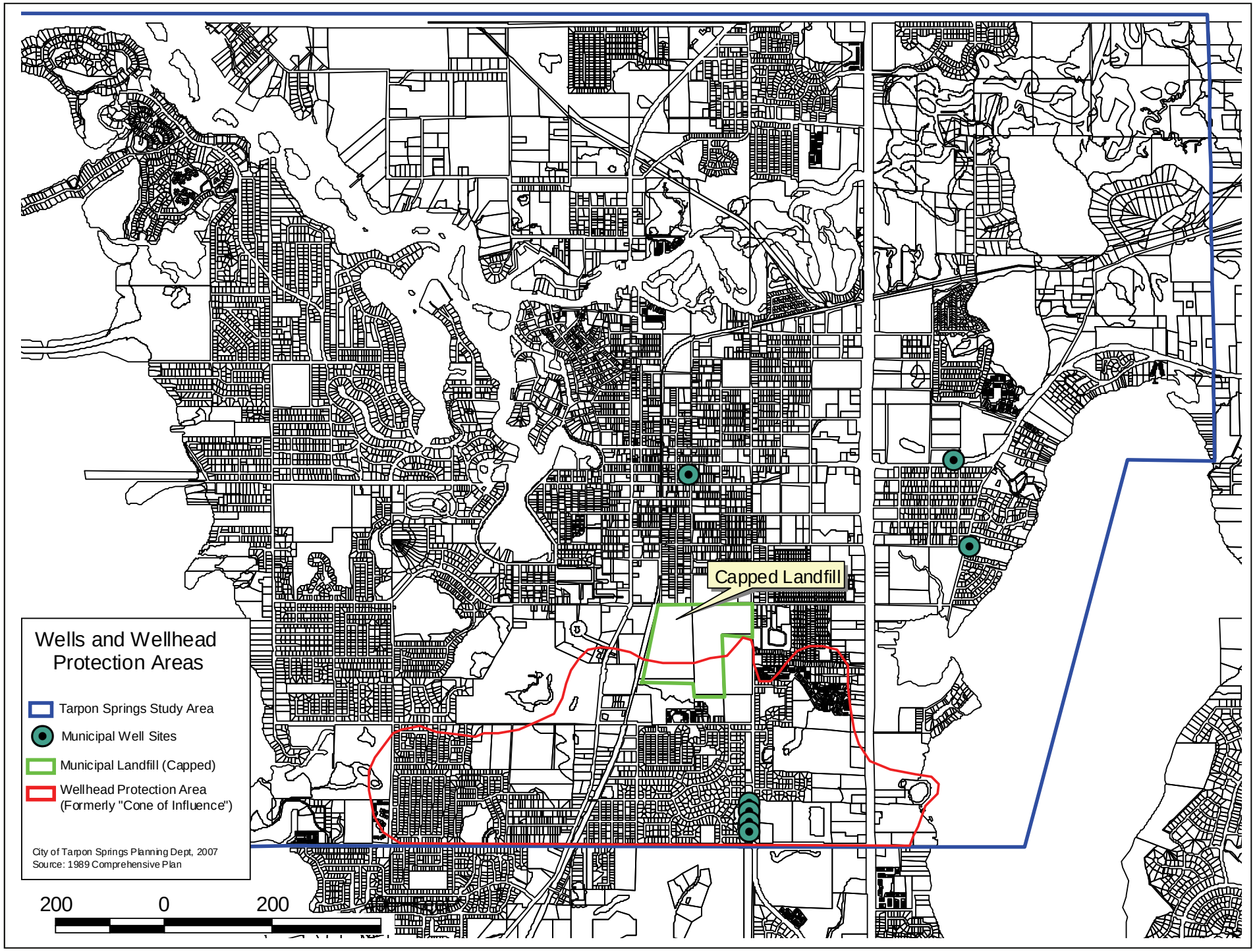
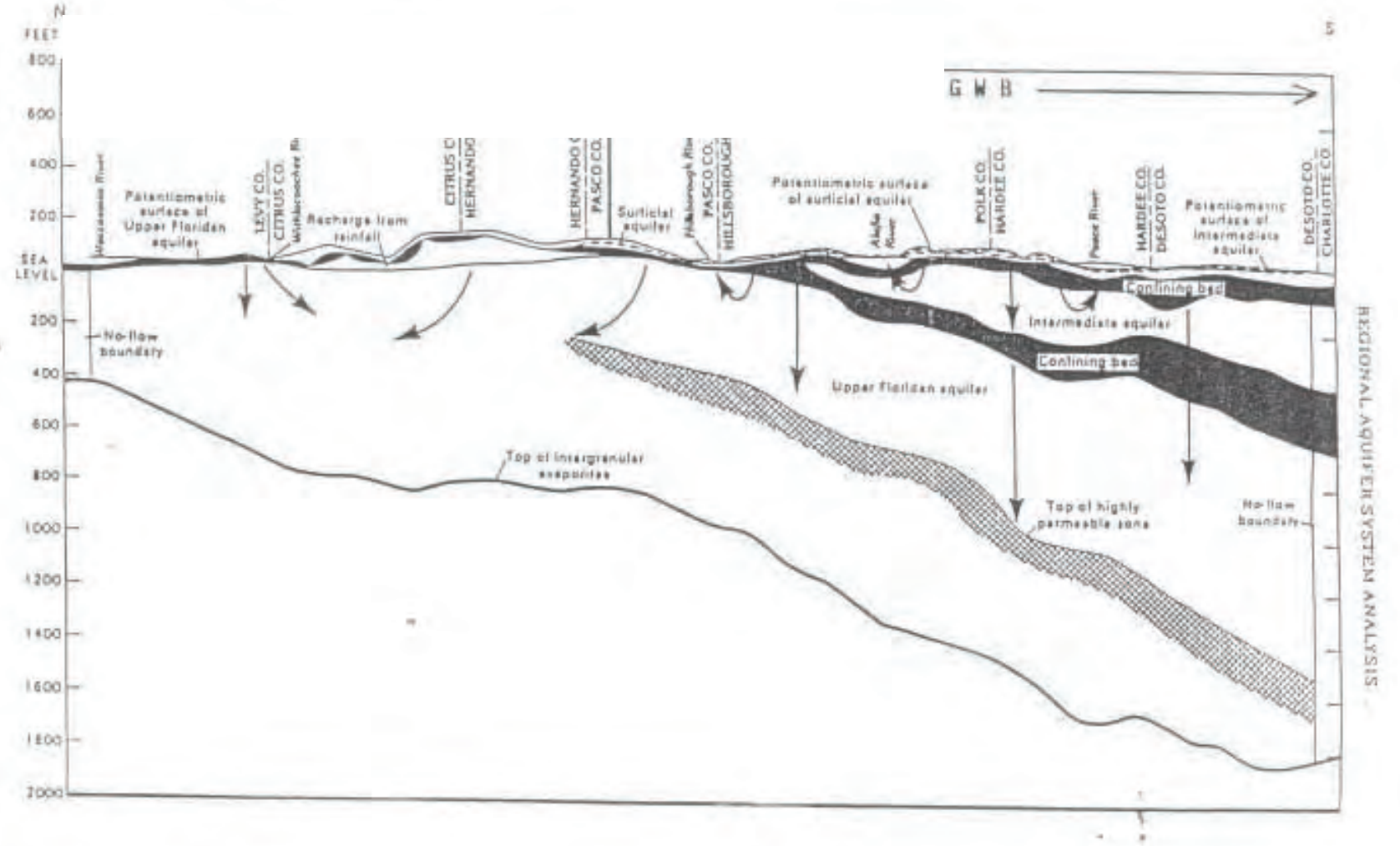


