TOWN OF LAKE PARK

Comprehensive Plan and Support Documentation

Comprehensive Plan adopted October 1998, as amended

Updated September 2020

The original document was prepared by the Corradino Group and Bell David Planning Group in conjunction with the Department of Community Development with contributions and support of Town Staff.

Comprehensive Plan adopted October 1998, as amended

The following is a list of amendments since 2008

Incorporated into document in 2009

2008 EAR Amendments- Ordinance 04-2008, adopted October 15, 2008

Incorporated into document in 2020

- Ordinance 07-2015, Adopted August 23,, 2015. Incorporated policies related to sea level rise.
- Ordinance 12-2016. 2016 EAR Amendments, adopted on May 3, 2017
- Ordinance 09-16, adopted June, 2017 (est FHMUD)
- Ordinance 03-2018, adopted April 18, 2018 (FHMUD)
- 2020 CIP -Ordinance 02-2020, February 2020
- 2020 Water Supply Facilities Plan – Ord. 03-2020, May 2020

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

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1.0 GENERAL REQUIREMENTS

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1.0 GENERAL REQUIREMENTS

1.1 CHAPTER 163.3161-163.215, FLORIDA STATUTES

Chapter 163.3164 (3), Florida Statutes defines "Comprehensive Plan" as a "Plan that meets the requirements of Sections 163.3177 and 163.3178". Section 163.77 lists required conditions, studies, surveys and elements of the Comprehensive Plan, including:

1. Written and graphic material necessary to support the principles, guidelines and standards for the orderly and balanced future economic, social, physical, environmental and fiscal development of the area;
2. Elements of the Comprehensive Plan must be consistent with each other and the Plan shall be economically feasible;
3. A CAPITAL IMPROVEMENTS element, to be reviewed on an annual basis, designed to consider the need for and the location of public facilities to encourage the efficient use of such facilities;
4. Coordination of the Comprehensive Plan with: (1) those of adjacent municipalities; (2) The County; (3) the Region (Treasure Coast Regional Planning Council); and (4) the State Comprehensive Plan.
5. Policy recommendations for the implementation of the Comprehensive Plan; and
6. The following elements: FUTURE LAND USE; TRAFFIC CIRCULATION; SANITARY SEWER; SOLID WASTE; DRAINAGE, POTABLE WATER AND
7. NATURAL GROUNDWATER AQUIFER RECHARGE; CONSERVATION; 1.1COASTAL ZONE MANAGEMENT RECREATION AND OPEN SPACE; HOUSING; AND INTERGOVERNMENTAL COORDINATION.

In addition, it is required that local Comprehensive Plans be compatible with and further the Treasure Coast Regional Planning Council Regional Policy Plan and the Florida Comprehensive Plan.

Further, the following two provisions of Chapter 163, Florida Statutes are emphasized by the state:

1. Local governments are charged with setting levels of service for public facilities in their Comprehensive Plans in accordance with which development must occur and permits will be issued; and
2. Public facilities and services needed to support development shall be available concurrent with the impacts of such development.

NOTE: CHAPTER 9J-5, FAC HAS BEEN REPEALED IN ITS ENTIRETY BY THE FLORIDA LEGISLATURE. THE TOWN'S COMPREHENSIVE PLAN WILL BE UPDATED AND REVISED DURING NEXT EAR AMENDMENT PROCESS TO REFLECT THIS.

CERTAIN REQUIREMENTS DESCRIBED BELOW ARE STILL REQUIRED BY CHAPTER 163, FS.

1.2 CHAPTER 9J-5, FLORIDA ADMINISTRATIVE CODE

Chapter 9J-5.005, Florida Administrative Code establishes the general requirements for a Comprehensive Plan.

1.2.1 Format Requirements

The Comprehensive Plan shall consist of those items listed below. All other documentation may be considered as support documents. Support documents need not be adopted unless the local government desires to include all or part thereof within the Comprehensive Plan. All background data, studies, surveys, analyses and inventory maps not adopted as part of the Comprehensive Plan shall be available for public inspection while the Comprehensive Plan is being considered for adoption and while it is in effect. Unless local government desires to include more, the Comprehensive Plan shall consist of:

1. Goals, objectives, and policies;
2. Requirements for capital improvements implementation;
3. Procedures for monitoring and evaluation of the local plan;
4. Required maps showing future conditions; and
5. A copy of the local Comprehensive Plan adoption ordinance at such time as the plan in adopted.

The Comprehensive Plan format shall include:

1. A table of contents;
2. Numbered pages;
3. Element headings;
4. Section headings within elements;
5. A list of included tables, maps, and figures;
6. Titles and sources for all included tables, maps, and figures;
7. A preparation date; and
8. The name of the preparer.

All maps included in the Comprehensive Plan shall include major natural and man-made geographic features, city, county and state lines, when applicable; and shall contain a legend indicating a north arrow, map scale, and date

1.2.2 Data and Analysis Requirements

All goals, objectives, policies, standards, findings and conclusions within the Comprehensive Plan and its support documents shall be based upon relevant and appropriate data. Data or summaries thereof shall not be subject to the compliance review process. All tables, chart, graphs, maps, figures and data sources, and their limitations shall be clearly described where such data occur in the above documents.

Chapter 9J-5, Florida Administrative Code shall not be construed to require original data collected by local government; however, local governments are encouraged to utilize any original data necessary to update or refine the Comprehensive Plan data base so long as methodologies are professional accepted.

Data are to be taken from professionally accepted existing sources, such as the United States Census, State Data Center, State University System of Florida, regional planning councils, water management districts, or existing technical studies.

The data used shall be the best available existing data, unless the local government desires original data or special studies. Where data augmentation, updates, or special studies or surveys are deemed necessary by a local government, appropriate methodologies shall be clearly described or referenced and shall meet professionally accepted standards for such methodologies.

The Comprehensive Plan shall be based upon resident and seasonal population estimates and projections. Resident and seasonal population estimates and projections shall be either those provided by the University of Florida, Bureau of Economic and Business Research, those provided by the Executive Office of the Governor, or shall be generated by the local government.

1.2.3 Level of Service Standard Requirements

Level of service standards shall be established for ensuring that adequate facility capacity will be provided for future development and for purposes of issuing development orders or development permits, pursuant to Section 163.3202 (2) (g), Florida Statutes. Each local government shall establish a level of service standard for each public facility located within the boundary for which such local government has authority to issue development orders or development permits.

1.2.4 Internal Consistency Requirements

The required elements shall be consistent with each other. All elements of a particular Comprehensive Plan shall follow the same general format. Where data are relevant to several elements, the same data shall be used, including population estimates and projections.

Each map depicting future conditions must reflect goals, objectives, and policies within all elements and each such map must be contained within the Comprehensive Plan.

1.2.5 Plan Implementation Requirements

Recognizing that the intent of the Legislature is that local government Comprehensive Plans are to be implemented, pursuant to Subsection 163.3161 (5), and Sections 163.3194, 163.3201, and 163.3203, Florida Statutes, the sections of the Comprehensive Plan containing goals, objectives, and policies shall describe how the local government's programs, activities, and land development regulations will be initiated, modified or continued to implement the Comprehensive Plan in a consistent manner. It is not the intent of Chapter 9J-5 to require the inclusion of implementing regulations in the Comprehensive Plan but rather to require identification of those programs, activities, and land development regulations that will be part of the strategy for implementing the Comprehensive Plan and the goals, objectives, and policies that describe how the programs, activities, and land development regulations will be carried out consistent with Section 163.3201, Florida Statutes. Chapter 9J-5 does not mandate the creation, limitation, or elimination of regulatory authority for other agencies nor does it authorize the adoption or require the repeal of any rules, criteria, or standards of any local, regional, or state agency.

1.2.6 Monitoring and Evaluation Requirements

For the purpose of evaluating and appraising the implementation of the Comprehensive Plan, each Comprehensive Plan shall contain a section identifying five-year monitoring, updating and evaluation procedures to be followed in the preparation of the required five-year Evaluation and Appraisal Report. That section shall address:

1. Citizen participation in the process;
2. Updating appropriate baseline data and measurable objective to be accomplished in the first five-year period of the plan, and for the long-term period;
3. Accomplishments in the first five-year period, describing the degree to which the goals, objectives and policies have been successfully reached;
4. Obstacles or problems which resulted in underachievement of goals, objectives, or policies needed to correct discovered problems; and
5. A means of ensuring continuous monitoring and evaluation of the plan during the ensuing five-year period.

1.2.7 Procedural Requirements

Comprehensive Plans, Plan elements and Plan amendments shall be considered, adopted and amended pursuant to the procedural requirements of Sections 163.3161-.3215, Florida Statutes, including but not limited to the following:

1. The Comprehensive Plans for municipalities shall be prepared and submitted within the same timeframe as the counties in which the municipalities are located and all plans shall

be prepared and submitted in accordance with the schedule adopted by the Department of Community Affairs pursuant to Subsection 163.3167 (2), Florida Statutes;

2. The Comprehensive Plan or element shall be prepared in accordance with Section 163.3174 and Subsection 163.3167 (4), Florida Statutes, relating to Local Planning Agencies. Proposed plans, elements, portions thereof and amendments shall be considered at a public hearing with due public notice by the Local Planning Agency (LPA) prior to making its recommendation to the governing body pursuant to Subsection 163.3167 (4), and Section 163.3174, Florida Statutes

3. The Comprehensive Plan, element or amendment shall be considered and adopted in accordance with the procedures relating to public participation adopted by the governing body and the LPA pursuant to section 163.3181, Florida Statutes, and Section 9J-5.004, Florida Administrative Code. The local government shall submit with its initial transmittal, pursuant to Subsection 163.3167 (2), Florida Statutes, and subsequent transmittals pursuant to Section 163.3191, Florida Statutes, a copy of the procedures for public participation that have been adopted by the LPA and the governing body;

4. The Comprehensive Plan and any Comprehensive Plan amendments shall be transmitted after formal action by the governing body in accordance with the provisions of Sections 163.3184 and 163.3187, Florida Statutes, and the procedural rule adopted by the Department of Community Affairs pursuant to Subsection 163.3177(9), Florida Statutes;

5. The Comprehensive Plan shall not be amended more than two times during any calendar year except in the case of amendments directly related to a Development of Regional Impact (DRI) pursuant to Sections 380.05, 380.061, and 163.3187(1) (c), Florida Statutes or in the case of any emergency pursuant to Section 163.3187 (1)(a), Florida Statutes. The Comprehensive Plan, elements and amendments shall be adopted by ordinance and only after the public hearings required by Section 163.3184(15) (b), Florida Statutes, have been conducted after the notices required by Sections 163.3184(15) (b) and (c), Florida Statutes. Upon adoption, the local government shall transmit to the Department of Community Affairs a copy of the ordinance and required notices; and

6. The Comprehensive Plan shall be evaluated and updated as required by Section 163.3191, Florida Statutes, and Chapter 9J-5, Florida Administrative Code. A copy of the adopted report required by Section 163.3191, Florida Statutes, shall be transmitted to the Department at the time of the governing body's transmittal of related amendments pursuant to Section 163.3191(4), Florida Statutes.

1.3 COMPONENTS OF THE LAKE PARK COMPREHENSIVE PLAN

The Lake Park Comprehensive Plan and Support Documentation report is structured to meet all of the statutory and rule requirements as defined in Sections 1.1 and 1.2 above. **However, for the purposes of formal adoption, the following components shall comprise the Town of Lake Park Comprehensive Plan**

1.3.1 Goal, Objectives and Policies

The following sections of this report shall comprise the goals, objectives and policies component of the Comprehensive Plan:

- FUTURE LAND USE – Section 3.4
- TRAFFIC CIRCULATION – Section 4.6
- HOUSING – Section 5.4
- SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE – Section 6.6
- CONSERVATION – Section 7.2
- COASTAL ZONE MANAGEMENT – Section 8.4
- RECREATION AND OPEN SPACE – Section 9.4
- INTERGOVERNMENTAL COORDINATION – Section 10.4
- CAPITAL IMPROVEMENTS – Section 11.4

1.3.2 Capital Improvements

Sections 1.6.5 and 11.3.3.3 of this report shall comprise the Capital Improvements implementation component of the Comprehensive Plan.

1.3.3 Monitoring and Evaluation

Sections 1.6.1, 1.6.2, 1.6.3, 1.6.4, and 1.6.6 of this report shall comprise the Monitoring and Evaluation component of the Comprehensive Plan.

1.3.4 Maps Showing Future Conditions

Required maps showing future conditions are included within the Goal, Objectives and Policies component of the Comprehensive Plan or are incorporated therein by reference to another Section of this report.

1.3.5 Comprehensive Plan Adoption Ordinance

The adoption ordinance is included as figure 1-2

1.4 SUPPORT DOCUMENTATION

The balance of this Report, not specifically cited in Sections 1.3.1 to 1.3.5 shall be considered as the support documentation component of the Town of Lake Park Comprehensive Plan and Support Documentation report.

1.5 PLANNING PERIODS

According to Chapter 9J5.005(4), Florida Administrative Code, each Comprehensive Plan shall include at least two planning periods; one for at least the first five-year period subsequent to the Plan's adoption and one for at least an overall ten-year period. On this basis, the following two planning periods are utilized in the Lake Park Comprehensive Plan: Short-range – 2017-2022; and long-term – 2017-2027

1.6 MONITORING AND EVALUATION PROCEDURES

The intent of this Section is to meet that portion of the General Requirements of the State Comprehensive planning requirements regarding monitoring and evaluation procedures. Specifically, Chapter 9J5.005(7), Florida Administrative Code, states: "for the purpose of evaluating and appraising the implementation of the Comprehensive Plan, each Comprehensive Plan….shall contain a section identifying five-year monitoring, updating and evaluation procedures to be followed in the preparation of the required five-year evaluation and appraisal reports." The Florida Administrative Code further specifies that the following matters shall be addressed:

1. Citizen participation in the process;
2. Updating appropriate baseline data and measurable objectives to be accomplished in the first five-year period of the plan, and for the long-term period;
3. Accomplishments in the first five-year period, describing the degree to which the goals, objectives and policies have been successfully reached.
4. Obstacles of problems which resulted in underachievement of goals, objectives or policies;
5. New of modified goals, objectives or policies needed to correct discovered problems; and
6. A means of ensuring continuous monitoring and evaluation of the Plan during the five-year period.

The items identified above are addressed either separately or in combination in this section and incorporated as part of the Lake Park Comprehensive Plan.

1.6.1 Citizen Participation

The Town of Lake Park adopted Resolution No. 28, 1989 (Ref: Figure 1-1) on March 15, 1989, which adopted specific public participation procedures to be adhered to in updating its Comprehensive Plan. The procedures cover both the adoption of the new Comprehensive Plan per the 1985 Act, and subsequent amendments, as follows:

New Comprehensive Plan

- The Town shall put the real property owners of Lake Park on notice that it has begun to update and prepare a proposed revised Comprehensive Plan in conformance with the 1985 Local Government Comprehensive Planning and Land Regulation Act. Notice shall be given by posting the Notice on the Town Hall Bulletin Board and by advertising in at least one newspaper of general circulation in the Town.

- The notice shall inform the property owners that copies of documentation regarding the Comprehensive Plan shall be on file at Town Hall, 535 Park Avenue, Lake Park, Florida, as they become available for public inspection and review.

- The notice shall explain that written comments regarding the Comprehensive Plan are encouraged from the public and that written comments shall be forwarded to the Local Planning Agency, Town of Lake Park, 535 Park Avenue, Lake Park, Florida 33403.

For Plan and subsequent amendments:

- Town Commission shall keep the property owners of Lake Park informed by periodically providing a status report of the Comprehensive Planning Program at its regularly scheduled Commission meetings. The time, date and location of regularly scheduled meetings and special workshops that will be addressing the Comprehensive Plan shall be posted on the Town Hall Bulletin Board. If and when deemed necessary and appropriate, the Town Commission shall utilize such other methods as deemed appropriate to notify real property owners and to inform the property owners of particular concerns and issues related to the Planning Program.

- At a minimum, the Town shall hold appropriate public hearings as dictated by the 1985 Local Government Comprehensive Planning and Land Development Regulation Act. However, if deemed necessary and appropriate by the Local Planning Agency and/or Town Commission, additional public hearings shall be held to discuss various elements or concerns related to the Comprehensive Plan.

- The Town Clerk shall provide a written response to each written comment submitted to the Local Planning Agency and/ or Town Commission. The response shall indicate the nature of action(s) taken by the Local Planning Agency and/ or Town Commission regarding the written comment and the date that the comment was read and heard.

- The Local Planning Agency and Town Commission, at a minimum, shall provide information to the property owners of Lake Park consistent with these public participation requirements. Executive summaries will be prepared only when, and if, deemed necessary and appropriate by the Local Planning Agency or Town Commission

When the Town begins the adoption or amendment process, it is required by State law that appropriate public hearings to be held. Chapter 163, Part II Florida Statutes, needs to be closely followed and adhered to at that time. As particular issues or matters of an expressed community concern arises, the Local Planning Agency should, if it deems necessary, hold public meetings or hearings, to address such concerns. This would further enhance the citizens' participation in the planning process.

Depending upon the detail and need for summaries, the Local Planning Agency shall decide, if and when, to prepare Executive Summaries of Comprehensive Plan elements and documentation.

FIGURE 1-1: CITIZEN PARTICIPATION RESOLUTION

RESOLUTION NO. 28, 1989

A RESOLUTION OF THE TOWN COMMISSION OF THE TOWN OF LAKE PARK, FLORIDA, ADOPTING PUBLIC PARTICIPATION PROCEDURES TO BE FOLLOWED IN UPDATING THE TOWN OF LAKE PARK COMPREHENSIVE PLAN, PURSUANT TO AND IN CONFORMANCE WITH REQUIREMENTS OF THE 1985 LOCAL GOVERNMENT COMPREHENSIVE PLANNING AND LAND DEVELOPMENT REGULATION ACT; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, Chapter 163, Part II, Florida Statutes entitled the "Local Government Comprehensive Planning and Land Development Regulation Act" and Chapter 9J-5, Florida Administrative Code requires that public participation procedures be adopted; and

WHEREAS, the Town Commission has developed a proposed set of public participation procedures to meet state comprehensive planning requirements,

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COMMISSION OF THE TOWN OF LAKE PARK, FLORIDA, that:

Section 1: The public participation procedures as proposed and listed below are adopted:

1. The Town shall put the real property owners of Lake Park on notice that it has begun to update and prepare a proposed revised Comprehensive Plan in conformance with the 1985 Local Government Comprehensive Planning and Land Regulation Act. Notice shall be given by posting the Notice on the Town Hall Bulletin Board and by advertising in at least one newspaper of general circulation in the Town.

2. The notice shall inform the property owners that copies of documentation regarding the Comprehensive Plan shall be on file at Town Hall, 535 Park Avenue, Lake Park, Florida, as they become available for public inspection and review.

3. The notice shall explain that written comments regarding the Comprehensive Plan are encouraged from the public and that written comments shall be forwarded to the Local Planning Agency, Town of Lake Park, 535 Park Avenue, Lake Park, Florida 33403.

4. The Town Commission shall keep the property owners of Lake Park informed by periodically providing a status report of the Comprehensive Planning Program at its regularly scheduled Commission meetings. The time, date and location of regularly scheduled meetings and special workshops that will be addressing the Comprehensive Plan shall be posted on the Town Hall Bulletin Board. If and when deemed necessary and appropriate, the Town Commission shall utilize such other methods as deemed appropriate to notify real property owners and to inform the property owners of particular concerns and issues related to the Planning Program.

5. At a minimum, the Town shall hold appropriate public hearings as dictated by the 1985 Local Government Comprehensive Planning and Land Development Regulation Act. However, if deemed necessary and appropriate by the Local Planning Agency and/or Town Commission, additional public hearings shall be held to discuss various elements or concerns related to the Comprehensive Plan.

6. The Town Clerk shall provide a written response to each written comment submitted to the Local Planning Agency and/or Town Commission. The response shall indicate the nature of action(s) taken by the Local Planning Agency and/or Town Commission regarding the written comment and the date that the comment was read and heard.

7. The Local Planning Agency and Town Commission, at a minimum, shall provide information to the property owners of Lake Park consistent with these public participation requirements. Executive summaries will be prepared only when, and if, deemed necessary and appropriate by the Local Planning Agency or Town Commission.

8. These public participation procedures shall be instituted as expeditiously as possible upon acceptance and adoption by the Town of Lake Park, Florida, Town Commission.

Section 2: This Resolution shall become effective immediately upon passage.

PASSED AND ADOPTED this 15th day of March, 1989.

TOWN OF LAKE PARK, FLORIDA

Bobbie R. Beldner

James C. Pace

William Wagner

ATTEST:

Barbara A. Scheibing

1.6.2 Updates to Baseline Data and Objectives

All data, information and matters of fact that form the basis for the Comprehensive Plan (support documentation) should be updated at least once every five years. It is further recommended that data, information, and matters of fact for all elements of the Plan be updated at similar times, rather than at intervals. By doing so, the Town will establish a data base that will be internally consistent for the entire Comprehensive Plan. This will provide a specific time-frame for the collection and analysis of data, information and matters of fact upon which the Plan elements can be developed.

This process should be formalized at least once every five years for a rational and methodical presentation of information. However, the Town Local Planning Agency should assemble data, information and matters of fact on a regular (annual, semi-annual) basis or as information becomes available (when dependent on data and information from sources other than from the local government).

By proceeding in the update process in this manner, the Town can formally synthesize and update baseline information for each five year planning increment and develop historical trends to be used for the long-term planning needs.

Based on the compilation of information, the Town should be able to develop a logical, systematic methodology to measure the objectives and implementation activities proposed in the Comprehensive Plan. Data can be evaluated and assessed against those objectives of the Plan that are quantifiable. Updates to matters of fact and basic background information will help assess those objectives and implementation activities that are non-quantifiable.

1.6.3 Obstacles, Problems and Achievements

When baseline data, information and matters of fact are periodically updated and analyzed, the successes and failures of the Comprehensive Plan will become evident. The obstacles and problems witnessed by the Town that have effected implementation of Plan directives should be identified and reviewed. Based on the evaluation and assessment of those problems and subsequent underachievement of adopted goals, objectives and policies, the Town should strive toward correcting those shortcomings. Each goal, objective and policy of every Comprehensive Plan element should be reviewed and assessed according to its current adequacy. If the directions for growth and development have changed in the Town of Lake Park or the emphasis has shifted, additional goals, objectives or policies may need to be incorporated into the Plan to reflect new directions and intentions. When the Evaluation and Appraisal Report (EAR) is prepared, it should follow the procedure described above. This methodology and procedure will keep the Town abreast of its problems and concerns while providing for current and up-to-date growth and development directions established in its Comprehensive Plan.

1.6.4 Continuing Monitoring and Assessment

Although a formalized Evaluation and Appraisal Report (EAR) is only required to be prepared at least once every five years, the Town of Lake Park Comprehensive Plan should be continually scrutinized and reviewed for current applicability.

The Town should also coordinate data base collection activities with Palm Beach County, Treasure Coast Regional Planning Council, its municipal neighbors, appropriate State agencies and any other jurisdictions/entities that affect the Town's growth and development. These activities would enhance the comprehensive planning process in general and foster increased intergovernmental coordination activities.

1.6.5 Monitoring of Capital Improvements

In addition to the General Requirements for monitoring and evaluation procedures identified in Chapter 9J5.005(7), F.A.C., it is further required that the Capital Improvements element be reviewed on an annual basis (Ref. Chapter 9H5.016(5), REQUIREMENTS FOR MONITORING AND EVALUATION). Therefore, the Town shall review the CAPITAL IMPROVEMENTS elements of the Comprehensive Plan each year to evaluate and assess the need for amendments thereto.

Defined capital expenditures and projects should be reviewed to determine what has been accomplished. Any capital projects that have been completed can be reported as implemented. Those projects that have not been accomplished or that have been partially accomplished should be reassessed for current applicability. If determined to still be a valid concern and applicable, those capital improvements should be re-prioritized and rescheduled appropriately for inclusion in the Plan's CAPITAL IMPROVEMENTS element. Those that no longer are valid or do not apply should be deleted in future plans and projections. These decisions and actions should be compiled, reported and utilized for inclusion in the Town's EAR.

The monitoring and evaluation of capital improvements should be closely coordinated and timed with the Town's annual budgetary process. The Town's budget, when necessary, contains line item budgets for capital outlays/expenditures. Therefore, it is incumbent upon the Town to have the Manager review the Comprehensive Plan at budget preparation time to determine which capital projects have been accomplished in the current year and what anticipated budget needs are for the ensuing fiscal year. If budget needs conflict with what is in the adopted CAPITAL IMPROVEMENTS element of the Plan, then revisions to the 5-year schedule of improvements need to be accomplished.

Annual review of the CAPITAL IMPROVEMENTS element in conjunction with review and assessment of other elements of the Comprehensive Plan should concur with the monitoring and evaluation requirements established in Chapter 9J5, F.A.C.

1.6.6 Measurability

It is the intent of this Comprehensive Plan to develop objectives which are measurable and policies which provide the means by which to measure the effectiveness of objectives in moving toward the end state of Goals of the Plan. It is further the intent of this Plan to establish planning timeframes to measure the effectiveness of objectives and policies, as adopted. For purposes of this Comprehensive Plan, it is presumed that, the accomplishment of objectives and policies will occur within the five (5) year planning period, unless otherwise specifically stated or identified in the Plan; or, if the objective or policy specifically regards the update, revision to, or preparation of new development regulations to implement the Town of Lake Park's Comprehensive Plan. Where revisions, updates or preparation of development regulations are required, they will be accomplished within one year from the submittal date of the Comprehensive Plan, pursuant to Chapter 163.3202, Florida Statutes, or as state requirements may change from time to time.

FIGURE 1-2
ADOPTING ORDINANCE

BILL NO. 27, 1989

ORDINANCE NO. 25, 1989

AN ORDINANCE OF THE TOWN OF LAKE PARK, FLORIDA, AMENDING CHAPTER 19 (PLANNING AND ZONING GENERALLY), SECTION 19-2 OF THE LAKE PARK CODE, ADOPTING THE COMPREHENSIVE PLAN AND FUTURE LAND USE MAP; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR CODIFICATION THEREOF; PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE COMMISSION OF THE TOWN OF LAKE PARK, FLORIDA, AS FOLLOWS:

SECTION I

That Section 19-2 of the Lake Park Code is hereby amended to read as follows:

Sec. 19-2. Adoption of comprehensive plan.

The comprehensive development plan together with the future land use map, both dated September 20, 1989, be and the same are hereby adopted by the Town of Lake Park, Florida.

SECTION II

That should any section or provision of this Ordinance or any portion thereof, any paragraph, sentence or word be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remainder hereof as a whole or part thereof other than the part to be declared invalid.

SECTION III

The provisions of this Ordinance shall become and be made a part of the Code of Laws and Ordinances of the Town of Lake Park, Florida. The Sections of this Ordinance may be renumbered or relettered to accomplish such; and the word "Ordinance," may be changed to "Section," "Article," or other appropriate word.

SECTION IV

This Ordinance shall take effect September 20, 1989.

PLACED ON FIRST READING THIS 6th DAY OF September,

2 Consistency with the State of Florida Comprehensive Plan

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

2.1 INTRODUCTION

The "Consistency" element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(10)(b), Florida Statutes, establishes the consistency requirement and Chapter 9J5.021(4) Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains an analysis, in matrix form, of the goals, objectives and policies of the various elements of this Comprehensive Plan in terms of their consistency with the adopted goals of the Florida Comprehensive Plan.

2.2 CONSISTENCY REQUIREMENTS

Specific requirements for addressing the consistency mandate are established by Chapter 9J5.021(4) of the Florida Administrative Code as follows:

"…the local government shall attach to its comprehensive plan or plan amendment at the time of transmittal to the Department a listing entitled "Consistency of the Local Comprehensive Plan with the State Comprehensive Plan," which shall list the State Comprehensive Plan goals and policies which are addressed in its proposed plan or amendment and which shall indicate the plan element or elements, subsection or subsections and page number or numbers, where each of the State Comprehensive Plan foals and policies is addressed."

2.3 CONSISTENCY ANALYSIS

A listing of adopted State Comprehensive Plan goals is presented on Table 2-1, while an analysis of the Lake Park Comprehensive Plan, in terms of the State Goals is presented on Figure 2-1. The matrix indicates which Lake Park objectives and policies, by Comprehensive Plan element, further specific State goals.

Due to the clarity of the numbering system used to identify objectives and policies within Comprehensive Plan elements, it is concluded that page references are not necessary.

Table 2-1 Consistency Matrix Key

MATRIX REF. NO.	STATE PLAN ELEMENT	STATE GOAL
1	Education	The creation of an educational environment which is intended to provide adequate skills and knowledge for students to develop their full potential, embrace the highest ideas and accomplishments, make a positive contribution to society, and promote the advancement of knowledge on human dignity.
2	Children	Florida shall provide programs sufficient to protect health, safety and welfare of all its children.
3	Families	Florida shall strengthen the family and promote its economic independence.
4	The Elderly	Florida shall improve the quality of life for its elderly citizens by promoting improved provision of services with an emphasis on independence and self-sufficiency.
5	Housing	The public and private sectors shall increase the affordability and availability of housing for low-income and moderate-income persons, including citizens in rural areas, while at the same time encouraging self-sufficiency of the individual and assuring environmental and structural quality and cost-effective programs.
6	Health	Florida shall cultivate good health for all its citizens, promote individual responsibility for good health, assure access to affordable, quality health care, and reduce health care costs as a percentage of the total financial resources available to the state and its citizens.
7	Public Safety	Florida shall protect the public by preventing, discouraging and punishing criminal behavior, lowering the highway death rate, and protecting the lives and property from natural and man-made disasters.
8	Water Resources	Florida shall assure the availability of an adequate supply of water for all competing uses deemed reasonable and beneficial and shall maintain the functions of natural systems and the overall present level of surface and ground water quality. Florida shall improve and restore the quality of waters not presently meeting water quality standards.

9	Coastal & Marine Resources	Florida shall ensure that development and marine resource use and beach access improvements in coastal areas do not endanger public safety or important Natural resources. Florida shall through acquisition and access improvements, make available to the state's population additional beaches and marine environment, consistent with sound environmental planning.
10	Natural Systems Recreation Lands	Florida shall protect and acquire unique natural habitats and ecological systems such as wetlands, tropical hardwood hammocks, palm hammocks and virgin Longleaf pine forests, and restore degraded natural systems to a functional condition.
11	Air Quality	Florida shall comply with all national air quality standards by 1987, and by 1992 meet standards which are more stringent than 1985 state standards.
12	Energy	Florida shall reduce its energy requirements through enhanced conservation and efficiency measures in all end-use sectors, while at the same time promoting an increased use of renewable energy resources.
13	Hazardous & Non-Hazardous Material and Waste	All solid waste, including hazardous waste, wastewater, and all hazardous materials, shall be properly managed, and the use of landfills shall be eventually limited.
14	Mining	Florida shall protect its air, land and water resources from the adverse effects of resource extraction and ensure that the disturbed areas are reclaimed or restored to beneficial use as soon as reasonably possible.
15	Property Rights	Florida shall protect private property rights, and recognize the existence of legitimate and often competing public and private interests in land use regulation and other government action.
16	Land Use	In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and the service capacity to accommodate growth in an environmentally acceptable manner.
17	Public Facilities	Florida shall protect the substantial investments in public facilities that already exist, and shall plan for and finance new facilities to serve residents in a timely, orderly and efficient manner.
18	Cultural & Historical Resources	By 1995, Florida shall increase access to its historical and cultural resources and programs and encourage the development of cultural programs of National excellence.
19	Transportation	Florida shall direct future transportation improvements to aid in the management of growth and shall have a state

		transportation system that integrates highway, air, mass transit, and other transportation modes.
20	Government Efficiency	Florida governments shall economically and efficiently provide the amount and quality of services required by the public.
21	Economy	Florida shall promote an economic climate which provides economic stability, maximizes job opportunities, and increases per capital income for its residents.
22	Agriculture	Florida shall maintain and strive to expand its food, agriculture, ornamental, horticulture, aquaculture, forestry, and related industries in order to be a healthy and competitive force in the national or international marketplace.
23	Tourism	Florida will attract at least 55 million tourists annually by 1995, and shall support efforts by all areas of the state wishing to develop or expand tourist-related economics.
24	Employment	Florida shall promote economic opportunities for its unemployed and economically disadvantaged residents.
25	Plan Implementation	Systematic planning capabilities shall be integrated into all levels of governments in Florida with particular emphasis on improving intergovernmental coordination and maximizing citizen improvement.

Source: LRM, Inc.; 11/88

FIGURE 2-1

TOWN OF LAKE PARK COMPREHENSIVE PLAN			FLORIDA COMPREHENSIVE PLAN STATE GOAL – REF: REF: TABLE 2-1																							
ELEMENT/GOAL	OBJECTIVE	POLICY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
3 LAND USE	1	1.1																●	●								
		1.8																	●								
4 TRAFFIC CIRCULATION	1	1.2							●																		
	9	9.1																			●						
	11	11.1																			●						
5 HOUSING	3	3.4					●																				
	5	5.1					●																				
6 PUBLIC FACILITIES	2	2.1																				●					
	6	6.1								●																	
7 COASTAL MANAGEMENT	2	2.1									●																
8 CONSERVATION	4	4.2										●															
10 INTERGOV'T COORDINATION	1	1.2																									●
	4	4.1																				●					
		4.2																				●					

3 Future Land Use

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

3.0 Future Land Use

3.1 INTRODUCTION

The FUTURE LAND USE element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(a), Florida Statutes, establishes the future land use plan requirement and Chapter 9J5.006, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for future land use goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the FUTURE LAND USE element is structured according to the following format:

- Land Use Data;
- Land Use Analysis
- Land Use Goal, Objectives and Policies.

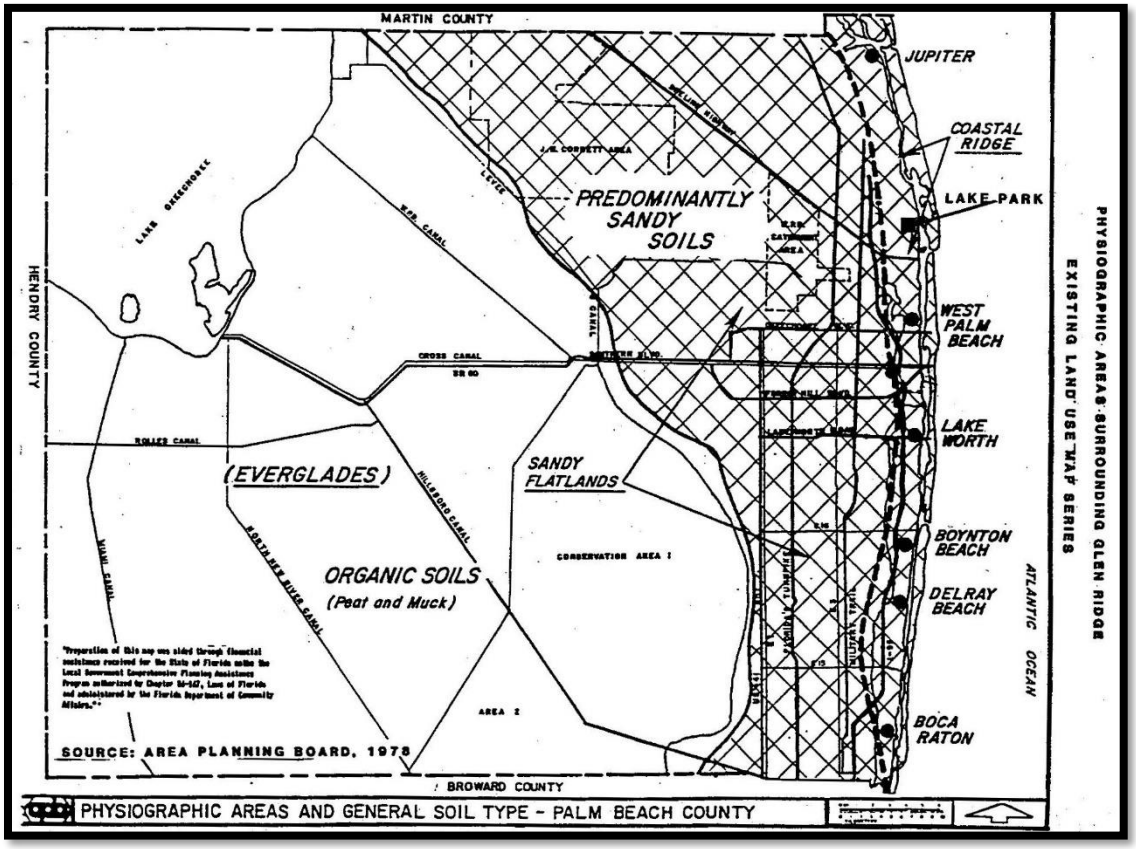
3.2 LAND USE DATA SUMMARY

An overview of conditions pertinent to the preparation of future land use goal, objectives and policies are presented in the sections that follow.

3.2.1 Topography

The Town is situated within the coastal ridge area of Palm Beach County which parallels the Atlantic Ocean (Ref: Figure 3-1). Elevations throughout the Town generally range between ten and fifteen feet above mean sea level (msl), although the extremes range from 5 feet to 40 feet (msl). Topographic data is summarized on Figure 3-2.

Figure 3.1 Physiographic Areas Surrounding Lake Park



The Town is bordered to the west by the sandy flatlands area where elevations are generally less than fifteen feet above mean sea level.

West of the sandy flatlands is the Everglades region which consists primarily of flat swamps less than fourteen feet in elevation.

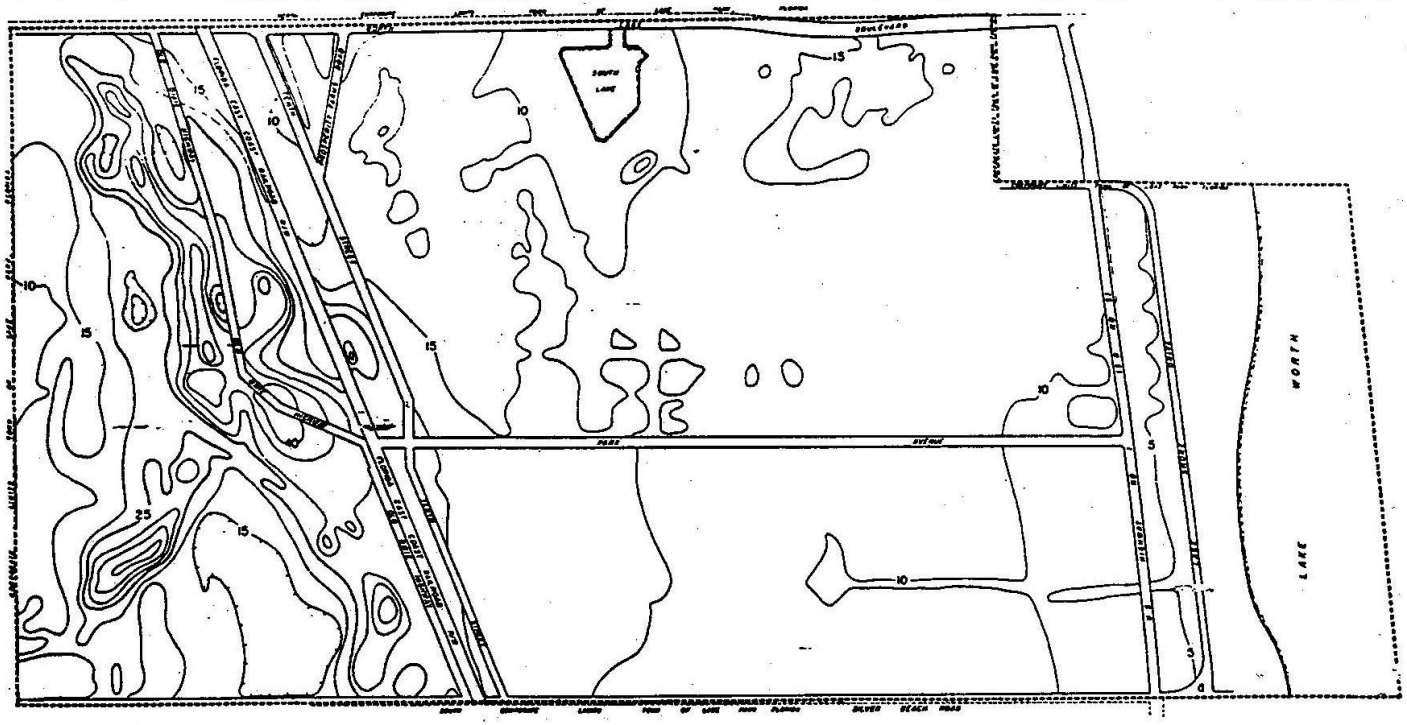


FIGURE 3-2

TOPOGRAPHIC MAP

EXISTING LAND USE MAP SERIES

LAKE PARK FLORIDA

LEGEND

- DEPRESSION CONTOURS
- CONTOUR INTERVAL 5 FEET
- CORPORATE LIMITS

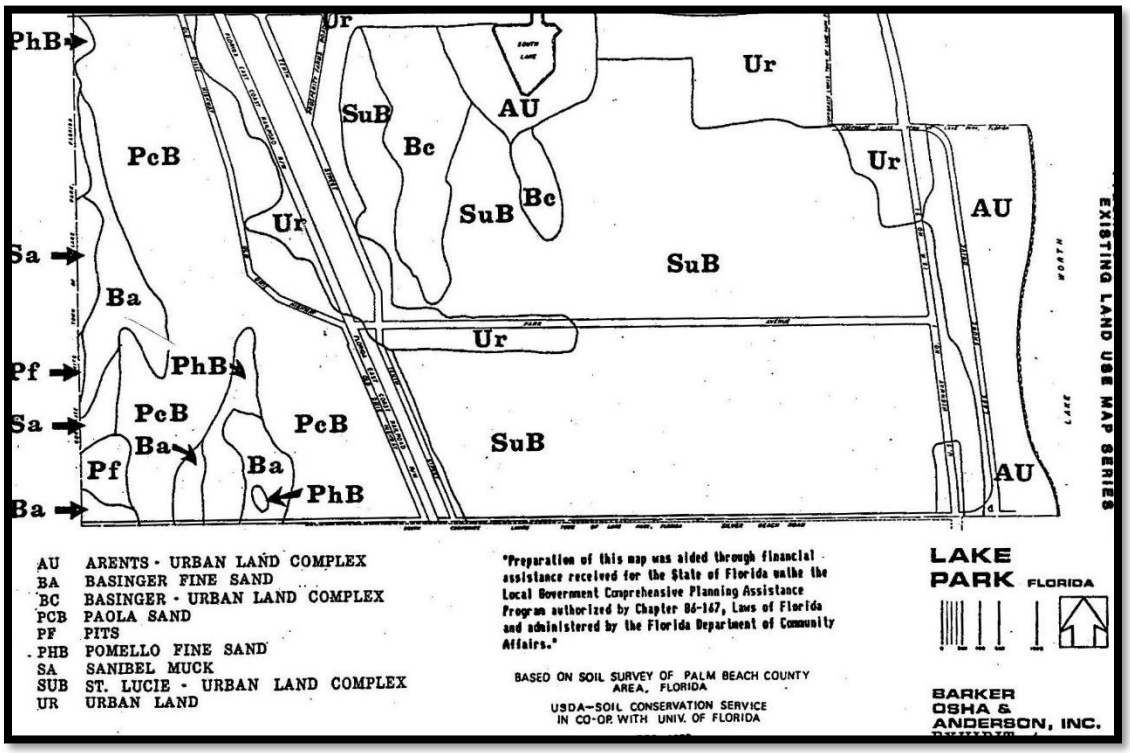
"Preparation of this map was aided through financial assistance received for the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-147, Laws of Florida and administered by the Florida Department of Community Affairs."

BARKER OSHA & ANDERSON, INC.

3.2.2 Soil Conditions and Mineral Resources

A majority of the natural solid underlying the Town are sandy with drainage characteristics ranging from poor to excessive. The distribution of generalized soil types within the Town is exhibited on Figure 3-3, while soil characteristics and limitations to development are presented on Tables 3-1 and 3-2. Low strength (i.e. weight bearing capabilities) wetness and corrosiveness, scope and amount of humus material are characteristics limiting development.

Figure 3.3 Generalized Soil Types in Lake Park



The natural soil formations within the Town have been significantly modified by urban development. In some areas, the impact of urban development has been minimal consisting of the deposition of several inches of fill over natural soils; however, natural soils in a large portion of the Town (i.e. east of the Florida East Coast Railroad) have been radically altered as a result of construction activities. Altered soil types are:

Table 3.1 Soil Type – Characteristics

Au	**Arents-Urban land complex.** The complex contains nearly level, somewhat poorly drained, sandy soil and Urban Land. The soils formed in thick layers of sandy fill material that were placed over low, wet mineral soils to make areas suitable for urban use. Land use on this complex includes golf courses, subdivisions, condominium developments, roadways, business or industrial areas, reclaimed borrow pits, and other areas filled over but not yet developed. This complex is about 60 to 75 percent Arents and 25 to 40 percent Urban. Arents consist of lawns, vacant lots, golf courses, undeveloped areas, and other open land. Urban land consists of areas covered by streets, sidewalks, parking lots, buildings, and other structures. The percentage of Arents and Urban varies. Small areas of soils, near Lake Worth have a layer of marl or organic material below a depth of 20 inches. The soil material is generally rapidly permeable in all layers. The available water capacity is low to very low. The organic matter content and natural fertility are low in most places.
Ba	**Basinger fine sand**. This is a nearly level, poorly drained, deep, sandy soil in broad grassy sloughs. The water table is within 10 inches of the surface for 2 to 6 months in most years and within 10 to 30 inches for the remainder of the year. The natural vegetation is St. Johnswort; slash pine, southern bayberry, and scattered cypress; pineland three-awn, blue maidencane, broomsedge bluestem, and low panicum grasses. In a representative soil profile the surface layer is gray fine sand about four inches thick. The subsurface layer in the upper 21 inches is white fine sand, and in the lower four inches it is dark grayish brown fine sand. The subsoil is dark reddish brown fine sand about seven inches thick. The substratum extends to a depth of 72 inches or more and is pale brown fine sand. Permeability is very rapid in all layers. The available water capacity is very low or low. The organic content is very low is in low-lying positions and normally has a high water table, water control is difficult.
Bc	**Basinger-Urban land complex.** This complex is made up of Basinger fine sand and Urban land. About 50 percent of this complex is open land, such as lawns. These areas consist of nearly level, poorly drained Basinger soils that have been modified in most places by spreading about 15 inches of fill material on the original surface. The original soil below the fill material is Basinger fine sand. About 20 to 40 percent of the area is covered by sidewalks, streets, driveways, buildinsa, and other structures. The remainder of the complex is Myakka, Immokalee and Pompano soils, which have about 15 inches of fill material on the surface, and Basinger, Placid, and Anclote soild in depressions, which have up to 20 inches of fill material spread on

	the surface. Where drainage has been improved, the water table is at a greater depth than in undrained areas, except for brief periods after heavy rains.
PcB	**Paola sand**, 0 to 8 percent slopes. This nearly level to sloping, excessively drained, deep sandy soil is located on long narrow dune-like ridges in the western portion of Lake Par. The soil formed in thick beds of sandy marine sediments. The water table is below a depth of six feet. Permeability is very rapid throughout. The available water capacity is very low. Organic matter content and fertility are very low. The natural vegetation is sand pine and an undergrowth of scrub oak, palmetto, and rosemary. The surface is sparsely covered by grasses, cacti, mosses and lichens.
Pf	**Pits**. These are excavations from which soil and geologic material have been removed for use in road construction or for foundation purposes.
PhB	**Pomello fine sand**. This is a nearly level to gently sloping, moderately well drained, deep, sandy soil that has a dark, weakly cemented layer below a depth of 30 inches. This soil occurs on low ridges and knolls. Under natural conditions, the water table is within 24 to 40 inchhes for one to four months during wet periods and below 40 inches during the rest of the year. Permeability is very rapid to a depth of 44 inches, moderately rapid to a depth of 60 inches, and rapid below this. The available water capacity is medium in the weakly cemented layer and very low in all other levels. Organic matter content and natural fertility are very low. The natural vegetation is slash pine, sand pine, scrub oak, saw-palmetto (scrub palmetto), inkberry, sand plum, fetterbush, pineland three-awn, and other native grasses. Most areas are in native vegetation. This soil is poorly suited to bahiagrass and other deep rooted, drought-resistant grasses, even if large amounts of fertilizers and lime are applied.
Sa	**Sanibel Muck**. This is a nearly level, very poorly drained, deep, sandy soil that has a thin organic layer on the surface. This soil is in depressions, drainage ways and broad flats. Under natural conditions, the water table is within 10 inches of the surface for six to 12 months in most years. Water covers the surface two to six months during wet periods. The natural vegetation is sawgrass, maidencane, cypress, southern bayberry, pickerelweed, ferns sedges and several water-tolerant grasses. Permeability is rapid. The available water capacity is very high in the organic surface layer and low in the sandy layers. The organic matter content is high, and natural fertility is medium.
SuB	**St. Lucie-Urban land complex.** This complex consists of St. Lucie sand and Urban land. About 50 percent of this complex is open land, such as lawns, playgrounds and vacant lots. These areas are made up of nearly level to sloping excessively drained St. Lucie soils. St. Lucie soils formed in thick beds of marine or eolian sand. The water table is below a depth of six feet. In a representative profile, the

	surface layer is gray sand about five inches thick. Below this is a white sand that extends to a depth of 80 inches or more. Permeability is very rapid. The available water capacity, the organic matter content, and natural fertility are very low in all layers. In places these soils have been modified by cutting, grading, or shaping for urban development. The rest of the complex is made up of Paola and Pomello soils. These soils may also be modified in places and the percentage of urban areas and open land varies.
Ur	**Urban land.** Urban land consists of areas that are more than 70 percent covered with shopping areas, parking lots, large buildings, streets, unoccupied areas, mostly lawns, parks, vacant lots, playground. These areas consist of Arredondo, Candler, Hague, Kendrick, Span and Blichten soils along with the predominant soil types of the surrounding area. These have been altered by cutting, ditching, shaping or by having sandy fill materials spread on the surface of the soils to a depth of five to 12 inches. These are too variable and small to map separately.

* Soil Survey of Palm Beach County Area, Florida
U.S. Department of Agriculture, Soil Conservation Service, December 1978

Table 3-2
Soil Limitations for Development
Limitation Summary

REF. NO.	Playgrounds	Dwellings	Commercial	Roads	Septic Tanks
Au	Severe	Moderate	Moderate	Moderate	Severe
Ba	Severe	Severe	Severe	Severe	Severe
Bc	Severe	Severe	Severe	Severe	Severe
PcB	Severe	Slight	Moderate	Slight	Slight
Pf	N/A	N/A	N/A	N/A	N/A
PhB	Severe	Moderate	Moderate	Slight	Severe
Sa	Severe	Severe	Severe	Severe	Severe
SuB	Severe	Slight	Moderate	Slight	Slight
Ur	Severe	Severe	Severe	Severe	Severe

1. For Additional Detail Ref: Soil Survey of Palm Beach County Area, Florida; USDA, SCS, 12/78
2. Without Basements
3. Small Commercial Buildings
4. Local Roads and Streets
5. Absorption Fields

N/A No rating for Urban Land Complexes or Beaches
T3-2.1p

Referred to as "Urban Land Complexes." Areas within the Town most affected by the limiting conditions of naturally occurring soil types are the areas west of the Florida East Coast Railroad, south of Gateway Road. There are no known, commercially exploitable mineral resources within the Town.

3.2.3 Flooding Potential

Flood plain information and flood zone designations applied to Lake Park are identified on Figure 3-4 which graphically depicts the flood zones, while Table 3-3 presents an explanation of flood zone designations.

In order to provide a national standard without regional discrimination, the 100-year flood has been adopted by the Federal Insurance Administration as the base flood for purposes of flood plain management measures. The 500-year flood is employed to indicate additional areas of flood risk in the community.

On Figure 3-4, the 100-year flood boundary corresponds to the boundary of the areas of special flood hazards (Zones A5, A8 and AH); and the 500-year flood boundary corresponds to the boundary of the areas of moderate flood hazards (Zone B). Zone A5, A8 and AH designations within the Town are located in three primary areas: (1) that portion of the Town located east of U.S. Highway No. 1, bordering Lake Worth; (2) properties immediately bordering South Lake; and (3) two areas within the commercial/industrial area located west of the Florida East Coast Railroad. Zone B designations are generally located adjacent to Zone A5 and A8 designations in upland areas, with the balance of the Town designated Zone C, indicating areas of minimal flooding potential.

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Figure 3.4 Flood Zones

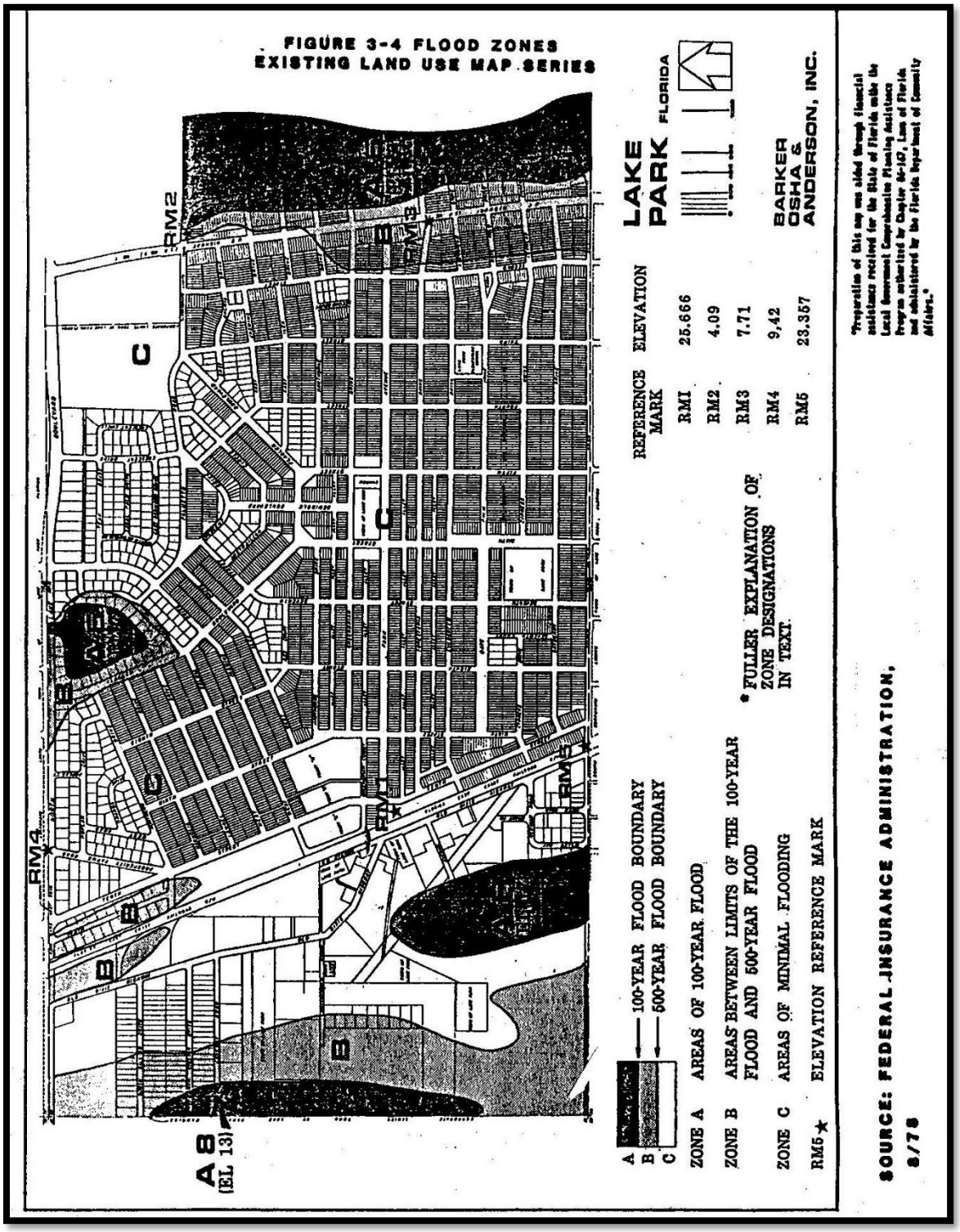


TABLE 3-3

FLOOD ZONE MAP KEY AND EXPLANATION OF ZONE DESIGNATIONS

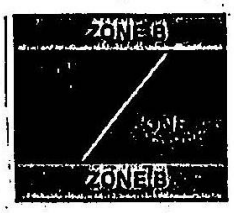
500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations* With Date of Identification e.g., 12/2/74

100-Year Flood Boundary

500-Year Flood Boundary



Base Flood Elevation Line With Elevation In Feet** — 513

Base Flood Elevation In Feet Where Uniform Within Zone** — (EL 987)

Elevation Reference Mark — RM7 ×

River Mile — • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

FIGURE 3-4 REF.

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

SOURCE: FEDERAL INSURANCE ADMINISTRATION, 8/78

According to the Floor Insurance Study for the Town, prepared by the Federal Insurance Administration:

> "Flooding conditions in Lake Park result primarily from high tides generated by hurricanes and severe tropical storms. While the coastal ridge provides some good protection from direct encroachment of tidal surges, floodwaters can pass through inlets, causing abnormal tides in Lake Worth."

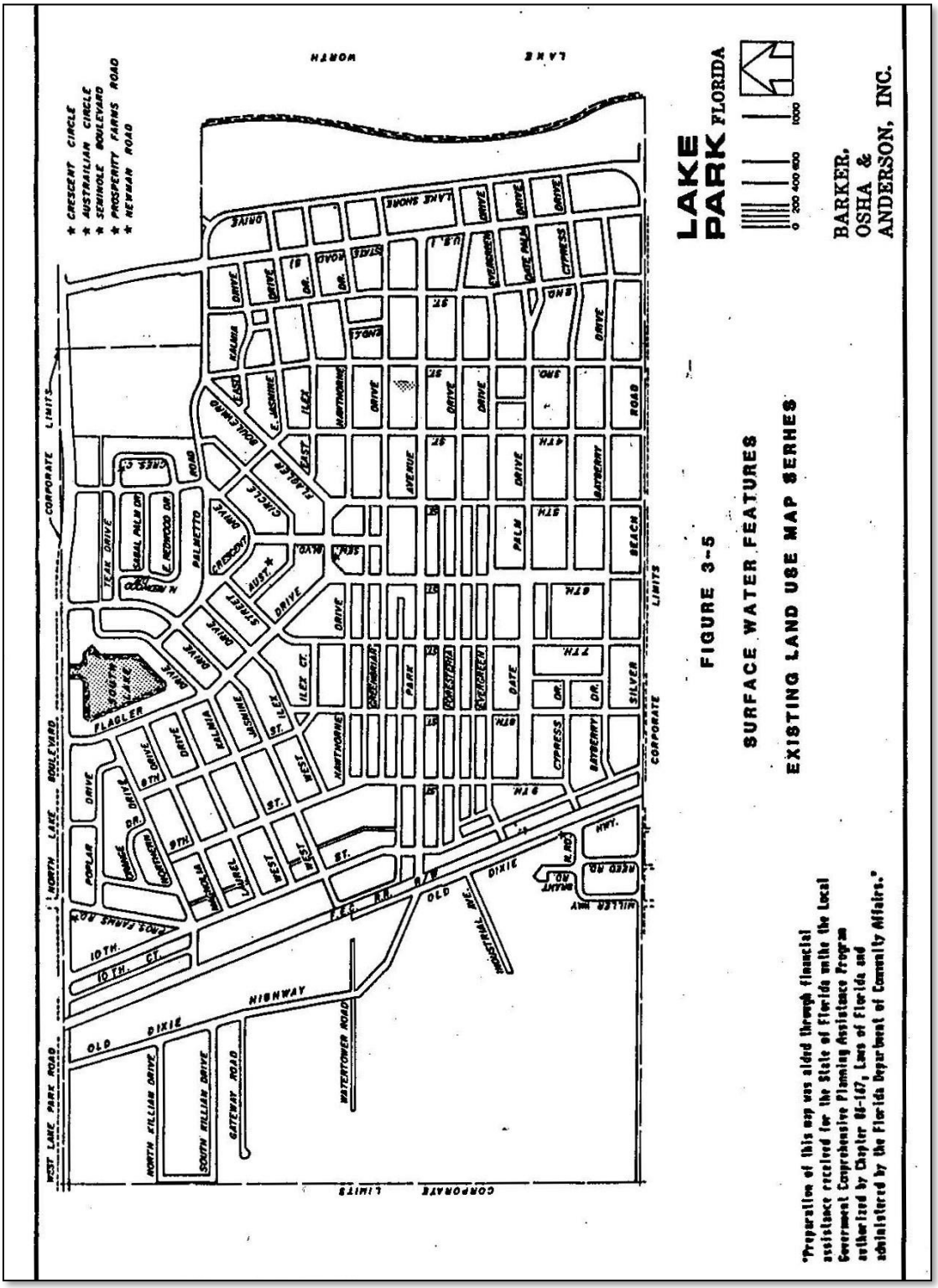
3.2.4 Native Vegetation

As indicated in the previous section on soil conditions (Ref: Section 3.2.2), a large portion of the area within the Town has been developed and natural soils converted to an "urban development" status. There is, however, one area where native soils remains significantly evident; the southwest portion of the Town, located south of Gateway Road. The predominant soil types are Basinger fine sand, Paola sand and Pomello fine sand. Native vegetative species associated with these soil types are: St. Johnswort; Slash Pine; Southern Bayberry; Pineland Three-awn; Blue Maindencane; Broom Hedge Bluestem; and low panicum grasses; scrub oak, palmetto; sand pine, rosemary; inkberry; sandplum and fetterbush.

3.2.5 Surface Water Bodies, Beaches and Shores

Surface waters within the Town limits are highlighted on Figure 3-5. There are no beaches or shores within the Town limits; however, Lake Worth which is part of the Intracoastal Waterway Estuarine System forms the eastern boundary of the Town. South Lake is classified by the State as a Class III water.

Figure 3-5 Surface Water Features



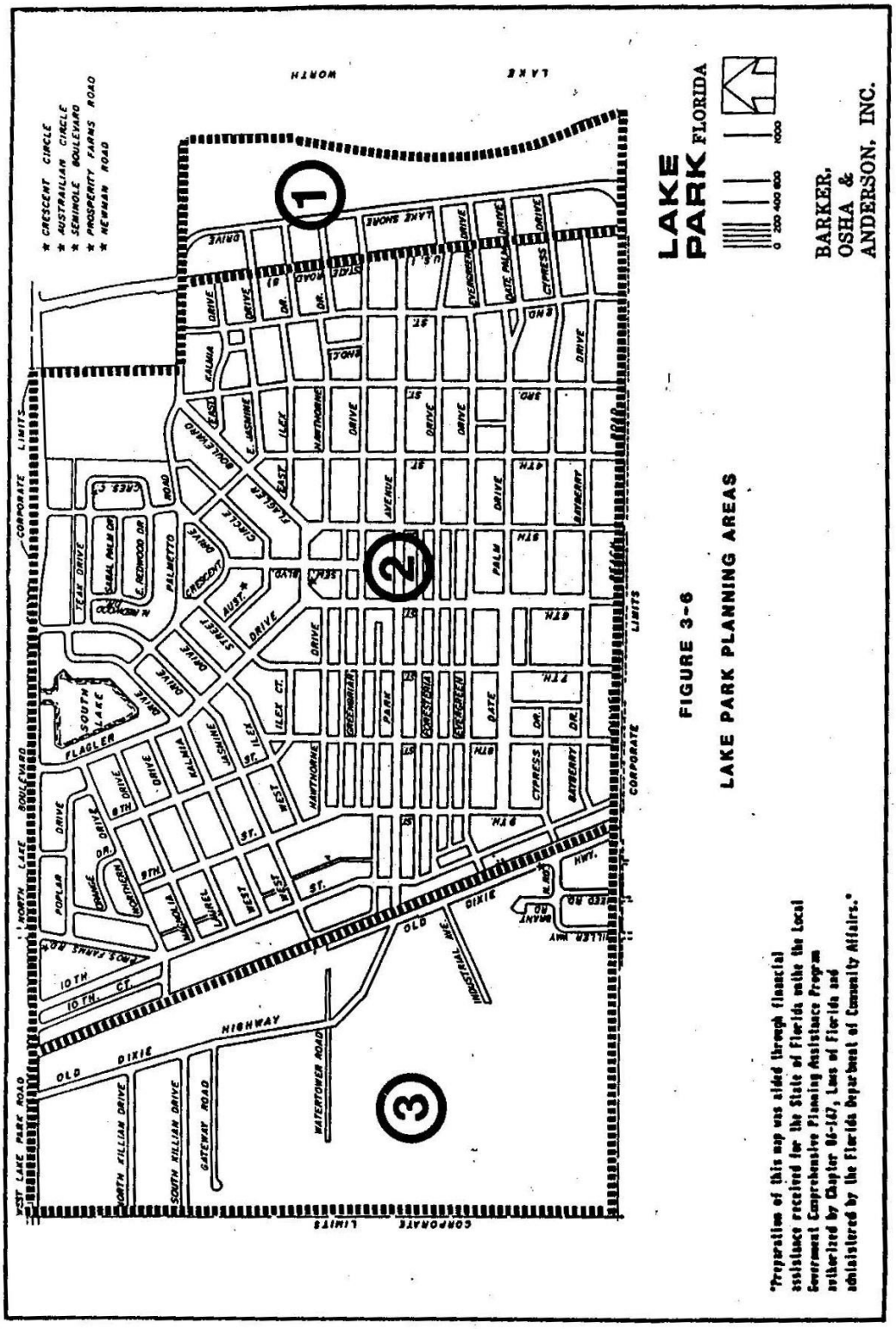
3.2.6 Existing Land Use Inventory

Lake Park, incorporated as Kelsey City in 1923, is essentially a platted, residential community with linear commercial areas along U.S. Highway No. 1, Northlake Blvd, Tenth Street and Park Avenue. Unique among communities of its size is the large mixed commercial and light industrial area located to the west of the Florida East Coast Railroad, which divides the Town. Existing land use data is indicative of how the land and water areas in Lake Park have developed. The location, type and distribution of land use patterns and activities are described in this section. There are approximately 1,116 total acres, or 1.74 square miles contained within the corporate limits.

For planning purposes, the Town is divided into three planning areas, each determined by major physical features. Although statistical data is presented on a Town-wide basis, Planning Areas are used as a means of further detailing analyses, recommendations and policies. Lake Park Planning Areas are illustrated on Figure 3-6. Each Planning Area is bounded by the Lake Park corporate limits on the north and south. East-west boundaries are as follows:

1. Planning Area 1 – Lake Worth (east); and U.S. Highway No. 1 (west).
2. Planning Area 2 – U.S. Highway No. 1 (east); and Florida East Coast Railroad (west).
3. Planning Area 3 – Florida East Coast Railroad (east); and the Town corporate limits (west).