FIGURE 3 FUTURE LAND USE ELEMENT, 2025

WELLS & WELL HEAD PROTECTION AREAS



SWFWMD CONFINING BED CROSS SECTION



SOURCE: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

FIGURE 5 FUTURE LAND USE ELEMENT, 2025

SOILS MAP

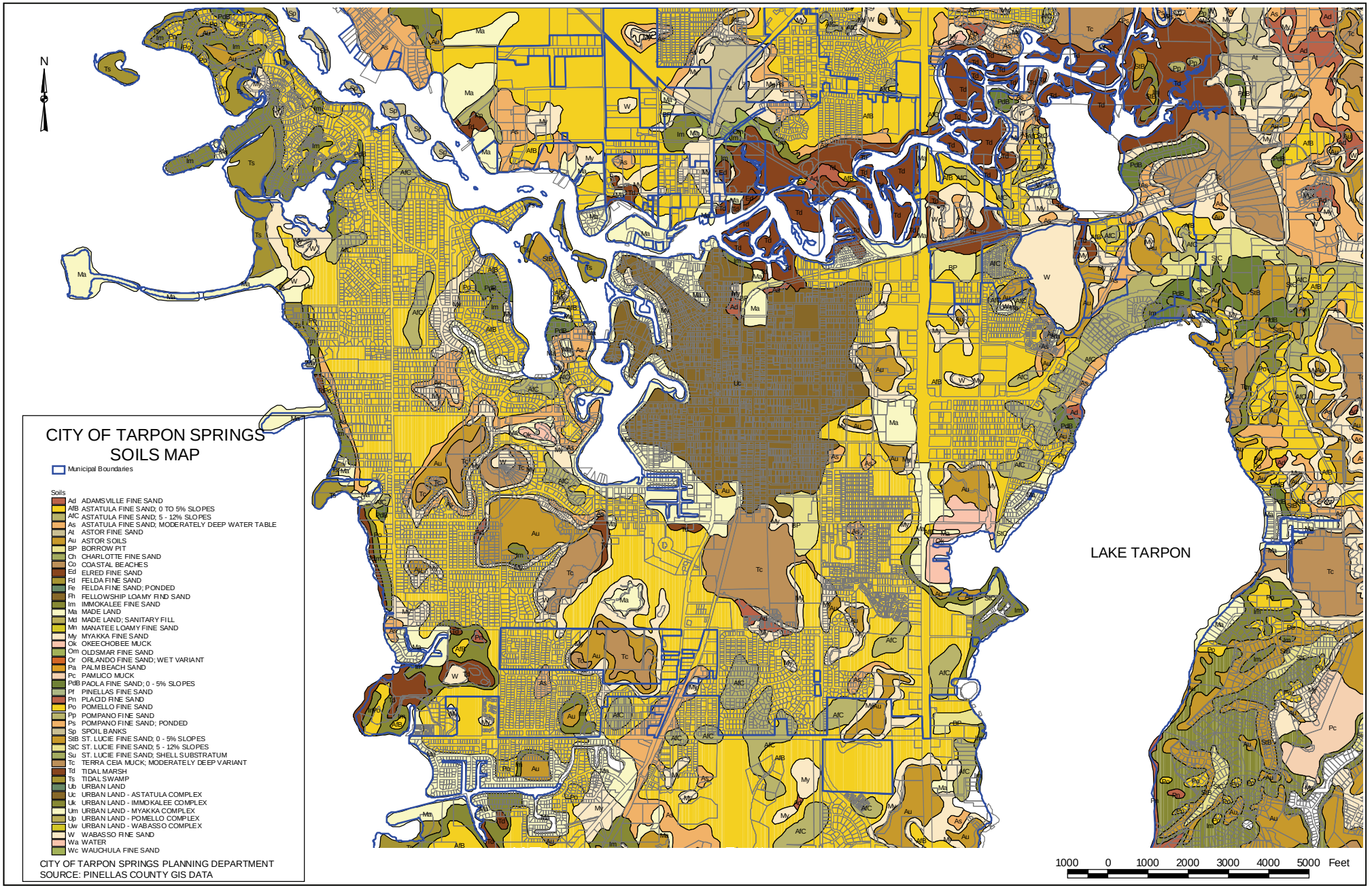


FIGURE 6 FUTURE LAND USE ELEMENT, 2025

MAJOR TRANSPORTATION ROUTES AND PARKING FACILITIES

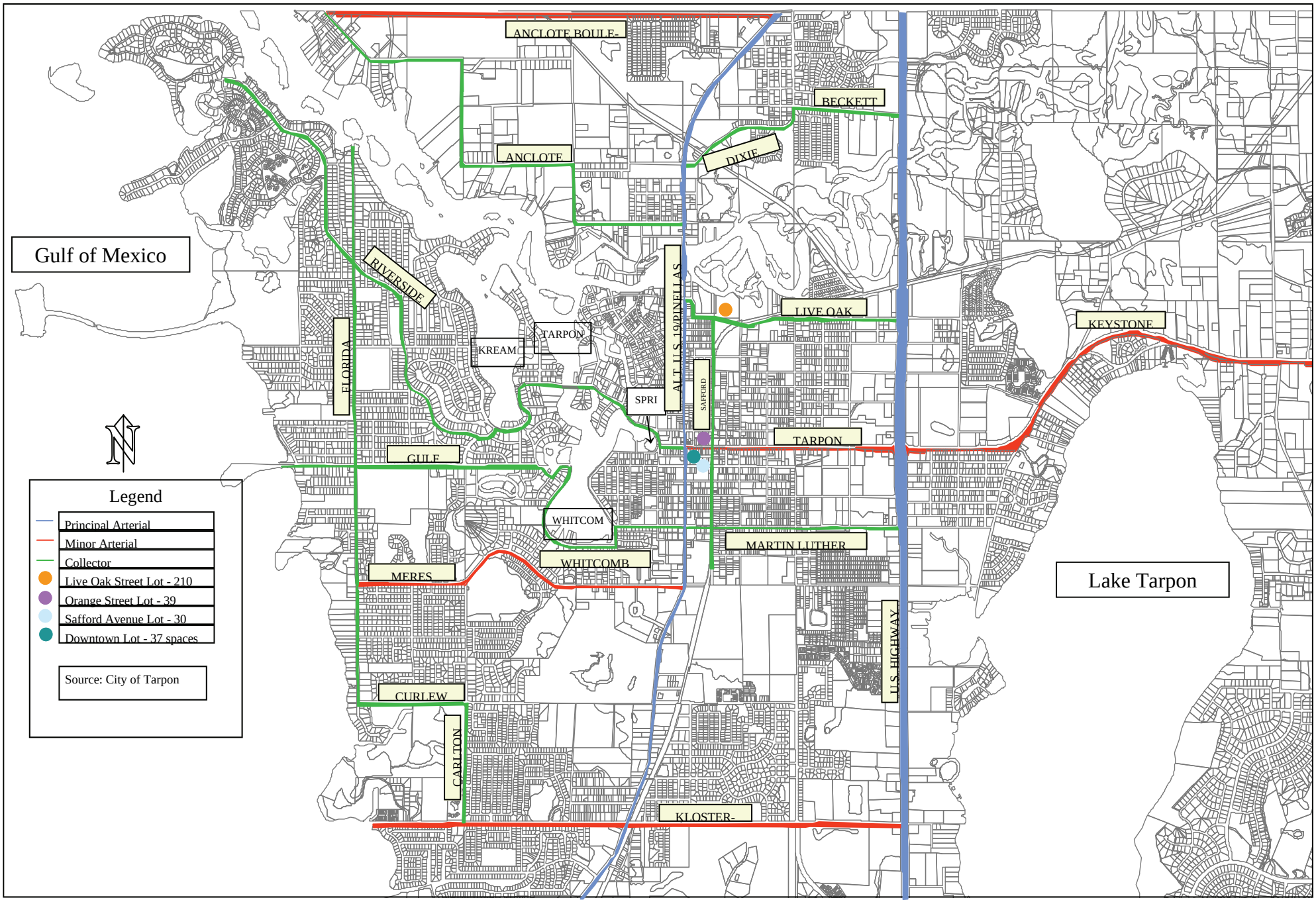


FIGURE 7 FUTURE LAND USE ELEMENT, 2025

SPECIAL DISTRICTS

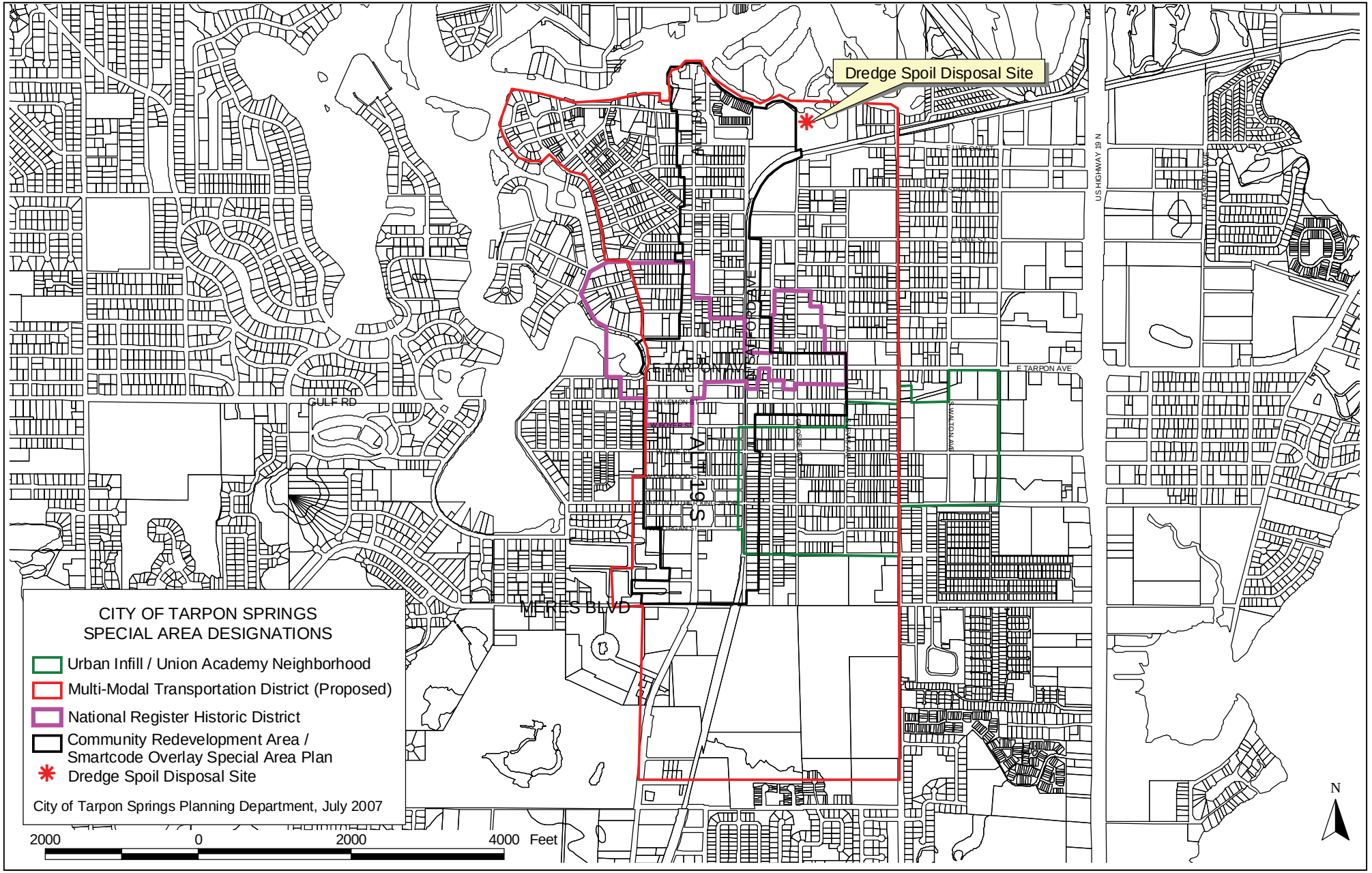


FIGURE 8 FUTURE LAND USE ELEMENT, 2025

100 YEAR FLOOD PLAIN, MOBILE HOME PARKS

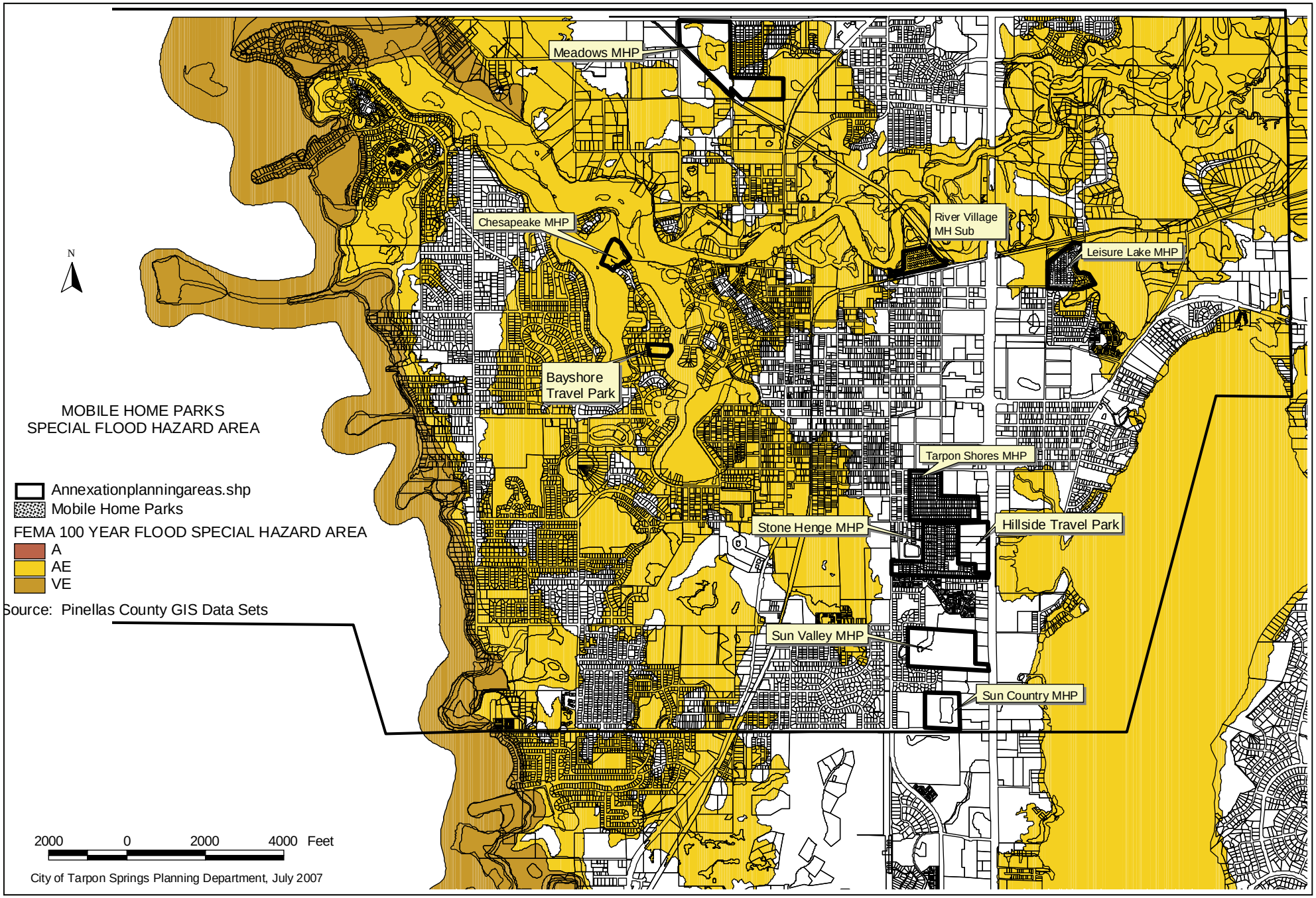
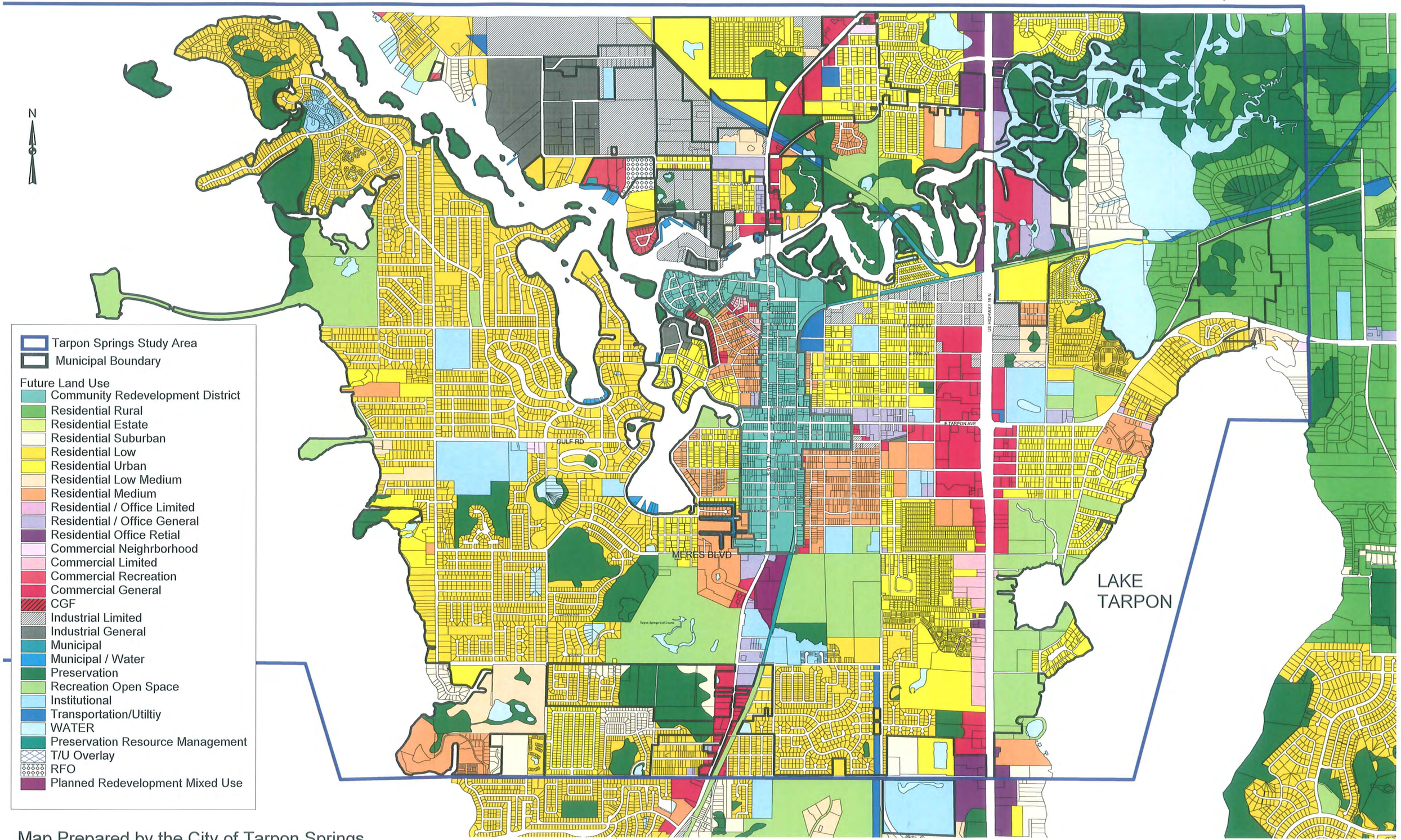


FIGURE 9, 2025 FUTURE LAND USE MAP

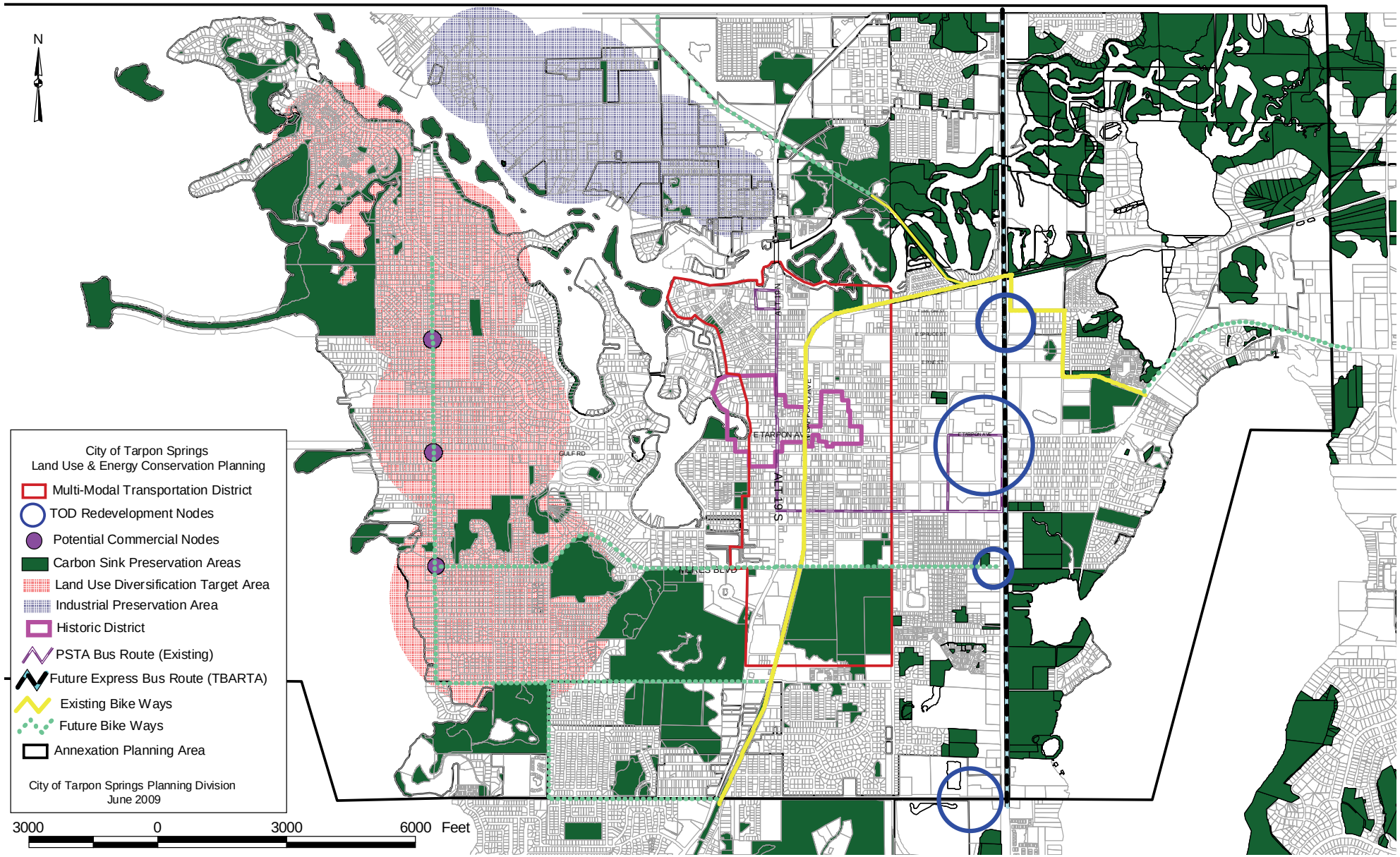
CITY OF TARPON SPRINGS FUTURE LAND USE MAP 2025 (AMENDED FOR ORDINANCE 2012-07)



Map Prepared by the City of Tarpon Springs
Planning and Zoning Division, June 2012

FIGURE 10 FUTURE LAND USE ELEMENT, 2025

LAND USE AND ENERGY CONSERVATION PLANNING (HB 697)



APPENDIX B

Existing Land Use Categories/Subcategories

MASTER LIST

PROPERTY USE/LAND TYPE CODES
GROUPED BY NUMERICAL ORDER

DATE: May 30, 2001

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
000.00	VACANT	Vacant Residential
000.10	VACANT	Vacant Office/Commercial Land
000.40	VACANT	Vacant Industrial Land
000.70	VACANT	Vacant Institutional Land
000.86	VACANT	County Owned Property/Vacant Land
000.87	VACANT	State of Florida Owned Property/Vacant Land
000.89	VACANT	Municipal (City) Owned Property/Vacant Land
000.92	INDUSTRIAL	Mining Lands – Extractive Industry, Borrow Pits Landfills
000.95	MISCELLANEOUS	Submerged Land – Rivers, Lakes
000.96	CONSERVATION/ PRESERVATION	Marshes, Mangroves, Sand Dunes, Swamps, Large Retention Ponds, Wellfields, Spoil Islands, Flood Control & Management Areas (Brooker Creek Basin, Joe's Creek & Jerry Lake, Irrigation Canals, Ditches, etc). Generally Designated as Preservation or Conservation on Local Comprehensive Plans & The Countywide Future Land Use Plan
000.97	VACANT	Wetlands, Marshes & Swamps Not Included In The Conservation/Preservation or Recreation/Open Space Categories. (To be Considered as a Type of Vacant Land)

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
110.59	AGRICULTURAL	Timberland (Not Classified by Site Index to Pines)
110.60	AGRICULTURAL	Grazing & Pasture Land
110.66	AGRICULTURAL	Orchard & Citrus Groves
110.67	AGRICULTURAL	Poultry, Swine, Tropical Fish, etc.
110.68	AGRICULTURAL	Dairy Farms
110.69	AGRICULTURAL	Ornamentals, Flower Growers, Palm Tree Farms (Nurseries Are Under Code 329.30).
120.67	AGRICULTURAL	Fisheries & Marine Products – These Establishments Are Primarily Engaged In Commercial Fishing, The Catching or Taking of Shellfish, or The Gathering of Sponges, etc. Include Docking Facilities & May Include Some Preliminary Processing (i.e.Salting). Directly Dependent Upon Access to Water
190.94	MISCELLANEOUS	Right-of-Way Street And Roads
210.01	SINGLE-FAMILY	Single-Family Detached Home
210.08	SINGLE-FAMILY	Single-Family Detached (More Than One House Parcel)
220.03	DUPLEX-TRIPLEX	Triplex
220.08	DUPLEX-TRIPLEX	Duplex
222.08	MULTI-FAMILY	Apartment House-Boarding House (4-9 units)
230.00	VACANT	Condominiums (Land Only)
230.04	MULTI-FAMILY	Condominiums
233.01	MULTI-FAMILY	Single-Family Attached Housing on Individual Lots (Includes Single & Multi-Story Units)

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
234.04	COMMERCIAL	Condo – Commercial
235.04	MULTI-FAMILY	Condo Parking Space
238.04	COMMERCIAL	Condo, Professional Office (Includes Uses Associated With The Professional Services Classification – 333.19)
240.04	RECREATION/ OPEN SPACE	Condo Recreation Areas
241.04	RECREATION/ OPEN SPACE	Condo Rec Area (Assn. Owned)
242.04	COMMERCIAL	Interval Ownership
243.04	COMMERCIAL	Time Share
245.04	MARINAS	Boat Slips Condo – Includes Condo Marinas, Individual Owned And Assigned or Rented to Unit Owner
251.97	RECREATION/ OPEN SPACE	Subdivision Rec & Green Spaces
260.02	MOBILE HOME	Mobile Home (Lot Owners, Co-ops, Condos)
290.00	SINGLE-FAMILY	Other Residential (Garages, Sheds, Barns, Kennels, Workshops, Boat Slips, Potential Buildable Lots)
290.04	MULTI-FAMILY	Multi-Family Green & Common Space (Not used for Recreation) – Yards And Green Space Typically Surrounding Condominium Structures And Given Separate Parcel Identification Numbers.
290.10	COMMERCIAL	Sheds, Garages, Non-Metered Parking Lots Associated With Commercial Uses & Not Located Adjacent to The Primary Use.
290.40	INDUSTRIAL	Sheds, Workshops, Garages, Etc.