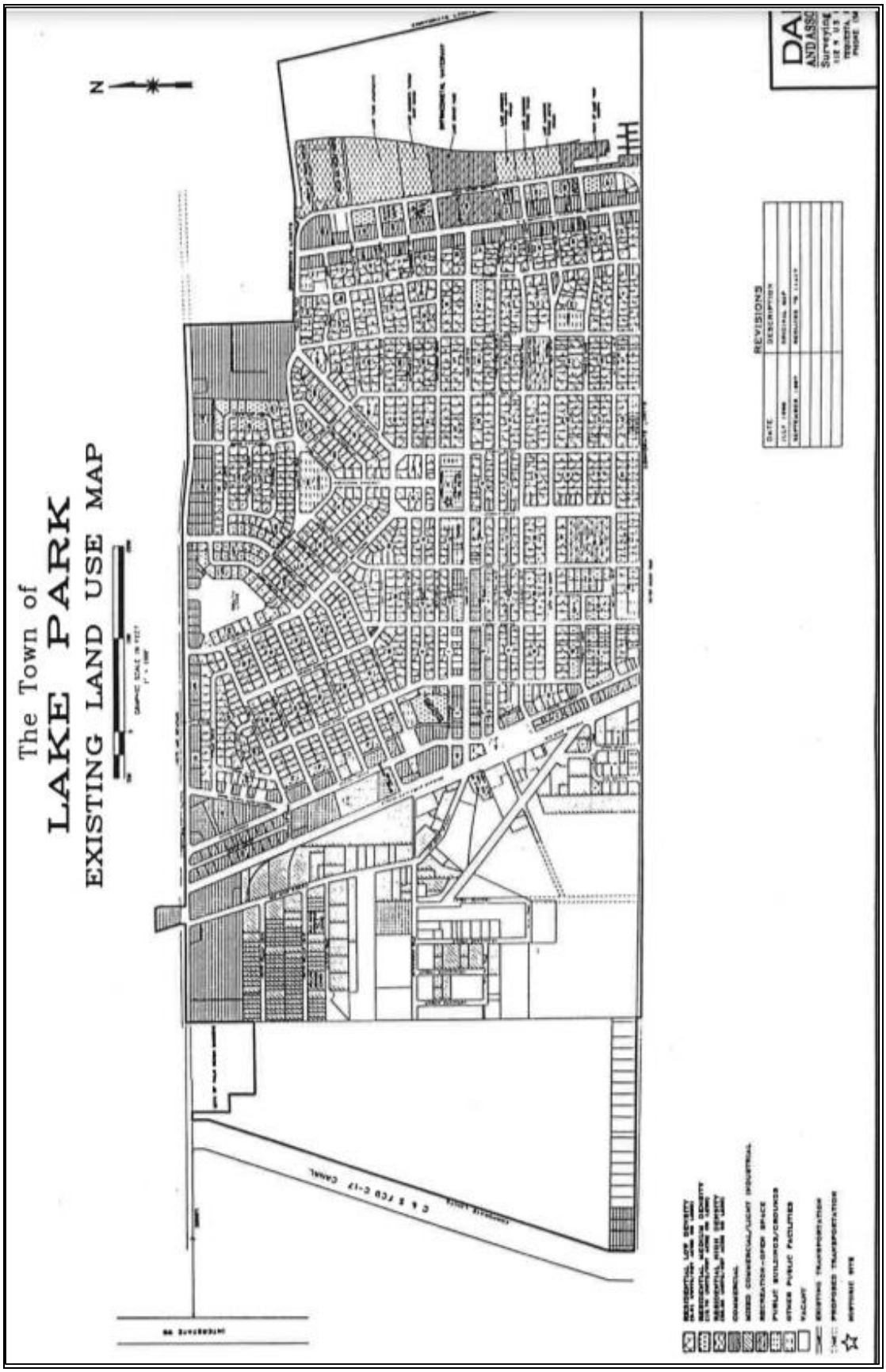
Figure 3-6 Planning Areas



The classification system used to inventory existing land use patterns within the Town is displayed on Table 3-4, while the application of the system to the incorporated area of

the Town is presented on Table 3-5. The conservation land use category is excluded from the classification system since it does not occur within the Town limits. Also, education land use is included with the "Other Public Facilities" category. Existing land use patterns within and immediately abutting the Town identified in the survey are shown on Figure 3-7. The only site within the Town listed on the Florida Master File of the National Register of Historic Places is the Town Hall.

FIGURE 3.7 EXISTING LAND USE – SEE FOLLOWING PAGE


The Town of
LAKE PARK
EXISTING LAND USE MAP
N
REVISIONS
DATE
DESCRIPTION
C & S FCD C-17 CANAL

The Town is built-out to 84% of the corporate area. Only 16% (i.e. 158 acres) of the total area is vacant and potentially available for future development. Of this total, 132 acres (i.e. 84%) of the total vacant area is designated and zoned for future mixed commercial/industrial development. Water areas constitute a minor portion (i.e. 0.8%) of the total area of the Town.

3.2.6.1 Residential Land Use

Single family, low density residential development comprises the largest single land use category within the Town. Approximately 305 acres of the total area of the Town is used for single-family residential purposes, while 56.4 acres are used for medium density and 22.2 acres are used for high density development. Nearly all of the low density development is located within:

Table 3-4 Land Use Classification System

For the purposes of the Comprehensive Plan, the following land use classifications, which are applicable to Lake Park, are used to describe existing land uses in the Town. The classifications are consistent with those defined in Chapter 9J5, F.A.C. and concurrent with the Town's perception of use.

Residential	Land uses and activities within land areas used predominantly for housing and excluding all tourist accommodations. Residential land is further divided into three categories: low-maximum of 5.81 units per net acre; medium-maximum of 15.78 units per net acre; and high-maximum of 20 units per net acre.
Commercial	Land uses and activities within land areas which are predominantly related to the sale, rental and distribution of products and the provision of performance or services.
Mixed Commercial/Light Industrial	Land Uses and activities within land areas which are predominantly light industrial, warehouses, wholesale establishments and/ or commercial activities that can be carried on unobtrusively.
Recreation/Open Space	Land uses and activities within land areas where recreation occurs and lands which are either developed or vacant and concerned with active or passive recreational use. These uses can also be suitable for conservation uses.
Public Buildings and Grounds	Lands and structures that are owned, leased, or operated by a government entity such as libraries police stations, fire stations, post offices, government administration buildings, and areas used for associated storage of vehicles and equipment. Also,

	lands and structures owned or operated by a private entity and used for a public purpose such as a privately held but publicly regulated utility.
Other Public Facilities	Land uses and activities within land areas concerned with other public or private facilities and institutions such as churches, clubs, schools, fraternal organizations, homes for the aged and infirm, and other similar uses.
Transportation	Land areas and uses devoted to the movement of goods and people including streets, railroads and associated rights-of-way
Water	All areas covered by water or any right-of-way for the purpose of conveying or storing water.
Historic Site	Any area or structure designated as an historic site or place and which is listed on the Florida Master File or National Register of Historic Places.
Vacant	Undeveloped land areas which are available for future development, and which are not included in any of the other land use classifications.

SOURCE: LRM, INC. 2/88

Table 3-5xisting Land Use

Land Use	Area in Acres	Total Acres	% of developed area	% of Total area
Residential -low density -medium density -high density	 305.1 56.4 22.2	1383.7	41.1	34.4
Commercial	135.9	135.9	14.6	12.2
Mixed Commercial /Light Industrial	95.1	95.1	10.2	8.5
Rec./open space	31.9	31.9	3.4	2.9
Public Bldgs./grounds*	9.4	9.4	1.0	0.8
Other Public Fac.	18.1	18.1	1.9	1.6
Transportation	250.0	250.0	26.8	22.4
Water	7.1	7.1	7.8	6.8
Total Devel.	933.0		100.0	
Vacant	183.0			16.4
Total	1116.0			100.0

*Includes Historic Site Land Use Acreage
SOURCE: LRM, Inc. 6/88.

Planning Area 2. All of the high density development is located in Planning Area 1, with medium density development located in both Planning Areas 1 and 2. High density development is located along Lake Worth. Medium density development acts essentially as a transitional use between higher and lower intensity uses in Planning Area 2 and between commercial and high density residential areas in Planning Area 1.

3.2.6.2 Commercial Land Use

All commercial development in the Town is located along four corridors: (1) U.S. Highway No. 1; (2) Northlake Boulevard; (3) Prosperity Farms Road/Tenth Street; and (4) Park Avenue. There are two major shopping centers, the Twin City Mall (i.e. shared with the Village of North Palm Beach) and K-Mart Center located in Lake Park, with the balance consisting of small, highway-oriented centers and free-standing businesses. Commercial uses in these facilities are primarily retail, service and professional businesses. Commercial uses utilize 135.9 acres, or 8.5% of the total area of the Town.

3.2.6.3 Mixed Commercial and Light Industrial Land Use

Mixed commercial and light industrial land use utilizes 95.1 acres and constitutes 8.5% of the municipal land area. All of these uses are located within Planning Area 3. These uses are buffered from the remainder of the Town by the Florida East Coast Railroad. Also, the greatest amount of vacant land is located in this area. Land use activities consist primarily of a variety of light industrial types mixed with various commercial support, warehouse, wholesale and service businesses.

3.2.6.4 Recreation/Open Space Land Use

Recreation/open space land use consists of ten active and/or passive facilities, totaling 31.9 acres, or 2.9% of the corporate area. Each facility is discussed in detail in the RECREATION AND OPEN SPACE element

3.2.6.5 Public Buildings and Grounds Land Use

Public building and grounds land use currently utilizes 9.4 acres and constitutes approximately 0.8% of the corporate area. Uses are located in Planning Areas 2 and 3 and consist of the following: Town Hall, library, police station, fire station, U.S. Post Office, Florida Power and Light Facilities, emergency medical service

facility and a Town maintenance and storage site. The Town Hall, an historic site, is included in this category.

3.2.6.6 Other Public Facilities Land Use

Other public facilities land use currently utilizes 18.1 acres, or approximately 1.6% of the total area of the Town. All of these uses are located within Planning Area 2. Uses included in this category include churches, Lake Park Elementary School and nursing and day care facilities.

3.2.6.7 Transportation Land Use

Existing rights-of-way for roads and streets and the Florida East Coast Railroad consume approximately 22.4% (i.e. 250 acres) of the total area in Lake Park. The existing road and street system is shown on Figure 3-7, while a detailed discussion of the classification system and an assessment of its function is presented in the TRAFFIC CIRCULATION element.

3.2.6.8 Water Uses

Water areas constitute approximately 0.8% (i.e. 8.9 acres) of the total surface area of the Town. The only surface water body within Lake Park is South Lake, which is connected to the C-17 Canal which runs parallel to Northlake Boulevard within the Village of North Palm Beach. Water areas within the Town are shown on Figure 3-5. (Note: The marina is included within the Recreation/Open Space category.)

3.2.6.9 Vacant Land

Less than 15% of the developable land (i.e. total area less water areas) of the Town is currently vacant and undeveloped at the present time. There is a minimal amount of land (i.e. approximately 26 acres) available for future development within Planning Areas 1 and 2 of the Town; however, substantial non-residential development potential exists in Planning Area 3. Resulting impacts upon Town services could be substantial, depending upon development timing and financing obligations. A mix of low density, single family development to higher density, and multiple family and small scale commercial development can be expected in Planning Areas 1 and 2. The greatest development potential exists in Planning Area 3, where there are 132.05 acres of vacant “Mixed Commercial/Light Industrial” lands.

3.2.7 Historical Population Growth

Resident Population Growth

Past permanent resident population estimates for Lake Park from 1960 through 1987 are presented on Tables 3-6 and 3-7. Data sources used are the U.S. Bureau of the Census (i.e. 1906, 1970 and 1980) and the University of Florida, Bureau of Business and Economic Research (1981-1987 estimates). Also presented on these tables are historical accounts of Lake Park's (1) share (i.e. percentage) of Countywide population; (2) growth during selected intervals of time; and (3) rate of growth during these same time intervals.

The Town share of Countywide population is currently 0.9%, declining in a slow but steady matter from 1.2% in 1980. Approximately 95% of the population growth in the Town occurred during the 1960-1970 period, due primarily to the fact that a majority of the buildable land was consumed during that period. Since 1980, population has decreased by 116 residents, an average of 16.6 residents per year (i.e. during the 1980-1987 peri

Table 3-6
Permanent Resident Population Estimates

Year	Palm Beach County Total	Total	Lake Park % of County
1960	238,106	3,589	1.5
1970	348,993	6,993	2.0
1980	576,758	6,909	1.2
1981	615,165	6,916	1.1
1982	637,940	6,900	1.1
1983	652,562	6,871	1.1
1984	682,638	6,831	1.0
1985	713,253	6,797	1.0
1986	752,115	6,795	0.9
1987	789,533	6,793	0.9

1. U.S. Bureau of the Census
2. University of Florida, Bureau of Business Economic Research; April 1st of each year
   Source: LAND RESEARCH MANAGEMENT, INC.; 7/88

Table 3-7
Historical Resident Population Growth Rates

	Palm Beach County		**Lake Park**	
Growth Period	**Growth**	**Rate (%)**	**Growth**	**Rate (%)**
1960-1970	110,887	46.6	3,404	94.8
1970-1980	227,756	65.3	(84)	(1.2)
1980-1981	38,407	6.7	17	0.23
1981-1982	22,775	3.7	(16)	(0.23)
1982-1983	14,622	2.3	(29)	(0.42)
1983-1984	30,076	4.6	(40)	(0.58)
1984-1985	30,615	4.5	(34)	(0.50)

1985-1986	38,862	5.5	(2)	0.00
1986-1987	37,418	5.0	(2)	0.00
1980-1987	212,775	36.0	(116)	(1.67)

Source: LAND RESEARCH MANAGEMENT, INC.; 7/88

Demographic Characteristics

Demographic characteristics for the Town of lake Park, in comparison to those of Palm Beach County as a whole, are exhibited on Tables 3-8 and 3-9. Comparative figures for 1980, based upon 1980 Census Data are presented on Table 3-8, while 1987 estimates are exhibited on Table 3-9.

Table 3-8
Population and Housing Characteristics – 1980: Palm Beach County, Lake Park

	Palm Beach County	**Lake Park**
Population	576,863	6,909
Per Capita Income ($)	9,017	9,158
Households	234,339	2,937
Household Income		
% less than $5,000	11.6	7.8
% $5,000-$9,999	16.5	11.4
% $10,000-$14,000	16.4	16.6
%$15,000-$19,999	14.2	16.8
%$20,000-$24,999	11.9	15.0
%$25,000 and over	29.2	32.4
Median ($)	16,714	19,103
Average ($)	22,036	21,488
Age		
% 0-20	21.3	23.5
% 21-64	55.3	57.5
% 65+	23.3	19.2
Median	40.2	35.8
Occupied Units		
% Renter	26.7	44.1
% Owner	73.3	55.9
Households		
% 1 person	24.7	24.8
% 2 persons	42.7	43.4
% 3 or more persons	32.6	31.8
Average Size	2.42	2.33

SOURCE: 1980 Census Tract Data Aggregated By
Urban Decision Systems, Inc.
Lptbl.3-8/pl

Table 3-9
Population and Housing Characteristics -1987: Palm Beach County, Lake Park

	Palm Beach County	Lake Park
Population	783,824	6,793
Per Capita Income ($)	14,629	14,067
Households	324,715	2,966
Household Income		
% less than $5,000	5.4	3.9
% $5,000-$9,999	10.9	9.4
% $10,000-$14,000	11.9	11.1
%$15,000-$19,999	11.5	12.9
%$25,000 and over	49.9	50.3
Median ($)	24,955	25,148
Average ($)	35,157	32,585
Age		
% 0-20	19.3	21.0
% 21-64	54.7	57.1
% 65+	25.9	22.1
Median	42.4	37.5
Occupied Units		
% Renter	25.4	46.5
% Owner	74.6	53.5
Households		
% 1 person	25.2	26.2
% 2 persons	41.9	41.6
% 3 or more persons	32.9	32.2
Average Size	2.38	2.29

Source: 1987 Census Tract Data Extrapolated by Urban Decision Systems, Inc. and LAND RESEARCH MANAGEMENT, INC.; 7/88

Median household income in the Town is slightly higher than Palm Beach County as a whole, while average household income is slightly lower, indicating a greater concentration of middle income households in the Town. In 1987, median income in the Town was estimated to be 100.7% of that witnessed Countywide, while average household income was 92.7% of that exhibited Countywide. In keeping with this observation, the Town has a smaller percentage of households within the lower income and upper income brackets than Palm Beach County as a whole.

Median age in the Town is substantially lower than the County as a whole. Differences in age distribution are evident within the younger and working age groups (i.e. 0-20 and 21-64) where the Town has a higher percentage than Palm Beach County, and elderly age groups (i.e. 65+) where the Town has a lower percentage. However, the most rapidly growing age-group is the 65 years and older bracket.

Housing units in the Town are predominantly owner-occupied, with a substantially higher proportion of renter-occupied housing than the County as a whole.

Impact of Seasonal Residents

It is the intent of this discussion to define the maximum number of seasonal residents residing in the Town at any given time during the year, as opposed to the Total number that will temporarily reside over the course of the year. Maximum day statistics can be used to define peak demands upon infrastructure services, which can be used as a basis for defining related service capabilities.

Calculations deriving this figure are presented on Table 3-10. Basic assumptions and procedures utilized in the preparation of this Table are as follows:

1. There are 3,237 total dwelling units in the Town potentially available for permanent residency (i.e. single-family homes, multiple-family units [duplexes and three units per structure and more]) and accessory residential units.
2. There are currently an estimated 74 units available for sale or rent. This is based upon the 1980 Census vacancy rate of 2.3%. It is assumed that this rate has remained constant due to the relative lack of construction activity since 1980.
3. There are currently 2,966 resident households in Lake Park (i.e. 1987 population divided by average household size).
4. There are currently 306 units available for seasonal occupancy (i.e. total available residential units less resident occupied units and vacancies) plus motel units.
5. For planning purposes, it should be assumed that 100% occupancy will occur on a peak day during the peak season.
6. Assuming 1 89 persons per seasonal unit (i.e. derived from a six (6) year analysis of tourist arrivals to Palm Beach County) a maximum day potential of 578 seasonal residents exists.

Table 3-10
Calculation of 1987 Maximum Day Seasonal Population Levels

Type	**Existing Residential Units**
Single-Family Detached	1,367
Multiple Family Units (2 or more units per structure)	1,651
Accessory Use	219
Hotel/Motel	109
Total	**3,346**
Analysis	
Units Available for Residency	3,237*
Less units for Sale or Residential Rental** (i.e. vacancy)	74
Less 1987 Resident Households***	2,966
Total Residential Units Available – For Seasonal Occupancy	197
Hotel/Motel Units	109
Total Season units	306
Maximum Day Seasonal Population Potential (100% occupancy @ 1.89 persons/unit)****	578

* Total units less hotel/motel units.
** Assumed to equal 1980 rates, as per 1980 Census (i.e. 2.39%)
*** Assumes average household size of 2.29 persons per dwelling unit.
**** Based upon 6 year analysis of tourist arrivals to Palm Beach County. Combined prorate share of air arrivals at 2.2 persons per party and automobile arrivals at 1.7 persons per party.

SOURCE: LAND R ESEARCH MANAGEMENT, INC.; 7/88
T3-10.1P

3.3 LAND USE ANALYSIS

3.3.1 Availability of Facilities and Services

The SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUND WATER AQUIFER RECHARGE element describes current infrastructure systems serving the Town and assesses the availability of those facilities and services.

Potable water and wastewater service are provided by Seacoast Utilities which is adequately serving existing development in Lake Park.

Solid waste collection services are provided in part by the Town and, in part, by a private hauler. The Town is currently being efficiently served by both entities. Services expand to accommodate growth on an "as needed" basis. Drainage and transportation facilities (roads and streets) are in place and adequately serving existing development, although some existing deficiencies have been identified. As indicated in the TRAFFIC CIRCULATION element, no roads within the Town are defined to have a level-of-service problem. Further detail regarding each of these systems including capacities and levels-of-service, is provided in each element referenced above.

3.3.2 Population Projections

<u>Resident Population Projections</u>

Population projections are prepared for 5 and 10 year increments from the date of the adoption of the Local Government Comprehensive Plan. Also, two (2) basic projection methodologies have been defined by the Department of Community Affairs (DCA) as

Being most appropriate for use by small municipal governments: mathematical extrapolation"; and "ratio".

Realistically, population growth is a function of available, developable land and the construction and occupancy of residential units. According to Table 3-5, there is a relatively small amount of land available for residential development in the Town at this time. Due to the limited amount of land remaining and the substantial remaining growth potential of most parent populations which would be utilized in ration methods, it is concluded that projections based upon application of this technique would result in inflated figures for the Town over the course of the next 5 to 10 years. Therefore, an adaptation of the "mathematical extrapolation" technique is utilized (i.e. necessary to account for a single large approved multiple-family project in Planning Area 1).

Since there is a limited amount of vacant residential land remaining in the Town, the first step I preparing projections is to determine remaining residential buildout potential as a means of estimating the maximum population that the Town can sustain. Calculations determining residential buildout population are presented on Table 3-11A. Acreage data and density factors used are extracted from vacant land analyses presented on Tables 3-12. From Table 3-11B, it is concluded that, if all remaining residential properties are totally developed and occupied, an estimated resident population of 574 would result.

However, utilizing a permanent resident occupancy rate of 91.4% (i.e. 1980 Census-based figure) and an average household size of 2.01 residents per unit (Ref: Table 3-11B), buildout resident population on remaining vacant land is estimated at 525 people. Projections are based upon the assumption that R-3 Zoned properties along Park Avenue and Prosperity Farms Road will develop as commercial, as opposed to residential uses (i.e. consistent with abutting parcels).

Utilizing Table 3-6, it is observed that the Town declined in population at a rate of 16.6 residents per year during the 1970-1987 period; however, it is assumed that the 11.5 acre tract in Planning Area 1 will be developed during the five-year planning period (Note: project has obtained site plan approval) and that additional development will occur consistent with historical building permit activity (Ref: HOUSING element) at a rate of 4 units per year through buildout. On this basis, short-term and long-range population projections for the Town are established as follows: 1994 – 7,222 residents (i.e. base year 1987 – 6,793 plus 1987-1994 growth of 429); 1999 – 7,270 residents (i.e. base year 1987 – 6,793 plus 1987-1999 growth of 477). Resident population growth projections are graphically displayed on Figure 3-8.

Seasonal Population Projections

Two factors will affect the growth in the peak-day seasonal resident population in the Town: (1) construction of additional hotel/motel units; and (2) additional occasional-use occupancy of "year-round" residences resulting from projected development activity. No additional growth is expected in Hotel/motel units. Also, based upon 1980 Census Data, it is concluded that, of the 286 potential residential units resulting from buildout of vacant land, approximately 18 will be held for occasional use (i.e. 72% of the units not utilized for permanent residency). It is assumed that units held for occasional use will be developed on a pro-rata basis through the short and long-range planning periods. Also, the estimated current seasonal household size of 1.89 persons per unit is assumed to remain unchanged throughout the long-range planning period. On this basis, seasonal population projections are determined using the following calculations:

1994 Projections:	
1987 seasonal population	578
Additional Hotel/Motel	0
Additional Occasional Use	
(21 units x 1.89)	40
Total	618
1999 Projections:	
1987 seasonal population	578
Additional Hotel/Motel	0
Additional Occasional Use	
(23 units x 1.89)	44
Total	622

Table 3-11A
Remaining Residential Development Potential

	Low Density		Medium Density		High Density	
Planning Area	**Acres**	**Units**	**Acres**	**Units**	**Acres**	**Units**
1	0	0	0.52	1	11.50	220
2	4.68	22	4.73	43	0	0
3	0	0	0	0	0	0
Totals	4.68	22	5.25	44	11.50	220

Total Acres – 21.43
Total Units – 286

Table 3-11B
Remaining Population Growth Potential

Type	**Units**	**Household Size**	**Population**
High Density	220	1.80	396
Medium Moderate Density	44	2.52	111
Low Density	22	3.05	67
Total	286	2.01	574

1. Includes R1 and R1A Zoning Districts
2. Includes R1B, R2 and R3 Zoning Districts (includes medium and moderate density land use categories)
3. Includes R1AA Zoning District
4. Based upon an analysis of Census Tract Data in the vicinity

Source: LAND RESEARCH MANAGEMENT, INC.; 7/88

Figure 3-8

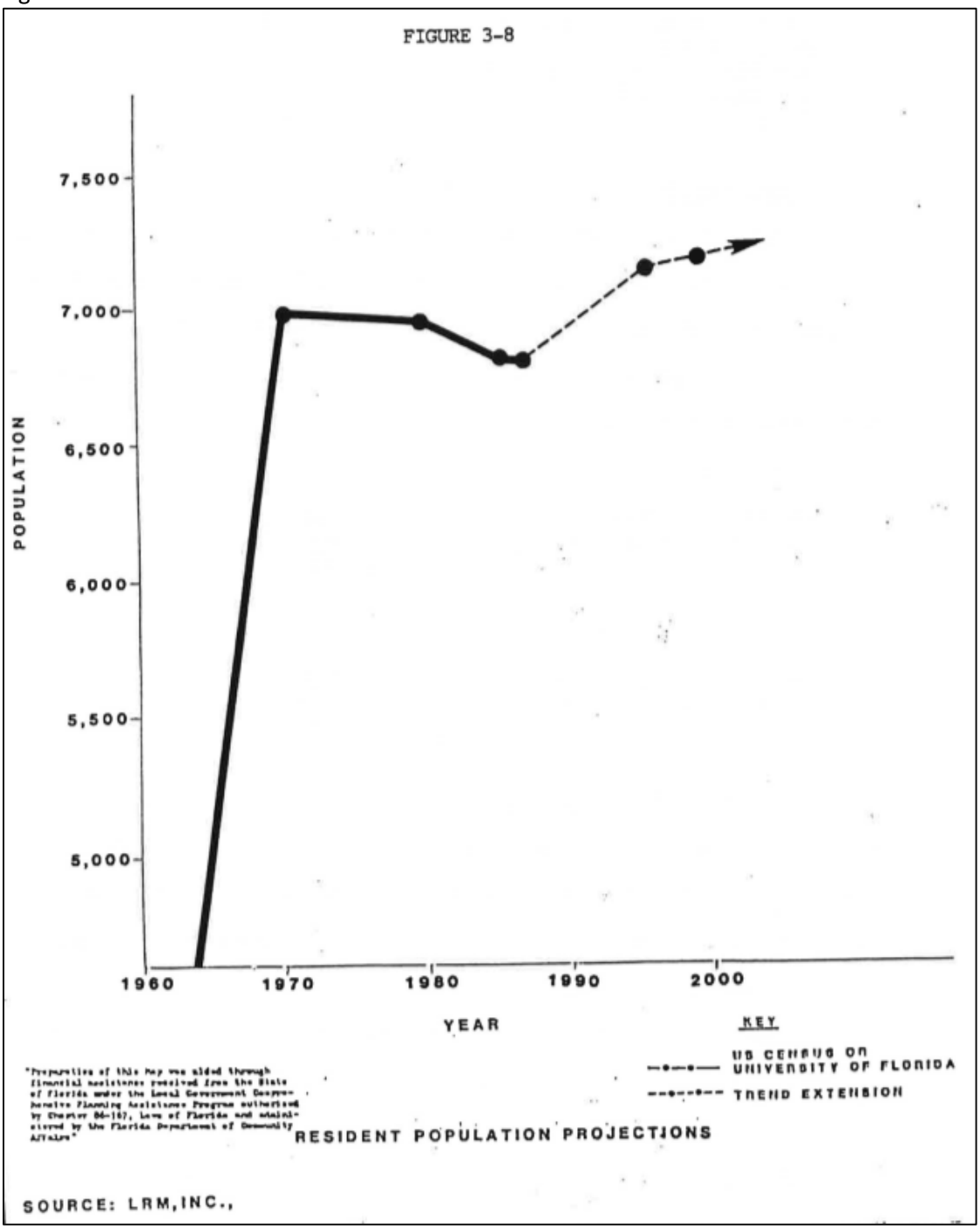


FIGURE 3-8
7,500
7,000
6,500
6,000
5,500
5,000
POPULATION
1960
1970
1980
1990
2000
YEAR
KEY
US CENSUS OR UNIVERSITY OF FLORIDA
TREND EXTENSION
RESIDENT POPULATION PROJECTIONS
SOURCE: LRM, INC.,

Total Population Projections

Total population projections are the sum of resident and seasonal projections for any given time period and represent the maximum population that will reside in the Town on a peak day. On this basis, total population projections are determined using the following calculations:

1994 Projections:	
Resident Population	7,222
Seasonal Population	618
Total	7,840
1999 Projections:	
Resident Population	7,270
Seasonal Population	622
Total	7,892

3.3.3 Vacant Land Analysis

Statistical data regarding vacant land are presented on Table 3-12. Only residential, commercial and industrial properties (i.e. based upon current zoning designations) are defined as vacant. Other land use types may be developed (i.e. specifically, public buildings and grounds land use in Planning Area 3); however, they are permitted or allowed within the general land use categories listed on Table 3-12.

In terms of limitations to development (i.e. soils, topography, natural resources and historic resources, etc.) all vacant land within Planning Areas 1, 2 and 3 are determined to be suitable for development. However, potential flooding in certain areas and potential contamination of the Old Dixie wellfield should be considered when allowing additional development in Planning Area 3 (Ref: GROUNDWATER AQUIFER RECHARGE Sub-element for further discussion).

Vacant land within Planning Area 1 consists of an 11.5 acre high density residential property fronting on Lake Worth (Note: Site Plan approval has been procured for development of 220 units), a 0.64 acre commercial parcel and a 0.52 acre single-family lot. There are no defined limitations to development. All urban services are currently available to the Sites. Approximately 8.0% of the vacant land within the Town limits is in Planning Area 1.

Table 3-12
Vacant Land Summary (Acres) Land Use Category

		Residential (Density)			
Planning Area	**Commercial**	**Low**	**Medium**	**High**	**Mixed Commercial & Industrial**
1	0.64	0.00	0.52	11.5	0
2	4.05	4.68	4.73	0.00	0
3	0.00	0.00	0.00	0.00	132.05
Total	4.69	4.68	5.25	11.5	132.05
Total Vacant Land – 158.17 acres					
Low:	0-6.81 units/net residential acre (maximum)				
Medium:	4.0 – 15.71 units/net residential acre (maximum)				
High:	20 units/net residential acre (maximum)				

Source: LAND RESEARCH MANAGEMENT, INC. 7/88
T3-12.1p

Vacant land in Planning Area 2 (i.e. 13.46 acres) comprises 8.5% of the total within the Town and 43.9% of the total vacant residential and, with the balance in Planning Area 1. Vacant residential land consists entirely of "in-fill" lots within existing developed areas. R-3 zoned lots along Prosperity Farms Road and Park Avenue can also be developed for bank, office building, medical clinic and dental office uses. For the purposes of this analysis, it is assumed that commercial development will occur. Several of the residential lots do not meet minimum size or frontage requirements; however, it is assumed that at least one single-family unit is permitted. It is concluded that all urban services are available and there are no development limitations. All vacant commercial properties (i.e. 2.15 acres) are located near the intersection of Foresteria Avenue and 10th Street. These are also termed "in-fill" sites with no defined development limitations. Vacant land in Planning Area 3 (i.e. 132.05 acres) comprises 83.5% of the total within the Town, including several large, municipally-owned parcels. All of the vacant land in Planning Area 3 is designed for mixed commercial/light industrial use on the current Future Land Use Plan Map. There are no existing or planned future residential uses in Planning Area 3.

3.3.4 Redevelopment Needs

The Town is an established middle income community consisting of clearly delineated residential neighborhoods and commercial districts. Field surveys undertaken as part of this element and the HOUSING element indicate that the housing stock is in standard condition. Normal maintenance should preclude the need for redevelopment activities during the 5 and 10 year planning periods. All commercial properties appear viable and in good condition. Potential land use incompatibilities between commercial and residential properties have been

minimized by using the following mitigation techniques: service alleys and setbacks at the rear of commercial properties; private fencing; private landscaping on the part of individual commercial and residential property owners; use of density gradients; signage restrictions; and height limitations. Uses inconsistent with the Town character have been precluded by the zoning and subdivision review process. The most serious potential incompatibility to be addressed in other elements is the potential contamination of the Old Dixie Wellfield by commercial and/or industrial land uses in Planning Area 3 (Ref: POTABLE WATER AND GROUNDWATER AQUIFER RECHARGE Sub-elements).

3.3.5 Land Use Projections

The following assumptions are used as a basis for preparing future land use projections:

1. Since the Town in 84% developed at the current time, the following land use categories will remain unchanged:
    i. Recreation/Open Space; public buildings; other public facilities; and water;
2. Residential land use projections are derived using the following assumptions: the 11.5 acre high density project will be developed by 1994; and low and medium density residential will be developed according to the rates developed on Table 3-13, until build-out;
3. Commercial and Mixed Commercial/Industrial land uses will be developed at rates consistent with those evidenced during the 1980-87 period; and
4. The only additional transportation land use development will be that required to accommodate Mixed Commercial/Industrial land use growth in Planning Area 3.

Land use projections indicate that the majority of the vacant residential land (i.e. 19.4 acres) should be developed by 1999.

Commercial land use projections are based upon historical absorption rates. According to the 1980 Comprehensive Development Plan, there were 130 acres of commercial land in 1978, while the current estimate is 136 acres. On this basis, commercial acreage has been absorbed at a rate of 0.56 acres per year during the 1978-88 period. Assuming this rate is maintained throughout the planning period, remaining vacant commercial acreage (i.e. 4.69 acres) will be developed by 1996. A similar procedure is used to project Mixed Commercial/Light Industrial growth.

The only additional transportation land use development anticipated is the local street network in Planning Area 3.

Table 3-13
Residential Land Use Projections 1994

Resident Population Growth (1987-94)		429	
Resident Dwelling Unit Growth (1987-94)		227	
1.540 / 2.62	Resident Unit Growth / Average H/H Size		
Total Year-round Dwelling Unit			
Growth (1987-1994)			
227 / 0.914	Resident Unit Growth / Resident Unit Occ. Rate	248	
Distribution of Units by Density Category:			
Type	**Growth Share**	**1987-94 Growth (units)**	
Low	2.00%	5	
Medium	9.30%	23	
High	88.70%	220	
Total	100%	248	
Distribution of Land use by Density Category:			
Type	**1987-94 Units**	**Intensity factor Units/Acres**	**Acres**
Low	5	4.00	1.30
Medium/moderate	23	7.00	3.30
High	220	19.10	11.50
Totals	249	15.40	16.10

Footnotes:

1. Derived using weighted averages of household size by housing type (Table 3-11B).
2. Based upon historical absorption rates during 1978-88 period and anticipated development of 11.5 acre tract in Planning Area 1.
3. Projected growth in units divided by projected growth in acres.

Source: LAND RESEARCH MANAGEMENT, INC.; 7/88
T3-13.1p

Table 3-14
Land Use Projections

Land Use	1988 area in Acres	1994 area in acres	1999 area in acres
Residential			
Low	305.1	306.4	307.4
Medium	56.4	59.7	62.0
High	22.2	33.7	33.7
Commercial	135.9	140.0	141.0
Mixed Commercial/light industrial	95.1	107.7	118.2
Recreation/Open space	31.9	31.9	31.9
Public Buildings and Grounds	9.4	9.4	9.4
Other Public Facilities	18.1	18.1	18.1
Transportation	250.0	254.3	257.8
Water	8.9	8.9	8.9
Total Devel.	957.8	994.9	1,011.2
Vacant	158.2	121.1	102.8
Total	1,116.0	1,116.0	1,116.0

Source: LAND RESEARCH MANAGEMENT, INC.; 8/77
T3-14.1p

3.3.6 Development of Flood prone Areas

Designated flood zones within the Town are illustrated on Figure 3-4. Zone A5, A8 and AH designation areas are within the 100-year storm flood zones and are defined to be flood hazard areas. Low-lying areas within the Town generally fall within the 5 feet to 10 feet msl range of elevations, while the base flood elevation is defined by the Federal Insurance Administration as 7.0 feet msl leading to the conclusion that flooding of up to 2 feet can be expected in certain areas within the Town during a 100 year storm event. From Exhibit 3-4, it can be seem that coastal areas (i.e. Intracoastal Waterway), properties fronting South Lake and the western-most properties in Planning Area 3 are most greatly affected. The Town has recognized this potential hazard by requiring an 8.5 feet msl minimum floor elevation for all structures (Ref: Town Subdivision Ordinance).

3.4 GOAL, OBJECTIVES AND POLICIES

3.4.1 Town Goal Statement

Ensure that the historic small-town character of Lake Park is maintained, while fostering development and redevelopment that is compatible with and improves existing neighborhoods and commercial areas. The Town shall maintain and seek opportunities to improve its ability to provide: (1) a full range of municipal services; (2) diversity of housing alternatives consistent with existing residential neighborhoods; (3) commercial, industrial and mixed-use development opportunities that will further the achievement of economic development goals; and (4) a variety of recreational activities and community facilities oriented to serving the needs and desires of the Town. Various land use activities, consistent with these Town character parameters, will be located to maximize the potential for economic benefit and the enjoyment of natural and man-made resources by residents and property owners, while minimizing potential threats to health, safety and welfare posed by hazards, nuisances, incompatibles land uses and environmental degradation.

3.4.2 Objectives and Policies

Objective 1:

Future growth and development shall be managed through the Future Land Use Plan Map and Comprehensive Plan, as implemented by land development regulations which: (1) coordinate future land uses with appropriate topography, soil conditions and the availability of facilities and services; (2) encourage the prevention, elimination or reduction of uses inconsistent with the Town goal statement and future land use plan; and (3) encourage redevelopment, renewal or renovation that maintains or improves existing neighborhoods and commercial areas; (4) facilitate the achievement of economic development, historic preservation, resource preservation, and other key goals; and (5) discourage the proliferation of urban sprawl. New, revised, or redeveloped uses of land shall be consistent with the designations shown on the Future Land Use Map (FLUM). The achievement of the maximum density or intensity on a development or redevelopment site, and all development and redevelopment approvals, shall be contingent upon, and limited by, the provision of data and analysis that demonstrates the ability to meet adopted Level of Service Standards in the short term (five-year) planning horizon. Improvements necessary to achieve the Level of Service Standard as a result of development or redevelopment must be programmed in the Five-Year Capital improvements schedule as condition for the development approval. It is the Town's intent to promote development and redevelopment in accordance with the Future Land Use Plan Map over a 20 year long-range planning period, and only to permit development or redevelopment when services are in place or planned to meet the increased demand, in accordance with the concurrency management system. Concurrency, site constraints,

and other factors will ensure that redevelopment happens in a deliberate and controlled manner and may inhibit the developers' ability to achieve maximum build-out.

Policy 1.1:

Policy 1.1: Land Development Regulations shall be amended as necessary to contain specific and detailed provisions required to implement the adopted Comprehensive Plan and which as a minimum:

a. Regulate the subdivision of land;
b. Regulate the use and intensity of land development consistent with this element to ensure the compatibility of adjacent land uses;
c. Regulate areas subject to seasonal and periodic flooding by requiring adequate drainage and stormwater management
d. Regulate signage
e. Ensure safe and convenient onsite traffic flow and vehicle parking needs;
f. Ensure that public facility, utility and service authorization has been procured prior to issuing any development order;
g. Provide that development orders and permits shall not be issued which result in a reduction of the level of services for the affected public facilities below the level of service standards adopted in this Comprehensive Plan;
h. Ensure the proper maintenance of building stock and property by continually adopting, updating and enforcing adopted housing, building and related codes;
i. Discourage the proliferation of urban sprawl;
j. Encourage redevelopment, renewal or renovation, that Maintains or improves existing neighborhoods and commercial areas;
k. Eliminate and/or reduce use of land inconsistent with the Future Land Use Map and the community's character, and;
l. Facilitates the achievement of economic development, historic preservation, resource preservation, and other key goals.

Policy 1.2:

Land development regulations shall address the location and extent of land uses in accordance with the Future Land Use Map. Future Land Use Map Districts may include residential, non-residential and pubic, semi-public and institutional uses such as schools, public facilities, recreational uses, etc., as indicated on the Future Land Use Map and regulated by the Town Zoning Code.

Policy 1.3:

Land development regulations adopted to implement this Comprehensive Plan shall be based on and consistent with the standards for residential land use densities provided in Section 3.4.3 of this Element, titled "Future Land Use Classification System". Please note

that the ability to achieve these densities shall be contingent upon, and limited by, the ability to meet adopted Level of Service Standards in the short-term planning horizon.

Policy 1.4:

Land Development regulations adopted to implement this Comprehensive Plan shall be based on and be consistent with the following standards for commercial land use intensities provided in Section 3.4.3 of this Element, titled "Future Land Use Classification System". Please note that the ability to achieve these intensities shall be contingent upon, and limited by, the ability to meet adopted Level of Service Standards in the short-term planning horizon.

Policy 1.5:

The Town shall encourage development and redevelopment activities which will substantially increase the tax base while minimizing negative impacts on natural and historic resources, existing neighborhoods and development. and adopted Levels of Service standards.

Policy 1.6:

Land development regulations shall contain performance standards which: Address buffering and open space requirements; and
Landscaping requirements.

Policy 1.7:

Land development regulations shall contain planned development provisions which allow design flexibility within projects under unity of title as a means of the maximum use of land, while preserving the current character of the Town.

Policy 1.8:

New development shall be permitted only when central water and wastewater systems are available or will be provided concurrent with the impacts of development.

Policy 1.9:

Subdivisions shall be designed to include an efficient system of internal circulation, including the provision of collector streets to feed traffic to arterial roads and highways.

Policy 1.10

The Town shall adopt and maintain land development regulations that provide incentives for bioscience research/biotechnology uses to encourage the clustering of that industry within the Town. and particularly within the Bioscience Research Protection Overlay (BRPO).

Policy 1.11:

The Town shall ensure that an adequate amount of land is designated for bioscience research/biotechnology uses.

Objective 2:

Development and redevelopment activities shall be undertaken in a manner to ensure the protection of natural and historic resources and the Town character as prescribed in the Town Goal Statement.

Policy 2.2:

The Town land development regulations shall address and limit activities which have the potential to contaminate land and water resources.

Policy 2.3:

The Town shall encourage protection of potable water wellfields by regulatory authorities having land use jurisdiction in aquifer recharge areas serving Seacoast Utilities, Inc. systems.

Policy 2.4:

At the time of each required Comprehensive Plan update, the Town shall consider the need for the identification, designation and protection of additional historically significant properties.

Objective 3:

All development orders and permits for future development and redevelopment activities shall be issued only if public facilities necessary to meet level of service standards are available concurrent with the impacts of the development. Further, require that all on-site lands for rights-of-way, easements, etc., be conveyed to the proper authority prior to final project approval.

Policy 3.1:

The development of residential, commercial and mixed commercial/industrial lands shall be timed and staged in conjunction with provisions of supporting community facilities, such as streets, utilities, police and fire protection service, emergency medical service, and public schools.

Policy 3.2:

Public facilities and utilities shall be located to: (1) maximize service efficiency; (2) minimize public costs; and (3) minimize impacts upon the natural environment.

Policy 3.3:

Joint public-private efforts shall be pursued as a means of financing needed infrastructure improvements where feasible and appropriate.

Policy 3.4:

Remaining properties not utilizing central water and wastewater systems shall be governed by the provisions of Florida Statutes, Chapter 381.272, Florida Administrative Code, Chapter 10D-6 and Palm Beach County Environmental Control Rule – 3, which regulate the use and installation of individual sewage disposal systems.

Objective 4:

The Town shall coordinate with appropriate governments and agencies to minimize and mitigate potential mutual adverse impacts of future development and redevelopment activities.

Policy 4.1:

Requests for development orders, permits or project proposals shall be coordinated, as appropriate, with adjacent municipalities, Metropolitan Planning Organization, Palm Beach County, Treasure Coast Regional Planning Council, Special Districts, South Florida Water Management District and State and Federal Agencies.

Objective 5:

As a substantially built-out community in an urbanized area, the Town shall promote redevelopment and infill development in a manner that is considerate to existing neighborhoods and uses, the built and natural environments. and neighboring jurisdictions.

Policy 5.1:

The Town shall protect, preserve, maintain and improve its core residential neighborhoods and historic resources, and protect these areas from physical degradation and the intrusion of incompatible uses.

Policy 5.2:

The Town shall foster the redevelopment of declining neighborhoods, underutilized parcels, and areas that demonstrate substandard and/or slum and blight conditions.

Policy 5.3:

The Town shall foster the redevelopment of key corridors and target areas. Compact mixed-use development, defined as a mixture of at least two different land uses in a

design-unified, vertically and or horizontally integrated, pedestrian-friendly environment, should be the preferred form of development and redevelopment.

Policy 5.4:

Utilize such techniques as distance requirements, buffering, landscaping, lower-intensity development, and scale-down requirements to provide appropriate transitions between uses and districts of different intensities, densities, and functions.

Policy 5.5:

Develop and redevelop downtown Lake Park in a pedestrian-friendly manner through streetscape improvements, and parking regulations for new construction.

Policy 5.6:

The Town, through its Land Development Regulations, shall require mitigation for landscaping off-site if development or redevelopment is unable to meet landscaping requirements on-site

Objective 6:

The Town shall protect structures and sites within its boundaries that contribute significantly to its heritage.

Policy 6.1:

The Zoning and Land Development Regulations shall include safeguards to protect historical buildings under consideration for alteration from unauthorized demolition.

Policy 6.2:

Consider the publication of guidelines to assist residents and businesses with the restoration of historic buildings, and provide other technical assistance as feasible and appropriate.

Policy 6.3:

The Town shall continue to designate historically significant buildings and sites as "Historic," and shall protect and preserve these buildings and sites through the Historic Preservation Ordinance, as it may be amended from time to time. The Town shall also consider the benefit and feasibility of designating a local historic district within its boundaries.

Policy 6.4:

The Town shall continue to maintain a database of the Town's historic structures and sites.

Policy 6.5:

The Town shall consider the use of transfers of development rights, purchase of development rights, and other creative mechanisms to achieve its historic preservation goals while not placing an undue burden on property owners.

Objective 7:

The Town recognizes the benefits of unified architectural and design standards. The Town shall continue to develop, maintain, revise and enforce these standards as appropriate.

Policy 7.1:

The Town shall continue to elicit community participation in the development of community design standards for specific neighborhoods and areas as a key component of its redevelopment and planning efforts.

Objective 8:

The Town shall implement a Bioscience Research Protection Overlay (BRPO) for the purpose of promoting bioscience research/biotechnology uses and shall discourage the conversion of those uses to retail or residential uses.

Policy 8.1:

The types of uses encouraged within the BRPO shall include science/ biotechnology research uses and their supporting facilities; laboratories; other industrial uses including manufacturing uses; clinical research hospitals; and commercial retail or office uses that are accessory or ancillary to bioscience research/biotechnology uses. The Town's Land Development Regulations shall implement the encouragement of these uses.

Policy 8.2:

The Bioscience Research Protection Overlay (BRPO) shall be depicted on the Town's Future Land Use Map and the Town's Official Zoning Map.

Policy 8.3:

The Town shall encourage bioscience research/biotechnology uses as permitted uses within the Bioscience Research Protection Overlay (BRPO) so as to achieve, in coordination with the County and adjacent municipalities, a clustering of bioscience research/biotechnology uses, and thus to promote the intellectual exchange between researchers, scientists, students and others in the bioscience research/biotechnology industry workforce.

Policy 8.4:

The Town shall adopt and maintain land development regulations that provide incentives for bioscience development and promote a predominance of bioscience research/biotechnology uses so as to develop a cluster of the industry within the BRPO.

Policy 8.5:

Those parcels of land whose future land use and zoning designations permit bioscience research/biotechnology uses, may not be rezoned, redesignated, amended or otherwise converted to other commercial retail or residential uses, which are not clearly accessory or ancillary uses to bioscience research/ biotechnology uses without the supermajority vote of the Town Commission.

Objective 9: Federal Highway Mixed Use District

Federal Highway Mixed Use District. The Commission designates an area as shown on the Town's Future Land Use Map as a unified redevelopment area to be known as the Federal Highway Mixed Use District (FHMUD) with the future land use designation of FHMUD.

Policy 9.1

The commercial use component of a building within the Mixed Use designation shall include those uses established by the land development regulations which generally include small scale retail sales and services; business services; and medical or professional offices primarily serving the residents of the town and those within close proximity of the town.

Policy 9.2

The intent of the FHMUD is to create a walkable, transit oriented mixed use district. Existing auto-oriented businesses within the FHMUD boundaries on the date of adoption of this land use plan amendment ordinance will be treated as any other permitted use within the FHMUD and will be allowed to remain, rebuild and expand and otherwise continue business operations regardless of present or future ownership as long as the use remains within the site boundaries established at the time this ordinance is adopted. New auto-oriented businesses, however, will not be allowed within the FHMUD unless designed in a manner to encourage pedestrian and transit usage and may be further restricted in the Town's applicable Zoning District regulations

Policy 9.3

Compatibility of adjacent uses will be of primary concern during redevelopment of the FHMUD. Compatibility will be accomplished by:

- Incorporating fences, walls or other appropriate edge treatments along with building design elements that respect existing development but do not impede safe and efficient pedestrian access.
- Building setbacks and heights that address compatibility between proposed and existing development.
- Service areas that do not impact adjacent residential development.
- All land uses, including institutional and utility uses, must be designed to be compatible with adjacent properties.

Policy 9.4

Public plazas, urban open space or green space/pocket park uses that are accessible to the public are encouraged where appropriate as an integrated component of redevelopment within the FHMUD.

Policy 9.5

Future development within the FHMUD area will include design features that promote and enhance public safety and pedestrian mobility. including connectivity and pedestrian amenities, based on the following characteristics which are detailed further in the Town's applicable Zoning District regulations:

- Integrated bus stops with shelters.
- Wide (the minimum shall be consistent with ADA requirements) pedestrian and bicycle paths that minimize conflicts with motorized traffic and are adequately landscaped, shaded and provide opportunities for shelter from the elements.
- Buildings should front the street (zero or minimal setbacks are encouraged).
- Vehicle parking strategies that encourage pedestrian activity such as parking that does not front the street, shared parking and parking structures.
- Streets (internal and adjacent to the FHMUD) should be designed to discourage isolation, and provide connectivity.
- Projects should be designed in accordance with Crime Prevention Through Environmental Design (CPTED) principles to enhance public safety.

Policy 9.6

Development within the FHMUD land use designation will include internal pedestrian amenities to serve the residents and employees within the area (such as seating on benches or planter edges, shade, light fixtures, trash receptacles. information kiosks, bicycle parking) and other amenities that can be incorporated into adjacent publicly accessible areas and plazas (such as clocks, fountains, sculpture, drinking fountains, banners, flags, and food and refreshment vendor areas.

Policy 9.7

The total land use entitlements within the FHMUD are established under the Land Use Classification System herein. At such time as the residential entitlements are 80 percent

committed to approved projects, the Town will prepare and consider a Comprehensive Plan amendment to add additional residential entitlements to ensure all properties in the District have access to adequate development rights to be distributed at the densities and intensities permitted by the FHMUD zoning code.

Objective 10:

The Commission shall amend the Town's Official Zoning Map establishing the boundaries of a zoning District consistent with the boundaries of the FHMUD land use designation as shown on the Future Land Use Map. The Zoning District shall provide for redevelopment with a mixture of residential and complementary commercial uses, open space, public amenities, and pedestrian access from Federal Highway to Lakeshore Drive and the adjacent waterfront, where feasible.

Policy 10.1

The Land Development Regulations for properties to be redeveloped within the FHMUD shall provide for the dedication of easements as an amenity or, public benefit to ensure the public has access from Federal Highway to Lakeshore Drive, the waterfront, and the Marina, to the greatest extent feasible.

Policy 10.2

The Town shall develop zoning regulations with height limits to encourage the preservation of historically designated or significant properties. If the buildings with historic character are relocated, the Town may reconsider the heights and densities allowed for the affected properties.

Policy 10.3

Development along Lakeshore Drive shall maintain pedestrian oriented architecture, landscaping and access as defined in the land development regulations.

3.4.3 Future Land Use Classification System

Land use categories listed as follows are hereby adopted as the "Future Land Use Classification System": Please note that the ability to achieve the maximum residential density and/or Floor Area Ratio (F.A.R.) is contingent upon, and shall be limited by, the ability to meet adopted Level of Service Standards in the short-term planning horizon.

Single Family Residential – Single family detached residences, with a maximum density not to exceed six (6) units per gross acre including permitted accessory uses.

Low Density Residential – Single family detached residences, and clustered single-family detached residents, with a maximum density not to exceed nine (9) dwelling units (du) per gross acre, including permitted accessory or conditional uses.

Medium Density Residential – Single family detached residences, duplexes, townhouses, clustered single-family detached residences, and multiple family residences with a maximum density not to exceed 19 dwelling units (du) per gross acre, including permitted accessory or conditional uses. Public schools are a permitted use within this land use designation.

High Density Residential – Single family detached residences, duplexes, townhouses, clustered single-family detached residences, and multiple family residences, with a maximum density not to exceed 40 dwelling units (du) per gross acre, including permitted accessory or conditional uses. Public schools are a permitted use within this land use designation.

Condominium Residential – Single-family detached residences, duplexes, townhouses, clustered single-family detached residences, and multiple family residences with a maximum density not to exceed 40 units per gross acre. Public schools are a permitted use within this land use designation.

Federal Highway Mixed Use District (FHMUD) - Lands located on the east and west side of Federal Highway as shown on the Future Land Use Map. This designation has been applied to the Future Land Use Map for Mixed Use District (Text Amendment Ord. 03-2018 and Map Amendment Ord. #03-2018.) The densities and intensities of permitted uses within the designated FHMUD are as follows:

- Residential: 3,049 dwelling units
- Nonresidential (Retail, Office, Hotel, Institutional, Utility etc. as per the Zoning Code permitted uses): 11,400,000 square feet.

Downtown – Mixed use development with a maximum F.A.R. of 5.0 and a maximum residential density of 27 units per gross acre. Residential uses shall comprise no less that 20 percent, or no more than 80 percent, of the floor area of any vertical mixed-use building, and no less than 20 percent and no more than 80 percent of the buildings on a development site or block face.

Commercial – Lands and structures devoted primarily to the delivery, sale or otherwise transfer of goods or services on a retail basis, with a maximum F.A.R. of 2.0. This category also includes personal and professional services. Public schools are a permitted use within this land use designation.

Commercial and Light Industrial – Lands and structures devoted to light industrial uses with pollutants controlled on site, warehouses, commercial, wholesale establishments, and limited small scale commercial uses that are supportive of workers in the area such as convenience stores and restaurants and that can be carried on unobtrusively, with a maximum F.A.R. of 2.0. Specific uses are delineated in the Town of Lake Park Zoning Code.

Public Buildings and Grounds – Lands and structures that are owned, leased, or operated by a government entity such as libraries, police stations, fire stations, post offices, government administration buildings, and areas used for associated storage of vehicles and equipment, with a maximum F.A.R. of 3.0. Also, lands and structures owned or operated by a private entity and used for a public purpose such as a privately held by publicly regulated utility. Public schools are a permitted use within this land use designation.

Other Public Facilities – Lands and structures utilized by other public or private facilities and institutions such as churches, clubs, schools, fraternal organizations, homes for the aged and infirm, and similar uses, with a maximum F.A.R. of 3.0. Public schools are a permitted use within this land use designation.

Recreation and Open Space – Areas devoted to leisure time and outdoor recreational needs. The Recreation Overlay indicates areas that have been identified for potential future use as recreation and open Space. Areas within the Recreational Overlay may be utilized in accordance with the underlying land use designation until they are acquired for recreation and open space use. At that time, the underlying land use designation shall convert to Recreation and Open Space.

Water – All areas covered by water or any right-of-way for the purpose of conveying or storing water.

Conservation – Areas of passive outdoor recreational uses such as wildlife sanctuaries and feeding stations, nature centers and trails, outdoor research stations, walkways, and greenways. Conservation uses must not impair the natural environment or disturb the natural ecosystem of the area, and will not conflict with any applicable contractual agreement or management policies of the federal, state, regional, county, municipal or non-profit agency which manages the natural reservation.

Bioscience Research Protection Overlay (BRPO) – The area designated on the Future Land Use Map includes land that has been determined to be appropriate to accommodate bioscience research / biotechnology uses, as well as other intellectual knowledge-based industry sectors. *"Bioscience uses"* means those land uses that support science and biotechnology research, engineering and manufacturing such uses as laboratories, educational facilities and clinical research hospitals and accessory uses, including administrative office and retail uses. Limited residential uses, which support the bioscience cluster shall be considered bioscience uses.

"Mixed Use Zoning Districts and Overlays" – a Mixed-Use Zoning District or Overlay Area, which allows projects consisting of a combination of at least two or more different uses within a unified development district area, such as mix of residential, non-residential, and commercial uses in a single project. The residential component of a mixed-use project may include single family detached, attached residences, duplexes, town homes, and other types of multi-family residences, except for adult congregate living facilities. The commercial component of a mixed-use project shall be comprised of small-scale retail sales and services, business services and medical, legal, and other similar professional office type uses intended to serve the residential areas of the town. The non-residential component may include active and passive parks and recreation facilities, green space,

open space, preserves, and conservation areas. It is the legislative intent that areas designated for mixed use projects should encourage and attract the development of a compatible mix of residential, non-residential. and commercial uses in a proposed development which is consistent and compatible with the Town's comprehensive plan and platted in accordance with the procedures of the Town Code and state law.

A mixed-use redevelopment project shall have a maximum F.A.R. of 2.5 for commercial uses and residential uses may have a maximum of 20 units per gross acre. Any such project shall include open space or public amenity uses. Buildings are encouraged to be located close to the sidewalk at the front setback line, or immediately behind a public/semi-public space (i.e. outside seating). Parking in front of businesses is discouraged. Buildings fronting on streets must include appropriate architectural street frontage detailing in addition to the standard requirements for the entire building as set forth in the zoning ordinance. Residential uses shall comprise no less that 20 percent, or no more than 80 percent, of the floor area of any vertical mixed-use building, and no less than 20 percent and no more than 80 percent of the buildings on a development site or block face. The first floor of any building in a mixed-use project that has frontage on the Federal Highway corridor may not contain any residential uses.

Annexation: Areas identified "Annexation" are not within the current Town boundaries but have been identified for potential future annexation.

3. 4. 4 Future Land Use Map Series

3. 4. 4. 1 Future Land Use Map

The Town of Lake Park Future Land Use Plan is displayed in Figure 3. 9
See also Figure 3-9a which depicts the coastal high hazard flood areas, which shall be incorporated into the Future Land Use Map, per State Statute.

3. 4. 4. 2 Natural Resources

The following natural resources data are hereby incorporated, by reference, within the Future Land Use Map Series;

1. Surface water features (Ref: Figure 3- 5);
2. Generalized Soils (Ref: Figure 3- 3 and Tables 3- 1 and 3-2) ; and
3. Flood Zones (Ref: Figure 3- 4 and Table 3- 3).

There are no wetlands, coastal vegetation or beaches within Lake Park. Further, there are no existing or planned potable water wellfields or cones of influence or any known minerals of any determined value within the Town.

3. 4. 4. 3 Future Annexation

The Town of Lake Park Future Annexation Area is illustrated on Figure 3- 10.

FIGURE 3.9: Future Land Use Map

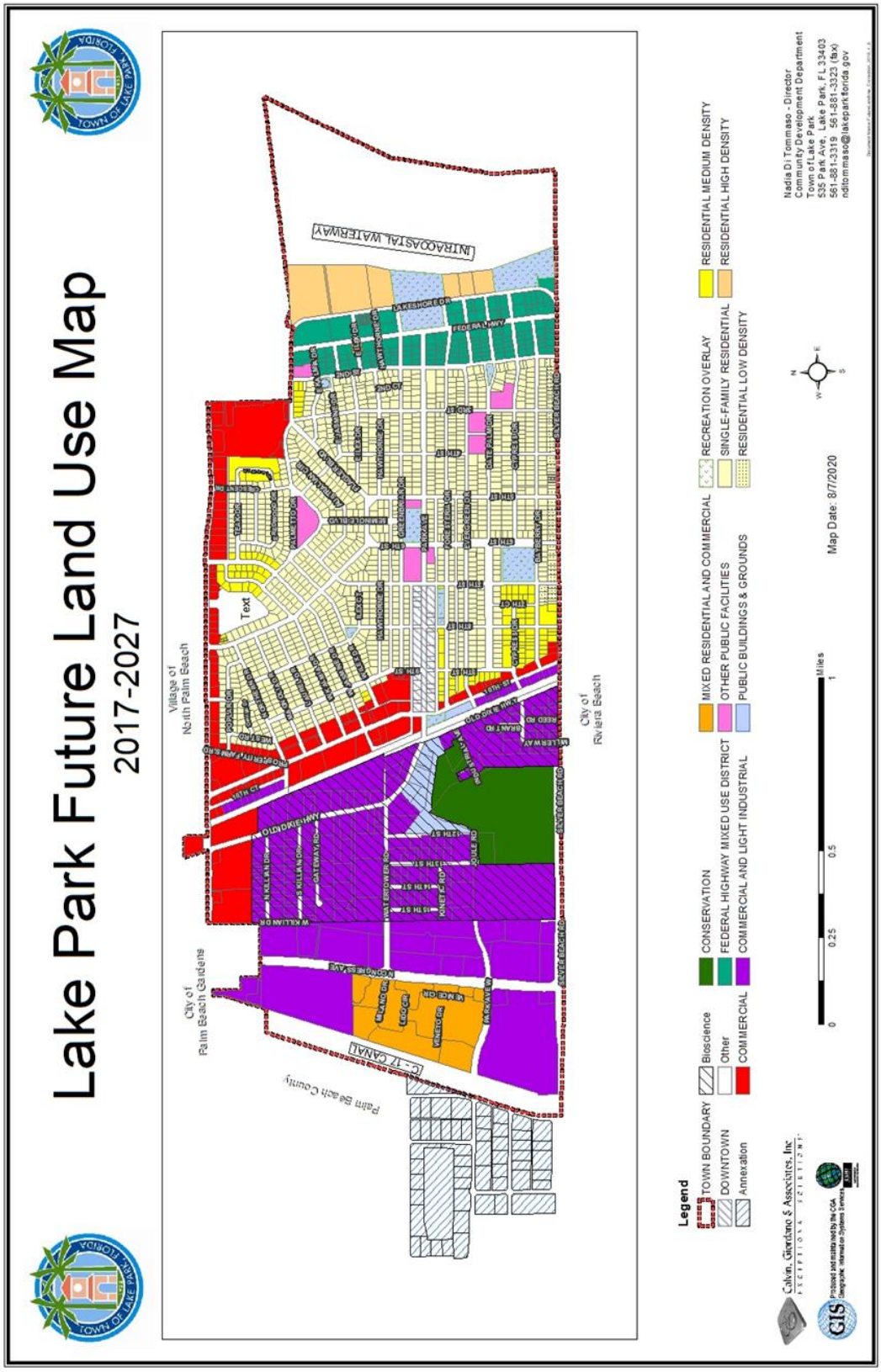


FIGURE 3-9A – Coastal High Hazard Area

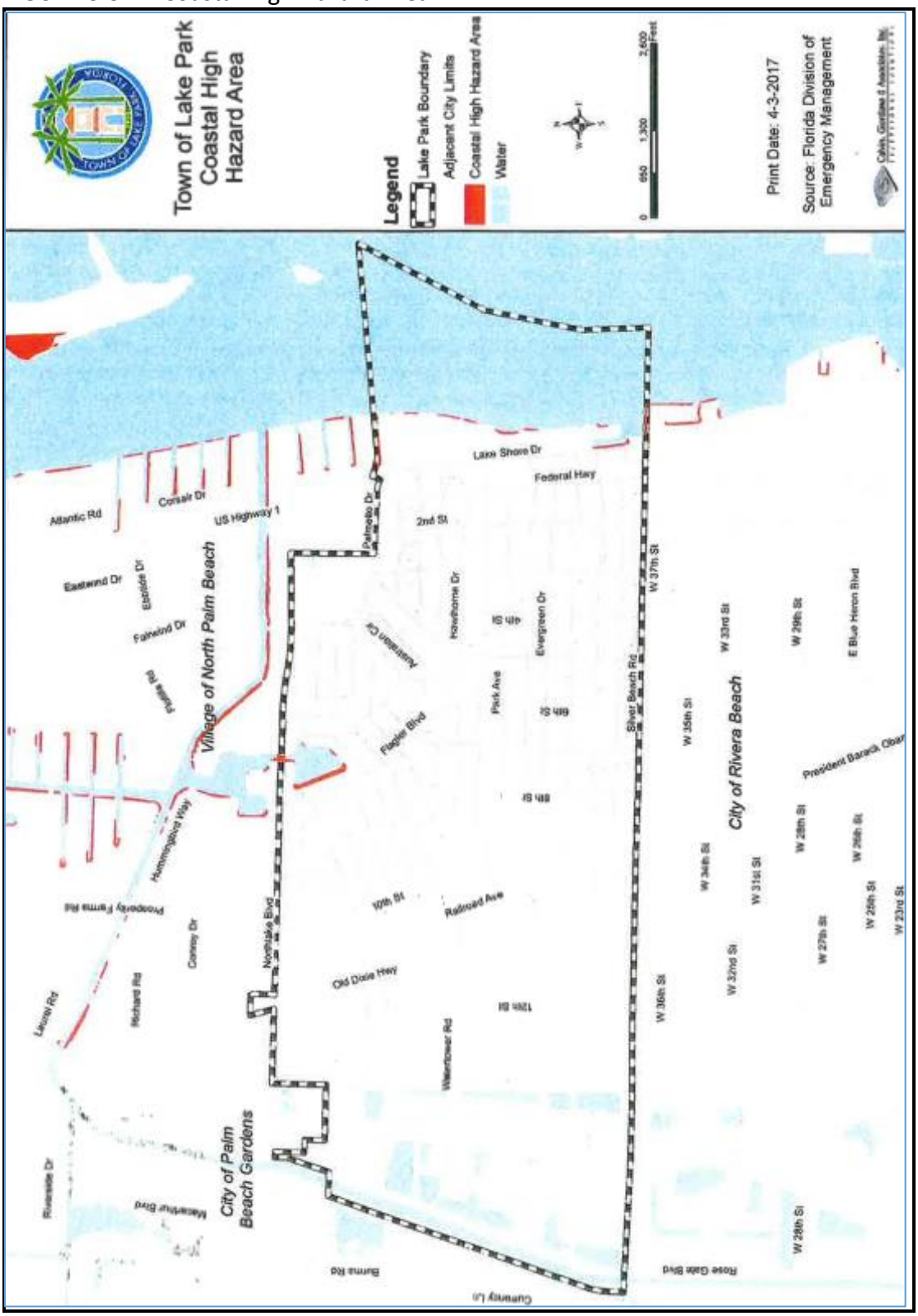
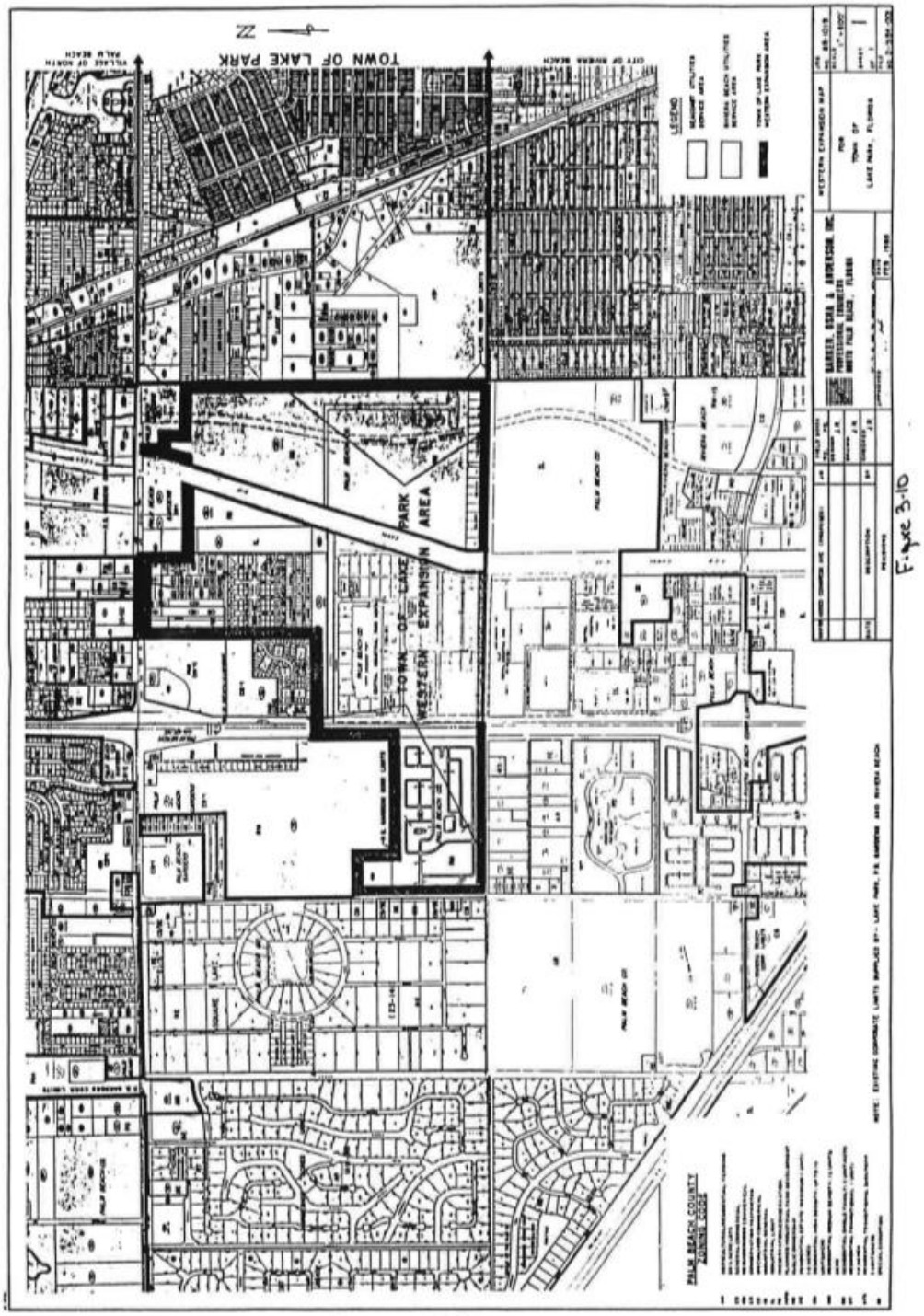


FIGURE 3-10 FUTURE ANNEXAQTION



Transportation

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

4.0 TRANSPORTATION-Traffic Circulation

4.1 INTRODUCTION

The TRAFFIC CIRCULATION element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177 (6) (b), Florida Statutes, establishes the TRAFFIC CIRCULATION element requirement and Chapter 9J5.007 Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for TRAFFIC CIRCULATION goals, objectives and policies. Relevant background data summarized herein are presented in greater detail in the report entitled Support Documentation for the Comprehensive Plan, prepared in September, 1987. Specific chapters of that document are referenced when necessary to embellish any information presented herein.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the TRAFFIC CIRCULATION element is structured according to the following format:

- Inventory of Existing Traffic Circulation System'
- Analysis of Existing Roadway Deficiencies within the System;
- Analysis of Projected Needs;
- Discussion of Traffic Related Issues (and opportunities); and
- Traffic Circulation Goals, Objectives and Policies.