310.03	MULTI-FAMILY	Apartments (50 Units or More)

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
311.03	MULTI-FAMILY	Apartments (10 to 49 Units)
312.39	COMMERCIAL	Hotels & Motels
314.28	MOBILE HOME	Mobile Home Parks – Trailer Parks (No Individual Lots)
315.28	MOBILE HOME	Travel Trailer Campgrounds
320.11	COMMERCIAL	Single Building Store – Free Standing (Not Otherwise Described) Where The Selling of Merchandise is The Primary Use (Produce Shops, Rental Equipment, Pool & Office Supply, Auto Parts, Hardware, Appliance, Clothing, Jewelry, Furniture, Flea Market, Roadside Fruit And/or Produce Stand, Florist Shop & Drug Store, Lawn Mower And Video Stores
321.11	COMMERCIAL	Strip Stores – 2 or More Stores – Some May Include An Office, Convenience Store, Bar And/or Restaurant (Not Major Food Stores)
322.11	COMMERCIAL	Convenience Stores (7-Eleven, Drive-Throughs)
323.11	COMMERCIAL	Discount Chain Stores (K-Mart, Wal-Mart, Etc. With or W/O One or More Small Strip Type Stores)
323.14	COMMERCIAL	Supermarket & Superstores – Free Standing (Albertson, Publix, Kash & Karry)
324.11	COMMERCIAL	Neighborhood Shopping Center – Tenants Sell Convenience Goods (i.e. Food, Drugs & Sundries) & Personal Services Primarily For Customers Within The Immediate Neighborhood Trade Area. A Grocery Store is The Anchor Tenant. Principal Tenants Include Drugstores And Small Variety Stores
324.13	COMMERCIAL	Department Stores – Free Standing (Stein Mart, Downtown Clearwater)
324.15	COMMERCIAL	Regional Shopping Center – (i.e. Enclosed Malls) – Tenants Sell Shopping Goods,

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
		General Merchandise, Apparel, Furniture & Home Furnishings. The Anchor Tenant is a Full-Line Department Store
324.16	COMMERCIAL	Community Shopping Center – One or More Major Non-Food Stores with Strip Stores. The Anchor Tenant is Typically a Discount or Off-Price Department Store, a Strong Specialty Store Such as a Hardware/Building/Home Improvement Store, or a Discount Catalog Display and Pickup Store (Levitz Home Center). May Include Full-Line Department Store And/or Food Store
325.21	COMMERCIAL	Restaurants, Cafeterias
325.33	COMMERCIAL	Bars, Liquor Stores With Lounges, Cocktail Lounges, Night Clubs (ABC, Crown, Light House, Joyland)
326.22	COMMERCIAL	Fast Food Restaurants – Drive-In/Dine-in (Burger King, Kentucky Fried Chicken, Long John Silver, Checkers)
327.12	COMMERCIAL	Stores or Offices With Apartments Above or In The Rear
329.29	COMMERCIAL	Wholesale Outlets, Produce Wholesalers, Manufacturing Outlets, Electrical Wholesalers, Restaurant Supplies, Plumbing Supplies, Office Depot
329.30	COMMERCIAL	Nurseries, Greenhouses, Landscapers, Sod, Sprinkler Systems, (Nonagricultural)
329.44	INDUSTRIAL	Packing Plants, Citrus Fruit Packing Houses, Meat Packing Plants
330.17	COMMERCIAL	General Service – Nonprofessional One Story Buildings Where The Selling of a Service(s) is The Primary Use (Advertising, Travel & Employment Agencies, Pest Control, Security Services, Cleaning/Janitorial Services, Photo-graphic Studios, Beauty Shops, Laundromats, Towing, Taxi, Limo, Upholstery Shops & Services Not Classified Elsewhere
330.24	COMMERCIAL	Insurance, Real Estate & Title Company Offices, Single or Multistory

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
331.23	COMMERCIAL	Financial Institutions – Savings, Full Service & Branch Banks, Loan Companies, Mortgage Companies, Credit Services & Credit Unions
332.18	COMMERCIAL	General Services Bldg – Multistory Office Bldgs. Predominately Non-Professional Services. Uses Include Those Listed for 330.17 Where The Selling of a Service(s) is The Primary Use
333.19	COMMERCIAL	Professional Services – Single & Multistory (Predominantly Professional) Medical, Dental, Legal, Vet & Animal Hospitals, Clinics, Architect, Accounting/Auditing/ Bookkeeping Services, Engineering Services, Educational/Scientific Research, Medical & Dental Laboratories, Utility Company Offices, Professional Services Not Classified Elsewhere. Diet Centers, Blood Banks
334.06	PUBLIC/ SEMI-PUBLIC	Residential Retirement Home (Multi-Family Areas). These Facilities Provide Housing, Food Services, & One or More Personal Services For 15 or More Adults Not Related to The Owner or Administrator by Blood or Marriage, for a Period Exceeding 24 Hours. Limited Nursing Services or Mental Health Services Are Also Provided if The Facility is Licensed IAW F.S. 400.407
334.73	PUBLIC/ SEMI-PUBLIC	Hospitals
334.74	SINGLE-FAMILY	Group Homes (Single-Family Structure) – Foster Care, Elderly, Handicapped, etc. "Group Home Facility" is a Residential Facility Providing Supervision & Care Necessary to Meet the Physical, Emotional & Social Needs of its Residents. The Capacity Of a Group Home Facility Normally is No More Than 14 Individuals
334.75	PUBLIC/ SEMI-PUBLIC	Welfare or Charitable Services - Housing Service, Drug Rehab/Mental Health Service, Red Cross, SPCA, Missions, Meals On Wheels, Salvation Facilities (Not Used For Assembly)

PROPERTY USE CODE/ LAND USE CODE	CATEGORY	CODE DESCRIPTION
334.78	PUBLIC/ SEMI-PUBLIC	Nursing Homes - Convalescent & Rest Homes, Sanitariums (Includes Full Time Care Staff)
335.76	COMMERCIAL	Mortuaries, Crematoriums, Funeral Homes
336.17	PUBLIC/ SEMI-PUBLIC	Post Office
337.76	PUBLIC/ SEMI-PUBLIC	Cemeteries
339.27	COMMERCIAL	Automobile Rental Agencies, Trailer Rentals, Truck & Van Rentals
340.27	COMMERCIAL	Boat Sales & Marine Equipment (Not Associated With a Marina), Mobile Homes, Motor Homes and Travel Trailer Sales, Boat Storage
341.26	COMMERCIAL	Service Stations – Full Service or Self-Service Gasoline
342.27	COMMERCIAL	Automobile, Motorcycle, Farm Machinery, Tractor-Trailer Dealerships – Full Agencies, Sales & Service (Grant Ford, Barney's Motorcycles, Used Car Lots)
343.27	COMMERCIAL	Auto Garages – General Repair (Radiator, Alternator, Battery, A/C, Tune-up, Body Shops)
344.27	COMMERCIAL	Auto Service Centers (National) – Aamco, Firestone, Goodyear, etc.
345.27	COMMERCIAL	Car Washes (Automatic or Do-It-Yourself)
346.28	COMMERCIAL	Paid Parking
346.29	INDUSTRIAL	Car Storage – Trailer Storage
347.20	PUBLIC/ SEMI-PUBLIC	Terminals – Airports (Private & Commercial) & Bus Terminals
348.20	MARINAS	Marinas – Nonresidential Boat Storage, High & Dry or Wet Slips That Are Rented or Owned, (Excluding Boat Ramp Facilities)

PROPERTY USE CODE/ LAND USE CODE	CATEGORY	CODE DESCRIPTION
349.49	INDUSTRIAL	Open Storage New & Used Bldg., Plumbing & Electrical Supplies, Junk Yards, Auto Wrecking, Bulk Fuel Storage, Open Equipment Storage, Open Material Storage, Bottle Gas
350.34	COMMERCIAL	Private Recreation Facilities – Bowling Alleys, Pool Halls, Skating Rinks, Spas, Gyms (and Pools), Dojos (Karate, Etc.) Arcades, Mini Golf, Obedience Training. Commercial Pools
351.32	COMMERCIAL	Entertainment Assembly – Enclosed Theaters (Movies or Playhouse), Drive-in Theaters, Enclosed Auditoriums
352.38	RECREATION/ OPEN SPACE	Golf courses, Golf Schools, Driving Ranges
352.97	RECREATION/ OPEN SPACE	Private Park Lands or Recreation Areas (Bass Haven/Redington Fishing Pier)
353.71	PUBLIC/ SEMI-PUBLIC	Non-Profit Organization Thrift Stores – Salvation Army, Goodwill, Donation Station, St. Vincent De Pauls
353.72	PUBLIC/ SEMI-PUBLIC	Professional and Trade/Service Schools – Beauty, Nursing, Dental Tech & Secretarial Career Schools, Message & Real Estate Schools, Workforce
354.35	COMMERCIAL	Amusements – Tourist Attractions, Fairgrounds, Charter Boats, Amusement Parks
359.36	RECREATION/ OPEN SPACE	Camps (Not Travel Trailer) - Day Camp, Girl Scouts, Boy Scouts, etc.
359.37	COMMERCIAL	Sports Assembly – Dog Tracks & Associated Kennels, Auto Racing Tracks, Stadium
360.91	PUBLIC/ SEMI-PUBLIC	Electrical Power Companies (Fla. Power, Tampa Electric) Rights-of-Way, Easements, Substations, Generating Stations, Maintenance Facilities, Storage Areas. (Company Offices Are Classified 333.19)

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
361.91	PUBLIC/ SEMI-PUBLIC	Telephone Company Property – Rights-of-Way, Maintenance Facilities, Storage Areas. (Company Offices Are Classified 333.19)
363.91	PUBLIC/ SEMI-PUBLIC	Railroad Property – Rights-of-Way, Maintenance Facilities & Storage Areas
364.91	PUBLIC/ SEMI-PUBLIC	Water & Sewer Facilities for Treatment, Distribution, Collection, etc.
365.91	PUBLIC/ SEMI-PUBLIC	Radio & TV Stations, Cable TV Reception Stations
369.91	PUBLIC/ SEMI-PUBLIC	Solid Waste Collection, Transfer & Disposal Facilities, Resource Recovery Plant, Mulching Facilities, Recycling Plant
510.42	INDUSTRIAL	Heavy Industrial & Heavy Equipment Mfg., Large Machine Shops, Foundries, Steel Fabrication Plants, Transportation Mfg. Plants (Boats, Aircraft, Etc.), Textile Mills, Paper Mills, Chemical Plants
520.41	INDUSTRIAL	Light Manufacturing, Electronics, Small Machine Shops, Instrument Mfg., Printing & Newspaper Plants, Small Equip. Mfg., Apparel Fabric, Rubber & Plastics, Leather Products Furniture, Lumber & Wood Product Plants; Jewelry, Silverware, Musical Instruments, Toy, Amusement & Sporting Goods, Office & Artist Materials, Novelty, Ordnance & Accessory, Sign & Advertising Display Mfg.
521.43	COMMERCIAL	Lumber Yards - Home Improvement Centers
530.44	INDUSTRIAL	Fish & Marine Products & Processing Plants. These Facilities Process, Package, Can or Otherwise Manufacture Products From Fish, Shellfish, Sponges, Etc., Not Directly Dependent Upon Access to Water
530.45	INDUSTRIAL	Canneries, Citrus Processing Plants, Bottlers,

PROPERTY USE CODE/ LAND USE CODE	CATEGORY	CODE DESCRIPTION
		Brewers, Creamery, (Pet Milk, Coke Bottlers)
530.46	INDUSTRIAL	Other Food Processing Plants, Candy, Ice Plants, Potato Chip Factories, Commercial Bakeries
530.47	INDUSTRIAL	Cement Plants, Asphalt Plants, Rock, Gravel & Clay Plants
540.48	INDUSTRIAL	Public Bonded Warehouse – Temporary Storage Facilities Used by Moving Companies
541.48	INDUSTRIAL	General Warehouses For Commercial Retailers, Distribution Terminals, Trucking Terminals, Warehouses For Manufactures (UPS), Farm Products & Food Storage
542.48	INDUSTRIAL	Mini-Storage Warehouses – Household Goods Warehousing & Storage
543.20	INDUSTRAIL	Industrial Marina Ship & Boat Building or Repair
543.25	COMMERCIAL	Repair Service Shop – Electric, Appliance, TV, Refrigeration (Excluding Automotive)
544.25	COMMERCIAL	Commercial Laundries & Dry Cleaners (Not Coin Laundromats With or W/O Dry Cleaning Services), Rug & Carpet Cleaners
590.41	INDUSTRIAL	Manufacturing Not Classified Elsewhere – Condo Industrial/Warehouse (Industrial Business as the Primary Use), Saw Mills
660.17	COMMERCIAL	Contractors, All Trades & Services, General Contractors & Consultants (e.g. General, Electrical, Plumbers, Glass, etc.), HVAC, Garbage (Private) Trucks, Portable Toilets

PROPERTY USE CODE/ LAND USE CODE	CATEGORY	CODE DESCRIPTION
910.81	PUBLIC/ SEMI-PUBLIC	Military (Army, Navy, Air Force, Marines, Coast Guard Facilities)
910.88	PUBLIC/ SEMI-PUBLIC	Federal Government Services – Executive, Legislative, & Judicial Functions & Their Related Activities (Civil Defense & Others Not Classified Elsewhere), & Correctional Institutions. Does Not Include Military & National Parks/Recreation Areas
911.87	PUBLIC/ SEMI-PUBLIC	State of Florida Services – Executive, Legislative, & Judicial Functions & Their Related Activities (Police, Civil Defense & Others Not Classified Elsewhere) & Correctional Institutions
912.86	PUBLIC/ SEMI-PUBLIC	County Services – Executive, Legislative, & Judicial Functions & Their Related Activities (Police, Fire Stations, (Includes Volunteer Fire Dept), Emergency Medical Services (EMS) & Others Not Classified Elsewhere) & Correctional Institutions
913.89	PUBLIC/ SEMI-PUBLIC	Municipal (City) Services – Executive, Legislative, & Judicial Functions & Their Related Activities (Police, Fire Stations (Includes Volunteer Fire Depts) & Others Not Classified Elsewhere), & Jails
918.86	PUBLIC SEMI-PUBLIC	Transit Authority
920.82	RECREATION/ OPEN SPACE	National Parks & National Recreational Areas
920.83	PUBLIC/ OPEN SPACE	Public County Schools – Including All School Board Facilities Except Vacant Land
922.72	PUBLIC/ SEMI-PUBLIC	Private Schools – Church School, Kindergarten, Day Schools (Children & Adult Day Care), & Nursery, Pre-schools
922.84	PUBLIC/ SEMI-PUBLIC	Colleges (Public & Private)

PROPERTY USE CODE/ LAND TYPE CODE	CATEGORY	CODE DESCRIPTION
925.87	RECREATION/ OPEN SPACE	State of Florida Owned Property (Recreation/ Open Space Areas – Includes Undeveloped Recreational Acreage) and Park Land of Southwest Fla. Water Management District (SWFWMD)
926.86	RECREATION/ OPEN SPACE	County Owned Property – (Recreation/Open Space Areas – Includes Undeveloped Recreational Acreage)
926.97	CONSERVATION/ PRESERVATION	Publicly-Owned Land Designated as Preservation-Resource Mgt. on the Future Land Use Plan for Wellfield Protection/Recharge Areas, Passive Recreational, Conservation or Aesthetic Uses That Are Predominantly Undeveloped Permeable Land
927.89	RECREATION/ OPEN SPACE	Municipal (City) Owned Property - Recreation/Open Space Areas (Includes Undeveloped Recreational Acreage)
930.71	PUBLIC/ SEMI-PUBLIC	Churches & Church-Owned Buildings (Excluding Schools)
940.79	PUBLIC/ SEMI-PUBLIC	Literary, Scientific & Cultural Organizations & Facilities – Libraries, Museums, Aquariums, Performing Art Centers, Poynter Institute
990.77	PUBLIC/ SEMI PUBLIC	Non-Profit Membership Organizations – Clubs, Lodges, Halls, Civic Clubs, Labor Union Property, Chamber of Commerce, YWCA, YMCA, Boys Clubs
991.74	MULTI-FAMILY	Assisted Living Facilities (Multi-Family Area) Primarily Independent Living Units

APPENDIX C

Soils Analysis Survey, Pinellas County
Use and Management of the Soils (excerpt)

United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experiment Stations, and Soil and Water Science Department; the Florida Department of Agricultural and Consumer Services; and the Pinellas County Board of Commissioners

Soil Survey of Pinellas County, Florida

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on slope, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; and for wildlife habitat and woodland. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and pasture is typically suggested in this section, but Pinellas County has very little acreage of either cropland or pastureland. Although estimated yields of crops and pasture plants are not listed, such information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service. For general information, the system of land capability classification used by the Natural Resources Conservation Service is explained and prime farmland is described.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their

limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of map units in this survey area is given in the section “Detailed Soil Map Units” and in table 3.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is

protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

Pinellas County does not contain any prime farmland soils.