An essential basis for planning traffic circulation systems within the Town is the FUTURE LAND USE Element. Initial traffic volume data I presented on a roadway link basis.

4.2 INVENTORY OF EXISTING TRAFFIC CIRCULATION SYSTEM

In order for the Town to responsibly plan for its future, it must assess the capability of its existing traffic circulation system to serve current demand. The availability of the traffic circulation system and its components to promote movement of people, goods and services while maintaining accessibility among the various land use activities in the Town will determine the overall effectiveness of the system.

This inventory of the existing traffic circulation system has been prepared to establish the basis for examining the existing roadway deficiencies and, further, to initiate plans to serve the Town's future growth and development. Roads located within the Town include those which are the responsibility of Florida Department of Transportation (FDOT, State Road), Palm Beach County (County Road); and the Town itself (collector roads, local roads and all the remaining roads not privately owned).

4.2.1 Roadway Classifications

The Town's roadways are identified according to the FDOT Roadway Functional Classification System, as required by Chapter 9J-5.007(1)(b). Therefore, the definitions presented below are based on the FDOT classifications which describe the "Functional" terminology used throughout this Element of the plan.

Limited Access Facility – Roadways designed for through traffic, and over, from ot to which users have no greater than a limited right or easement of access (i.e. an expressway, I-95).

Arterial Roads – Routes providing service which are relatively continuous and of relatively high traffic volume, long average trip length, high operating speed and high mobility importance. In addition, every United States numbered highway is an arterial road.

Urban Principal Arterial Roads – Routes which generally serve the major centers of activity of an urban area, the highest traffic volume corridors and the longest trip purpose and carry a high proportion of the local urban area travel on a minimum of mileage. The routes are integrated both internally and between major rural connections.

Urban Minor Arterial Roads – Routes which generally interconnect with and augment urban principal arterial routes and provide service to trips of shorter length and a lower level of travel mobility. Such routes include all arterials not classified as "principal" and contain facilities that place more emphasis on land access than the higher system.

Collector Roads – Routes providing service which are of relatively moderate average traffic volume, moderately average trip length and moderately average operating speed. Such routes also collect and distribute traffic between local roads or arterial roads and serve as a linkage between land access and mobility needs.

Local Roads – Routes providing service which are of relatively low average traffic volume, short average trip length or minimal through-traffic movements and high land access for abutting property.

4.2.2 Roadway Description

Based upon the most recent revision to the Florida Department of Transportation Roadway Classification System, the Town of Lake Park contains arterial (i.e. both urban principal and urban minor arterial roadways), collectors (i.e. both County urban collectors and Town urban collectors) and local roadways, bud does not contain any limited access facilities. A railroad line (i.e. Florida East Coast Railroad) runs in a north-south direction through the western portion of the Town. However, ports, airports, high speed rail lines or related facilities are not found in the Town and will not be considered further herein.

Primary access to, from and through various portions of Lake Park is provided by U.S. Highway #1 (SR 5), Northlake Blvd., 10th Street, Old Dixie Highway, Park Avenue and Silver Beach Road. U.S. Highway #1 carries the second largest volume of traffic through the

Town and is classified as a State urban principal arterial road. U.S. Highway #1 is presently a five (5) land undivided facility through the Town.

Northlake Boulevard carries the highest volume of traffic in Town. It is classified as a State urban principal arterial from U.S. Highway #1 to 10th Street and a State urban minor arterial from 10th Street west to beyond Lake Park's corporate limit. Northlake Boulevard is a six (6) lane divided road, except where it narrows to four (4) lands on the bridge separating Northlake from Southlake just west of Jasmine Drive/Southwind Drive. Much of the traffic on Northlake Boulevard, as well as U.S. Highway #1 is generated in areas outside of Lake Park. U.S. Highway #1 is the eastern terminus of Northlake Boulevard while it extends westward to the Beeline Highway.

Three roadway segments within Lake Park are classified as County urban arterials, they are: 10th Street from Northlake Boulevard to Park Avenue; Old Dixie Highway from Park Avenue to Silver Beach Road; and Park Avenue from Old Dixie Highway to 10th Street. 10th Street runs in a north-south direction through the western part of Town. This segment of 10th Street is a four (4) lane divided road which extends south from Park Avenue to Silver Beach Road. This segment is classified as a local road. According to State Functional Classification System, this roadway segment is identified as a County minor arterial which indicates that the County has the maintenance responsibility for this road. However, according to the Town's Public Works Department, the Town has been maintaining this roadway segment. This disparity needs to be resolved soon since it could have direct impact on the CAPITAL IMPROVEMENTS element of the Comprehensive Plan.

Old Dixie Highway is divided into two (2) segments. The first segment is from Silver Beach Road to Park Avenue which is classified as a County minor arterial. It is a four (4) lane divided roadway with the County having the maintenance responsibility. The second segment is from Park Avenue north to Northlake Boulevard which is classified as a Town urban collector. This segment is a two (2) lane undivided road with turn lanes at the intersections with Park Avenue and Northlake Boulevard. The maintenance responsibility belongs to the Town.

Also, Park Avenue is divided into two (2) roadway segments. The first is a short segment between Old Dixie Highway to the west and 10th Avenue to the east. This segment crosses the Florida East Coast Railroad line and is classified as a County minor arterial. It is a four (4) lane undivided road with maintenance responsibility assigned to the County, however, the Town has been maintaining this segment. The Town should coordinate with the County's Engineering Department to rectify this issue. The second segment of Park Avenue is from 10th Street east to U.S. Highway #1 which is classified as a Town urban collector. This segment is a four (4) lane undivided road with the Town of Lake Park having the responsibility for its maintenance.

Silver Beach Road which constitutes the southern corporate limit of the Town is classified as a County urban collector. This road is a two (2) lane undivided roadway with turn lanes at the intersections of U.S. Highway #1 and Old Dixie Highway. The County has the maintenance responsibility for this road.

The Remainder of the streets in Lake Park are classified as "local" streets with the exception of a short segment of Prosperity Farms Road which is a tow (2) lane undivided

road classified as a County urban collector and is the responsibility of the County to maintain.

Table 4-1 depicts and characterizes the major roads and streets, configuration and right-of-way easements in Lake Park, while depicting the location, lineage, and function types of the existing roadway system.

4.2.3 Traffic Volumes

Traffic counts are taken at selected locations on the principal street system located in Palm Beach County and within the West Palm Beach Urban Study Area (WPBUSA). The primary stations are located at designated north-south and east-west "screenlines". The volumes aggregated at these locations aid in the determination of laneage requirements necessary to maintain a designated level of service where possible. Counts are also taken selectively at selected "point" locations along major thoroughfares and intersections of interest.

The actual counting agencies are the Palm Beach County Engineering Department, the Florida Department of Transportation, the City of West Palm Beach, the City of Boca Raton and the Town of Palm Beach. Each maintains their own counting program and cooperates with the Metropolitan Planning Organization (MPO) of Palm Beach County in satisfying its needs in the long range transportation planning process for the study area.

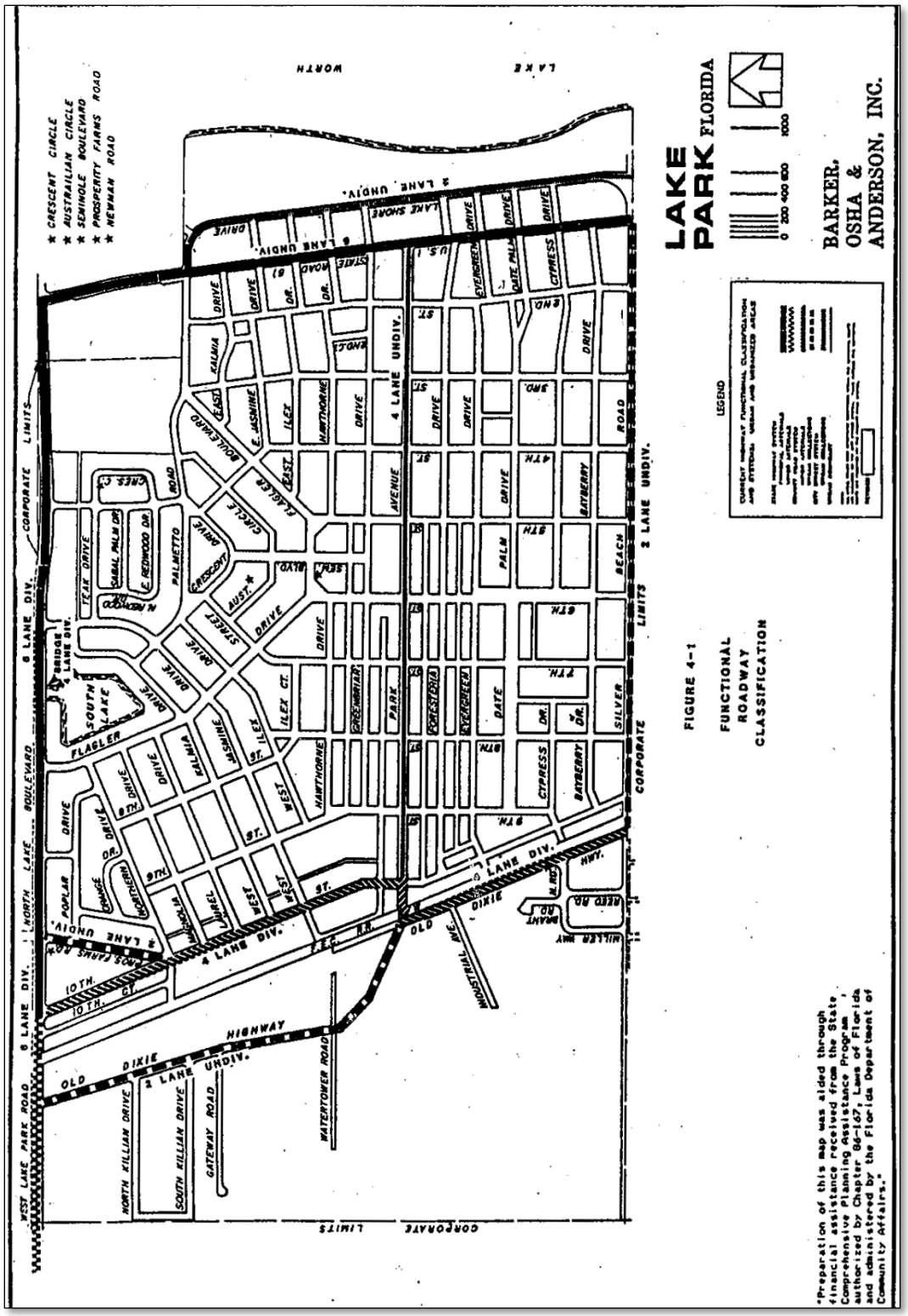
TABLE 4-1
EXISTING MAJOR ROADWAY SYSTEM INVENTORY TOWN OF LAKE PARK

NAME	FDOT REF. #	STATE (FDOT) FUNCTIONAL CLASS.	SEGMENT	DESCRIPTION	MAINTENANCE RESPONSIBILITY	RIGHT-OF-WAY
US Hwy. 1 (SR-5)	10	State Urban Principal Arterial	Silver Bch Rd. (S. Corp. limit) to Palmetto Rd. (Northern extent of roadway within Lake Park)	5 lane-undiv.	FDOT	120 FT
Northlake Blvd.	18	State Urban Principal Arterial	U.S. 1 to 10th Street	6 lane-div. (except at bridge separating NLake and SLake where it is four lanes)	FDOT	108 FT
Northlake Blvd.	34	State Urban Minor Arterial	10th St. W to Lake Park Corp. limit and beyond to I-95	6 lane-div.	PBC	108 FT
10th St.	502	County Minor Arterial*	NLake Blvd. to Park Ave.	4 lane-div.	Lake Park	80 FT
Old Dixie Hwy.	503	County Minor Arterial	Silver Bch. Rd. to Park Ave.	4 lane-div.	PBC	80 FT
Park Ave.	607	County Minor Arterial	Old Dixie Hwy to 10th St.	4 land-undiv.	Lake Park	80 FT
Prosperity Farms Rd.	527	County Urban Collector	NLake Blvd. to 10th St.	2 lane - undivided w/ turn lanes @ NLake Blvd.	PBC	80 FT.
Silver Bch Rd.	723	County Urban Collector	Old Dixie Hwy to US 1	2 lane - undivided w/ turn lanes @ Old Dixie Hwy. and US #1	PBC	n/a
Old Dixie	606	County Urban Collector**	NLake Blvd. to Park Ave.	2 lane - undivided w/ turn lanes @ NL Blvd. and Old Dixie Hwy	PBC	n/a
Park Ave.	607	Town Urban Collector	10th St. to U.S. #1	4 lane-undiv.	Lake Park	80 FT
Lakeshore	n/a	Town Urban Collector***	Silver Bch Rd to Palmetto Rd	2 lane-undiv.	Lake Park	80 FT

* Identified as a Cty. Minor Arterial on the State Functional Classification System but is maintained by the Town of Lake Park
** Identified as a Town Urban Collector but after checking with Cty. Eng. and Town of Lake Park determined that it was a Cty. Urban Collector.
*** Designated as Local Street but exhibits characteristics of a Town Urban Collector

tab 1-1

Figure 4-1- Functional Roadway Classifications



In an effort to capture seasonal variations that may occur and arrive at an Average Daily Traffic (ADT) volume for a given calendar year, a 24-hour count is taken in the first (peak season) and third (off-peak season) calendar year quarters. All counts, unless otherwise noted, reflect two-way traffic. It should be noted that since 1984, excluding permanent

count stations and Florida Turnpike counts, FDOT has been counting only once per calendar year. FDOT is using a factoring program to arrive at an annual daily average.

As of 1987, there are 567 count stations located in the WPBUSA. A total of eight traffic count stations are either within Lake Park or are in close proximity to the corporate limits to be utilized by the Town for planning purposes. The count station on U.S. Highway #1 that is inventoried is located at the Town of Lake Park northern corporate limit.
Four count stations are inventoried on Northlake Boulevard. All these stations are located within the Town; however, Northlake Boulevard is the Town's northern corporate limit. One station is located 200 feet west of U.S. Highway #1; the second is located 300 feet east of Prosperity Farms Road; the third is located 200 feet east of Alt. A1A (SR 811); and the fourth is located 100 feet west of the Florida East Coast (FEC) Railroad. There is a traffic count station located on Old Dixie Highway 218 feet south of Silver Beach Rd., the Town's southern corporate limit.

Another station is located on Silver Beach Road, 154 feet east of Old Dixie Highway.
Finally, the eight station is located on Alt. A1A (SR 811) 500 feet north of Northlake Boulevard outside the Town's northern corporate limit.

An historical accounting of traffic counts and volumes from 1970 to 1987 is provided in Table 4-2 for the count stations described above

Table 4.2 Historical Data

Roadway	**Station Number**	**1970**	**1975**	**1980**	**1985**	**1986**	**1987**
U.S. Hwy. 1	2800-1	18193	22503	23260	27932	N/A	25990
Northlake							
W of US1	2819-1	N/A	N/A	N/A	22095*	26748*	21668
E of Pros.Fms. Rd.	2817-2	N/A	N/A	30001	830481	32460	30819
W of Alt A1A	2815-2	N/A	N/A	32292	35769	36012	35381
(SR811)	2821-1	N/A	N/A	N/A	20176	31326	30826
E of Alt A1A (SR811)							
Old Dixie Hwy.							
S of Silver Beach Rd.	2808-2	4751	16021	18034	16747	17446	17402
Silver Beach Rd.							
E of Old Dixie Hwy.	2807-2	N/A	7651	7922	8708	9472	9580
10th Street							
N of NLake Blvd.	2814-2	5764*	12875*	14384	16001	16056	18433

*Traffic volume is not an average

SOURCE: West Palm Beach Urban Study Area (WPBUSA) Traffic County Program, Historic Traffic Volumes, 1987

In an effort to inventory and analyze traffic volumes on roads considered important within Lake Park that were not counted by the sources listed above, traffic counts were derived

for the following roadways to establish an existing count from which to base future projections:

1) Park Avenue – the segment of Park Avenue located east of Old Dixie Highway to 10th Street is considered a minor arterial by the Town and is the link that connects Old Dixie Highway with 10th Street. Both of these segments are considered County minor arterials (Ref: Table 4-1). In order to obtain a current estimate of the traffic volumes (AADT), an intersection count at Old Dixie Highway and Park Avenue performed by the Palm Beach County Traffic Division in 1983 was utilized. This study indicated 8282 vehicles headed eastbound off of Old Dixie Highway onto Park Avenue. According to the FUTURE LAND USE element of this Plan, minor growth has occurred in Planning Areas 2 and 3 indicating no substantial increase on this roadway link. Further, the majority of traffic utilizing this roadway is generated from outside the Town as is;

2) Evidenced by the fact the link of Old Dixie Highway (Park Avenue between Old Dixie Highway and 10th Street) is designated a County minor arterial in the State's Functional Classification System (Ref: Figure 4-1). Therefore, the assumption were made: (1) to double this traffic count (i.e. 16564 vehicles) to indicate two-way flow; and (2) that this count has not substantially changed since 1983. This count will therefore be used as the 1989 Average Annual Daily Traffic (AADT) Count.

3) Park Avenue – the segment of Park Avenue from 10th Street east to U.S. Highway #1 is considered a Town urban collector according to the State's Functional Classification System. A similar methodology as above was utilized to derive a current traffic count estimate for this link. A 1982 intersection count at Park Avenue and U.S. Highway #1 by Palm Beach County Traffic Division was used. This study indicated an eastbound traffic volume of 3358. Using the same assumption of minimal growth in Planning Area 2, as indicated in the FUTURE LAND USE element of this plan, this volume was doubled to indicate two-way traffic and assumed to have remained relatively unchanged since 1982.

4) Old Dixie Highway – the segment of Old Dixie Highway from Northlake Boulevard to Park Avenue is considered a Town Urban

   collector according to the State's Functional Classification System. A discrepancy has been identified that should be corrected in the future in that both the Town of Lake Park and the County agree that this road link is County owned and maintained and is incorrectly classified. Therefore, it appears that the State's Functional Classification System should be updated to reflect this link as a County urban collector.

The methodology used to derive a current estimate for this link utilized the intersection count at Old Dixie Highway and Park Avenue performed by the Palm Beach County Traffic Division in 1983. This study indicated that 5200 vehicles per day entered Old Dixie highway from a westerly direction. However, this was a one directional flow from the west and according to observed traffic patterns it is assumed a reasonable estimate that half this volume would enter this link from the opposite direction to indicate a two-way volume in 1983 of 7800 vehicles per day. The FUTURE LAND USE element indicates approximate growth within this area (i.e. Planning Area 3) of two acres per year, amounting to a total of ten acres since 1983. The traffic generation standard for an industrial park of 6.969 trips/1000 sq. ft., taken from the Institute of Traffic Engineers, September, 1987, page 149, was then applied to this total developed acreage based upon Lake Park's maximum allowable lot coverage ratio of fifty (50) percent for the existing zoning districts. Applying these standards resulted in an additional traffic generation of 1518 vehicles which established the current 1988 estimate of 9318 average annual daily traffic.

5) Lakeshore Drive – the entire length of Lakeshore Drive from Silver Beach Road north to Palmetto Road is being included herein as a special segment to be analyzed as if designated a Town collector, rather than being designated a local street according to the State Functional Classification System.

   To derive an estimated current (AADT count, a recent Traffic Access and Impact Analysis for Blair House prepared by Kimley-Horn and Associates, Inc., in March 1986 and updated in April 1988, was utilized. According to this study, the existing daily traffic is shown as 5500 vehicles/day, which was reaffirmed to have remained unchanged in Kimley-Horn's letter of April 1988. The proposed project which has just recently received site plan approval by the Town is for the development of two hundred twenty multi-family residential dwelling units (220 du's) and is assumed for purposes of this analysis to be built-out by 1994. In addition to this residential project, there is only a 0.64 acre vacant commercial parcel that remains to be developed in this area (Planning Area 1) according to the FUTURE LAND USE element of this plan. Both these parcels will be assumed to be built by 1994.

4.2.4 Other Modes of Transportation

The Town has no full-scale integrated bicycle path system in place. The bicycle and pedestrian ways are rather extensive within the residential areas of the Town but have been constructed in a piecemeal manner as developments have been built. Consequently, many residential areas may not be totally linked to recreational areas, schools and shopping areas within neighborhoods. However, there is a bicycle path that runs from Palmetto Road south along Lakeshore Drive to the Town's southern corporate limit at Silver Beach Road.

4.3 ANALYSIS OF EXISTING ROADWAY DEFICIENCIES

This section is intended to analyze existing traffic circulation levels and systems needs based upon existing design capacities of the roadway system. This analysis also addresses the need for expansion to existing facilities or the need for new facilities to provide safe and efficient operating conditions within the Town's roadway network.

4.3.1 Levels of Service

Levels of service (LOS) are a good summary of facility conditions. The LOS of a roadway is defined as the ability of a maximum number of vehicles to pass over a given section of roadway of through an intersection during a specified time period, while maintaining a given operating condition. A level of service definition generally describes operational conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

The highway Capacity Manual, Special Report 209, prepared by the Transportation Research Board of the National Research Council, defines levels of service for roads and streets that ate an accepted state of the art standard.

Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst. In general, the various levels of service are defined as follows for uninterrupted flow facilities:

1. Level of Service A: represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

2. Level of Service B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

3. Level of Service C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual uers becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

4. Level of Service D represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

5. Level of Service E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

6. Level of Service F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more then is required to stop in a cyclic fashion. Level of Service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and Level of Service F is an appropriate designation for such points. It should be noted that these definitions are general and conceptual in nature, and they apply primarily to uninterrupted flow. Levels of service for interrupted flow facilities vary widely in terms of both the users' perception of service quality and the operational variables used to describe them. Each
chapter of the manual contains a detailed description of the levels of service as defined for each facility type.

The capacity of a roadway is defined as the maximum number of vehicles which have a reasonable expectation of passing over a given roadway section or through a given intersection under prevailing road and traffic conditions during a specified period of time. The Treasure Coast Regional Planning Council (TCRPC) has identified and adopted roadway capacities for various types of roads, and classifies them by levels of service. These capacities are given as Average Annual Daily Traffic (AADT) volumes and are illustrated in TABLE 4-3.

Once the roadway capacities are established, the average annual daily traffic volume demand to average annual daily traffic capacities (V/C) ratio can be determined assuming Level of Service E as the maximum acceptable capacity of a roadway. The following V/C ratio ranges were derived for each of the six levels of service from TABLE 4-3:

Table 4-3Generalized Roadway Capacities
(Average Annual Daily Traffic [AADT})

Level of Service	2-Lane Collector	3-Lane* Undivided Collector	4-Lane Undivided Arterial	4-Lane Divided Arterial	6-Lane Divided Arterial	6-Lane Expressway
A	9,800	15,210	20,000	22,500	34,800	71,000
B	11,500	18,000	24,400	26,300	40,600	83,600
C	13,100	20,430	27,800	30,000	46,400	95,000
D	15,800	24,480	33,500	36,000	55,800	114,000
E	17,400	27,270	37,100	40,000	61,900	126,700

Source: Treasure Coast Regional Planning Council, 1985.

Level of Standard		Volume/Capacity V/C Ratio
A	Less than or equal to	0.56
B	Less than or equal to	0.66
C	Less than or equal to	0.75
D	Less than or equal to	0.90
E	Less than or equal to	1.00
F	Less than or equal to	1.00

Based upon the volume/capacity ratios, the major roadway system (i.e. arterials and collectors) are examined using the estimated 1988 AADT counts to determine each roadway segment's existing level of service. According to Chapter 9J-5.005.4 Florida Administrative Code (FAC), the requirement is established under that at least two planning periods be considered. The first being at least the first five-year period subsequent to Comprehensive Plan adoption and the second for an overall ten-year period. Since the Lake Park Comprehensive Plan is scheduled for adoption in 1989, the existing capacity analysis will be based on the 1987 AADT counts projected to 1989 which will be the base year from which a 1994 five-year planning period and a 1999 ten-year planning period will be established. The methodology used in deriving the projected figures will be described in further detail in Section 4.4 Analysis of Projected Needs. The results of this capacity analysis by roadway segment are illustrated in Table 4-4.

4.3.2 Analysis of Existing Deficiencies

It is recommended that LOS C will be adopted by the Town as the acceptable standard, generally, for all collector and arterial roadways within its jurisdiction. This will promote consistency with Treasure Coast Regional Planning Council, the Palm Beach County Metropolitan Planning Organization and Palm Beach County all of which have adopted LOS C as their standard. According to Table 4-4, all the roadway segments analyzed within the Town are at level of service B or higher. These findings indicate that the existing system needs are currently adequate and the Town of Lake Park has no immediate roadway capacity improvements to consider.

TABLE 4-4

LAKE PARK CAPACITY ANALYSIS FOR EXISTING ROADWAY SYSTEM (1989 Traffic Volumes)

STATION	ROADWAY	SEGMENT	CLASS	LANES	TYPES	1989 AADT	@ LOS E TCRPC AADT CAPACITY	V/C RATIO	LOS
2800-1	U.S. Highway 1	Lk Pk N City Limit to S of PGA Blvd.	Arterial	4/5	Undivided	26091	40000	0.65	B
2819-1	Northlake Blvd.	W of US1 to E of Prosp.Fms. Rd.	Arterial	6	Divided	21668	61900	0.35	A
2817-2	Northlake Blvd.	E of Prosperity Fms to E of SR811	Arterial	6	Divided	30819	61900	0.50	A
2821-1	Northlake Blvd.	E of SR811 to W of FEC RR	Arterial	6	Divided	30836	61900	0.50	A
2815-2	Northlake Blvd.	W of FEC RR to E of I-95	Arterial	6	Divided	35980	61900	0.58	B
2808-2	Old Dixie Highway	S of Silver Bch Rd. to Park Ave.	Arterial	4	Divided	17440	40000	0.44	A
2807-2	Silver Beach Rd.	E of Old Dixie Hwy to US 1	Collector	2	Undivided	9871	17400	0.57	B
2814-2	10th Street*	N of NL Blvd. to Park Ave.	Arterial	4	Divided	19888	40000	0.50	A
	Park Ave.**	E of Old Dixie Hwy to 10th St.	Arterial	4	Undivided	16564	37100	0.45	A
	Park Ave.***	E of 10th St. to U.S. 1	Collector	4	Undivided	6716	37100	0.18	A
	Lakeshore Dr****	Silver Bch. Rd.to Palmetto Rd.	Collector	2	Undivided	5500	17400	0.32	A
	Old Dixie Hwy*****	S of NL Blvd.	Collector	3	Undivided	9318	27270	0.34	A

* Used same count as on North side of Intersection which appears high.

** Using best available information-AADT Count based on intersection count in 1983 at Old Dixie Hwy and Park Ave. by PBCty Traffic Division for east bound loading of 8282 and assumed doubling to account for two-way traffic and increase in traffic data by 1988.

*** Using best available information-AADT Count based upon latest intersection count in 1982 at Park Ave. and US1 eastbound loading of 3358 (1 direction) and assuming 3358 will occur in opposite direction; based upon Future Land Use Element growth in Planning Area 2 from 1982-1988 was minimal therefore this traffic volume is assumed to remain the same.

**** Special segment being analyzed as if designated as a Town Collector (identified as Local Street in State Functional Classification System).

***** Based on intersection count at Old Dixie Hwy and Park Ave. by PBCty. Traffic Division in 1983 of 5200 vehicles from westerly direction and assumed 2600 in westerly direction; based on Future Land Use Element assumed approx. growth of 2 acres/year (10 Acres); assumed traffic generation for an industrial park of 6.969 trips/1000 sq. ft. (from ITE, page 49, Sept. 1987) and a lot coverage of 50% maximum according to Zoning Code. [(10 ac)(43560 sq. ft./ac)(0.5)(6.969 trips/1000 sq. ft.) = 1518 + 7800 = 9318]

4.3.3 Accident Data

As a result of Palm Beach County Establishing an accident records data base in the early 1970's, most public safety agencies (i.e. Florida Highway Patrol, Palm Beach County Sheriff's Department and Municipal Police and Public Safety Departments) voluntarily submit all accident reports within the County to the Traffic Records Section within the Emergency Medical Services Division of the Palm Beach County Public Safety Department. Since Lake Park's Police Department participates in this program, Lake Park accident data was obtained for 1987 through Palm Beach County's Traffic Records Section for purposes of this analysis.

Table 4-5 summarizes the accidents which occurred in the Town for the twelve month calendar period in 1987 and indicates that most of the accidents recorded within the Town occurred on Northlake

Table 4-5
Town of Lake Park Accident Summary
Accidents W/I Town (1/1/87-12/31/87)

Total Accidents				
Accidents by Roadway				
U.S. 1	**#**	**%**	30	16.8
Bayberry Dr.	1	3.3		
Cypress Dr.	2	6.7		
Date Palm Dr.	1	3.3		
Foresteria Dr.	1	3.3		
E. Ilex Dr	1	3.3		
Northlake Blvd	4	13.4		
Palmetto Dr.	4	13.4		
Park Ave.	3	10.0		
Silver Beach Rd	6	20.0		
@ Driveway access	3	10.0		
Other (No Trend Established)	4	13.3		
Northlake Blvd.			61	31.8
10th Court	4	6.6		
10th Court	8	13.1		
Flagler Blvd.	2	3.3		
W. Jasmine Dr	2	3.3		
Old Dixie Highway*	11	18.0		
Poplar Ct.	1	1.6		
Prosperity Farms Rd.	9	14.7		
U.S. #1 (SR5)	4	6.6		
FEC RR Crossing	3	4.9		

A Driveway Access	5	8.2		
Other (No Trend Established)	12	19.7		
10th Street			31	12.8
Evergreen Dr	1	3.2		
W. Jasmine Dr.	4	12.9		
Magnolia Dr.	1	3.2		
Northern Dr.	1	3.2		
Northlake Blvd.	8	25.8		
Park Ave.	3	9.7		
Prosperity Farms Rd.	1	3.2		
Silver Beach Rd.	1	3.2		
@ Driveway Access	5	16.2		
Other (No Trend Established)	6	19.4		
Old Dixie Highway			41	16.8
Killian Drive	8	19.6		
Newman Rd.	1	2.4		
Northlake Blvd.	11	26.8		
Park Ave./RR	6	14.7		
Silver Beach Rd.	1	2.4		
Watertower Rd.	1	2.4		
@ Driveway Access	3	2.4		
Other (No Trend Established)	10	24.4		
Park Ave.			27	8.4
2nd Street	1	3.7		
3rd Street	2	7.4		
4th Street	1	3.7		
7th Street	1	3.7		
10th Street	3	11.1		
Old Dixie Highway./RR	6	22.2		
U.S. #1 (SR5)	3	11.1		
@ Driveway Access	2	7.4		
Other (No Trend Established)	8	29.7		
Lakeshore Drive			3	1.1
E. Jasmine Dr.	1	33.3		
Date Palm Drive	1	33.3		
Silver Beach Road	1	33.3		
Total Accidents				
US 1 (SR 5)	30			
Northlake Blvd.	61			
10th Street	31			
Old Dixie Highway	41			
Park Ave.	27			
Prosperity Farms Rd	14			
Silver Beach Road	24			
Lakeshore Dr.	3			
Total	**231**			
Less common Accidents	-52/179			

Boulevard (31.8%) and/or its intersections. Based upon the data from Table 4-5, the following road segments and intersections were identified as frequent accident areas within the Town:

1) Northlake Boulevard at Old Dixie Highway
2) Northlake Boulevard at Prosperity Farms Road
3) Northlake Boulevard at 10th Street
4) Old Dixie Highway at Killian Drive
5) Park Avenue Segment between Old Dixie Highway and 10th Street; and
6) U.S. Highway #1 at Silver Beach Road

Analysis of the data along U.S. Highway #1 indicates that the most frequent accident location was at the Silver Beach Road intersection with six (6) accidents reported here. However, Northlake Boulevard intersection and Palmetto Drive intersection both had four accidents. These three intersections account for nearly half (46.8%) of the accidents reported by Lake Park on U.S. Highway #1.

Northlake Boulevard, which handles the highest traffic volumes, accounted for the greatest number of accidents, representing approximately thirty-two percent of the accidents reported within the Town. The four major intersections on Northlake Boulevard (i.e. U.S. Highway #1, Prosperity Farms Road, 10th Street, and Old Dixie Highway) accounted for over fifty percent (52.4%) of the accidents on this road.

Old Dixie Highway is second in the number of accidents at 41 or twenty-three percent (23%) of the total accidents within the Town, without considering common accidents. The greatest number of accidents on this road occurred at its intersection with Northlake Boulevard (26.8%). When combined with the accidents at Old Dixie Highway at Killian Drive and Old Dixie at Park Avenue, accounts for sixty-one (61%) of the accidents on this road.

The only scheduled improvement that possibly could have a positive influence in reducing accident hazards within the Town is the widening of the bridge on Northlake Boulevard separating Southlake and Northlake. Currently, the bridge is a four lane facility with a six lane roadway existing on both sides. The completion of this project scheduled for FY 87/88 will provide a continuous six lane divided roadway from U.S. Highway #1 to Military Trail

Other improvements commonly used to alleviate accident hazards entail traffic signalization, improved roadway maintenance and additional signage which are relatively small scale and require expenditures of less than twenty-five thousand ($25,000) per project. Only the improvements of relatively large scale requiring an expenditure by the Town of greater than $25,000 are included in the CAPITAL IMPROVEMENTS element of this Comprehensive Plan. Therefore, improvements to relieve high accident frequency locations will only be included in the Town's annual budget since they involve a range of project costs below the scope of this TRAFFIC CIRCULATION element and the CAPITAL IMPROVEMENTS element of this Comprehensive Plan.

4.4 ANALYSIS OF PROJECTED NEEDS

Pursuant to the requirements of Chapter 9J-5, FAC, projections of the future traffic circulation levels of service and systems needs were prepared based upon the future land uses shown on the future land use series maps, included in the FUTURE LAND UST element of this Comprehensive Plan.

The Town of Lake Park is located within an urbanized area and is, therefore, within the Palm Beach County Metropolitan Planning Organization (MPO) jurisdiction. The MPO has recently completed a transportation study referred to as the West Palm Beach Urban Area Transportation Study, Recommended 2010 Highway Plan which projects future traffic volumes to the year 2010. This study has not yet been adopted by the MPO, however, for purposes of this analysis, these volumes will be used for projection purposes to obtain 1994 and 1999 AADT roadway volumes.

As mentioned in the previous Section, 9J-5.005 Florida Administrative Code requires that both a five year (1994) and a ten year (1999) planning period be analyzed. In order to derive traffic volume projections for 1999, compound annual growth rates were calculated in Table 4-5 based upon traffic volume between 1989, as shown in Table 4-4, and the projected 2010 traffic volumes. However, two roadways volumes for Lakeshore Drive and Dixie Highway from Northlake Boulevard to Park Avenue were not projected in the 2010 Highway Plan. Therefore, the Lakeshore Drive projected volumes were derived by utilizing data from the FUTURE LAND USE element (i.e. the fact that the 11.5 acre 220 unit residential project will be developed during the five-year planning period). Based upon Kimley-Horn's traffic impact analysis for this project, a daily traffic generation rate of six trips per dwelling unit was used which generates 1,320 vehicle trips/day. Also, the last remaining 0.64 acre vacant commercial parcel on Lakeshore Drive is assumed to be developed during the five-year planning period. Trip generation from this development was derived by using a daily traffic generation rate of 18 trips per 1000 sq. ft. of office space obtained from the 1981 Update Study of Vehicular Traffic Generation Characteristics within Palm Beach County prepared by Kimley Horn and Associates, Inc. By assuming a two story professional office building at a thirty-five percent lot coverage ratio, consistent with Lake Park's Zoning Code, and additional 351 trips/day are generated. Therefore, the AADT projected for 1994 is 7171 vehicles/day. Since Planning Area 1 is built-out as a result of these two developments, the 1999 AADT projection is assumed to be the same as 1994.

Old Dixie Highway between Northlake Boulevard and Park Avenue 1994 and 1995 AADT projections were developed using the same methodology used in obtaining the 1989 estimated volumes. From Table 3-14 of the FUTURE LAND USE element it is shown that 12.6 acres of mixed commercial/industrial within Planning Area 3 will be developed by 1994 and an additional 10.5 acres will be developed by 1999. Using the same generation rates and lot coverage ratios as in 1989, derivation of the 1994 and 1999 projected AADT volumes are 11,230 vehicles/day and 12,824 vehicles/day, respectively.

TABLE 4-5

TOWN OF LAKE PARK ACCIDENT SUMMARY
ACCIDENTS W/I TOWN (1/1/87-12/31/87)

Total Accidents

Accidents By Roadway	#	%	#	%
U.S. 1			30	16.8
Bayberry Dr.	1	3.3		
Cypress Dr.	2	6.7		
Date Palm Dr.	1	3.3		
Foresteria Dr.	1	3.3		
E. Ilex Dr.	1	3.3		
Northlake Blvd.	4	13.4		
Palmetto Dr.	4	13.4		
Park Ave.	3	10.0		
Silver Beach Rd.	6	20.0		
@ Driveway Access	3	10.0		
Other (No Trend Established)	4	13.3		
Northlake Blvd.			61	31.8
10th Court	4	6.6		
10th St.	8	13.1		
Flagler Blvd.	2	3.3		
W. Jasmine Dr.	2	3.3		
Old Dixie Highway*	11	18.0		
Poplar Ct.	1	1.6		
Prosperity Farms Rd.	9	14.7		
U.S. #1 (SR5)	4	6.6	Common w/US1	
FEC RR Crossing	3	4.9		
@ Driveway Access	5	8.2		
Other (No Trend Established)	12	19.7		
10th Street			31	12.8
Evergreen Dr.	1	3.2		
W. Jasmine Dr.	4	12.9		
Magnolia Dr.	1	3.2		
Northern Dr.	1	3.2		
Northlake Blvd.	8	25.8		
Park Ave.	3	9.7		
Prosperity Farms Rd.	1	3.2		
Silver Beach Rd.	1	3.2		
@ Driveway Access	5	16.2		
Other (No Trend Established)	6	19.4		
Old Dixie Highway			41	16.8
Killian Drive	8	19.6		
Newman Rd.	1	2.4		
Northlake Blvd.	11	26.8	Common w/NL Blvd.	
Park Ave./RR	6	14.7		
Silver Beach Rd.	1	2.4		
Watertower Rd.	1	2.4		
@ Driveway Access	3	7.3		
Other (No Trend Established)	10	24.4		

TABLE 4-5 (Cont)

Accidents By Roadway			#	%
Park Ave.			27	8.4
2nd Street	1	3.7		
3rd Street	2	7.4		
4th Street	1	3.7		
7th Street	1	3.7		
10th Street	3	11.1	Common w/10th St.	
Old Dixie Hwy./RR	6	22.2	Common w/ODH	
U.S. #1 (SR5)	3	11.1	Common w/ US 1	
@ Driveway Access	2	7.4		
Other (No Trend Established)	8	29.7		
Prosperity Farms Rd.			14	2.8
Northlake Blvd.	9	64.3	Common w/NL Blvd.	
Poplar Dr.	1	7.1		
@ Driveway Access	4	28.6		
Silver Beach Road			24	9.5
2nd Street	2	8.3		
8th Street	1	4.1		
10th Street	1	4.2		
Lakeshore Dr.	1	4.2		
Manor Dr.	1	4.2		
Old Dixie Highway	1	4.2	Common w/ODH	
U.S. 1 (SR5)	6	25.0	Common w/US 1	
@ Driveway Access	6	25.0		
Other (No Trend Established)	5	20.8		
Lakeshore Drive			3	1.1
E. Jasmine Dr.	1	33.3		
Date Palm Dr.	1	33.3		
Silver Beach Road	1	33.3	Common w/Sil.Bch.Rd.	

TOTAL ACCIDENTS

US 1 (SR5)	30
Northlake Blvd.	61
10th Street	31
Old Dixie Highway	41
Park Ave.	27
Prosperity Farms Rd.	14
Silver Beach Road	24
Lakeshore Dr.	3
Total	231
Less common accidents	-52
	179

T4-5.1p

The methodology used for analyzing the Town's projected system needs was the same as that utilized for analyzing the existing roadway deficiencies in the previous section. Assuming a desired LOS C for all traffic volumes on arterial and collector roadways, V/C ratios were calculated for each of the roadway segments using projected traffic volumes for 1994 and 1999. The results of these capacity analyses are illustrated in Tables 4-6 and 4-7. The only improvement indicated by these analyses is the segment of U.S. Highway #1, from Silver Beach Road to Palmetto Road, where volumes are projected to exceed LOS C by 1996 but remain at LOS D through 1999.

Based upon the projected traffic volume in Table 4.7indicates that U.S. Highway #1 will need to be improved by 1999 in order to maintain the projected traffic volumes to within LOS C. Since this roadway is not under the Town's jurisdiction, the Town should monitor, cooperate and support the responsible agency (FDOT) in order to maintain efficient roadway circulation within the Town. To bring U. S. Highway #1 to within LOS C will require the expansion of the existing road from a five lane undivided highway to a six lane divided highway which changes the Level of Service from D to A. This improvement is shown on the Future Traffic Circulation Map, Figure 4.2.

TABLE 4-6
LAKE PARK CAPACITY ANALYSIS FOR EXISTING ROADWAY SYSTEM (1994 TRAFFIC VOLUMES)

STATION	ROADWAY	SEGMENT	CLASS	LANES	TYPES	AADT	@ LOS E TCRPC AADT CAPACITY	V/C RATIO	LOS
2800-1	U.S. Highway 1	Lk Pk N City Limit to S of PGA Blvd.	Arterial	4/5	Undivided	29314	40000	0.73	C
2819-1	Northlake Blvd.	W of US1 to E of Prosp.Fms. Rd.	Arterial	6	Divided	25618	61900	0.41	A
2817-2	Northlake Blvd.	E of Prosperity Fms to E of SR811	Arterial	6	Divided	33008	61900	0.53	A
2821-1	Northlake Blvd.	E of SR811 to W of FEC RR	Arterial	6	Divided	33026	61900	0.53	A
2815-2	Northlake Blvd.	W of FEC RR to E of I-95	Arterial	6	Divided	37029	61900	0.60	B
2808-2	Old Dixie Highway	S of Silver Bch Rd. to Park Ave.	Arterial	4	Divided	21093	40000	0.53	A
2807-2	Silver Beach Rd.	E of Old Dixie Hwy to US 1	Collector	2	Undivided	9907	17400	0.57	B
2814-2	10th Street	N of NL Blvd. to Park Ave.	Arterial	4	Divided	22253	40000	0.56	A
	Park Ave.	E of Old Dixie Hwy to 10th St.	Arterial	4	Undivided	16564	37100	0.44	A
	Park Ave.	E of 10th St. to U.S. 1	Collector	4	Undivided	8362	37100	0.23	A
	Lakeshore Dr**	Silver Bch. Rd.to Palmetto Rd.	Collector	2	Undivided	7171	17400	0.41	A
	Old Dixie Hwy*	S of NL Blvd.	Collector	3	Undivided	11230	27270	0.41	A

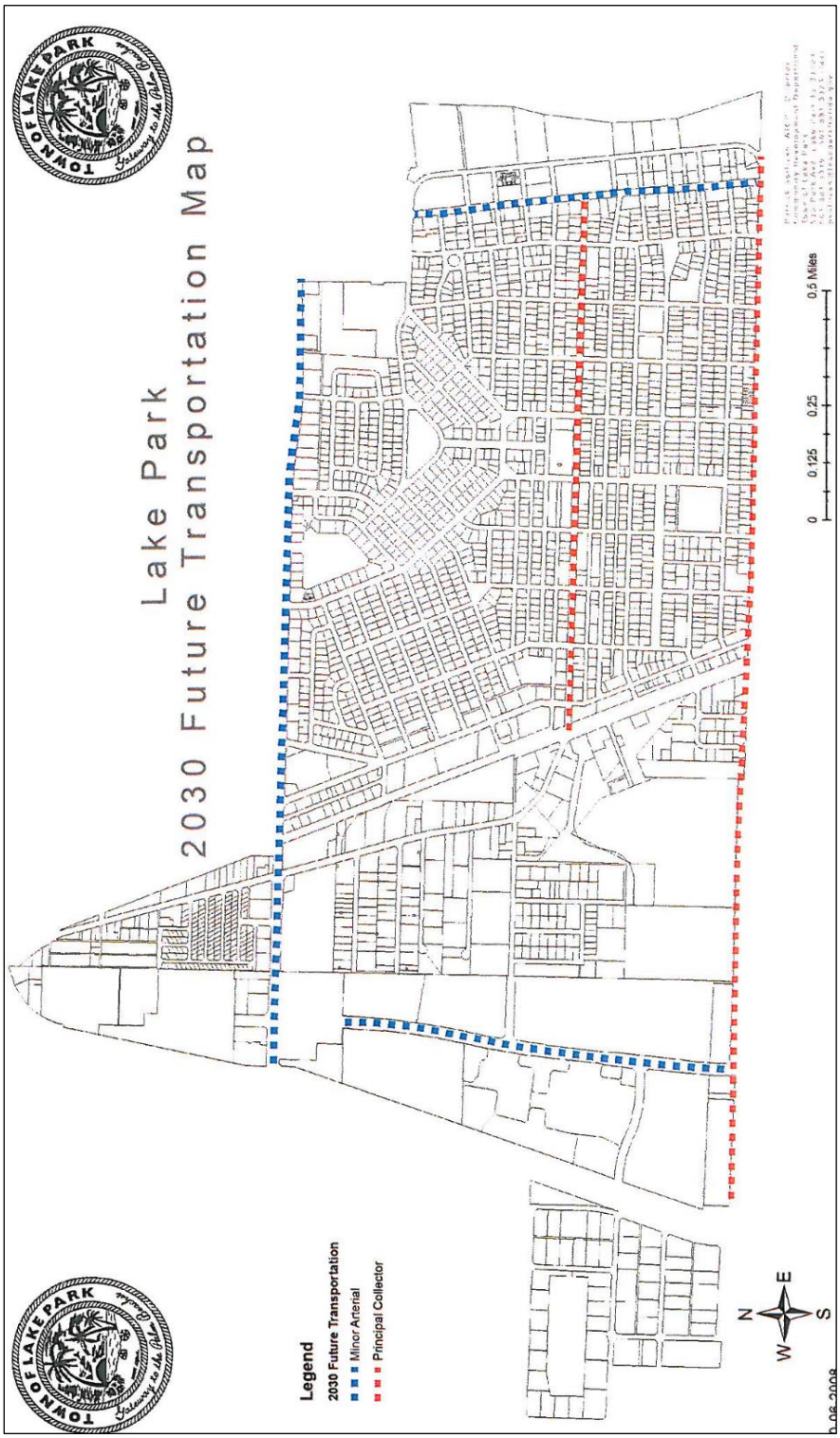
* Based on 6.969 trips/1000 sq. ft., lot coverage ratio of 50% and 12.6 acres being developed between 1988 and 1994.

** Based on Blair House build-out of 220 DU's with residential generation rate of 6 trips/day/du (1320 trips/day) plus 0.64 acre prof. office buildings assuming 2 story structure at 35% lot coverage to obtain 19,500 sq. ft. of building at a trip generation rate of 18 trips/1000 sq. ft. (351 trips/day).

TABLE 4-7
LAKE PARK CAPACITY ANALYSIS FOR EXISTING ROADWAY SYSTEM (1999 TRAFFIC VOLUMES)

STATION	ROADWAY	SEGMENT	CLASS	LANES	TYPES	AADT	@ LOS E TCRPC AADT CAPACITY	V/C RATIO	LOS
2800-1	U.S. Highway 1	Lk Pk N City Limit to S of PGA Blvd.	Arterial	4/5	Undivided	33064	40000	0.83	D
2819-1	Northlake Blvd.	W of US1 to E of Prosp.Fms. Rd.	Arterial	6	Divided	29453	61900	0.48	A
2817-2	Northlake Blvd.	E of Prosperity Fms to E of SR811	Arterial	6	Divided	34950	61900	0.57	B
2821-1	Northlake Blvd.	E of SR811 to W of FEC RR	Arterial	6	Divided	34969	61900	0.57	B
2815-2	Northlake Blvd.	W of FEC RR to E of I-95	Arterial	6	Divided	37926	61900	0.61	B
2808-2	Old Dixie Highway	S of Silver Bch Rd. to Park Ave.	Arterial	4	Divided	24714	40000	0.62	B
2807-2	Silver Beach Rd.	E of Old Dixie Hwy to US 1	Collector	2	Undivided	9936	17400	0.57	B
2814-2	10th Street	N of NL Blvd. to Park Ave.	Arterial	4	Divided	24436	40000	0.61	B
	Park Ave.	E of Old Dixie Hwy to 10th St.	Arterial	4	Undivided	16564	37100	0.44	A
	Park Ave.	E of 10th St. to U.S. 1	Collector	4	Undivided	10037	37100	0.27	A
	Lakeshore Dr	Silver Bch. Rd.to Palmetto Rd.	Collector	2	Undivided	7171	17400	0.41	A
	Old Dixie Hwy	S of NL Blvd.	Collector	3	Undivided	12824	27270	0.47	A

Figure 4.2 Future Traffic Circulation Map



4.5 ISSUES AND OPPORTUNITIES

The transportation system serving Lake Park has been generally efficient in circulating traffic in and through the Town. Maintenance of the existing roads and streets has been effectuated on an as-needed basis, and capital improvements to the system have been planned well in advance. The Town has continued to work with other levels of government regarding roads that are under jurisdictions other than Lake Park. These cooperative and coordinated efforts, in conjunction with local programs, have provided an effective road and street system on Lake Park. However, the construction/maintenance of roadway improvements is one of the Town's largest annual fiscal challenges. As indicated in the previous section entitled "Analysis of Existing Deficiencies" and "Analysis of Projected Needs", the need for any roadway capacity improvements is not foreseen in the near future other than U.S. Highway 1 which is the State's responsibility to maintain and improve.

4.5.1 Florida Department of Transportation (FDOT) Five Year Transportation Improvement Program

Each of the State's (FDOT) roadway networks within Lake Park is discussed below regarding improvements scheduled in the State's Five Year Transportation Improvement Program.

U.S. Highway #1 from Silver Beach Road to Palmetto Road

No projects are included for improvements to this link within Lake Park with the exception of signage and pavement markings performed on an as-necessary basis.

Northlake Boulevard from U.S. #1 to Alt. A1A (SR 811)

This segment of Northlake Boulevard is a State maintained road which is a six-lane divided principal urban arterial from U.S. #1 west to Alternate A1A and is Lake Park's northern corporate limit. No improvement on this link is scheduled in the State's Five Year Transportation Improvement Program; however, in the County's Five Year Road Improvement Program the bridge dividing Northlake and Southlake, which is about three-quarters of a mile west of U.S. Highway #1 is scheduled for construction of two additional lanes in fiscal year FY 87/88. Currently the bridge is a four lane facility with a six lane roadway existing on both sides. The completion of this project will provide a continuous six land divided roadway from U.S. Highway #1 to Military Trail.

4.5.2 Palm Beach County Five Year Road Improvement Program

Each of the County's responsible roadway networks within Lake Park will be discussed below as to any improvements scheduled in the County's Five Year Road Improvement Program:

10th Street from Northlake Boulevard to Park Avenue

No road improvements are scheduled for this roadway segment in the County's Five Year Road Improvement Program (1988-1992).

Old Dixie Highway from Silver Beach Road to Park Avenue

No road improvements are scheduled for this roadway segment in the County's Five Year Road Improvement Program (1988-1992).
Prosperity Farms Road from Northlake Blvd. to 10th Street

No road improvements are scheduled for this roadway segment in the County's Five Year Road Improvement Program (1988-1992).

Silver Beach Road from U.S. Highway #1 to Old Dixie Highway

No road improvements are scheduled for this roadway segment in the County's Five Year Road Improvement Program (1988-1992).

Old Dixie Highway from Northlake Blvd. to Park Avenue.

No road improvements are scheduled for this roadway segment in the County's Five Year Road Improvement Program (1988-1992).

4.5.3 Intergovernmental Coordination

Intergovernmental coordination is essential for the development of a cost efficient approach to obtaining traffic circulation system improvements within the Town. Since the arterial streets in the Town of Lake Park are under the jurisdiction of other agencies and levels of government, it is clear that the Town does not possess the resources nor is it fiscally responsible for correcting all the traffic circulation system needs identified in this element. Therefore, it is necessary for the Town to review the transportation improvement plans and programs prepared by the County and FDOT. In this way, the dollars expended by the Town to improve its traffic circulation system may be complimented or even enhanced by the activities of the County and FDOT.

4.5.4 Future Right of Way Protection

One area of coordination should include the preservation and protection of rights-of-way for future roadway improvements and construction where possible. With the escalating value of land and costs of right-of-way acquisition, it becomes essential that the Town protect roadway corridors to the extent possible in advance from building encroachment. Increased right-of-way costs reduce funds available for construction. FDOT had indicated in the 1987 Florida Transportation Plan that it will consider, as part of its project priority analysis, the availability and protection of rights-of-way and will place a higher funding priority on projects located where right-of-preservation and protection measures have been implemented. Therefore, it would be advantageous for the Town to utilize such techniques as setback requirements, zoning restrictions, right-of-way protection regulations and official traffic-way maps to preserve and protect existing and future rights-of-way.

4.5.5 Mass Transit

Public transportation/mass transit was not considered. The population was found to be of neither sufficient magnitude nor density to ensure cost-effectiveness. According to 9J-5.008, a mass transit element needs to be prepared when the population reaches 50,000 or more which is far above the Town's 1999 projected population (i.e. 7,892). The provision of a public transportation system in Palm Beach County has been in the form of bus service. The Palm Beach County Transportation Authority (COTRAN) operates and maintains this system. Lake Park is served by a north/south route which traverses Northlake Boulevard, U.S. Highway #1, Silver Beach Road and returns to U.S. Highway #1. A regional public transportation system does not exist, but the Town continues to support the concept.

4.6 GOAL, OBJECTIVES AND POLICIES

4.6.1 Town Goal Statement

A safe, convenient and efficient motorized and non-motorized transportation system shall be available to all residents and visitors to the Town.

4.6.2 Objective and Policies

OBJECTIVE 1:

The Town shall coordinate as appropriate with the appropriate agencies, including the Florida Department of Transportation and Palm Beach County Metropolitan Planning Organization, to implement projects to address roadway deficiencies and address current and projected multi-modal transportation needs.

Policy 1.1:

The Town hereby adopts the following Level of Service (LOS) standards for each listed facility type:

a. Collector roadways - LOS Standard D
b. Urban Minor Arterial roadways - LOS Standard D
c. Urban Major Arterial roadways- LOS Standard D
d. Strategic Intermodal System roadways- LOS Standard D.

Policy 1.2:

The Town prioritize any new roadway projects by first addressing the existing roadway deficiencies that evidence a high accident frequency.

Policy 1.3:

The Town shall adopt a Traffic Performance Standard ordinance for ensuring that adequate roadway capacity is available or is planned when needed by a development. The Town will continue to utilize the County's Traffic Performance Standards.

Policy 1.4:

The Town shall review all proposed development and coordinate and cooperate with the responsible agencies to assure that roadway improvements are planned in accordance with the LOS Standards.

Policy 1.5:

The Town shall periodically evaluate the transportation network and implement an improvement schedule in conformance with the Capital Improvements Element.

Policy 1.6:

The Town shall allow traffic concurrency requirements to be satisfied in accordance with provisions contained in F.S. 163.3180 (5)(h).

Objective 2:

Ensure the provision of a full range of multi-modal transportation options, including pedestrianism, bicycles, automobiles, and transit for existing and future residents, businesses and visitors.

Policy 2.1:

The Town shall continue to coordinate with the Palm Beach County Metropolitan Planning Organization (MPO) to ensure that innovative ideas regarding transportation planning in Lake Park are forwarded.

Policy 2.2:

The Town shall encourage mixed-use development and/or Transit Oriented Development in appropriate locations in order to reduce the need for vehicular trips.

Objective 3:

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

Policy 3.1:

The Town shall seek opportunities to expand multi-modal transportation access to its roadway system and existing and proposed developments and uses.

Policy 3.2:

The Town shall review all proposed development for its accommodation of bicycle and pedestrian traffic needs.

Objective 4:

The Town transportation system will emphasize safety and aesthetics.

Policy 4.1:

The Palm Beach County Sheriff's Department shall be responsible for the preparation of annual accident frequency reports for all collector and arterial roads.

Policy 4.2:

The Town shall coordinate with the appropriate agencies to implement improvements at the dangerous points as identified in the accident analysis of this element.

Objective 5:

Traffic circulation planning will be coordinated with the future land uses shown on the Future Land Map of this plan, and the roadway and transportation improvement plans of the State, County, Palm Beach County MPO, and neighboring jurisdictions.

Policy 5.1:

As part of the annual budgeting and Capital Improvements Element update the Town shall review the compatibility of this Element with the roadway and transportation improvement plans of the State, County and MPO.

Policy 5.2:

The Town shall review the transportation plans and programs of other jurisdictions that operate transportation facilities within or proximate to its boundaries, including neighboring jurisdictions, to ensure consistency with this Element.

Objective 6:

Right-of-way acquisition needs shall be identified, prioritized, and incorporated into the Capital Improvements Schedule, to the extent that needed projects are identified and funded. Right-of-way reservations shall continue to be required, as appropriate, as a function of development approvals or other components of the Town's Code of Ordinances, Zoning Code, and Land Development Regulations.

Policy 6.1:

The Town shall maintain an "Official Transportation Map" identifying future rights-of-way based upon this Plan.

Objective 7:

Continue current high level of roadway maintenance.

Policy 7.1:

The Town shall plan maintenance and repair of local streets as part of the annual update of the Capital Improvements Element and its budgeting processes.

Objective 8:

Continue to insure adequate traffic circulation and access to new developments.

Policy 8.1:

The Town shall strictly enforce land development regulations during the plan review and implementation process.

Policy 8.2:

At the time of redevelopment and though cross-access and shared access agreements, the Town shall discourage excessive curb cuts including the control of connections and access points of driveways and roads to roadways on arterial and major collector streets within the confines of the Town's roadway network.

Objective 9:

The Town shall encourage adequate public transportation systems.

Policy 9.1:

The Town continues to support an improved intra-county public transportation system.

Policy 9.2:

The Town supports the concept for the development of a regional public transportation system.

Objective 10:

To coordinate transportation planning and implementation with the City of Riviera Beach and Village of North Palm Beach to avoid conflicting regulations of commonly shared streets.

Policy 10.1:

Coordinate the Town's efforts to implement any roadway maintenance, signage, stripping or any other activity affecting Silver Beach Road, Northlake Boulevard and Old Dixie Highway with the City of Riviera Beach and/or Village of North Palm Beach.

Objective 11:

To assure participation in the transportation planning process of the West Palm Beach Metropolitan area such that Lake Park will continue to be well integrated with the larger transportation network.

Policy 11.1:

To continue the Town's transportation planning and implementation with the Metropolitan Planning Organization, the Staff of the West Palm Beach Urban Area Transportation Study, and the Fourth District of the Florida Department of Transportation at Ft. Lauderdale.

Policy 11.2:

To consider the latest urban transportation plan prepared by the West Palm Beach Urban Area Metropolitan Planning Organization and the Florida Department of Transportation in the planning of the Town's traffic circulation system.

5 HOUSING

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

5.0 HOUSING

5.2 INTRODUCTION

The HOUSING element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6) (f), Florida Statutes, establishes the HOUSING element requirement and Chapter 9J5.010, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for the future housing goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.010 Florida Administrative Code, the HOUSING element is structured according to the following format:

- Housing Data;
- Housing Analysis; and
- Housing Goal, Objectives and Policies

5.3 HOUSING DATA SUMMARY

An overview of condition pertinent to the preparation of the housing goal, objectives and policies statements are presented in sections that follow.

5.3.1 Housing and Household Characteristics

The Town is approximately 84% developed at this time (Ref: Table 3-5; FUTURE LAND USE element) leading to the conclusion that there is relatively little remaining land for additional residential growth and development. Further, of the current total of 158.2 acres of vacant land, only 21.4 is zoned for additional residential development. The Town is primarily residential, with a total of 1,363 single-family, 142 duplex, 36 triplex, 92 quadplex and 1,381 multiple-family (I.e. 5 units or more) units. Further, there are approximately 219 accessory-use residential units scattered throughout the Town. These units are permitted for residential purposes as accessory uses associated with single-family residences in the R1 and R1A zoning Districts.

5.3.1.1 Housing and Residential Development

New housing growth, as evidenced by recent population estimates (Ref: Table 3-7; FUTURE LAND USE element) has been modest in recent years, particularly since 1980. In accord with Town records and a field survey taken in June, 1988, there are presently a total of 3,237 permanent housing units in Lake Park. In 1980, the U.S. Census reported a total of 3,147 housing units. Current numbers reflect an approximate three percent

increase in the housing stock during the 1980-1987 period. This conclusion is substantiated by a history of building permit activity evidenced in the Town during the 1980-1987 period (Ref: Table 5-1).

According to Table 5-2, 2,267 housing units were constructed in the Town during the March 1960 to March, 1980 period. Adding units constructed since that time (i.e. estimated at 90 units) leads to the conclusion that 72.8% of the housing stock in the Town has been constructed since 1960, with the balance (27.2%) constructed prior to that time.

Table 5-1
Town of Lake Park
Building Permit Activity 1980-87

Number of Units						
	Single-Family		Multiple-Family		Motel	Mobile Home
	No.	Unit Cost ($)	No.	Unit Cost ($)		
1979	1	50,000	57	22,000	0	0
1980	20	36,900	15	23,800	0	0
1981	2	58,500	10	N/A	0	0
1982	0	N/A	0	N/A	0	0
1983	1	34,800	0	N/A	0	0
1984	1	46,000	0	N/A	0	0
1985	0	N/A	0	N/A	0	0
1986	2	35,300	0	29,500	0	0
1987	0	N/A	15	38,300	0	0
Total	27	39,125	57	28,084	0	0

Note: No units were converted or removed from the Housing Stock during the 1979-87 period.
Source: Palm Beach County Planning Zoning and Building Department; LRM, Inc.; 1988

Table 5-2 Comparative Age of Year-Round Housing Units, 1980

	Number of Units	
Year Built	**Palm Beach County**	**Lake Park**
Year-round housing units	286,784	3,147
1979 to March 1980	31,017	0
1975 – 1978	47,108	205
1970 – 1974	75,489	781
1960 – 1969	66,651	1,281
1950 – 1959	37,841	730
1940 – 1949	13,897	51
Before 1940	14,781	99
Owner-occupied housing units	171,751	1,550
1979 – March 1980	15,054	0
1975 – 1978	29,576	68
1970 – 1974	47,601	307
1960 – 1969	42,030	559
1950 – 1959	24,140	554
1940 – 1949	6,374	26
Before 1940	6,976	36
Renter-occupied housing units	62,588	1,379
1979 – March 1980	3,139	0
1975 – 1978	7,583	130
1970 – 1974	14,443	412
1960 – 1969	16,295	328
1950 – 1959	9,745	152
1940 – 1949	5,755	21
Before 1940	5,628	36

Source: U.S. Bureau of the Census, 1980; Land Research Management, Inc.; 10/88

The housing stock within Lake Park constitutes a minute share of the countywide totals; approximately 1.1% of the 286,784 year-round units reported by the Census in 1980.

5.3.1.2 Household Characteristics

Characteristics of housing within the Town including type, tenure, rent, value, monthly cost to income ration are examined in this section and compared with

those characteristics exhibited countywide. The most current statistics available roe an inventory and analysis of this type is the 1980 U.S. Census.