Ecological Communities

Among areas that have similar climate and topography, differences in the kind and amount of vegetation produced are closely related to the kinds of soils in the areas. An *ecological community* is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff; and a characteristic plant community. The vegetation, soils, and hydrology are all interrelated. Descriptions of ecological communities are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

The relationship between soils and vegetation was ascertained during this survey; thus, ecological communities generally can be determined directly from the soil map. Soil properties that affect moisture supply and plant nutrients have the greatest influence on the productivity of plants. Soil reaction, salt content, and a seasonal high water table are also important.

The ecological community concept is based on the knowledge that a soil type commonly supports a specific vegetative community, which in turn provides the habitat needed by specific wildlife species.

Vegetative communities form recognizable units on the landscape, most of which are apparent to the casual observer after only a little training. Even without prior botanical training, an observer can quickly learn to distinguish between the South Florida Flatwoods community and the Longleaf Pine-Turkey Oak Hills community and between the Slough community and the Freshwater Marshes and Ponds community. Once a community is recognized, information can be found concerning the general characteristics of the soil on which it occurs and the types of plants and animals it supports.

Although some plants are found only within a very narrow range of conditions, many plants can survive throughout a wide range of conditions. Individual plants that have a wide tolerance level can occur in many different communities and on a variety of soils. When describing ecological communities, plant scientists study the patterns in which vegetation occurs. They study what species occur, the relative abundance of each species, the stage of plant succession, the dominance of species, the position of species on the landscape, and the soil or soils on which the patterns occur. Recognizable patterns of vegetation are typically found in a small group of soil types that have common characteristics.

During many years of field observation while conducting soil surveys, the Natural Resources Conservation Service determined which vegetative communities commonly occur on which soils throughout Florida. This information is summarized in a booklet named “26 Ecological Communities of Florida” (USDA, 1989).

In the following paragraphs, the vegetative communities occurring during the climax state of plant succession are described. The descriptions are based on relatively natural conditions. Human activities, such as urbanization and fire suppression, can alter the community on a specific site.

Freshwater Marshes and Ponds

The Freshwater Marshes and Ponds ecological community consists dominantly of open grassland marshes and ponds. Some sites support some trees, mostly cypress. Areas of this ecological community are typically saturated or covered with surface water for two or more months during the year. Common types of vegetation include pickerelweed, sawgrass, arrowhead, fire flag, and maidencane. This community provides excellent habitat for many species of urban wetland wildlife, such as wading birds, waterfowl, fish, and water-adapted reptiles and mammals. The map units that support the Freshwater Marshes and Ponds ecological community in Pinellas County are:

3 Anclote fine sand, depressional
7 Basinger fine sand, depressional
12 Felda fine sand, depressional
15 Manatee loamy fine sand
18 Okeechobee muck
25 Placid fine sand, depressional
27 Samsula muck

Longleaf Pine-Turkey Oak Hills

The Longleaf Pine-Turkey Oak Hills ecological community is on nearly level to gently sloping uplands. There are several variations of this community. In mature, natural stands of trees that have not been logged, the overstory is scattered longleaf pine. Areas in which pines were removed are dominated by turkey oak and other oaks, have little ground cover, and have numerous bare areas. The most important urban wildlife are such birds as warblers, towhees, great crested flycatchers, and

doves. Animals in areas of this ecological community include burrowers, such as the pocket gopher and gopher tortoise. The map units that support the Longleaf Pine-Turkey Oak Hills ecological community in Pinellas County are:

4 Astatula soils and Urban land, 0 to 5 percent slopes
5 Astatula soils and Urban land, 5 to 12 percent slopes
29 Tavares soils and Urban land, 0 to 5 percent slopes

Mangrove Swamp

The Mangrove Swamp ecological community occurs along saltwater shorelines that normally have mild wave action. Mangroves appear as a medium-height (10 to 20 feet) thicket of fleshy leafed, woody plants. The most common species are the red, black, and white mangrove. The mangrove swamps support a variety of wildlife, including birds, waterfowl, and alligators. This community is especially important for shoreline protection and stabilization. The map unit that supports the Mangrove Swamp ecological community in Pinellas County is:

14 Kesson fine sand, very frequently flooded

Salt Marsh

The Salt Marsh ecological community occurs along the gulf coast and inland along tidal rivers. This ecological community is normally flooded during high tides. The vegetative community appears as an open expanse of grasses, sedges, and rushes, such as black needlerush, seashore saltgrass, smooth cordgrass, and marshhay cordgrass. The salt marsh supports a variety of wildlife, including birds, waterfowl, and alligators. Areas of this ecological community also serve as habitat for numerous ocean species during the early life stages as they feed on invertebrate organisms. The map unit that supports the Salt Marsh ecological community in Pinellas County is:

32 Wulfert muck, very frequently flooded

Sand Scrub

The Sand Scrub ecological community occurs inland from the coast and supports even-aged stands of sand pines or thick, scrubby, oak growth. The understory is very sparse or bare. This ecological community provides valuable habitat for urban wildlife, such as the scrub jay, black racer, gopher tortoise, sand skink, and gopher frog. The map units that support the Sand Scrub ecological community in Pinellas County are:

20 Paola and St. Lucie soils and Urban land, 0 to 5 percent slopes
21 Paola and St. Lucie soils and Urban land, 5 to 12 percent slopes (fig. 7)
26 Pomello soils and Urban land, 0 to 5 percent slopes

Slough

The Slough ecological community consists primarily of open grassland in nearly level, broad drainage areas. The plant community is mostly grasses, such as blue maidencane, chalky bluestem, and bluejoint panicum, with scattered shrubs. The most important urban wildlife in areas of this community are songbirds, gray squirrels, opossum, and raccoon. The map units that support the Slough ecological community in Pinellas County are:

6 Basinger soils and Urban land
11 Felda soils and Urban land

South Florida Coastal Strand

The South Florida Coastal Strand ecological community occurs along the Gulf of Mexico and adjacent bays. This community generally encompasses long, narrow areas (sand dunes) and coastal beaches. The natural vegetation of this community is low-growing grasses, vines, and herbaceous plants with few trees or large shrubs. Seagrape, beach morning-glory, sandbur, and seaoats are some of the common plant species. These plants help to secure the dunes during hurricanes and periods of high wind. A variety of shorebirds, terns, and gulls can be found on or near the beach. Areas adjacent to the beach serve as nesting grounds for sea turtles. The map units that support the South Florida Coastal Strand ecological community in Pinellas County are:

8 Beaches
19 Palm Beach fine sand, 0 to 8 percent slopes

South Florida Flatwoods

The South Florida Flatwoods ecological community occurs in nearly level areas. The typical vegetation is scattered slash pine with an understory of sawpalmetto and grasses, typically pineland threeawn. The most important urban wildlife in areas of this community are songbirds, armadillo, gray squirrel, skunks, raccoon, and possum. The map units that support the South Florida Flatwoods ecological community in Pinellas County are:

10 EauGallie soils and Urban land

Figure 7.—Sand pine in an area of Paola and St. Lucie soils and Urban land, which is a droughty map unit. The ground cover is very sparse because the water table is deep and the soil has a very low available water capacity.

13 Immokalee soils and Urban land (fig. 8)
17 Myakka soils and Urban land
22 Pineda soils and Urban land
23 Pinellas soils and Urban land
31 Wabasso soils and Urban land

Upland Hardwood Hammocks

The Upland Hardwood Hammocks ecological community occurs as slight uplands adjacent to the flatwoods. This community is characterized by stands of hardwoods (mostly oak) and a few pines with an understory of grasses and scattered palmetto. The most important urban wildlife in areas of this community are songbirds, gray squirrel, raccoon, possum, and gopher tortoise. The map units that support the Upland Hardwood Hammocks ecological community in Pinellas County are:

2 Adamsville soils and Urban land, 0 to 5 percent slopes
28 Seffner soils and Urban land (fig. 9)

Units not assigned to an Ecological Community are:

9 Dumps
16 Matlacha and St. Augustine soils and Urban land
24 Pits
30 Urban land

Woodland Productivity and Management

The tables in this section can help woodland owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of woodland management.

Woodland Productivity

In table 4, the *potential productivity* of merchantable or *common trees* on a soil is

expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and co-dominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Woodland Management

In tables 5a through 5e, interpretive ratings are given for various aspects of woodland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified woodland management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more

Figure 8.—Typical Florida flatwoods in an area of Immokalee soils and Urban land in War Veterans' Memorial Park. The vegetation consists of saw palmetto and scattered slash pine.

Figure 9.—An area of the Upland Hardwood Hammocks ecological community in Philippe Park. This is an area of Seffner soils and Urban land.

properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified woodland management practice (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for fire damage and seedling mortality are expressed as *low, moderate,* and *high*. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for woodland management practices. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in

construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of woodland equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a low, moderate, or high potential for this kind of damage. The ratings indicate an evaluation of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer (fig. 10).

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Figure 10.—An area of Myakka soils and Urban land that was managed by controlled burning to minimize the potential for wildfire.

Recreation

The soils of the survey area are rated in tables 6a and 6b according to limitations that affect their suitability for recreation (fig. 11). The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by

the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 6a and 6b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and

Figure 11.—Lake Tarpon, which is in the northern part of Pinellas County. The county has many water areas that are used for recreation.

Figure 12.—Boca Ciega Bay viewed from Boca Ciega Millennium Park. This area can be flooded during extremely high tides.

stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer (fig. 12).

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to

bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 7, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak and sweetgum.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine and cedar.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, saltgrass, cordgrass, rushes, sedges, and reeds.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these

Figure 13.—A sidewalk passing over a wetland in an area of Basinger fine sand, depressional.

areas include bobwhite quail, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, woodpeckers, possum, squirrels, gray fox, raccoon, and deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, herons, shore birds, and egrets.

Hydric Soils

In this section, hydric soils are defined and described. The hydric soils in the survey area are listed in table 8.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation (fig. 13).

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The

criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 1998) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

The following map units meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1998).

3 Anclote fine sand, depressional
7 Basinger fine sand, depressional
8 Beaches
12 Felda fine sand, depressional
14 Kesson fine sand, very frequently flooded
15 Manatee loamy fine sand
18 Okeechobee muck
25 Placid fine sand, depressional
27 Samsula muck
32 Wulfert muck, very frequently flooded

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The following map units, in general, do not meet the definition of hydric soils. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

6 Basinger soils and Urban land
11 Felda soils and Urban land
22 Pineda soils and Urban land

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses (fig 14).

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate

Figure 14.—A concrete water-control structure that minimizes erosion and controls the water level in a small lake.

alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills and septic tank absorption fields; plan detailed onsite investigations of soils and geology; locate potential sources of sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 9a and 9b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 10a and 10b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the

Figure 15.—An area of Felda fine sand in which a septic system has been placed in a raised bed due to a seasonal high water table.

specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table (fig. 15), ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for

the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 11a and 11b give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 11a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair,* or *poor* as potential sources of topsoil, reclamation material, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification

of the soil) and linear extensibility (shrink-swell potential).

Water Management

Table 12 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

APPENDIX D
Ordinance 2006-33, Annexation Policy

ORDINANCE 2006-33

AN ORDINANCE AMENDING IN ITS ENTIRETY SECTION 20-23 OF ARTICLE II, CHAPTER 20, WATER AND SEWERS, OF THE CODE OF ORDINANCES OF THE CITY OF TARPON SPRINGS, FLORIDA; PROVIDING FOR ANNEXATION INTO THE CORPORATE LIMITS OF THE CITY OF TARPON SPRINGS AS A CONDITION FOR CONNECTION TO TARPON SPRINGS' PUBLIC WATER SYSTEM, RECLAIMED WATER SYSTEM, OR SEWER SYSTEM; PROVIDING FOR ANNEXATION AS A CONDITION FOR REDEVELOPMENT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Board of Commissioners of the City of Tarpon Springs, makes the following legislative findings set forth herein below; and

WHEREAS, the water, reclaimed water, and sewer systems of the City of Tarpon Springs are limited in their capacity and capability of supplying those services to persons residing within and without the City who wish to develop or redevelop their properties and put additional burdens on the present water, reclaimed water, and sewer system of the City, and

WHEREAS, nothing in the Tarpon Springs' Code of Ordinances precludes a property owner who's property lies outside the Tarpon Springs' municipal boundaries from procuring sewer or water services from a private provider, a public provider other than Tarpon Springs, or by means of a self contained private treatment facility; and

WHEREAS, Tarpon Springs had limited resources available for any expansion to its water, reclaimed water, and sewer facilities and it may suffer a loss of revenue and would be unable to ensure adequate services to its own residents if it were required to supply water, reclaimed water, and sewer services to areas outside its municipal boundaries without requiring annexation as provided in Chapter 171 of the Florida Statutes as a condition of the supply of water, reclaimed water, and sewer services; and

WHEREAS, it would be detrimental to the citizens of Tarpon Springs to use public resources to benefit members of the public who do not desire to become part of the Tarpon Springs' community; and

WHEREAS, the City has previously had water and sewer service area agreements with Pinellas County but those agreements have lapsed and no longer have any legal affect; and

WHEREAS, Tarpon Springs has never manifested the intent to provide sewer services to residents and nonresidents alike and, therefore, has not acceded to the status of a public utility and, therefore, cannot be compelled to supply sewer service to areas

outside its municipal boundaries; and

WHEREAS, if Tarpon Springs supplied water, reclaimed water, and sewer services to nonresidents without annexation of the property requesting City services the property owners would potentially be allowed to develop their property more extensively than would be allowed under the City's zoning ordinances and Comprehensive Plan, thus placing a greater burden on the water, reclaimed water, and sewer systems than the systems would experience if the property were annexed into the City; and

WHEREAS, the City's Future Land Use Element of its Comprehensive Plan provides that the portions of the City lying on the north bank of the Anclote River although substantially undeveloped and part of unincorporated Pinellas County can be economically served by existing City of Tarpon Springs water, reclaimed water, and sewer systems, and should ultimately be incorporated into the City of Tarpon Springs for the provision of a full range of governmental and municipal services, and that the majority of these unincorporated lands are virtually cut off from the mainstream of Pinellas County by geography, and

WHEREAS, the existing water, reclaimed water, and sewer resources of the City should be provided to lands that are within the incorporated boundaries of the City or are willing to annex into the City in order to receive the benefit of the range of municipal services available, including water, reclaimed water, and sewer services; now, therefore,

BE IT ORDAINED BY THE CITY OF TARPON SPRINGS, FLORIDA, IN SESSION AND DULY AND REGULARLY ASSEMBLED.

SECTION 1.

Section 20-23 of Chapter 20 of Article 11 of the Code of Ordinances of the City of Tarpon Springs is hereby amended in its entirety to read as follows:

§ 20-23. CONNECTIONS TO PUBLIC WATER, RECLAIMED WATER, AND SEWER SYSTEMS; ANNEXATION REQUIRED.

Property owners requesting to have either water, reclaimed water, or sewer service from the City of Tarpon Springs Public Sewer System, Public Water System, or Public Reclaimed Water System will be provided such services conditioned upon and subsequent to the following being accomplished:

(1) Lands abutting the City limits shall annex into the corporate limits of the City and be developed or improved in accordance with all existing City requirements prior to either water, reclaimed water, or sewer service being provided to such lands.

(2) Lands being redeveloped from an existing use, even though such lands presently have either water, reclaimed water, or sewer service, or both, provided by the City shall

be required to annex into the City if such water, reclaimed water, or sewer requirements shall be increased over presently existing use, or if there is a reasonable probability that such use will increase. In the event that such redevelopment occurs without the knowledge of the City or without contact by the property owner with the City to insure that sufficient water, reclaimed water, and sewer capacity exists to serve such redevelopment, the property owner shall voluntarily annex into the City. If the property owner fails to annex into the City on a timely basis, existing water, reclaimed water, and sewer services to such property shall be discontinued after reasonable notice.

(3) Undeveloped lands not abutting the City limits shall be developed in accordance with City requirements, with the exception that should a record plat be involved, the plat shall require approval by the Board of Commissioners. However, the plat shall not require the signature of the Mayor, the chair of the local planning agency, the City Clerk, or the City Manager. City development requirements shall include, but not be limited to, meeting park land dedication requirements. In addition, either the record plat, deed covenants, or other legally binding instrument approved by the City Attorney as being legally sufficient to comply with the requirements of this subsection, shall obligate the property owner and all future owners to annex into the City if and when the City so desires. If any of the City requirements are not met, water, reclaimed water, and sewer service shall not be provided or, if temporarily connected, shall be disconnected. The property owner shall execute and record a covenant running with the land that will require the property owner upon said property becoming contiguous to the City and all other legal requirements for annexation being met to annex into the City as a condition of being provided City water, reclaimed, water or sewer services.