Comparative tenure statistics are presented on Table 5-3. Of the 3,147 housing units reported in 1980 by the U.S. Census, 1,550, or 52.9% were owner-occupied, while 1,379, or 47.1% of the units were reported as renter-occupied. Owner and renter-occupied statistics represent "year-round" occupancy, while the remainder (8.5%) are vacant or "occasional use" units. The Town has a higher "year-round" housing unit occupancy rate than Palm Beach County as a whole; 93% to 82%, respectively. Approximately 95.6% or 1,482 units, of the year-round owner-occupied housing units in the Town are owned by the white population. The remaining 68 units reported as owned by black (3.4%) and "other" (0.1% races. Likewise, of the 1,379 renter-occupied units, 1,221 were occupied by whites (88.5%), 152 (11.0%) by blacks and 6 (0.4%) by "other" races.

Table 5-3
Comparative Housing Tenure Characteristics, 1980

Tenure	Palm Beach County	Lake Park
Tenure by Race and Spanish-Origin of Householder		
Total Year-round Housing units	286,784	3,147
Year-round occupied housing units	234,339	2,929
Owner-occupied	171,771	1,550
Percent owner-occupied	73.3	52.9
White	160,456	1,482
Black	9,963	53
Other	1,352	15
Spanish Origin	4,375	21
Renter-occupied	62,568	1,379
Percent renter-occupied	26.7	47.1
White	48,200	1,221
Black	13,099	152
Other	1,287	6
Spanish Origin	3,287	22
Vacancy Status		
Vacant year-round housing units	52,259	266
For sale only	5,022	13
For Rent	6,134	55
Held for occasional use	26,587	98
Other Vacant	14,516	100
Boarded-up	752	0
Vacant seasonal nits	9,066	10

SOURCE: U.S. Bureau of the Census, 1980: Land Research Management, Inc.; 10/88.

It is estimated that there are currently 70 vacant units available for resident occupancy. This estimate is based upon a 2.16% vacancy rate reported by the 1980 U.S. Census. It is assumed that this rate has remained constant due to the limited construction activity since 1980. This compares to a 1980 3.9% vacancy rate in Palm Beach County (11,156 vacant "for sale or "for rent" units/286,784 total units) in 1980.

Comparative monthly gross rent (i.e. 1980) data, for Palm Beach County and Lake Park are presented on Table 5-4A, while monthly rent-to-income ratios (i.e. 1980) for renter-occupied units in the Town are presented on Table 504B. The median monthly rent for renter-occupied units in Lake Park was $265 in 1980, as compared to $279 for Palm Beach County. In terms of affordability, it is generally concluded that a rent-to-income ratio of 30% to 35% or less (i.e. depending upon other long-term liabilities) is an acceptable rate. With limited additional liabilities (e.g. car payments, commercial loans, etc.) acceptable rates can be raised to 35% to 45% of household income. On this bases, it is difficult to determine the affordability level of rental housing from data presented on Table 5-4B other than to conclude that at least 90.2% of the rental units are reasonably priced in relation to renter income levels. Comparative value (i.e. 1980) of non-condominium owner-occupied housing data for Palm Beach County and Lake Park are presented on Table 5-5A, while comparative monthly costs (i.e. 1980) of owner-occupied units are presented on Table 5-5B and owner occupied units to-income ratios (i.e. 1980) for owner-occupied units in the Town are presented on Table 5-5C.

Table 5-4A
Monthly Gross Rent of Renter-Occupied Units, 1980

	Dwellings	
Gross Rent	**Palm Beach County**	**Lake Park**
$ 0 - $99	2,054	4
$100 - $149	4,325	58
$150 - $199	7,550	103
$200 - $249	9,313	384
$250 - $299	9,736	491
$300 - $399	13,939	258
$400 and more	10,921	65
No Cash Rent	3,669	16
Total	61,507	1,379
Medium	279	265

Source: U.S. Bureau of the Census, 1980; Land Research Management, Inc.; 10/88

Table 5-4B
RENT-TO-INCOME RATIO FOR RENTER-OCCUPIED HOUSING UNITS, 1980

Rent to Income Ratio	**Income Range (%)**					**Total**
	Less than $5,000	$5,000 - $9,999	$10,000- $14,999	$15,000- $19,000	$20,000 + or more	
Less than 20%	14	74	101	125	613	927
20% - 24%	0	77	44	21	68	140
25% - 34%	52	0	29	41	46	168
35% or more	34	56	22	14	8	134
Not computed	10					
Total	100	137	196	201	735	1369

SOURCE: U.S. Bureau of the Census, 1980; Land Research Management, Inc.; 10/88

Table 5-5A
Value of Owner-Occupied Housing, 1980

	Dwellings	
Vale Selected	**Palm Beach County**	**Lake Park**
Non-Condominium Units		
Less than $10,000	967	1
$10,000 - $19,999	3,680	32
$20,000 - $29,999	7,983	101
$30,000 - $39,000	13,366	123
$40,000 - $49,000	14,738	229
$50,000 - $79,999	32,216	562
$80,000 - $99,999	8,814	54
$100,000 - $149,999	8,865	11
$150,000 or more	7,089	5
Total	97,538 units	1,119 units
Median ($)	7,482	53,877
Condominium	51,065 units	403 units
Average ($)		59,417

Source: U.S. Bureau of the Census, 1980, LRM

Table 5-5B
Monthly Owner Costs of Owner-Occupied Housing Units, 1980

Mortgage Status and Selected Monthly Owner Costs	Palm Beach County	Lake Park*
Owner-occupied housing units with a mortgage	71,771	
Less than $100	655	0
$100 - $149	2,330	0
$150 - $199	5,202	67
$200 - $249	5,945	173
$250 - $299	6,878	85
$300 - $349	7,251	74
$350 - $399	6,269	103
$400 - $449	5,385	84
$450 - $499	5,418	78
$500 - $599	7,362	74
$600 - $749	5,982	28
$750 or more	6,173	13
Total	66,894	779
Median ($)	384	344
Not Mortgaged		
Less than $50	2,242	21
$50 - $74	5,653	42
$75 - $99	6,742	107
$100 – $149	8,527	123
$150 - $199	3,293	44
$200 - $249	1,573	18
$250 or more	2,153	6
Total	30,183	361
Median ($)	102	104

Source: U.S. Bureau of the Census, 1980; LRM, Inc.; 1

Table 5-5C
Owner Cost-To-Income Ratio for Owner-Occupied Housing Units, 1908

	Income Range ($)				
Owner Cost-to-income Ratio	**Less than $,5000**	**$5,000-$9,999**	**$10,000-$14,999**	**$15,000-$19,999**	**$20,000 + or acre**
Less than 20%	12	62	83	104	505
20%-24%	0	6	36	17	56
25%-34%	43	0	24	34	38
35% or more	29	47	18	11	7
Not computed (8)					
Total	84	115	161	166	606

Source: U.S. Bureau of the Census, 1980; LRM, Inc.; 10/88

The median value of selected non-condominium units reported in 1980 was $53,877 in Lake Park, as compared to $57,482 for Palm Beach County. The most commonly occurring value range was similar in the Town and County; Palm Beach County reported thirty-three percent (33%) of the housing stock having a value in the $50,000 - $79,999 range, while Lake Park reported nearly fifty percent (50%) in that same value range. Lake Park; however, had a lower percentage of housing units valued in the higher ranges. Lake Park had 403 condominium units in 1980, with an average value of $59,417.

The 1980 Census reported a median monthly cost of owner-occupied housing in Lake Park of $344 for those units with a mortgage, and a median cost of $104 for those without a mortgage. This compares to median values in the County of $384 with a mortgage, and $102 for those units not mortgaged. Both Lake Park and the County reported that monthly costs varied greatly for housing units with a mortgage. The Town and County reported similar monthly cost ranges for non-mortgaged units.

According to the State Department of Community Affairs, if a 28% to 36% cost-to-income ratio is exceeded, it is often difficult to obtain a mortgage. The 1980 U.S. Census revealed that 91.1% of the mortgaged units exhibited

a cost-to-income ratio of 34% or less. Using the 36% "rule of thumb", it appears that the housing stock is affordable in terms of income levels exhibited by Town residents.

5.3.2 Housing and Living Conditions

There are several measures which can be used to evaluate housing stock and living conditions within the Town, including: age of structure; over-crowding; the lack of certain necessary facilities; structural integrity; and Standard Housing Code requirements. Specific indicators of substandard housing or living conditions for each of the above measures are as follows:

1) Age of Structure – Housing unit constructed prior to 1940, which is valued at less than $25,000 (Source: Palm Beach County Planning Division).

2) Over-Crowding – 1.01 persons per room or more within a dwelling unit.

3) Lacking Facilities – Housing unit lacking complete plumbing facilities, heating and cooking facilities and/or complete kitchen facilities.

4) Structural Integrity – Obvious damage, such as cracking, sagging or deterioration to the following structural components: foundations or flooring; exterior walls; roofs; and doors.

5) Code Violations – The Town has not adopted the Standard Housing Code; however, the code incorporates the following definition of unsafe residential buildings:

> "All residential buildings or structures used as such which are unsafe, unsanitary, unfit for human habitation or which constitutes a fire hazard or are otherwise dangerous to human life, or which in relation to existing use constitutes a hazard to safety or healthy by reason of inadequate maintenance, dilapidation, obsolescence or abandonment, are considered unsafe buildings."

The Housing Code further states: "All such unsafe buildings are hereby declared illegal and shall be abated by repair and rehabilitation or by demolition…"

It is recommended that the above definition or one similar thereto be adopted by the Town as a basis for code enforcement. The following discussion outlines a rationale which can be used for preparing definitions of "standard" and "substandard" living and housing conditions in terms of the five measures listed and defined above. From Table 5-2, it can be observed that only 99 units within the Town were constructed prior to 1940. Since only 3.0% of the housing stock was constructed prior to 1940 and the Town reports no concerns in terms of the remaining four measures, it is concluded that AGE OF STRUCTURE does not, in itself, raise any issues regarding overall substandard living and housing conditions within the Town.

An over-crowded condition is normally defined to occur when there are greater than 1.01 persons per room in a dwelling unit (note: excludes bathrooms, open porches, utility rooms, unfurnished attics, etc. – rooms not used for "living" purposes). Although, persons per unit statistics were not available from the Census reports utilized in this analysis, it is concluded that, since 94% of the occupied dwelling units in 1980 reported a household size of four persons or less than the average household size was 2.33 Persons per unit, OVER-CROWDING does not, in itself, raise any issues regarding overall substandard living and housing conditions within the Town.

The 1980 Census reported that 100% of the occupied year-round housing stock had complete plumbing facilities, 99.2% had complete heating facilities, 99.9% had complete cooking facilities, 98.6% had complete kitchen facilities, and 94.0% had telephone ability. Due to the high level of availability, it is concluded that LACK OF FACILITIES does not, in itself, raise any issues regarding overall substandard living and housing conditions within the Town.

A "windshield survey" oriented to identifying STRUCTURAL INTEGRITY indicators of substandard housing conditions was completed in June of 1988. Based upon the evaluation of Census data presented for previously discussed measures, it was concluded that a cursory "drive-by" methodology would suffice to detect any obvious major structural integrity indicators. In performing the "drive-by", 100% of the housing structures in the Town were surveyed and none of the defined damage factors were observed. On this basis, STRUCTURAL INTEGRITY does not, in itself, raise any issues regarding overall substandard living and housing conditions within the Town.

The STANDARD HOUSING CODE has not been adopted by the Town. Therefore, CODE VIOLATIONS cannot be used as a basis to raise any issues regarding substandard living and housing conditions within the Town.
Although the existence of substandard living and housing conditions is not an issue within the Town at this time, it is necessary to prepare appropriate definitions for potential future use should the need arise. Timely preparation and adoption of definitions will allow the institution of appropriate implementation mechanisms oriented to preserving current quality of living and housing conditions. Since no definitions currently exist, they will be prepared as part of the Goal, Objectives and Policies section of this element. Although definitions do not currently exist, issues to be addressed in their preparation include: public nuisance; attractive nuisance; danger or detriment to human life, health or safety; overcrowding; adequacy of equipment and/or facilities; sanitary condition; and structural condition.

5.3.3 Subsidized Housing

There are a number of programs for subsidized housing, primarily at the federal level. The U.S. Department of Housing and Urban Development (HUD) funds numerous rental housing subsidy programs. Major federal programs include the traditional Public Housing Program, Section 8, Section 202, Section 312, Section 221d3 and Section 236. Some of these programs are not presently being funded for additional construction; nevertheless, housing constructed or rehabilitated under these programs in the past continues to serve the occupants and provide for additional tenants when vacancies occur.

In addition to HUD's programs, other rental and owner subsidy programs are funded by the Farmers Home Administration (FmHA) of the Department of Agriculture. FmHA's rental programs include the Section 515 rental housing program and the Section 514/516 Farm Labor Housing program. Subsidized housing may also be produced under general community assistance programs such as Palm Beach County Community Development Block Grants (CDBG) and the Urban Development Action Grants (UDAG).

Other assisted housing can be constructed through state and local programs. The State of Florida established the Florida Housing Finance Agency, which through the sale of bonds, provides funding for low and moderate income households. The Palm Beach County Housing Finance Authority can provide the same function on a Countywide level.

5.3.4 Group Facilities and Homes

The Florida Department of Health and Rehabilitative Services operates a number of programs licensing group homes and foster care facilities. These group homes serve adults and children, and generally are operated by private or non-profit sponsors. The programs and the types of group homes inventoried here are:

<u>Children, Youth and Families (CYF)</u>

- Family Group Homes (Troubled Youth)
- Foster Family Group Homes (Dependents)
- Licensed Child Caring/Child Placing Facilities

Division of Developmental Services (DDS)

Long Term Residential Care (LTRC) Facilities
Centers for Independent Living

Aging and Adult Services

Adult Congregate Living Facilities (ACLF)
Nursing Home (NH)

An inventory of current facilities in Lake Park licensed under these programs is presented on Table 5-6.

5.3.5 Mobile Homes

There are currently no mobile home parks, condominiums, cooperatives or subdivisions within the Town at this time.

5.3.6 Historically Significant Housing

There are no locally designated historically significant housing units within Lake Park, nor are there any listed on the Florida Master Site File or the National Register of Historic Places. The only facility currently registered as an historic site is the Town Hall.

Table 5-6
Inventory of Group Homes in the Town of Lake Park

Division of Children, Youth & Families		
Program/Facility Name	***Capacity***	***Location***
Child Care/Caring for Peanuts	233	W. Ilex, near 10th St.
Child Care/Happyville	27	831 Park Avenue
Child Care/Kiddie Haven	80	309 9th Street
Child Care/L.P. Learning Center	80	425 Crescent Drive
Child Care/Sugar & Spice	90	359 10th Street
Child Care/ White's Academy	85	9118 Old Dixie Hwy.
Child Care/ Plummer Family Day	5	736 Laurel Drive
Child Care/ Vaccaro Family Day	5	3865 Van Cott Drive
Fam. Fos Home/C. Woronka	1	3976 Roam Court
Development Services Division		
N/A		
Acting and Adult Services		
Retirement Center		
Helen Wilkes Residence	85	750 Bayberry Drive

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5.4 HOUSING ANALYSIS

5.4.1 Housing Projections

Lake Park population was estimated at 6,793 residents in 1987 (Ref: Table 3-6; FUTURE LAND USE element). Applying an estimated average household size of 2.29 persons per unit (Ref: Table 3-9; FUTURE LAND USE element) results in an estimated 2,966 resident-occupied housing units in 1987; approximately 92.1% of the total housing stock which was surveyed at 3,237 units. The housing stock of the Town currently consists of the following components: Single-family – 1,367 units (42.2%); duplex, triples and quadplex – 270 units (8.3%); and multiple-family (5 or more units) – 1,381 units (42.7%); and accessory use – 219 units (6.8%). Vacant residential land analyses (Ref: Tables 3-11 A and B; FUTURE LAND USE element) indicate that the remaining residential buildout potential of the Town is 286 units consisting of the following zoning-based components: Low density (single-family) – 22 units (07.7%); medium density (duplex, triplex, quadplex) – 44 units (15.4%); and high density (5 units or more multiple-family) – 220 units (76.9%). When existing housing stock (3,237 units) is added to remaining buildout potential (286 units) it is concluded that total residential buildout of the Town is 3,523 units consisting of the following components: low density – 1,389 units (39.4%); medium density – 314 units (8.9%); and high density – 1,601 units (45.5%); and accessory use units – 219 (6.2%). If a comparison is made between the components of the projected total buildout situation and the components of the current housing stock, particularly in light of the fact that 84% of the total has been built, it can be concluded that the current population and housing characteristics of the Town (Ref: Table 3-9; FUTURE LAND USE element) will remain relatively unchanged throughout the short-term and long-range planning periods. (NOTE: it is recognized that household income statistics will increase due to inflation during the planning periods) – Utilizing population projections as the basis (Ref: Section 3.3.4; FUTURE LAND USE element) the following table presents total housing stock projections.

	Units		
Unit Type Density	**1987**	**1994**	**1999**
Low	1367	1372	1378
Medium	270	293	307
High	1381	1601	1601
Accessory Use	219	219	219
Total	3237	3485	3505

Land requirements necessary to accommodate the above projections are shown on Table 3-14 of the FUTURE LAND USE element

5.3.1.2 Household Characteristics Projections

The number of current resident-occupied households in the Town is estimated at 2,966 (i.e. 1987 population – 6,793 and a 2.29 persons per household average). Projections of total household growth, based upon resident population projections and estimated average household sizes of various unit types (Ref: Table 3-11B; FUTURE LAND USE element) are presented on the following table.

	1987	**1994**	**1999**
Households	2966	3179	3203

The above estimates have included the assumption of an adequate number of vacant units to meet or exceed the rate defined by the 1980 Census.

Projections of population and housing characteristics, based upon the assumption that the current character of the Town will be maintained, are presented on Table 5-7.

Due to the age and condition of the housing stock as evaluated in Section 5.2.3 of this element, it is concluded that normal maintenance of residential properties during the short and long-range planning periods will preclude the need for any replacement activities. Further, due to the character of the Town and its removed relationship to agricultural areas of the County, there is no need to anticipate the provision of rural or farmworker housing.

5.3.1.3 Housing Delivery Process

From its beginnings as a planned community, housing in Lake Park has been totally supplied by the private sector. Relatively high Town household income levels (Ref: Tables 3-8 and 3-9; FUTURE LAND USE element), high housing values and rent (Ref: Table 5-4A and 5-5A), low vacancy rates (Ref: Table 5-3) and good quality and condition of the housing stock (Ref: Section 5.2.3) lead to the conclusion that the private sector will continue to meet defined housing needs throughout the projected buildout period. Vacant land patterns substantiate this conclusion also. With the exception of the 220 units project in Planning Area 1, all future residential development will consist of "in-fill" within existing, established residential neighborhoods whose current character has established the pattern for any remaining growth. On this basis, it is further concluded that the private sector housing delivery process has capably fulfilled Town housing needs and has the capacity to meet defined needs throughout the short and long-range planning periods.

Table 5-7
Projected Population and Housing Characteristics
Town of Lake Park

	1994	1999
Population	7,222	7,270
Per Capita Income ($)*	17,857	17,857
Households	3,179	3,202
Household Income*		
Less than $5,000	124	125
$5,000 - $9,999	299	301
$10,000 - $14,999	353	356
$15,000 - $19,999	410	413
$20,000 - $24,999	394	397
$25,000 and over	1,599	1,611
Median ($)	30,107	30,107
Average ($)	41,454	41,454
Age**		
0-20	1,516	1,527
21-64	4,124	4,151
Median	37.5	37.5
Occupied Units**		
Renter	1,478	1,489
Owner	1,701	1,714
Households**		
1 person	833	839
2 persons	1,322	1,332
3 persons	1,024	1,031
Average Size****	2.27	2.27

*Expressed in 1986 dollars
**Assumes maintenance of 1986 Rates per Table 3-
***Factored Rate as of 1986 with that of expected growth (Ref: Table 3- 11B)

SOURCE: LRM, Inc.; 3/88

Indicators of the cost of housing are presented on Table 5-1. During the past five years, single-family (i.e. low density) construction costs have been in the range of $35,000 to $46,000 per unit, while multiple-family (i.e. inclusive of medium and high density) construction costs have ranged from $29,500 to $38,300 per unit.

An analysis of vacant residential land (Ref: Table 3-12; FUTURE LAND USE element) leads to the conclusion that these trends will be maintained. With the exception of the 220 unit project in Planning Area 1, all future residential development will consist of infill within established residential neighborhoods where current land costs will dictate the cost of construction and unit selling prices. Rental housing demand (i.e. in excess of 47% of the occupied housing stock) will continue to be met primarily by investor-owned supply (i.e. duplexes, triplexes, quadplexes, accessory use and multiple family properties), where current rents range from approximately $250.00 to in excel of $600.00 per month, depending upon the number of bedrooms and location.

5.4.2 Alternative Housing Issues

An analysis of household income and age-group statistics from Table 3-9 (Ref: FUTURE LAND USE element) in relation to housing values, monthly costs of housing without a mortgage and rent-to-income and owner cost-to-income ratios (ref: Tables 5-4B, 505A, 5-5B and 5-5C) lead to the conclusion that low and moderate income households (i.e. less than $15,000 per year in 1980) consist primarily of renters and households which owned a home without a mortgage.

Rental unit vacancy statistics from Table 5-3 indicate that there is a slight undersupply situation, with the vacancy rate at 3.8%. (NOTE: a 5% vacancy rate is indicative of an equilibrium situation where supply equals demand, accounting for a normal turnover of tenants). On this basis, coupled with the unusually high percentage of renter-occupied housing units in Lake Park it is concluded that the private sector delivery process is adequately meeting associated demands within the Town. It is further concluded that low-to-moderate income housing owners will consist primarily of elderly households who purchase a home without a mortgage, therefore reducing housing costs to affordable levels.

The above analyses, coupled with the limited availability of vacant residential land and relatively small remaining growth potential in the Town (Ref: Section 3.3.7;

FUTURE LAND USE element) lead to the conclusion that current demographic and housing characteristics will remain relatively constant throughout the short-term and long-range planning periods. Also, it is not anticipated that these characteristics will be modified to any great extent due to relatively slow projected growth in non - Residential land uses. (Note: Non-residential growth can result in the creation of a substantial number of additional jobs). Land use projections (Ref: Table 3-14; FUTURE LAND USE element) indicate that only an additional 6 acres of commercial land and 23 acres of mixed commercial/industrial land are projected during the ten-year planning period.

5.4.2.1 Availability of Services

Infrastructure services are currently available to serve projected residential growth in Lake Park. Major infrastructure system components (i.e. wellfields; water treatment facilities and distribution mains; wastewater collection and

transmission mains and treatment and disposal facilities; primary drainage facilities; primary roads; and solid waste disposal systems) are in place and have capacities to accommodate the residential build-out of the Town.

5.4.2.2 Substandard Housing Conditions

Although no specific definitions of substandard housing were used to evaluate Town housing stock in Section 5.2.3., the application of several evaluation measures lead to the conclusion that there are no defined concerns regarding potential substandard housing conditions at this time. Also, substandard housing conditions are not projected to occur during the short-term and long-range planning periods provided that maintenance efforts on the part of individual owners are continued. Town responsibilities are expected to consist of adoption, monitoring and enforcement of a standard or locally prepared version of a housing code.

5.4.2.3 Low and Moderate Income Housing

Discussions in Section 5.3.1.3 led to the conclusion that the private sector delivery process has adequately provided housing to accommodate the needs of Town residents at various income levels, particularly in light of the high proportions of rental housing. It is anticipated that this will be the case throughout the short-term and long-range planning periods.

The Town Zoning Code does not allow the development of mobile homes; nor is there vacant land to accommodate them in appropriate areas. The only remaining residential parcel of the size and density necessary to accommodate a mobile home park development has recently been approved for a 220 unit multiple-family residential project.

5.4.2.4 Group Homes

Day Care centers and nursing homes are the only “Group Home” type facilities permitted under Town codes at present; however, it is recommended that special exception procedures be incorporated to accommodate additional uses such as Foster Care homes.

5.4.2.5 Conservation Activities

The Town is expected to continue its primary role as monitoring and enforcement agent, as discussed in Section 5.3.2.2. Further conservation, rehabilitation or demolition activities are not anticipated unless an emergency arises. The designation of historically significant housing is not anticipated at this time;

however, the need for such designations should be considered at the time of each required Comprehensive Plan evaluation and review.

5.5 GOAL, OBJECTIVES and POLICIES

5.5.1 Town Goal Statement

Ensure the provision of safe, decent and sanitary housing and living conditions in designated residential neighborhoods consistent with: (1) density levels indicated on the Future Land Use Plan Map; (2) specific housing needs as reflected in the most recent Shimberg Center for Affordable Housing's Affordable Housing Needs Assessment; and (3) the current residential character of the Town and individual Planning Areas. Further, ensure that the character of new housing is compatible with the existing housing stock, particularly historic housing, while accommodating current housing needs.

5.5.2 Objectives and policies

Objective 1:

The quality of the existing housing stock and residential neighborhoods shall be maintained by addressing substandard housing through code enforcement and other appropriate mechanisms.

Policy 1.1:

Maintain minimum housing regulations that shall contain specific and detailed provisions required to ensure the provision of decent, safe, sanitary and affordable housing in accordance with the Comprehensive Plan.

Policy 1.2:

Utilize the following definitions of in assessing and monitoring housing conditions:

Standard Condition – A residential structure meeting all minimum standards for basic equipment and facilities, as set forth in the most recent version of the Standard Housing Code.

Substandard Condition – A residential structure which does not meet all minimum standards for basic equipment and facilities, as set forth in the most recent version of the Standard Housing Code, where the costs of rehabilitation or code compliance are valued at less than 50% of the total value of the structure.

In Need of Replacement - A residential structure which does not meet all minimum standards for basic equipment and facilities, as set forth in the most recent version of the

Standard Housing Code, where the costs of rehabilitation, renovation or code compliance are valued at greater than 50% of the total value of the structure

Objective 2:

Code enforcement activities shall be maintained through periodic inspections, oriented to conserving the current condition of the housing stock and identification of residential structures in need of rehabilitation or demolition. The definitions of "Standard," "Substandard" and "In Need of Replacement" shall be used as the basis for defining rehabilitation or demolition needs.

Policy 2.1:

Assist any efforts on the Part of Town residents to upgrade neighborhood housing conditions by providing Code enforcement assistance.

Policy 2.2:

Utilize the following definitions in assessing and monitoring housing conditions:

Standard Condition – A residential structure meeting all minimum standards for basic equipment and facilities, as set forth in the most recent version of the Standard Housing Code.

Substandard Condition – A residential structure which does not meet all minimum standards for basic equipment and facilities, as set forth in the most recent version of the Standard Housing Code where the costs of rehabilitation or code compliance are valued at less than 50% of the total value of the structure.

In Need of Replacement – A residential structure which does not meet all minimum standards for basic equipment and facilities, as set forth in the most recent version of the Standard Housing Code where the costs of rehabilitation, renovation or code compliance are valued at greater than 50% of the total value of the structure.

Policy 2.3:

Review and amend, where and when necessary, Town Housing, Building and Construction Codes to incorporate updated criteria oriented to conserving existing housing stock.

Policy 2.4:

The Town shall coordinate with the appropriate agencies, including the State of Florida and Palm Beach County, to attempt to secure grant funds (i.e. CDBG, HOME, SHIP) to assist income-qualified households in conducting repairs to correct substandard housing conditions, and to improve the condition of the rental housing stock that is affordable to income-qualified households.

Objective 3:

Adequate and affordable housing, consistent with the current character of the Town shall be provided for the existing population and anticipated population growth, including housing to accommodate the defined specialized needs of low and moderate income, elderly or handicapped or displaced residents.

Policy 3.1:

Encourage, support and develop incentives for home improvements and residential beautification.

Policy 3.2:

Require housing construction that is compatible with the existing natural resources and service capabilities as defined in the TRAFFIC CIRCULATION AND SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUNDWATER RECHARGE elements and which does not adversely impact environmental features.

Policy 3.3:

Require developers to coordinate with the Town during the design and completion of residential developments to assure that the Town and Planning Area characteristics are maintained, and any defined special housing needs are accommodated.

Policy 3.4:

Consider innovative housing delivery alternatives (e.g. construction techniques and materials, site planning concepts, etc.) oriented to facilitating reduced housing costs.

Policy 3.5:

Allow for a broad range of housing densities and types in residential environments consistent with the FUTURE LAND USE element.

Policy 3.6:

Assure that reasonably located, standard housing, at affordable cost, is available to persons displaced through public action prior to their displacement.

Policy 3.7:

The Town shall implement strategies to ensure the availability of a diversity and mix of housing types in order to meet the needs of households of different income and needs groups. These strategies might include, but are not limited to, inclusionary zoning, land trusts, linkage fees, density bonuses, and participation in federal, State and County grant programs.

Policy 3.8:

In consideration of the fact that the Town's 2005 homeownership rate of 43.5% is significant less than the homeownership rate for the State of Florida's 2005 homeownership rate of 70.3%, the Town shall prioritize the creation of homeownership units, and shall coordinate with the appropriate agencies, including the State of Florida and Palm Beach County, to attempt to secure grant funds (i.e. CDBG, HOME, SHIP) to assist income-qualified renter households in becoming homeowners.

Objective 4:

Provision shall be made for the location of group or Foster Care facilities licensed by the Florida Department of Health and Rehabilitative Services in a manner consistent with the character of existing neighborhoods.

Policy 4.1:

The Town shall review, and amend if warranted, the Zoning Code so that different classes of group homes be permitted in appropriate residential neighborhoods, and that no residential neighborhoods be closed to such facilities.

Policy 4.2:

The building official shall monitor the development and distribution of group homes and foster care facilities to insure that adequate sites and infrastructure are provided and that over-concentration in any residential area is avoided.

Policy 4.3:

The Town shall enforce compliance with the Americans with Disabilities Act (ADA) in order to ensure that persons with disabilities have equal access to housing, employment and services.

Objective 5:

The private sector delivery process shall continue to be relied upon as the means for providing housing to accommodate Town residents until such time that it is demonstrated that the formulation of alternative housing implementation programs is necessary.

Policy 5.1:

If it is determined by the Town that the private sector delivery process is not adequately functioning, in terms of meeting the housing needs of residents, alternative mechanisms, including government and non-profit sector participation shall be considered, including the use of available Federal, state and local assistance programs.

Policy 5.2:

Provide information, technical assistance, and incentives to the private sector to maintain a housing production capacity sufficient ot meet projected needs.

Objective 6:

Historically significant housing shall be identified.

Policy 6.1:

The Town Commission shall establish criteria for identification of historically significant housing.

Objective 7:

The Town shall insure that development regulations will allow the provision of low and/or moderate-income housing.

Policy 7.1:

The Town, in developing new or revising existing regulations, shall consider potential impacts of these regulations on the provision of affordable and workforce housing, and take steps to mitigate these barriers.

Policy 7.2:

In the event the Town enacts an impact fee schedule related to development or redevelopment projects, impact fee discounts will be established applicable to low and/or moderate-income housing.

Policy 7.3:

A land development regulation will be established for density bonuses in multifamily residential areas for low and/or moderate income housing.

Policy 7.4:

In scheduling the review of proposed development or redevelopment, the Planning and Zoning Board shall give priority to applications that provide for affordable homeownership units.

Objective 8:

The Town shall insure that land development regulations will allow the location and placement of manufactured housing within the Town.

Policy 8.1:

The Town shall develop land development regulations applicable to all categories of housing within the Town.

Policy 8.2:

The location and placement of manufactured housing is permissible in low to medium residential land use categories as shown on the future land use map in the comprehensive plan.

Policy 8.3:

The location and placement of manufactured housing is permissible in low to medium residential land use categories as shown on the future land use map in the comprehensive plan.

6 SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUND WATER

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

6.2 SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE

6.3 SOLID WASTE SUB-ELEMENT

6.3.1 Introduction

The SANITARY SEWER sub-element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(c), Florida Statutes, established the SANITARY SEWER Sub-element requirement and Chapter 9J5.011, Florida Administrative Code, established minimum criteria to guide its preparation.

This sub-element contains a summary of the data, analyses and support documentation necessary to form the basis for the future sanitary sewer goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the SANITARY SEWER sub-element is structured according to the following format:

- Sanitary Sewer Data;
- Sanitary Sewer Analysis; and
- Town Goal, Objectives and Policies

Initial sanitary sewer data is presented on a system-wide basis; however for the purposes of defining Town specific service levels and needs, the Sub-system level may be utilized.

6.3.2 Sanitary Sewer Data Summary

The Federal Water Pollution Control Act (PL-92-500), as amended, is the controlling national legislation related to the provision of wastewater service. The goal of this Act is the restoration and/or maintenance of the chemical; physical and biological integrity of the nation's waters. -The Act established the national policy of implementing area wide waste treatment and management programs to ensure adequate control of various sources of pollutants. Under Section 201 and 208 of PL-92-500, grants have been made available to local governments to plan and construct wastewater facilities. The U.S. Environmental Protection Agency is responsible for implementing the Act.

The Florida Department of Environmental Regulation (FDER) is responsible for ensuring that the State implements responsibilities assigned to it under PL 92-500. FDER has adopted rules for the construction and operation of wastewater facilities under Chapter

17-6, Florida Administrative Code. These rules apply to all facilities which treat flows exceeding 5,000 gallons per day for domestic establishments, 3,000 gallons per day for food service establishments, and instances where wastewater contains industrial, toxic or hazardous chemical wastes. The Florida Department of Health and Rehabilitation Services (FDHRS) regulates septic tank and drain field installation within the State. These requirements have been adopted by rule in Chapter 1OD-6, Florida Administrative Code.