(4) The requirements of Florida Statutes Section 171.044 and all other applicable and legally binding local ordinances and state statutes shall be followed by the property owner and the City when a property owner annexes into the City of Tarpon Springs in order to receive sewer, reclaimed water, or water services under any subsection of this Section.

SECTION 2. The provisions of this Ordinance shall be deemed severable. Should any section, paragraph, sentence, clause, phrase or provision of this Ordinance be declared unconstitutional or invalid by the valid judgment or decree of a court of competent jurisdiction, such unconstitutionality, shall not affect the validity of this Ordinance as a whole or any section, paragraph, sentence, clause, phrase or provision other than the part so declared to be unconstitutional or invalid.

SECTION 3. That this Ordinance shall become effective immediately upon final passage and adoption.

PASSED and ADOPTED this 19th day of September, 2006.

BEVERLEY BILLIRIS, MAYOR

DAVID O. ARCHIE, VICE-MAYOR

PETER F. NEHR, COMMISSIONER

PETER S. DALACOS, COMMISSIONER

ROBIN SAENGER, COMMISSIONER

MOTION BY:COMMISSIONER DALACOS
SECOND BY:COMMISSIONER SAENGER

VOTE ON MOTION

COMMISSIONER SAENGER	Yes
COMMISSIONER DALACOS	Yes
COMMISSIONER NEHR	Yes
VICE-MAYOR ARCHIE	Yes
MAYOR BILLIRIS	Yes

ATTEST:

TARPON SPRINGS, FLORIDA PINELLAS COUNTY

IRENE S. JACOBS, CMC
CITY CLERK & COLLECTOR

FIRST READING: September 5, 2006

SECOND READING: September 19, 2006

APPROVED AS TO FORM:

JOHN HUBBARD
CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF PINELLAS } S.S.

ST. PETERSBURG TIMES

Published Daily
St.Petersburg, Pinellas County, Florida

Before the undersigned authority personally appeared Lori Showen
who on oath says that she is Legal Clerk
of the St. Petersburg Times North Pinellas Times
a daily newspaper published at St. Petersburg, in Pinellas County, Florida: that
the attached copy of advertisement, being a Legal Notice
in the matter RE: City of Tarpon Springs - Ordinance 2006-33

ad#1002067456 in the Court
was published in said newpaper in the issues of August 6 & 25, 2006

Affiant further states the said St. Petersburg Times
is a newspaper published at St. Petersburg, in said Pinellas County, Florida, and that the said newspaper has heretofore been continuously published in said Pinellas County, Florida, each day and has been entered as second class mail matter at the post office in St. Petersburg, in said Pinellas County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement, and affiant further says that he has neither paid nor promised any person, firm, or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newpaper.

Sworn to and subScribed before
me this 25th day of
August A.D. 2006

Janice K Ganote
Notary Public

Notary Public State of Florida
Janice K Ganote
My Commission DD532333
Expires 03/23/2010

Personally known ✓ (Seal)
or produced identification
Type of identification produced

LEGAL NOTICE

NOTICE OF PROPOSED AMENDMENT TO TARPON SPRINGS CODE OF ORDINANCES

The City of Tarpon Springs, Florida, proposes to adopt the following Ordinance:

ORDINANCE NO. 2006 – 33

AN ORDINANCE AMENDING IN ITS ENTIRETY SECTION 20-23 OF ARTICLE II, CHAPTER 20, WATER AND SEWERS, OF THE CODE OF ORDINANCES OF THE CITY OF TARPON SPRINGS, FLORIDA; PROVIDING FOR ANNEXATION INTO THE CORPORATE LIMITS OF THE CITY OF TARPON SPRINGS AS A CONDITION FOR CONNECTION TO TARPON SPRINGS' PUBLIC WATER SYSTEM, RECLAIMED WATER SYSTEM, OR SEWER SYSTEM; PROVIDING FOR ANNEXATION AS A CONDITION FOR REDEVELOPMENT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

Public Hearings on the proposed Ordinance will be held as follows:

Monday, August 21, 2006	**@ 7:00 P.M.**	**Planning and Zoning Board**
Tuesday, September 5, 2006	**@ 6:30 P.M.**	**Board of Commissioners Hearing (First Reading)**
Tuesday, September 19, 2006	**@ 6:30 P.M.**	**Board of Commissioners Hearing (Second Reading)**

All meetings will be held in the City Hall Auditorium, 324 East Pine Street, Tarpon Springs, Florida. Said hearings may be continued from time to time pending Adjournment. All interested parties are invited to attend any and all of these meetings to express your views or to present facts in the case.

If a person decides to appeal any decision made by the Planning & Zoning Commission or the Board of Commissioners with respect to any matter considered at these meetings or hearings, he will need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Comments may be addressed to the Planning Department, (Phone (727) 942-5611), City of Tarpon Springs, P.O. Box 5004, Tarpon Springs, Florida 34688-5004. Written comments will become a part of the record. Materials related to these ordinances may be inspected at the Planning & Zoning Department during City Hall business hours. Any person with a disability requiring reasonable accommodation in order to participate in these meetings should call (727) 942-5611 or FAX a written request to (727) 937-1137.

August 6 & 25, 2006 067456-01

APPENDIX E
Population Methodology

AFFORDABLE HOUSING NEEDS ASSESSMENT

Population and Household Projection Methodology

Prepared by the Shimberg Center for Affordable Housing
Rinker School of Building Construction
College of Design, Construction and Planning
University of Florida

September, 2006

Housing Demand

A. Population and Population by Age Projections – the basic building block

While the variables of greatest interest in the Affordable Housing Needs Assessment (AHNA) are the household estimates, those estimates are an outgrowth of a more fundamental building block – population and particularly population by age. Since the Assessment methodology assumes a constant household formation rate by age over the projection horizon the dynamic component of the household estimation process is population. Thus we begin a discussion of the Assessment's housing demand methodology by first describing the AHNA's population estimates.

Population projections for jurisdictions and the unincorporated portions of counties are based on extrapolation of trends since 1990 and adjusted to the University of Florida's Bureau of Economic and Business Research (BEBR) population projections.[1] The BEBR's 2005 population estimate for each jurisdiction is used as the launch year population and projections are made for the years 2010-2030 in five-year intervals. To estimate and project housing demand, the next step is to divide the population into households. Finally, these households are allocated across tenure classes, age, size, income groups and cost burden. The methodology assumes that household formation rates and the distribution of household characteristics remain constant in their 2000 proportions across the entire projection horizon. However, changes in the age distribution of the population would be expected to lead to shifts in average household size as

1 BEBR is the state demographer and produces Florida's official population projections.

different age groups have different propensities to form households. Therefore, the number of households is estimated using age-specific headship rates to reflect the projected changing age structure.

1. Population Projections

Following the University of Florida's Bureau of Economic and Business Research (BEBR) approach to small area population forecasts, six methods were used to project the population of jurisdictions in the county, including the unincorporated portion of the county. The highest and lowest of the results of these six methods is dropped, and the remaining four are averaged. Finally, the results are adjusted to sum to the mid-range county projection, which is obtained from the BEBR. The population projections form the basis for the projection of population by age and ultimately the projection of households by age of householder.

Assumptions

The methodology uses the most currently available year, in this case 2005, as the benchmark or launch year and develops projections for the years 2010-2030 in five-year increments. The Bureau of Economic and Business Research (BEBR) provides the launch year population for each jurisdiction and county as well as the 2010-2030 county projections based on that launch year. Population for the base years (1990 and 2000) comes from the U.S. Census. County population projections prepared by BEBR control the population projections for each jurisdiction within a county. The methodology uses the BEBR's middle (medium) range population projections.

Population projections are based on previous trends in a jurisdiction, and as such are not able to account for a particular community having limited land availability. Other local conditions not reflected in the estimates would be aggressive annexation policy (the BEBR estimates of population herein do include annexations as of the date of the estimate), recent commencement of large development projects, or dramatic and recent changes in local institutional facilities with large populations such as prisons.

Description of Population Projections

The most important base data for preparing estimates and projections of housing demand is population data. Population is the basis of estimates and projections of households, and the difference between households and housing inventory, when adjusted for the need for vacancies to allow a smoothly functioning housing market, is equal to the basic construction need for housing units.

Population estimates and projections for small areas such as cities, as compared to the nation or a state, are difficult because of the influence of in- and out- migration of population, annexation, land availability, zoning, infrastructure availability, and other factors that have a large impact at the local level. In addition, in a smaller city the impact of growth is magnified under certain projection techniques. To overcome this problem, four techniques are used to project population. In addition, in the application of two of these techniques two different time periods are used resulting in six estimates. The highest and lowest

estimates are dropped to eliminate extreme numbers, and the remaining four are averaged.

The four approaches to population projection consist of two ratio techniques, relating one area to a larger area, and two mathematical extrapolation techniques that project population based on historical trends. We use the following terminology to describe each technique in the methodology:

1. Base year - the year of the earliest observed population used to make a projection;
2. Launch year - the year of the latest observed population used to make a projection;
3. Target year - the year for which population is projected;
4. Base period - the interval between the base year and the launch year;
5. Projection horizon - the interval between the launch year and the target year;
6. Medium, high and low projections - the BEBR county projections based on a variety of projection techniques; the high and low projections are derived from the Bureau's analysis of projection forecast errors for approximately 3,000 counties in the U.S.; the high and low projections are two-thirds confidence intervals around the medium projection.

Data requirements include jurisdiction and total county population for base and launch years (1990, 2000 and 2005) using census data or BEBR estimates. For target years (2010, 2015, etc.) BEBR medium range county projections are used.

The four basic projection techniques used in the methodology include the linear, exponential, share and shift methods. The linear and exponential techniques use the mathematical extrapolation approach; they take the jurisdiction's population from the base period and extrapolate it into the future. The shift and share methods use the ratio approach; they express the data as ratios or shares of the larger, parent population, for which a projection already

exists. Therefore, these techniques require a county or parent population projection. The linear and share techniques use both 5 and 15-year base periods, resulting in a total of six projections. The base periods change over time as the launch year moves forward in time; the current base periods reflect the 1990 and 2000 base years and the 2005 launch year. A more detailed account of each technique is provided below.

There is one final twist to the projection methodology. It is only the resident population of the jurisdiction that we want to project, so institutional populations such as prison inmates, military personnel or college students are removed from total county and jurisdiction populations prior to the calculations. (At a different point in the methodology the household-forming portion of this institutional population will be added back to the resident population to create a total household-forming population. However, only off-base military and off-campus college populations are considered household forming in this methodology.) Sources for institutional population are the Florida Departments of Corrections and Children and Families, U.S. Department of Defense, and the State Universities, as compiled by the Bureau of Economic and Business Research and the Shimberg Center.

Population Projection Formulas

The four projection techniques are patterned after the University of Florida Bureau of Economic and Business Research's (BEBR) county population projections. The trends established during a particular base period (e.g. 1990-2005) are measured and continued through a growth period or projection horizon

(e.g. 2010-2015) to establish the population projection. Though the techniques are simple, more sophisticated projection methodologies do not necessarily produce more accurate results.

Attributes of each of the four techniques are as follows:

Technique	**Attributes**
Mathematical Extrapolation	
Linear	Bottom-up Approach
Exponential	Extrapolation of Small-Area Population
Ratio	
Shift	Top-down Approach
Share	Ratio of Parent Population Projection

Formulas for each of the techniques are as follows:

Linear (Amount of Change)

Linear projection = (((launch year pop - base year pop)/(launch year-base year)* (target year - launch year)) + launch year pop

Two linear projections are developed by using two different base years. The population change between each base year and the launch year is divided by the difference in the two periods to compute an average annual population increase (or decrease). This annual increase is multiplied by the number of years in the projection horizon to generate the total population growth for the area. This growth is added to the area's launch year population to establish its population.

Exponential (Percent of Change)

Exponential = launch year pop *EXP(LN(percent pop change))

where: LN(percent pop change)=LN(launch year pop/base year pop) *((target year -launch year)/(launch year-base year))

The template breaks this equation into two parts: a) computation of an average growth rate (using natural logarithms), and b) extrapolation of this rate to produce projected population. The former calculates the average rate of change in population between the oldest base year and the launch year. This rate is applied to the launch year population to project the population in the target year. The technique divides the area's launch year population by that for the base year

to compute the percent change. This is multiplied by the projection period adjustment: (target year - launch year)/(launch year-base year).

Share

Share = ((area's launch year pop - area's base year pop)/(county launch pop - county base year pop)*(county target year pop - county launch year pop)) + area's launch year pop

Two share projections are developed by using two different base years. This method computes the area's share of the county's population growth between launch year and the two base years, and then allocates to it an equal share of the county's projected population growth over the projection period.

Shift

Shift = county's target year pop * ((launch year area pop/launch year county pop) + ((target year - launch year)/launch year-base year) * ((area's launch year pop /county's launch year pop) - (area's base year pop/county's base year pop)))

The shift method combines elements of the linear and share methods, making a linear extrapolation of the change in each area's share of the county population between the oldest base year (1990) and launch year.

Average

Average = (linear proj.1 + linear proj.2 + exponential projection + share proj.1 + share proj.2 + shift proj. - highest proj. - lowest proj.)/4

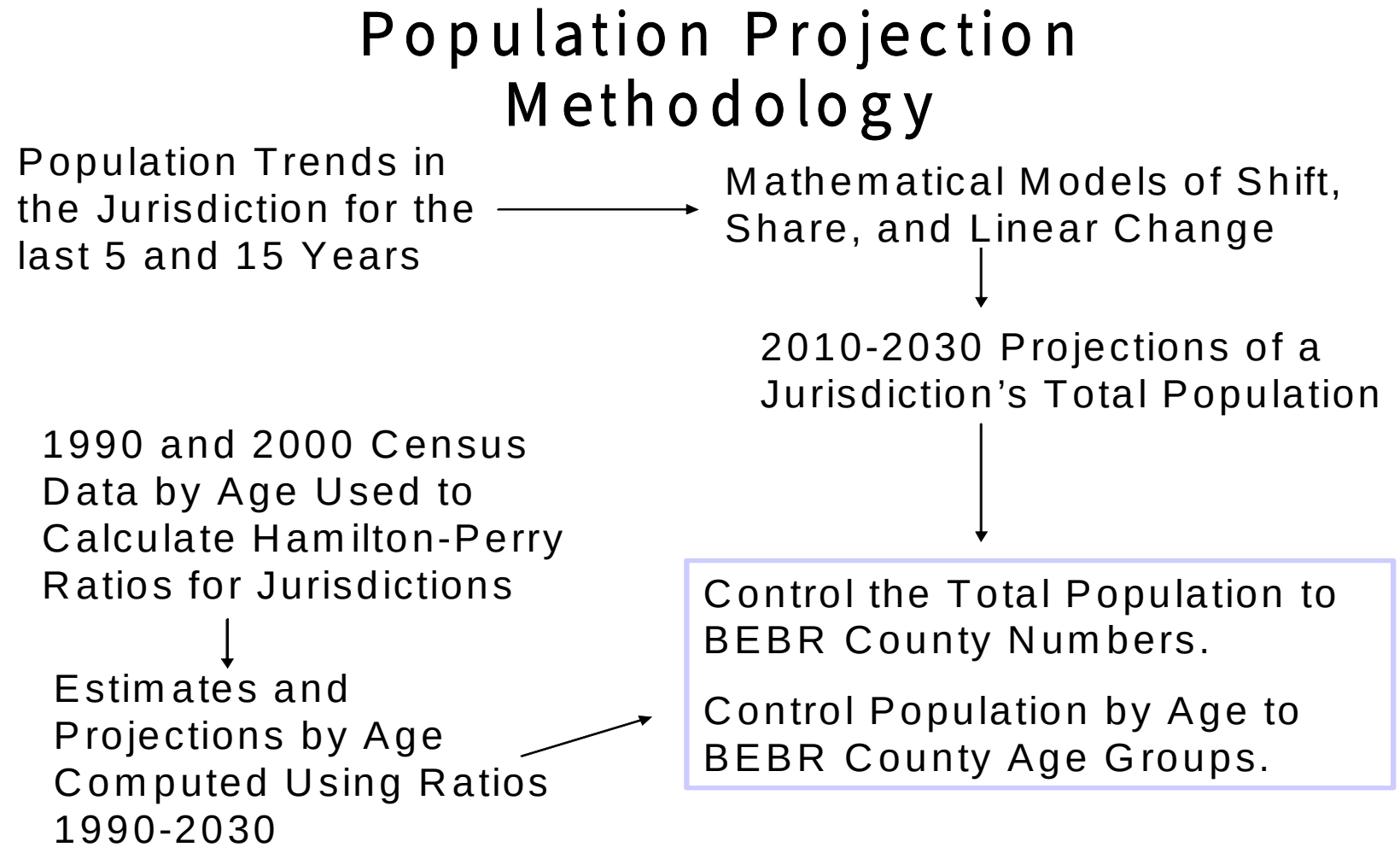
The accuracy of the four previously discussed techniques will vary according to the time period of the projection and the size of the area. No single technique is the most accurate, and certain techniques may yield rather explosive projections. To avoid producing the largest possible error we sum the six projections minus the lowest and highest of the six and take the average of the remaining four.

Adjusted Average

Adjusted Average = area projection * (county projection / sum of area average projections)

The shift and share methods use apportionment techniques which generate county totals consistent with the overall county projection. However, the linear and exponential techniques ignore the county population projection, relying instead on extrapolation of the historic area trends. Since the Average includes the results of all four techniques, it is unlikely that it will produce county totals identical to the BEBR's county projection. The Adjusted Average computes the ratio of the projected county population to total area averages and then applies the ratio to each area average projection. The sum of the adjusted projections equals the county projection.

Figure 1


Population Projection Methodology
Population Trends in the Jurisdiction for the last 5 and 15 Years
Mathematical Models of Shift, Share, and Linear Change
2010-2030 Projections of a Jurisdiction's Total Population
1990 and 2000 Census Data by Age Used to Calculate Hamilton-Perry Ratios for Jurisdictions
Estimates and Projections by Age Computed Using Ratios 1990-2030
Control the Total Population to BEBR County Numbers.
Control Population by Age to BEBR County Age Groups.

2. Population by Age - Background

The age distribution of the population serves as the basis for projecting the number of households and other aspects of housing demand. This is a fundamental assumption and the estimates and projections of population by age are a crucial component of the Assessment methodology. Several avenues are closed off to a method that must project an age distribution at the jurisdiction (or other small area) level. Cohort-component and econometric techniques require detail generally lacking at this geographic level. Small area techniques appropriate to total population projection are not so for age projections. Similarly, extrapolating trends in age groups may not be appropriate for rapidly growing areas like Florida. The Assessment's methodology produces sub-county estimates and projections with age detail, using data sources and techniques that are readily available, reliable, and relatively inexpensive.

Since the United States conducts its population census every ten years, there is a substantial need for current information in the years between censuses. Population estimation techniques have been created to fill this need. Methods fall into three broad categories: 1) extrapolation of past trends, 2) allocation of current trends from other geographic areas, and 3) use of symptomatic data about the particular geographic area of interest.

Extrapolation methods utilize data previously collected about an area to calculate a trend over time and then carry that trend forward to the present. Estimates can be created easily using extrapolation methods since the calculations are often simple and census data is commonly available.

Extrapolation techniques do not work well in places that are increasing or decreasing in population at an unpredictable rate. Also, extrapolation techniques are not applicable for geographic areas whose boundaries are defined by the user (such as a 2 mile radius around a bank) rather than by a typical political and analysis geography for which data are regularly collected (such as cities or counties).

Allocation methods produce population estimates by applying trends in one area to a second area. For example, if a reliable estimate exists for a state in 2005, then a 2005 estimate could be produced for a county by applying the state's average annual growth rate since 2000 to the 2000 population of the county. Ratios are often used to allocate population change from larger areas to smaller areas. For example, the absolute increase in population that occurred in the state since the last census can be divided among the constituent counties based on their share of the state's population at some prior point. Similar to extrapolation, allocation methods are fairly easy to calculate, but allocation is limited in that it requires data for two places, not just one. Also, allocation of trends is only reliable if there is continuity over time in the relationship between the two places. If the underlying ratios change over time, but there is no data available to detect that change, then an estimate produced by an allocation method will be unreliable.

Collection of symptomatic data about the place of interest is going to produce the most reliable estimates of population, but this approach has the highest costs. Data sources for small areas vary greatly in terms of availability,

cost, and precision. Some researchers use data on vital statistics (births and deaths), housing units, water usage, special surveys, and property appraiser parcels. Any consistent series that reflects the underlying demographic change occurring in the area is useful in calculating a trend and updating the results from the last census.

Once an estimate is created for the total population, detail can be generated for different segments of the population and the current trends can be projected into the future. Since projections are based on historical data and trends in an area, projection methods fall into the extrapolation classification. For national estimates and projections, numerous data sources are available that generate quality results. Data availability and reliability are roughly proportionate to the size of place under investigation. There are far fewer options for calculating estimates and projections for counties than for the nation as a whole–and even fewer are available for sub-county areas. In general, the arduousness of a calculation and its potential error are increased by adding levels of detail (total population vs. age, sex, and income detail), decreasing the size of the place (nation vs. county vs. census tract), and increasing the time since the last base point (estimate for 5 years since the last census vs. 20 year projection vs. 50 year projection). Estimating and projecting a population's composition is especially problematic for small geographic areas. That objective crosses all three areas of difficulty–detail, size, and horizon.

No single method has been the authoritative choice for detailed sub-county population estimates and projections. Cohort-component techniques

(which fall into the extrapolation classification) have been the primary method used for national and state-level projections of the population by age. Cohort-component applies historical fertility, mortality, and migration patterns to a base population to produce a detailed depiction of the population at some subsequent point. Since fertility, mortality, and migration do not happen on a daily basis to all age segments of the population, accurate measurement of those demographic events in smaller populations is nearly impossible. Cohort-component has been used successfully for counties, but rarely for sub-county areas due to its data requirements. In the next section we examine the usefulness of a variation of the cohort-component method employed in the Assessment.

3. Hamilton-Perry Ratios

There are no population by age estimates or projections available at the local level to the extent needed for this model. In fact there are no population projections for all Florida jurisdictions, so development of these numbers was a critical first step in the methodology. The population age projection used in the housing needs assessment is a technique in which survival rates (births and deaths) are combined with net migration rates into a single ratio for each age group. This survival/net migration ratio is then used to project the age group into the future. This methodology is, in turn, a simplified application of the cohort-component method of projection in which births, deaths, and migration (the components of population change) are projected separately for each age-sex group in the population (Hamilton and Perry, 1962; Smith and Shahidullah, 1995).

The choice of this approach for use in the Assessment is notable, in part, because of what can't reasonably be done at a small geographic level that meets the objectives of low cost and accessibility. The conventional cohort-component approach requires individual detail for births, deaths, and migration not available at the jurisdiction level; for econometric modeling the jurisdiction is generally too small a unit of measure; typical small area population projection techniques like shift and share are not appropriate for age projections; and extrapolating trends in age groups is not appropriate for rapidly growing areas with volatile migration patterns.

To calculate population by age, a net migration/survival ratio is determined for each age group. Two points in time are needed to construct the survival/net migration ratio – in our case the jurisdiction's population by age group for 1990 and 2000. The sources for this data are the respective census counts. The third set of data needed for this methodology is the jurisdiction's population for each of the projection years.

Since we are interested in projecting our resident population we subtract out the institutional population to give us an adjusted population. It is the adjusted population that we will project and, where necessary, add back the institutional population to give a final total population by age group. The data for institutional population by age group comes from the Florida Departments of Corrections and Children and Families, the U.S. Department of Defense, and the State Universities as compiled by the Bureau of Economic and Business Research (BEBR) and the Shimberg Center (The institutional population for two

counties, Alachua and Leon, are special cases, please see the appendix for a description of how those two counties are handled).

The Hamilton-Perry ratio is the change in the population of a particular set of birth years between two dates (an age cohort). The ratio is designed to capture the change in the size of an age cohort over a ten-year period. For example, the population aged 10-14 in 2000 is divided by the population ten years earlier, that is, the population aged 0-4 in 1990. The ratio is then applied to the population aged 0-4 in 2000 to project the population aged 10-14 in 2010 and to the population aged 0-4 in 2010 to project population aged 10-14 in 2020. The population in a cohort changes as a result of both the survival of the population in the cohort at the beginning of the ten-year period and the in- or out-migration of population in the particular set of birth years. In most age groups, migration is the dominant factor affecting changes in the population of an age group. Further, many parts of Florida have experienced large net in-migration.

Calculation of the migration/survival ratio reflects the past impact of migration on various age groups and uses that trend as a basis to project the population by age group, with the total adjusted to the previously calculated jurisdiction total. Finally, the projections are “tweaked” slightly by making an adjustment to the projections of the population age 0-9 and 75+. To accomplish this slight adjustment, the Bureau of Economic and Business Research’s estimates and projections of age group totals for each county are employed.

Adjustment To The 0 - 9 and 75+ Age Ranges

Two age groups require a modification to the general calculation, children aged 0-9 and persons aged 75 and older. To create the ratio for population aged 75+, divide that population in 2000 (75+) by the sum of populations age 65 to 75+ in 1990.

The population less than ten years old is projected by calculating the ratio of children age 0-9 to the population age 15-44 in 2000 (0-9/15-44) and applying that ratio to the population age 15-44 ten years later. We still have to divide the population age 0-9 into the two population groups age 0-4 and 5-9. To do that we make an assumption that the share of children age 0-4 to those age 0-9 in the jurisdiction is the same as that of the county as a whole.

4. Finalize the population by age projections

The preceding calculations have given us a preliminary projection for the year 2010. But the total jurisdiction population projected using this methodology may be inconsistent with that of the population projection methodology in Part 1. So, to complete the projection for 2010, the population of each age group is adjusted to reflect the total jurisdiction population calculated previously. The controlled age projection for 2010 computes the ratio of the projected jurisdiction population (control total) to the sum of age group populations (the jurisdiction's total uncontrolled population) and applies that ratio to each age group population.

Age group projections for 2020 and 2030 are calculated in the same fashion. The survival/net migration ratio is applied to the age group population in the year 2010 (using the final or controlled age projection figure, rather than the

uncontrolled figure) to produce a 2020 projection and that step is repeated again for the 2030 projection using 2020 as a base. The preliminary (or uncontrolled) age group projection is then adjusted using the ratio of the projected population (from the preceding methodology -- Part 1) to the sum of age group populations (total controlled population) to produce a final (or controlled) projection. We derive the projections for the launch year (2005), and the mid-decade points, 2015, etc., by using the compound growth rate between decades. The function is:

Pop of year 2000+n = pop2000 * e ^ (n/10 * ln(pop2000/pop2010))
(n = 2 or n = 5)

Pop of year 2015 = pop2010 * e ^ (5/10 * ln(pop2010/pop2020))

Pop of year 2025 = pop2020 * e ^ (5/10 * ln(pop2020/pop2030))

The Hamilton-Perry ratios seem less able to capture the volatility in young adult and elderly populations. In counties like Charlotte, for example, the accelerated in-migration of elderly in the 1980's and 1990's and the corresponding shift in the age structure fell outside the rates captured by the H-P ratios. The use of the BEBR county age projections provides a way to recapture that important shift. So, the last step in the population by age projection methodology is to control the sum of jurisdictions by age group to the BEBR county age group projection. This is an iterative mathematical procedure that produces a best fit between the jurisdiction's total population and the county age group total.

B. Householder by Age and Tenure

1. A fundamental assumption: headship rates

Households are the basic unit of demand for housing. They are the way in which the population divides itself to occupy housing units. One member of a household is considered the representative of that household and is referred to as the householder. The percentage of the population in a given age group that are householders is the headship rate in that age group, or the propensity of persons in that age group to be household heads. Therefore, headship rates allow the conversion of the population of an age group into households. Different age groups have different propensities for forming households, so that as the age structure of the population shifts, the number of households that a given population would yield would also change.

The way in which the population divides itself into households is related to a number of economic and social factors including income, housing prices, governmental assistance, marriage and divorce rates, and the mobility of the population. While household sizes declined significantly in the 1970s and continued to decline more slowly in the 1980s, the rate of decline slowed significantly during the 1990s. Further, factors that lead to changes in household size do not exhibit a clear and convincing pointer to the direction of future change. The fundamental assumption in the construction of household estimates in the Assessment is that household formation rates and the distribution of household characteristics remained constant in their 2000 proportions across the projection horizon. Estimates and projections of households are therefore based

on age-specific householder (headship) rates. These headship rates are applied to the age-specific population projections calculated in the previous section. The projection of householder by age, tenure, and size (headship) builds on the age group projections developed in Part 2. Three data sets are needed -- householder by tenure and age (at a minimum), population by age from the 2000 Census for each jurisdiction and the age group projections previously calculated. A headship rate is calculated from the 2000 census data by dividing the number of householders in each tenure/age group by the total population of that age group. The projection of householder by age/tenure is then calculated by applying that ratio (headship rate) to the age group projections of population for each projection period. The numbers of households in each age group are summed to the projected number of households.

However, to meet the twin objectives of housing plan- and housing program-friendly formats in conjunction with more accurate household projections, the AHNA model requires complex cross-tabulations.

2. Household Projection Methodology

In order to produce a complex cross-tabulation of household characteristics such as – Tenure X Age X Size X Income X Cost Burden projections (for a projection horizon of 2010-2030) – the data requirements of the methodology are:

1. Population by age estimates/projections (2000-2030);
2. 2000 Household Count by Tenure X Age X Size X Income X Cost Burden

Methodology:

Step 1:
Calculate the household formation rate for year 2000 (or the most recent census).

$$\text{Household formation rate} = \frac{\text{Household Count of Tenure X Age X Size X Income X Cost Burden}}{\text{Population by age}}$$

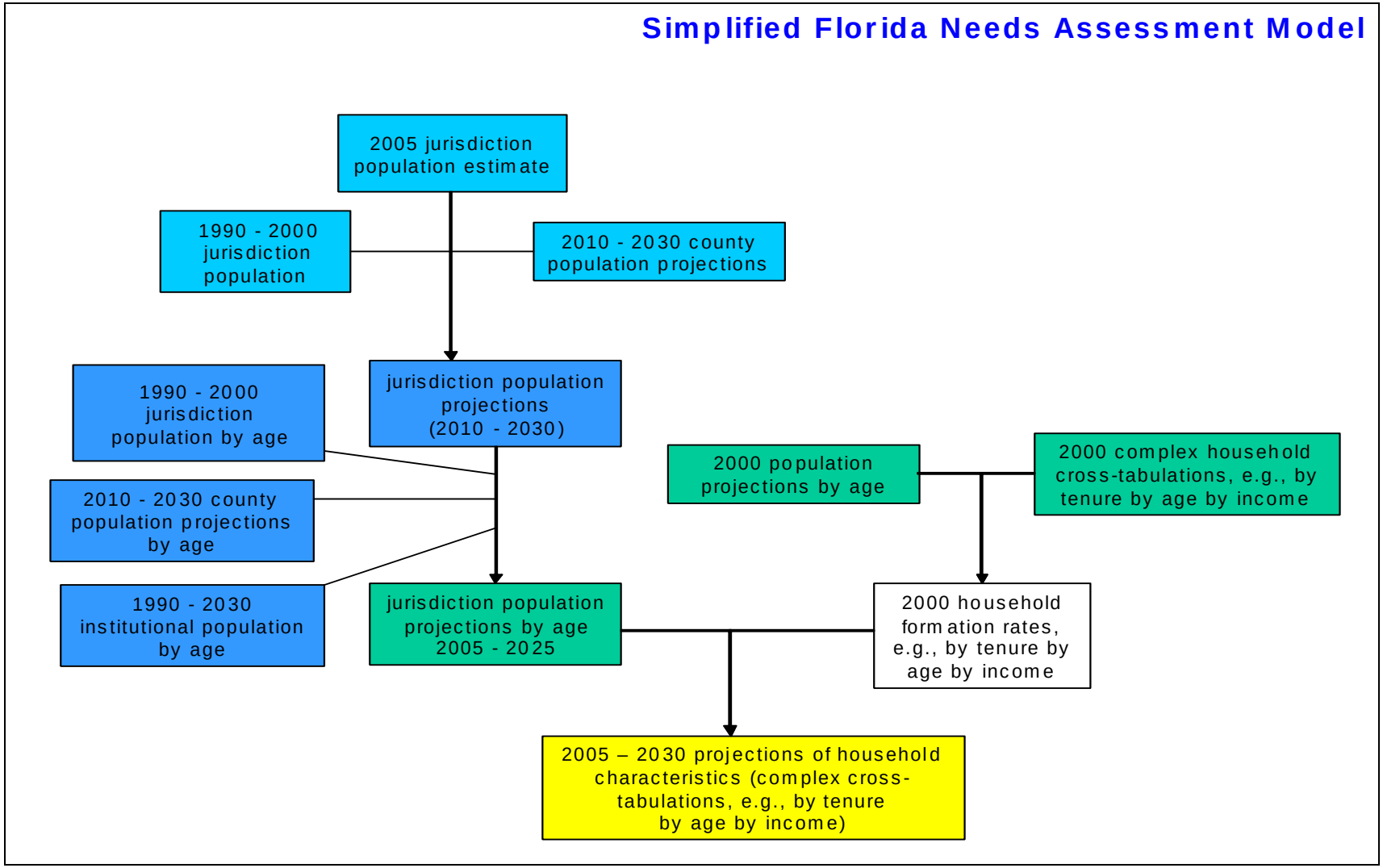
For example, the household formation rate for the following household type: renter/15-24years old/1person per household/Income of 30.1-50% of Area Median Income (AMI)/cost burden less than 30% =

$$\frac{\text{\# of renter households/15-24 years old/1pph/Inc=50\%AMI/<30\% CB (year 2000)}}{\text{\# of persons 15-24 years old (year 2000)}}$$

Step 2:
The 2005 projection of the example household type is:

Household formation rate X population of persons 15-24 years of age in 2005

Figure 2


Simplified Florida Needs Assessment Model
2005 jurisdiction population estimate
1990 - 2000 jurisdiction population
2010 - 2030 county population projections
1990 - 2000 jurisdiction population by age
jurisdiction population projections (2010 - 2030)
2010 - 2030 county population projections by age
2000 population projections by age
2000 complex household cross-tabulations, e.g., by tenure by age by income
1990 - 2030 institutional population by age
jurisdiction population projections by age 2005 - 2025
2000 household formation rates, e.g., by tenure by age by income
2005 – 2030 projections of household characteristics (complex cross-tabulations, e.g., by tenure by age by income)

APPENDIX

A discussion of the FSU/FAMU and UF enrollment figures

The FSU/FAMU and UF enrollment figures for three universities – Florida State University and Florida A&M University in Leon County and University of Florida in Alachua County – their distribution by age and their distribution by on- and off-campus population, have a significant influence on the household projections contained in the Needs Assessment (AHNA) for Leon and Alachua counties. This is an explanation of how that was accomplished. Planning officials in these two counties should pay close attention to the assumptions and the resulting population and household estimates and projections.

Institutional populations such as major university enrollments, inmate populations, and the armed forces are subtracted from total population estimates before the AHNA projections of "permanent" population are made. Projections of the institutional populations are made separately and these populations are added back to the permanent population projections to produce a final population total. Household estimates and projections are made from the "permanent" population figures, i.e., the permanent population is the household-forming population and does not generally include the institutional population. In certain counties the institutional population or some part of it is considered a household-forming population. In Alachua and Leon Counties a portion of the university headcount, the off-campus portion, is added back to the permanent population (by age) and the total is used to project households.

The FSU/FAMU and UF headcounts include all students and, if the information is available, the spouses and children of students residing in on-campus family housing. The actual and projected headcounts, the distribution of headcount by age, and on-campus occupancy were obtained from various sources at the three universities. In certain cases projections had to be extrapolated by assuming an average annual increase derived from the last year of projected headcount that the Shimberg Center could obtain from university sources.

To distribute the university headcounts geographically we attributed all the on-campus student population plus a varying percentage of the off-campus to Tallahassee or Gainesville; the remainder was attributed to the unincorporated area. The percentage of off-campus UF headcount attributed to Gainesville was: 40%-1989/90, 45%-thereafter. The off-campus distribution for Leon County was derived from data obtained from the Tallahassee-Leon County Planning Department.

APPENDIX F
Interlocal Agreement for Planning Areas

00-296214 SPT-29-2000 9:37AM
PINELLAS CO BK 11068 PG 1651

FIRST AMENDMENT TO AN INTERLOCAL AGREEMENT BETWEEN PINELLAS COUNTY AND THE CITY OF TARPON SPRINGS

THIS AGREEMENT, made and entered into this 27 day of September, 2000, between the City of TARPON SPRINGS, FLORIDA, a Florida municipality, and PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida.

WITNESSTH

WHEREAS, the parties hereto entered into the Interlocal Agreement dated October 10, 1989, for the purpose of creating the Tarpon Springs Planning Area and establishing procedures for the joint designation of municipal land use designations to unincorporated land that may be annexed in the future; and

WHEREAS, it is beneficial to extend the term of said Agreement to a date beyond the automatic extension ending on September 30, 2000 as noted in Section 2, Term, of said Agreement; and

WHEREAS, the County and the City mutually agree that it is reasonable to amend the Tarpon Springs Planning Area by adding a certain portion to the Planning Area; that portion being east of the Anclote River, Salt Bayou, and Salt Lake and west of the east boundary lines of Section 5 and the North ½ of Section 8, Township 27 South, Range 16 East; and

WHEREAS, Section 163.3171(3), Florida Statutes (1998) specifically requires a public hearing with public notice as defined in Section 163.3164 (18), Florida Statutes (1998), both the City and County having held public hearings pursuant to those requirements; and

WHEREAS, the County has distributed copies of the amendment to the Interlocal Agreement to all local governments adjacent to the Tarpon Springs Planning Area created under this Agreement for their review and comment.

NOW, THEREFORE, the parties, upon consideration expressed herein, agree as follows:

SECTION 1. That Section 2. Term of said Agreement be amended to read as follows:

> Section 2. Term: The initial term of this Interlocal Agreement shall be the date hereof through September 30, 2000. Thereafter, unless sooner terminated, the term shall be automatically extended for successive one year terms beginning on October 1, and ending on September 30 of the

HOLDOVER FOR BOARD RECORD

following year, with the last such automatic extension ending on September 30, 2010.

SECTION 2. Exhibit "A" (legal description of the Tarpon Springs Planning Area) of the Interlocal Agreement is replaced with Exhibit "A", as attached, which adjusts the Tarpon Springs Planning Area to include an area east of the Anclote River, Salt Bayou, and Salt Lake to the east section boundary lines of Section 5 and the North ½ of Section 8 of Township 27 South, Range 16 East.

SECTION 3. Exhibit "B" (map of the Tarpon Springs Planning Area) of the Interlocal Agreement is replaced with Exhibit "B", as attached, which includes the area of the Tarpon Springs Planning Area as described in SECTION 2, above.

SECTION 4. All other provisions of the Interlocal Agreement remain in effect.

SECTION 5. Filing; Effective Date. As required by Section 163.01(11), Florida Statutes, this amendment to the Interlocal Agreement shall be filed with the Clerk of the Circuit Court of Pinellas County, after execution by the parties, and shall take effect upon the date of filing.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the date set forth above.

ATTEST:
KARLEEN F. DeBLAKER, CLERK

By: _____
Deputy Clerk

PINELLAS COUNTY, FLORIDA
by and through its Board of County Commissioners

By: _____
Vice Chairman

Approved as to Form:

By: _____
David Sadowsky
Assistant County Attorney

PINELLAS COUNTY FLA.
OFF.REC.BK 11068 PG 1652

HOLDOVER FOR
BOARD RECORDS

Countersigned:

By: _____
Ellen S. Posivach
City Manager

CITY OF TARPON SPRINGS, FLORIDA

By: _____
Frank DiDonato
Mayor

ATTEST:

By: _____
Kathy Alesafis
City Clerk

Approved as to Form:

By: _____
John G. Hubbard
City Attorney

PINELLAS COUNTY FLA.
OFF.REC.BK 11068 PG 1653

EXHIBIT A

LEGAL DESCRIPTION OF TARPON SPRINGS PLANNING AREA

1. The Point of Beginning being at the intersection of the centerline of Lake Tarpon at a point where it intersects with the centerline of an eastward extension of Klosterman Road;

2. Thence running westerly along the centerline of the eastward extension of Klosterman Road;

3. Thence continuing westerly along the centerline of Klosterman Road;

4. Thence continuing westerly on westward extension of the centerline of Klosterman Road to the Gulf of Mexico;

5. Thence running northerly along the Gulf of Mexico shoreline to a point being the intersection of the west shore of the Anclote river and the common boundary line of Pinellas and Pasco Counties;

6. Thence running easterly along said Common Boundary Line of Pinellas and Pasco Counties to the Northeast corner of Section 5, Township 27 South, Range 16 East, that point being 21.2 feet northeast of the Northeast corner of Lot 1 of the Tampa & Tarpon Springs Land Company plat, as recorded in Plat Book H1, Page 116 of the Public Records of Pinellas County, Florida;

7. Thence from the Northeast corner of said Section 5, running southerly along the east boundary line of said Section 5 to the Southeast corner of said Section 5;

8. Thence running southerly along the east boundary line of Section 8, Township 27 South, Range 16 East to the Southeast corner of the North ½ of said Section 8;

9. Thence running southerly along the east boundary line of said Section 8, 1,850 feet to the Southeast corner of the Lake Vista Subdivision, as recorded in Plat Book 24, Page 001 of said Public Records;

10. Thence running westerly along the South subdivision line of said subdivision to the Southwest corner of said subdivision;

11. Thence running westerly along an westward extension of the South subdivision line of said subdivision to the centerline of Lake Tarpon, also being the eastern municipal limits of the City of Tarpon Springs;

12. Thence running southwesterly along the centerline of Lake Tarpon to the Point of Beginning.

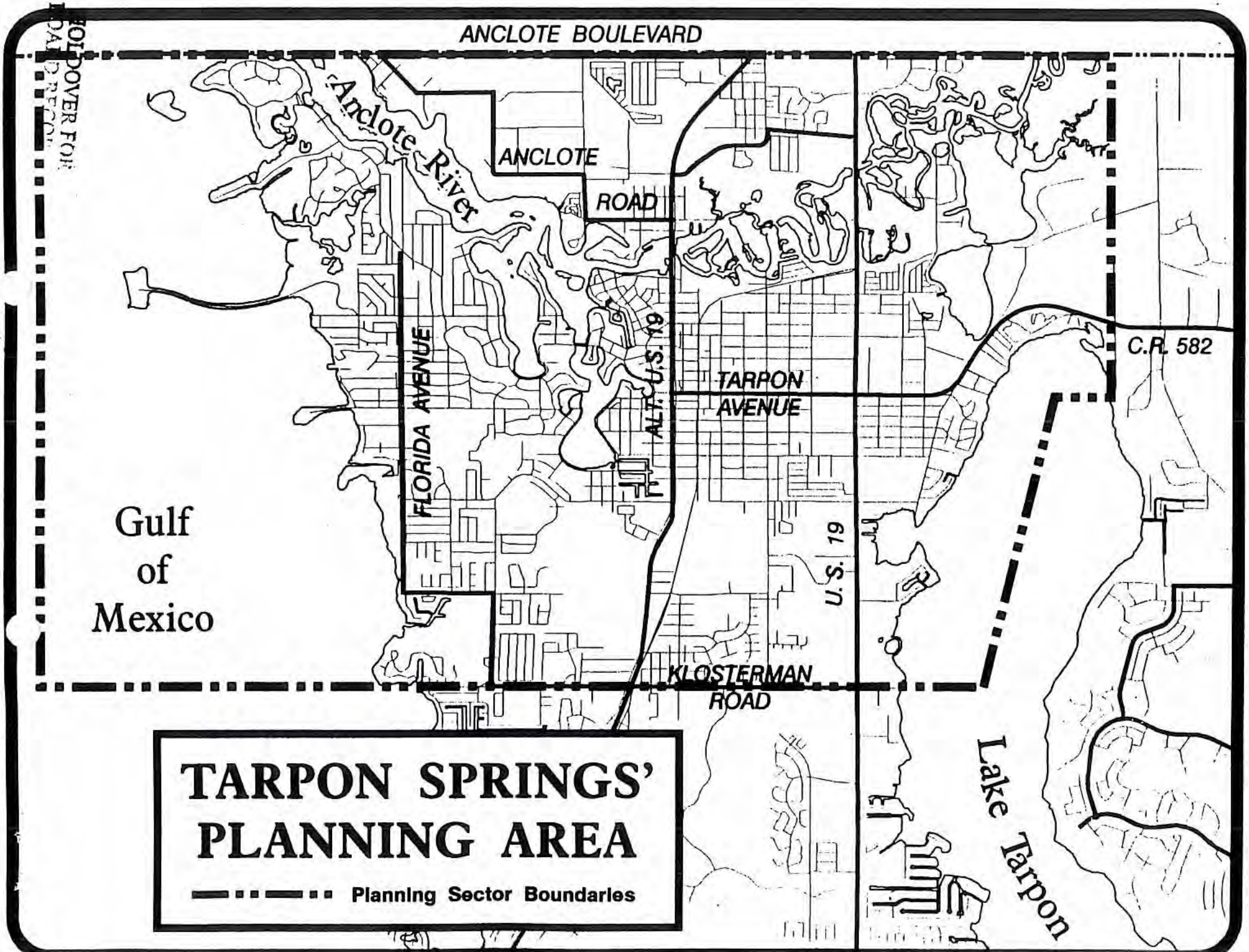


EXHIBIT B

PINELLAS COUNTY FLA.
OFF.REC.BK 11068 PG 1655

FIRST AMENDMENT TO AN INTERLOCAL AGREEMENT BETWEEN PINELLAS COUNTY AND THE CITY OF TARPON SPRINGS

THIS AGREEMENT, made and entered into this 27 day of September, 2000, between the City of TARPON SPRINGS, FLORIDA, a Florida municipality, and PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida.

WITNESSTH

WHEREAS, the parties hereto entered into the Interlocal Agreement dated October 10, 1989, for the purpose of creating the Tarpon Springs Planning Area and establishing procedures for the joint designation of municipal land use designations to unincorporated land that may be annexed in the future; and

WHEREAS, it is beneficial to extend the term of said Agreement to a date beyond the automatic extension ending on September 30, 2000 as noted in Section 2, Term, of said Agreement; and

WHEREAS, the County and the City mutually agree that it is reasonable to amend the Tarpon Springs Planning Area by adding a certain portion to the Planning Area; that portion being east of the Anclote River, Salt Bayou, and Salt Lake and west of the east boundary lines of Section 5 and the North ½ of Section 8, Township 27 South, Range 16 East; and

WHEREAS, Section 163.3171(3), Florida Statutes (1998) specifically requires a public hearing with public notice as defined in Section 163.3164 (18), Florida Statutes (1998), both the City and County having held public hearings pursuant to those requirements; and

WHEREAS, the County has distributed copies of the amendment to the Interlocal Agreement to all local governments adjacent to the Tarpon Springs Planning Area created under this Agreement for their review and comment.

NOW, THEREFORE, the parties, upon consideration expressed herein, agree as follows:

SECTION 1. That Section 2. Term of said Agreement be amended to read as follows:

> Section 2. Term: The initial term of this Interlocal Agreement shall be the date hereof through September 30, 2000. Thereafter, unless sooner terminated, the term shall be automatically extended for successive one year terms beginning on October 1, and ending on September 30 of the

following year, with the last such automatic extension ending on September 30, 2010.

SECTION 2. Exhibit "A" (legal description of the Tarpon Springs Planning Area) of the Interlocal Agreement is replaced with Exhibit "A", as attached, which adjusts the Tarpon Springs Planning Area to include an area east of the Anclote River, Salt Bayou, and Salt Lake to the east section boundary lines of Section 5 and the North ½ of Section 8 of Township 27 South, Range 16 East.

SECTION 3. Exhibit "B" (map of the Tarpon Springs Planning Area) of the Interlocal Agreement is replaced with Exhibit "B", as attached, which includes the area of the Tarpon Springs Planning Area as described in SECTION 2, above.

SECTION 4. All other provisions of the Interlocal Agreement remain in effect.

SECTION 5. Filing; Effective Date. As required by Section 163.01(11), Florida Statutes, this amendment to the Interlocal Agreement shall be filed with the Clerk of the Circuit Court of Pinellas County, after execution by the parties, and shall take effect upon the date of filing.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the date set forth above.

ATTEST:
KARLEEN F. DeBLAKER, CLERK

By: _____
Deputy Clerk

PINELLAS COUNTY, FLORIDA
by and through its Board of County Commissioners

By: _____
Vice Chairman

Approved as to Form:

By: _____
David Sadowsky
Assistant County Attorney

Countersigned:

By: _____
Ellen S. Posivach
City Manager

CITY OF TARPON SPRINGS, FLORIDA

By: _____
Frank DiDonato
Mayor

ATTEST:

By: _____
Kathy Alesafis
City Clerk

Approved as to Form:

By: _____
John G. Hubbard
City Attorney

EXHIBIT A

LEGAL DESCRIPTION OF TARPON SPRINGS PLANNING AREA

1. The Point of Beginning being at the intersection of the centerline of Lake Tarpon at a point where it intersects with the centerline of an eastward extension of Klosterman Road;

2. Thence running westerly along the centerline of the eastward extension of Klosterman Road;

3. Thence continuing westerly along the centerline of Klosterman Road;

4. Thence continuing westerly on westward extension of the centerline of Klosterman Road to the Gulf of Mexico;

5. Thence running northerly along the Gulf of Mexico shoreline to a point being the intersection of the west shore of the Anclote river and the common boundary line of Pinellas and Pasco Counties;

6. Thence running easterly along said Common Boundary Line of Pinellas and Pasco Counties to the Northeast corner of Section 5, Township 27 South, Range 16 East, that point being 21.2 feet northeast of the Northeast corner of Lot 1 of the Tampa & Tarpon Springs Land Company plat, as recorded in Plat Book H1, Page 116 of the Public Records of Pinellas County, Florida;

7. Thence from the Northeast corner of said Section 5, running southerly along the east boundary line of said Section 5 to the Southeast corner of said Section 5;

8. Thence running southerly along the east boundary line of Section 8, Township 27 South, Range 16 East to the Southeast corner of the North ½ of said Section 8;

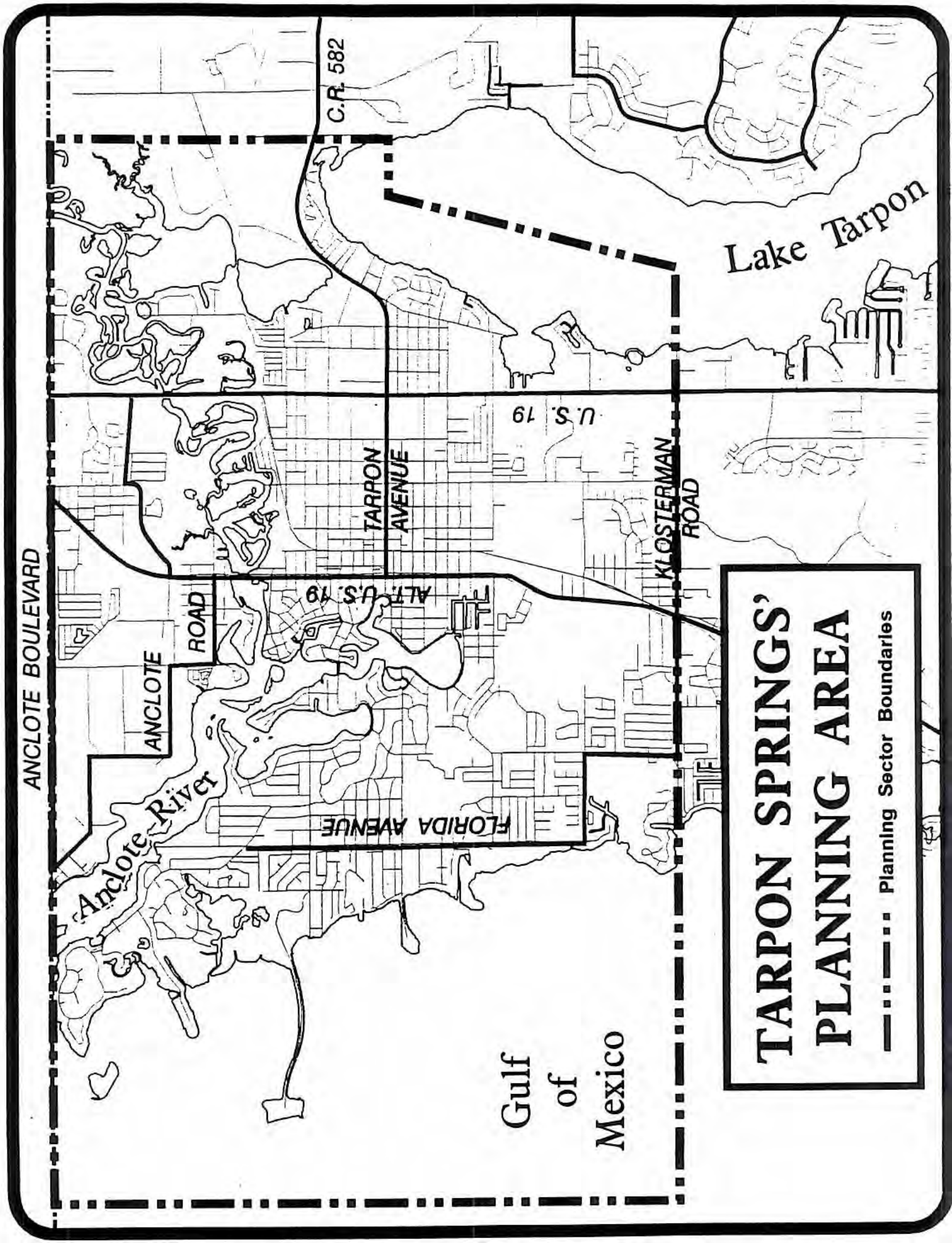
9. Thence running southerly along the east boundary line of said Section 8, 1,850 feet to the Southeast corner of the Lake Vista Subdivision, as recorded in Plat Book 24, Page 001 of said Public Records;

10. Thence running westerly along the South subdivision line of said subdivision to the Southwest corner of said subdivision;

11. Thence running westerly along an westward extension of the South subdivision line of said subdivision to the centerline of Lake Tarpon, also being the eastern municipal limits of the City of Tarpon Springs;

12. Thence running southwesterly along the centerline of Lake Tarpon to the Point of Beginning.

EXHIBIT B


TARPON SPRINGS' PLANNING AREA
Planning Sector Boundaries
Lake Tarpon
C.R. 582
U.S. 19
TARPON AVENUE
KLOSTERMAN ROAD
ALT. U.S. 19
ANCLOTE ROAD
ANCLOTE BOULEVARD
FLORIDA AVENUE
Anclote River
Gulf of Mexico

INTERLOCAL AGREEMENT

THIS INTERLOCAL AGREEMENT is made and entered into this 10th day of October, 1989, by and between PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida (herein, the "County") and CITY OF TARPON SPRINGS, FLORIDA, a Florida municipality (herein, the "City").

WHEREAS, both the County and the City exercise comprehensive planning authority pursuant to the Local Government Comprehensive Planning and Land Development Regulation Act, as set forth in Part II of Chapter 163, Florida Statutes (herein, the "Planning Act"), and enforce land development regulations to regulate the development of land within the respective areas of jurisidiction of each party; and

WHEREAS, numerous parcels of unincorporated land subject to the planning jurisdiction of the County are enclaves or are otherwise within adjacent areas of possible future voluntary annexation by the City, but lie outside of the planning jurisdiction of the City; and

WHEREAS, the orderly planning for future development of both the County and the City requires that the procedures set forth herein be followed, so that property owners may be fully informed of the requirements of both agencies; and

WHEREAS, Section 163.3171 (3), Florida Statutes, specifically permits agreements between counties and cities to provide for the joint exercise authority under the Planning Act with respect to unincorporated areas adjacent to municipalities;

WHEREAS, Section 163.3171(3), Florida Statutes, specifically requires a public hearing with due public notice as defined in Section 163.3164(17), Florida Statutes, both the City and County having held public hearings pursuant to those requirements; and

WHEREAS, the County has received letters of no objection from all municipalities adjacent to the Tarpon Springs Planning Area created under this Agreement;

NOW, THEREFORE, in consideration of the covenants made by each party to the other and of the mutual advantages to be realized by the parties hereto, the County and the City agree as follows:

Section 1. Authority. This Interlocal Agreement is entered into pursuant to the general authority of Section 163.01, Florida Statutes, relating to interlocal agreements, and the specific authority of Section 163.3171(3), Florida Statutes.

Section 2. Term. The initial term of this Interlocal Agreement shall be the date hereof through September 30, 1990. Thereafter, unless sooner terminated, the term shall be automatically extended for successive one year terms beginning on October 1 and ending on September 30 of the following year, with the last such automatic extension ending on September 30, 2000.

Section 3. Tarpon Springs Planning Area Created. The area within Pinellas County which is described in Exhibit A and depicted in Exhibit B hereto, consisting generally of certain lands lying outside the corporate limits of this City is hereby designated as the Tarpon Springs Planning Area.

Section 4. Planning Authority for Tarpon Springs Planning Area; Procedures.

(a) The County shall have full authority for the preparation and adoption of the Comprehensive Plan and any amendments thereto pursuant to the Planning Act, and for the adoption, amendment and enforcement of land development regulations thereunder, for all parcels of property within the Tarpon Springs Planning Area lying outside the corporate limits of the City unless and until such parcel is annexed by the City.

(b) The City, in preparing and adopting its comprehensive plan for the development of land within the City, and any amendments thereto, may include the Tarpon Springs Planning Area within the City's plan in order to advise both the County and the owners of parcels of property therein of the long-range planning objectives of the City. However, the City

acknowledges that the inclusion in the City's plan of parcels of property within the Tarpon Springs Planning Area which lie outside the corporate limits of the City shall not be binding on the County or the property owners prior to such annexation of such parcels by the City.

(c) Any affected person within the Tarpon Springs Planning Area shall have standing to participate in any administrative, legislative, quasi-judicial or judicial proceeding in which the adoption or effect of the City's comprehensive plan or any amendment thereto upon the affected person's property is an issue, and may challenge the adoption of the plan or any amendment thereto, to the same extent that the affected person would have standing if the property were included within the boundaries of the City. For the purpose of this sub-paragraph, "affected person" includes the owner of the property and any person residing upon it or owning or operating a business thereon, and shall be synonymous with the "affected person" as defined by Section 163.3184(1)(a), Florida Statutes (1987), as the same may be amended from time to time.

(d) In the event that an owner of property within the Tarpon Springs Planning Area applies to the City for voluntary annexation of the property, the owner may assent to the City's comprehensive plan as it applies to the property if the City's comprehensive plan provides for intensity of use or density which is equal to or less than the County's comprehensive plan as determined by the Pinellas County Local Planning Agency, in which case the City's comprehensive plan shall take effect as to the property at the time of annexation and any subsequent public hearing and final plan amendment action for the property that may be required, including but not limited to any required amendments to the Countywide Land Use Plan.

(e) If the contingencies of sub-section (d) of this Section 4 are not met, with regard to the owners assent or the determination by the local planning agency, a land-use designation will be established for the newly annexed property pursuant to the provisions of Chapter 163.3184, Florida Statutes and Chapter 73-594, Laws of Florida, as amended.

(f) Property in the Tarpon Springs Planning Area shall become subject to the planning authority of the City upon the effective date of annexation by the City as provided by Section 171.062, Florida Statutes (1987), or successor provisions thereto.

Section 5. Notice. Notice by either party to the other pursuant to this Interlocal Agreement shall be given in writing and hand-delivered or mailed as follows:

if to the County:
County Administrator
Pinellas County Courthouse
315 Court Street
Clearwater, FL 34616

if to the City:
City Manager
P.O. Box 5004
Tarpon Springs, FL 34688-5004

Section 6. Construction. This Interlocal Agreement shall be construed as an expression of inter-agency cooperation enabling each party to make the most efficient use of its powers in furtherance of the objectives of the Planning Act. However, this Interlocal Agreement shall not be construed as delegating or authorizing the delegation of the constitutional or statutory duties of either party to the other.

Section 7. Termination. Either party may terminate this Interlocal Agreement upon 30 days notice to the other.

Section 8. Filing; effective date. As required by Section 163.01(11), Florida Statutes, this Interlocal Agreement shall be filed with the Clerk of the Circuit Court of Pinellas County, after execution by the parties, and shall take effect upon the date of filing.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the date set forth above.

Attest:
KARLEEN F. DeBLAKER, CLERK

By: _____
Deputy Clerk

PINELLAS COUNTY, FLORIDA by and through its Board of County Commissioners

By: _____
Bruce Tyndall, Chairman

Approved as to form and correctness:

By: _____

Countersigned:

By: _____
Tom Ash
Mayor-Commissioner

CITY OF TARPON SPRINGS, FLORIDA

By: _____
Anthony L. Shoemaker
City Manager

Approved as to form and correctness:

By: _____
Alan S. Zimmet
City Attorney

Attest:

By: _____
Kathy M. Aresafis
City Clerk

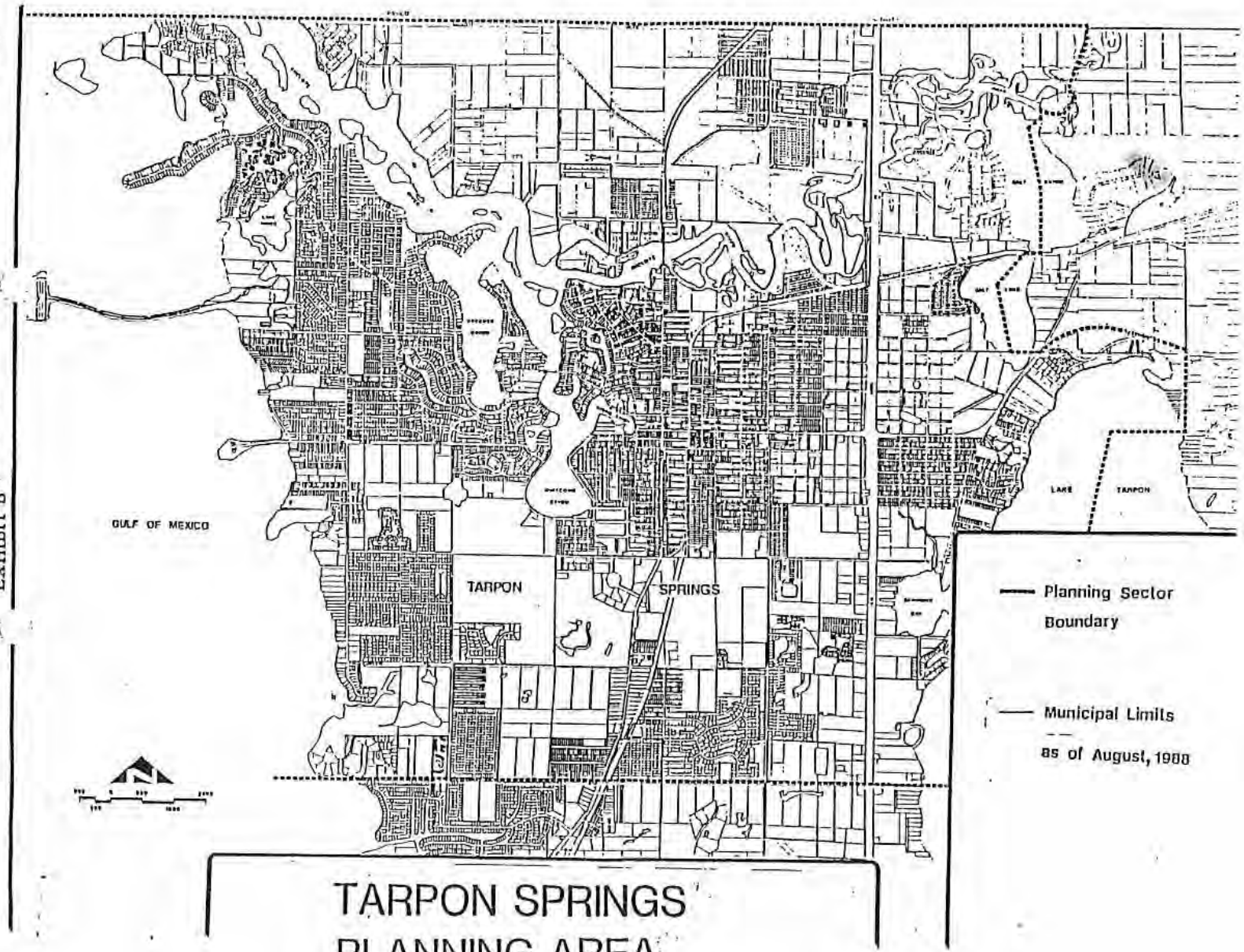
(2598Q)

EXHIBIT "A"

LEGAL DESCRIPTION OF THE TARPON SPRINGS PLANNING AREA

Begin at the intersection of the centerline of Lake Tarpon at a point where it intersects with the centerline of Klosterman Road extended. Thence west along the centerline extension of Klosterman Road extended to the Gulf of Mexico; Thence northerly along the shoreline to a point being the intersection of the east shore of the Anclote River and the common boundary line of Pinellas and Pasco Counties; Thence easterly along said Common County line of Pinellas and Pasco Counties to a point of intersection of the west bank of the Anclote River and the northern boundary line also being the Common County line of Pinellas and Pasco Counties and being approximately 250 feet east of the northwest corner of lot 7 of The Tampa and Tarpon Springs Land Company lying in the N 1/2 of Section 5, Township 27, Range 16 East; Thence southerly following the west bank of the Anclote River to a point in lot 28 lying in the N 1/2 of Section 5, Township 27, Range 16E, of The Tampa and Tarpon Springs Land Company Subdivision at which point the Anclote River takes a westerly turn and hence the west bank becomes the north bank; Thence following said north bank to a point of intersection with the common boundary line of lots 27 and 26 of The Tampa and Tarpon Springs Land Company Subdivision, lying in the N 1/2 of Section 5, Township 27, Range 16 E; Thence southerly along the said common boundary line of lots 27 and 26 approximately 280 feet to a point of intersection with the north shoreline of Salt Bayou; Thence following in a westerly direction a distance of approximately 535 feet to the intersection of the centerline of Salt Bayou; Thence south along said centerline to the vacated Seaboard Coastline Railroad lying in the N 1/2 of Section 8, Township 27, Range 16 East; Thence following the centerline of said Railroad Right-of-Way a distance of 430 feet to a point being the common boundary line of Lots 19 and 21 of the Tampa and Tarpon Springs Land Company Subdivision, lying in the N 1/2 of Section 5, Township 27, Range 16 E; Thence South along said common boundary line to the north shore of Salt Lake; Thence Westerly at approximately a 45 degree angle a distance of 1064 feet to the centerline of Salt Lake; Thence South along said centerline to a point where the centerline of said lake intersects with the north boundary line of the S 1/2 of Section 8, Township 27, Range 16 East; Thence east approximately 700 feet along the north boundary of the S 1/2 of Section 8, Township 27 S, Range 16 East to a point of intersection with the centerline of Keystone Road (SR 582); Thence easterly along said centerline of Keystone Road (SR 582) to a point of intersection with the common boundary line of Sections 8 and 9, Township 27, Range 16 East; Thence South along said extended boundary line a distance of approximately 1850 feet to a point also being the South boundary line of Lake Vista Subdivision; Thence West to the centerline of Lake Tarpon, also being the eastern limits of The City Municipal boundary; Thence begin following in a Southwesterly direction the centerline of Lake Tarpon until reaching the point of beginning.

EXHIBIT B



TARPON SPRINGS PLANNING AREA

APPENDIX G
Bibliography

SWFWMD Individual Consumptive Use Permit #200742.03
(Issued September 27, 1988)

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