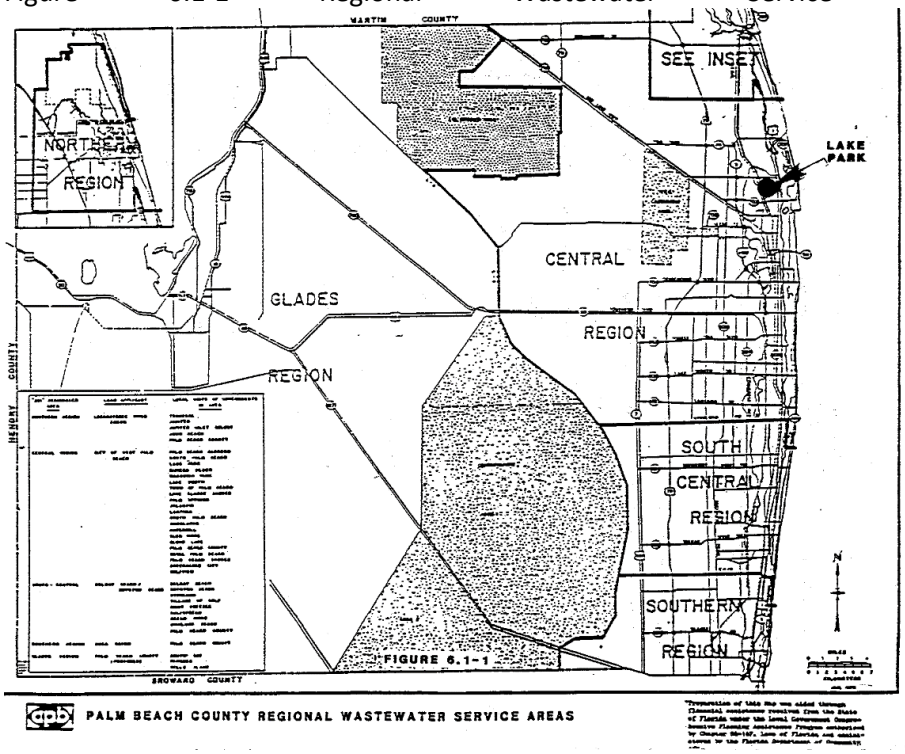
To ensure economic efficiency in the operation of the regional facilities which it provides, Palm Beach County has adopted regulations which require establishments to connect to a wastewater system where service is available. Municipal and privately owned Wastewater systems fi 46" also adopted design standards and review procedures to ensure that all connections are compatible with the overall system design. The Palm Beach County Health Department is responsible for assuring that State and Federal requirements are met.

The Palm Beach County Health Department under a Local Program Agreement with FDER oversees permitting, set-up and operation of septic tank and package plant systems in accordance with County and State rules and regulations. Palm Beach County has also adopted local rules and regulations for septic tank installation consistent with Chapter 1OD-6, Florida Administrative Code (i.e. Environmental Control Rule #3).

6.3.2.1 Operational Entity and Service Area

The Palm Beach County Area wide Waste Treatment Management Plan, prepared under Section 208 of PL 92-500, as amended, was completed and adopted by Palm Beach County in 1979. Although somewhat dated at this time, basic regional wastewater service area designations and responsibilities remain relatively current. Regional and sub-regional service area designations under this program are illustrated on FIGURES.6.1-1 and 6.2-2. Under the 208 Plan, Seacoast Utilities, Inc., a private utility company, was designated as the service agent for the "Palm Beach Gardens" Sub region. Also, as a privately owned utility company, Seacoast Utilities, Inc. is regulated by the Florida Public Service Commission (i.e. primarily service area and rate structure)

Figure 6.1-1 Regional Wastewater Service Area as



Currently, the Public Service Commission (PSC) Certificated Area, defined in PSC #S-29, generally includes the area bounded by the following: Atlantic Ocean (east); Silver Beach Road (south); Beeline Highway/a line six miles west of Florida's Turnpike (west); and Donald Ross Road (north).

Seacoast Utilities, Inc. currently operates three sanitary sewer systems within its designated service area: 1) Anchorage; 2) Cabana Colony; and 3) PGA. Current service areas for each system are delineated on FIGURE 6.1-3. In addition to the Town of Lake Park, Seacoast Utilities, Inc. provides wastewater service to Palm Beach Gardens, Village of North Palm Beach, a portion of Juno Beach and unincorporated lands lying within the PSC Certificated Area. Lake Park is currently served by the Anchorage Plant, which also serves North Palm Beach, a portion of Juno Beach and portions of unincorporated Palm Beach County. All customers are served on a retail basis, with separate billing by Seacoast Utilities, Inc.

Seacoast Utilities, Inc. owns, operates and maintains the sanitary sewer collection system serving the Town. Collection systems include all local sewerage which collects wastewater from various locations throughout the corporate limits to designated "points of delivery" (i.e. either lift stations, trunk mains or interceptors [i.e. gravity and force mains] owned by Seacoast Utilities, Inc.). The entirety of the Town is served by central wastewater facilities. Major transmission facilities are owned, operated and maintained by Seacoast Utilities, Inc. Components of the transmission system are located on FIGURE 6.1-4.

Figure 6.1-3

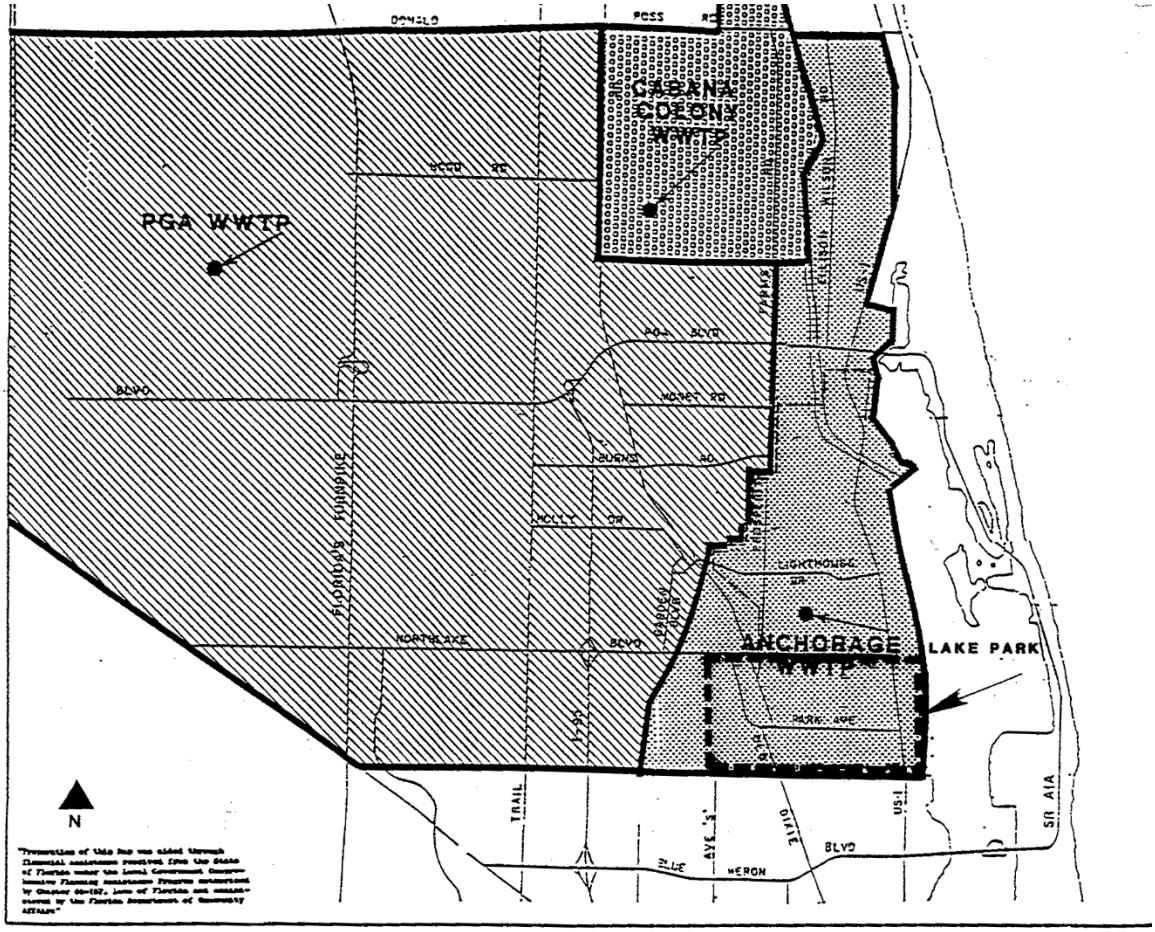


FIGURE 6.1-3 SEACOAST UTILITIES, INC. WASTEWATER PLANTS & SERVICE AREAS

6.3.2.2

Design Capacity

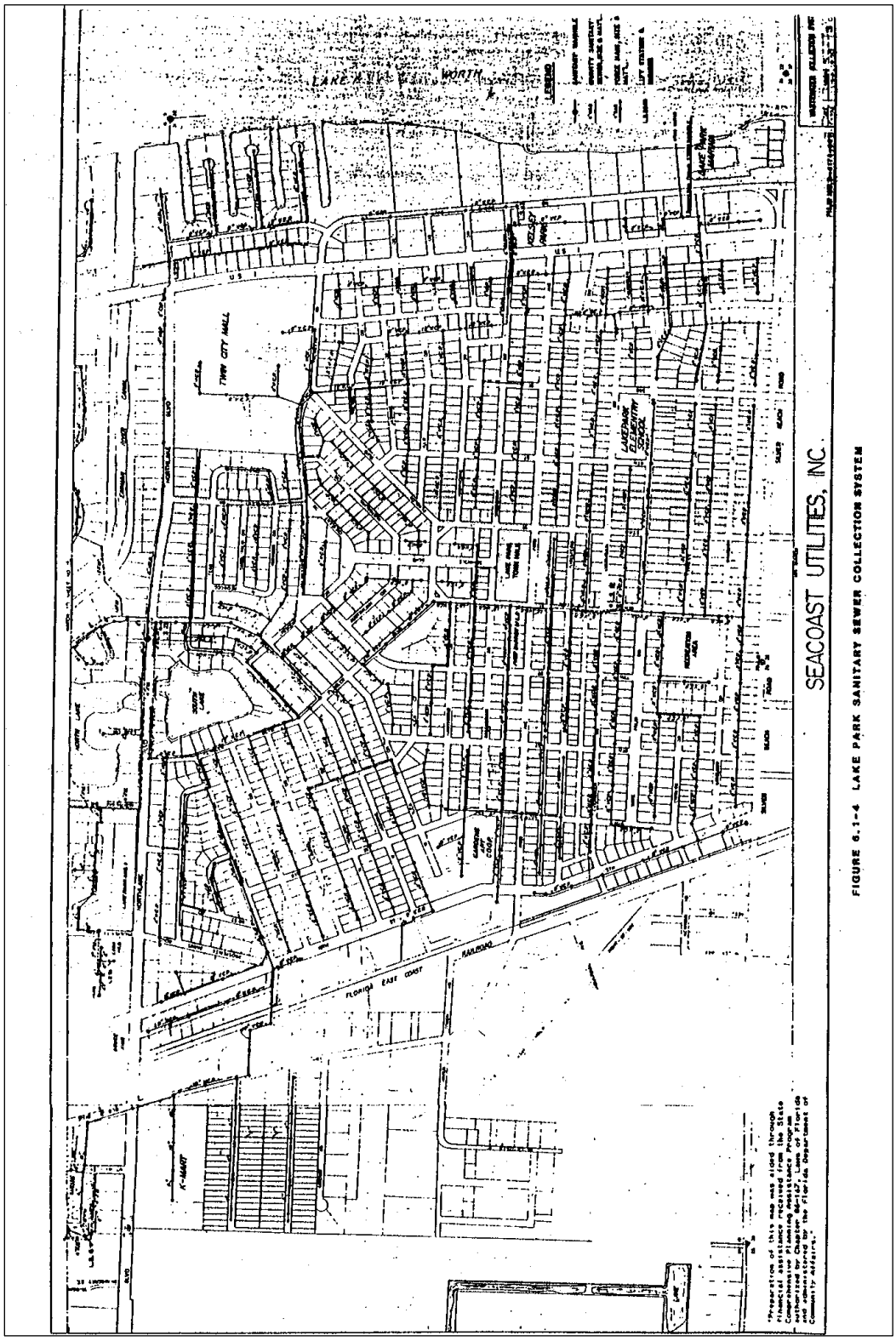
The Anchorage treatment and disposal facility currently consists of the following components: 1) Treatment Plant - a 4.85 MGD (design capacity) activated sludge secondary treatment facility; 2) Effluent Disposal - secondary treated effluent is disposed of via surface water discharge to the Barman River. A National Pollution Disposal Elimination System - NPDES - Permit and Florida Department of Environmental Regulation (FDER) Temporary Operating Permit (issued in May, 1987) have been issued to address the issues of volume of discharge and pollutant loading. The Temporary Operating Permit will be reviewed by the State in 1990, for the purposes of either renewal or requiring discharges to be

eliminated. If discharges are to be eliminated, alternative means must be implemented. (Note: Two possibilities

that exist are deep well injection or conversion of the plant to a re-pump facility for transmission to the PGA Plant.) The only physical limits to discharge capacity are the volume of wastewater treated at the plant and the volume permitted by the Florida Department of Environmental Regulation; and 3) Sludge Disposal - sludge is currently treated via an aerobic digestion process and thickened at the Anchorage Treatment Plant, then trucked to another Seacoast Utilities' wastewater plant (i.e. PGA Plant) where it is further de-watered by belt press (i.e. to 15* solids) and trucked to an FDER approved landfill for final disposal. The Anchorage Treatment facility is currently treating an average of 1.69 MGD of raw wastewater while FDER has permitted 3.69 MGD. According to Seacoast Utilities, Inc., the treatment facility has the capacity to provide service to a build-out situation within its defined service area. FDER has limited capacity to 3.69 MGD, although Plant capacity is rated at 4.85 MGD due to pollutant loading problems.

FIGURE 6.1-4 LAKE PARK SANITARY SEWER COLLECTION SYSTEM

Components of the transmission system



6.3.2.3 Current Demand and Level of Service

The following three system wide wastewater flow characteristics are important for assessing the capability of wastewater treatment, pumping, and transmission facilities to service customers according to industry standards:

- Annual Average Day Flow (AADF) - total system wastewater flow for the year divided by 365 days.
- Maximum Monthly Daily Flow (MMDF) - the largest monthly wastewater flow in the year of interest divided by the number of days in that month.
- Maximum Daily Flow (MDF) - the largest wastewater flow during a single 24-hour day in the year of interest.

Table 6.1-1 represents the 1986 flows for the Anchorage Plant service area and Lake Park

Table 6.1-1
1986 Wastewater Flows (mgd)

Customer Group	Total*	Lake Park**
AADF-		
Residential	1.32	0.45
Non-Residential	0.37	0.13
Total		
Total AADF	1.69	0.58
Total MMDF	1.84	0.63
Total MDF	2.68	0.91

Seacoast Utilities, Inc. Interpolated by LRM, Inc.

Within the Anchorage Plant service area, it is estimated that residential customers discharged an average of 66 gallons per capita per day into the wastewater system in 1986. On this basis, it is concluded that 20,000 people are currently being served on an average annual daily basis. Of this total, approximately 34.0% are residents of Lake Park (i.e. 6,795 in 1986). If non-residential wastewater flow (370,000 gallons per day) is expressed on a resident per capita basis, 1986 average daily flow within the Anchorage Plant service area can be defined as including an additional 18.5 gallons per capita per day. Total average daily flow, expressed on a per capita resident basis, is therefore, 84.5 gallons per capita per day.

Maximum Daily Flow (MDF) should be used for sizing facilities that must accommodate short-term peak loads, such as pumps, pipelines and chlorine contact basis. Current MDF, expressed on a resident basis in the Anchorage service area is 134 gallons per capita per day.

6.3.3 Sanitary Sewer Systems-Analysis

6.3.3.1 Facility Capacity Analysis

Although the design capacity of the Anchorage Plant is 4.85 MGD, this analysis will be based upon a capacity of 3.69 MGD. This is necessary due to current FDER permit effluent discharge limitations. Use of the full design capacity will require a solution to-current pollutant problems. Future demands and analysis of system capacity is based upon resident population projections and wastewater use factors expressed on a
resident per capita per day basis. Average Daily Flow, based upon 1986 wastewater flow figures is 84.5 gallons per capita per day, while maximum daily flow is 134 gallons per capita per day. Inherent in the use of these figures for projection purposes is the assumption that the mix of residential versus commercial land uses 'will remain consistent with that evidenced in 1986 throughout the Anchorage Plant service area. Land use projections for Lake Park' (Ref -,- Table 3-26) indicate that this is a relatively valid assumption within the Town limits. 0 basis, the following table presents average and maximum daily flow projections for the-Town of Lake Park.

		Average	Maximum
Year	**Population**	**Daily Flow (mgd)***	**Daily Flow (mgd)****
1986	6,795	0.58	0.91
1994	7,222	0.61	0.97
1999	7,270	0.61	0.97

Resident Population x 84.5 gallons per day Resident Population x 134 gallons per day
SOURCE: LRM, Inc.

Utilizing a plant, capacity, figure of 3.69 MGD*and the year 1999 maximum daily flow Or6jecti.6ns, it is concluded that 26.4% of the Anchorage Plant-capacity-should be reserved for the Town over the 10-year planning period. If capacity is increased to the current design capacity of 4.85 MGD, Town capacity reservation would be reduced to 20.1%.

Based upon the above projections, it is concluded that the Anchorage Plant has the current capacity (i.e. 3.69 MGD) to accommodate projected growth within the Town for both the five and ten year projection periods. In addition, with certain improvements to the system, Seacoast Utilities, Inc. has estimated that the Anchorage Plant can accommodate the equivalent of 10,220 single-family units within its service area.

6.3.3.2 General Performance Evaluation

Although plant capacity is adequate to accommodate current and projected future needs, the system does have some problems that are currently being addressed by Seacoast Utilities, Inc.

The following comments are excerpted from the report entitled: Analysis of the Seacoast Utilities System for Palm Beach. Gardens by Lindahl, Browning, Ferrari and Helstrom, prepared in 1987. The original plant was built in 1956 as a 1.1 MGD trickling filter plant. With intermittent
modifications, the current 4.85 MGD complete mix plant was built in 1975 when the original trickling filter plant was removed from service. This plant has I two major problems. The plant effluent is plagued with a toxicity problem which-has-resulted in the issuance of a Temporary Operating Permit (TOP) by FDER for a capacity of 3.69 MGD. The time schedule in the TOP calls for a source control program to be implemented October 1, 1987 with quarterly progress reports thereafter. If toxicity is not significantly reduced a completed construction permit must be submitted by January 1, 1989 and construction must start by April 1, 1989. New facilities must be in operation by July 1, 1990. An additional condition of the permit is the limitation on new sanitary sewer collection systems for which applications have been received after May 1, 1987. Additional connections to the plant are allowed only until the flow increases by an additional 165,000 gallons per day. The connection limit may be raised if compliance with the TOP is achieved. The discharge Biochemical Oxygen Demand (BOD) level cannot exceed 13.5 milligrams per liter (mg/1) based on the monthly average and at no time exceed 27 mg/l.

In addition to the TOP, the plant is operating under a National Pollutant Discharge Elimination System (NPDES) Permit. The permit for this facility expired June 28, 1986; however, a renewal application was made June 3, 1986 and is in process. This permit allows the discharge of pounds per day of BOD's and total suspended solids. If the allowed discharges are decreased, the stated 4.85 MGD capacity would have to be lowered or additional treatment required. Long range planning should consider constructing a deep well as the ultimate method of effluent disposal. Alternative locations for such-a facility include the Anchorage Plant site, or conversion of the Plant to a re-pump facility and construction of a deep well at the PGA Plant to accommodate both systems.

The Anchorage sewer collection system contains 25 pump stations, twenty-three owned by Seacoast Utilities Inc. and two privately owned. The system was analyzed in 1986 and three pump stations needed upgrading. Pump

Station 6; 7 and 22 could not meet the influent demand and require larger pumps. Seacoast Utilities is in the process of expanding these three stations. Each of the problems identified above are being addressed by Seacoast Utilities, Inc. and are not the responsibility of the Town of Lake Park, in terms of capital expenditures.

The only area of the Town where substantial wastewater collection system improvements remain to be implemented is Planning Area 3. Any improvements (i.e. local collection lines, pump stations and transmission mains) will be financed through developer's agreements between property owners and Seacoast Utilities, Inc. as specific projects are approved.

6.3.3.3 Septic Tank Suitability

There are currently a few septic tanks within the Town limits, located in the commercial/industrial portion of Planning Area 3, although an exact number is not known.

Soil survey and soil l imitations for septic tank use are exhibited on FIGURE 3-3 and Tables.-3-1 and-3--!2 (Ref: FUTURE LAND USE Element).Soil limitations to septic tank development appear to be in the "severe" category however, due to the limited number, low density of use and the elevation of drain fields to create percolation, no pollution problems have been noted by Town officials. If problems become apparent, 41 central wastewater service is available from lines located along Old Dixie Highway.

6.4 SOLID WASTE SUB-ELEMENT

6.4.1 Introduction

The SOLID WASTE sub-element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(c), Florida Statutes, establishes the SOLID WASTE sub-element requirement and Chapter 9J5.011 Florida Administrative Code, establishes minimum criteria to guide its preparation. This sub-element contains a summary of the data, analyses and support documentation necessary to form the basis for the future SOLID WASTE goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the SOLID WASTE sub-element is structured according to the following format:

- Regulatory Framework Summary;
- Existing Conditions;
- Solid Waste Analysis; and

- Town Goal, Objectives and Policies

The following is provided as a brief overview of the laws and requirements by various levels of government that currently have jurisdiction in the regulation of solid waste.

Potential environmental impacts of solid waste facilities have led to the development of an extensive network of permitting requirements at the Federal-and State levels. Impacts on air and water quality are reviewed by the U.S. Environmental Protection Agency (EPA) at the Federal level. For processing plants, which will generate electrical power or require tall emission stacks, Federal Aviation Administration (FAA) review may be required. Additionally, U.S. Army Corps of Engineers (COE) review will be required where dredging and filling might be necessary.

The National Resource-Conservation and Recovery Act (RCRA) of 1976 directed EPA to develop a national program to regulate and manage hazardous wastes and provide incentives for states to adopt consistent programs. The National Comprehensive Emergency Response and Compensation Liability Act (CERCLA) enacted in 1980 provided EPA with authority and funds to respond to incidents requiring site clean-up and emergency mitigation (the EPA "Superfund" Program). This Act also defined the liability of business engaged in hazardous waste generation, transport and disposal and provided enforcement processes.

At the State level, the Florida Department of Environmental Regulation (FDER) has the review and permitting authority for air and water quality impacts, as well as, projects that require dredging and filling. Further, FDER has delegated authority to the regional water management districts to provide State level review for water quality and quantity impacts. Actual construction and operation of solid waste facilities requires further permits and review by FDER. Further, the Florida Resource Recovery and Management Act (Section 403.7, F.S.), passed in 1980, adopted Federal guidelines and directed FDER to develop and implement a hazardous waste management program.

The Solid Waste Authority of Palm Beach County was created in 1974 by Special Act to preserve the aesthetic qualities, conserve natural resources, and protect the public health, safety and welfare of residents of Palm Beach County through a Countywide resource recovery and waste management program.

It should be understood that the Solid Waste Authority is a State agency functioning under a Special Act, even though its jurisdictional boundaries are that of Palm Beach County, and it is not, as often misconstrued, a County agency.

The purpose of the Authority is to provide a coordinated Countywide program for the control of solid waste processing and disposal in cooperation with Federal, State and local agencies responsible for the prevention, control or abatement of air, water and land pollution, and to otherwise provide for the safe and sanitary processing and disposal of solid waste in the district over which the Authority exercises sole jurisdiction in Palm Beach County.

6.4.2 Solid Waste Data Summary

Solid waste collection and disposal is one of the many problems that local governments must cope with today. Since it is the responsibility of local government to provide for the public health, safety and welfare of its residents, it is essential that Palm Beach County and its municipalities deal effectively with this pressing problem. Urban development in the County is situated primarily along the coastal areas. Proximity of municipalities with large concentrations of population necessitate an organized, well managed system of solid waste collection and disposal to maintain a high quality standard of life within Palm Beach County and to prevent health hazards.

6.4.2.1 Solid Waste Collection

Since the Town of Lake Park generates a high per capita and a high tonnage rate of solid waste, it is essential that an effective system of collection, both in cost and operation, be available to its residents.

The Sanitation Division of the public Works Department offers collection service-to all residences and businesses within the Town. The Town provides garbage pick-up service to all residential residences three times per week. Trash such as yard clippings and other biodegradable wastes and other special wastes (i.e. large items such as appliances, furniture, tree stumps, etc.) are collected twice per week. Costs for these services are recovered through ad valorem taxes. Therefore, no additional fees are charged to residents for this service.

The Town collects all solid wastes from both single family residential units and multi-family complexes (i.e. 2 units or more). This residential classification represents over fifty (50) percent of all solid wastes generated by the Town, according to Town -records. Multi-family complexes except for duplexes use containers (dumpsters) to collect solid waste on site.

The Town also provides additional service for the collection of newspapers. One day per week, the Town picks-up newspapers curbside (swale area). In addition, Lake Park provides two permanent newspaper drop-off locations in Town. The Town of Lake Park has a contract with a local vendor for the purchase of the collected newspaper. Prices per ton can vary, as does the marketability of the newspapers, but the Town currently receives twenty-four dollars per ton of newspapers.

The Town does have a franchise agreement with County Sanitation to place large "roll-on and roll-off" containers in Town. Currently, there are five locations within Town where regular service is being provided (i.e. Builders Square, Sears, K-Mart, Osowski and Rinker Concrete) with additional temporary service being provided to construction sites within the Town. Individual developers are responsible for collecting and disposing wastes generated on their properties.

The Town owns, operates and maintains its own equipment for solid waste collection. The Town Sanitation Division has three twenty cubic yard rear loading packer trucks, one

twenty cubic yard barrel loader with crane, one ten cubic yard standard dump truck and one backhoe used in conjunction with the dump truck.

The Sanitation Division is administered by the Public Works Department Assistant Director. There are a total of 12 employees including the Assistant Director and one foreman. The Sanitation Division is divided into two divisions, Commercial Division and Residential Division. The staff is platooned as follows:

Commercial Division: .2 packer truck drivers with no collectors assigned to these trucks.

Residential Division: 2 packer truck drivers with 2 collectors per truck; and 1 trash truck driver with 1 collector.

The trash collector is also used as the "swing-man" to fill in for anyone who is out sick, on vacation leave or during any other leave times. The Grounds Maintenance Division is also used as an emergency backup in the rare case that more than one staff collector is needed.

6.4.2.2 Solid Waste Disposal

The Town hauls solid waste approximately four miles to the Dyer Boulevard Landfill for disposal. Hauls are made "as needed" by the packers servicing the residential and commercial/industrial areas and usually is not more than twice per day.

Based upon the Palm Beach County Solid Waste Authority's 1986 Annual Report, the Dyer Boulevard Landfill site received 442,249 tons of solid waste in 1986. Based upon the 1987 solid waste generation of 4,319.92 tons, Lake Park's share of solid waste to the Dyer Boulevard Landfill is just under 1.0 percent.

The Palm Beach County Solid Waste Authority is currently constructing a resource recovery facility to be located on forty acres of a 1,320 acre tract of land. The facility and the property will be solely owned by the Authority. The site is located north of 45th Street, south of the Beeline Highway, west of the Florida Turnpike, and east of the West Palm Beach Water Catchment Area. The proposed facility will be immediately west of the existing Dyer Landfill.

Since the closing of the Lantana Landfill site, all waste disposal from that site has been transferred to the Dyer Landfill site. Currently, the Palm Beach County Solid Waste Authority is in the process of revising their Master Plan, which will evaluate the impact of the increased demand on the design capacity of the Dyer Landfill resulting from the opening of the new Resource Recovery Facility scheduled to go into operation in 1989. The Authority is also planning the construction of a solid waste transfer station in the north end of the County in the vicinity of Donald Ross Road, off the future extension of Central Boulevard. The use of this transfer station by the Town may reduce the travel time to the resource recovery facility.

Based upon conservations with Authority staff, the current Dyer Boulevard Landfill has an eighteen month design capacity as per the Florida Department of Environmental Regulation Closure Plan which was developed to coincide with the scheduled opening of the ,new Resource Recovery Site. Flexibility of this date is understood, since the Dyer Boulevard Landfill site cannot be closed until the Palm Beach Count 'Regional Resource Recovery Facility becomes operational.

This new facility to be known as the "North County Regional Resource Recovery and Solid Waste Disposal Facility" is currently under construction with January, 1989, as the most recent target date estimated to start operation. This facility will have a design capacity to handle the projected refuse disposal needs for the County in conjunction with resource recovery for the next twenty years. Further, this facility will have a level of service capable of handling a daily disposal rate of three thousand tons per day. When or if this generation rate exceeds 3000 tons per day, a sixteen hundred acre sister Resource Recovery Facility is planned for the South County area. Between these two facilities, the entire County's solid waste disposal needs are expected to be handled through build-out of the County

6.4.3 Solid Waste Analysis

6.4.3.1 Solid Waste Generation

Generally, the generation of solid waste in all communities is influenced by two primary factors: (1) the population of the community, and (2) the amount and intensity of commercial and industrial activities. These two factors, in combination, significantly influence the amount of waste produced by the Town. The majority of solid waste in the Town of Lake Park is generated by residential areas. The Town of Lake Park is a residential community, supplemented by various commercial and industrial developments. Obviously, then, the population of the residential sector is the primary generator of wastes in the Town.
Commercial and other areas in Lake Park-are not as significant a -factor to overall solid waste generation, as are the residential areas.

Table 6.2-1
Solid Waste Generation/Collection (October ’87-June’88)

	Residential Division		Commercial Division	
Month	**Trash (tons)**	**Garbage (tons)**	**Trash (tons)**	**Garbage (tons)**
Oct’87	142.93	248.39	54.72	389.38
Nov	123.96	236.88	45.30	455.22
Dec	121.29	200.91	28.68	404.05
Jan’88	140.82	230.73	34.60	437.90
Feb	111.50	253.56	9.31	497.93
Mar	133.45	266.64	42.99	478.17
Apr	153.63	163.98	0.00	492.96
May	147.47	267.22	18.31	479.62

Jun	167.44	247.91	1.97	523.53
Total	1252.49	2216.22	235.88	4158.76
Totals Summary (tons)				
Type		**Residential**	**Commercial**	**Total**
Trash		1252.49	235.88	1488.37
Garbage		2216.22	4158.76	6347.98
Total		3468.71	4394.64	7863.35

1ptbl6.2-1

According to the Town Public Works Department records, solid waste generation rates have increased over the last ten years. Table 6.2-1 lists the actual solid waste generated over a nine month period from October 1987 thru June 1988. In October 1987, the Town took over the collection of solid wastes in the commercial and industrial areas, prior to this time the Town only collected from the residential areas. Therefore, for purposes of this analysis the derivation of level of service (LOS) standards, will be based upon this nine month period. As indicated in Table 6.2-1, residential waste collection was partially collected by the Commercial Sanitation Division which is responsible for commercial/industrial area wastes as well as residential apartment complexes. The Residential Sanitation Division is responsible for collecting all the remaining residential waste areas which include single family residences, duplexes and multifamily condominium complexes. Therefore, a methodology had to be developed in order to separate the uses collected by the Commercial Division. The method used was to inventory the Commercial Division Accounts utilizing the container sizes and frequency of pick-up to estimate the generation rates from each land use type collected (i.e. commercial, industrial and residential) then adjusted each so that the sum of the individual uses equaled the actual total waste collected. In this analysis it was assumed that one cubic yard of solid waste equaled one hundred pounds. `The residential apartment estimated wastes was then able to be added to the residential waste collected by the Residential Sanitary Division to obtain a total residential waste generation for the analysis period which is shown as follows:

Type	**Oct'87-June'88 (tons)**	**%**
Residential	4255.10	0.54
Commercial	2900.31	0.37
Industrial	707.94	0.09
Total	7863.35	1.00

It was then necessary to separate the residential waste further into single family generated waste and multi-family generated waste. Table 6.2-2 was developed

from the FUTURE LAND USE element to obtain both the unit number and equivalent permanent resident population by single-family and multi-family uses.

Based upon a national average solid waste generation standard for multi-family (2+units) of 4 cubic yards per week per 10 units obtained through the Palm Beach County Solid Waste Authority, a solid waste generation rate can be derived using Table 6.2-2.

Also utilized is the published National Average for loose residential waste of between 85-110 lbs/yd3 , for purposes of this analysis 100 lbs/yd was used for all cubic yard conversions. Applying this criteria multi-family generation rate of 5.714 lbs/day/unit times permanent plus season units (1,839 units) is calculated to be 1437.5 tons for a nine month period. Then the single-family residential generation rate can be derived by subtracting the multi-family rate from the total residential rate (4255.10 tons/9 months) to obtain the single family rate of 2817.6 tons for the nine month period.

Using the equivalent permanent residential population from Table 6.2-2 the level of service (LOS) standards are derived as shown below:

Type	**Equivalent Res. Pop.**	**Gen. Rate Tons/9 mon.**	**Tons/Cap/9 mon.**	**Los lbs/cap/day**
SF	3919	2817.6	0.7190	5.25
MF	3061	1437.5	0.4696	3.43

The commercial and industrial level of service are derived by taking their respective generation rates, as discussed earlier, of 2900.3 tons and 707.94 tons respectively for the nine month period dividing that number by

occupied areas in each respective use. Then the LOS is obtained by taking this result and converting it to a daily rate as shown below:

Type	**Gen. Rate Tons/9 mon.**	**1987 Occupied* Acre**	**LOS Lbs/Acre/Day**
Commercial	2900.31	188.2**	112.56
Industrial	707.94	95.1	54.39

Occupied acres from FUTURE LAND USE element, Table 3-26 From Table 3-26 includes commercial, public buildings and grounds, institutional and other public facilities.

The Town is predominately a residential community with a mix of commercial, industrial and other non-residential uses. Industrial uses within the Town are almost exclusively of the light industrial type which the Town wishes to maintain. Therefore, there are no known hazardous-wastes generated within the Town.

6.4.3.2 Solid Waste Generation Projections

In projecting the future solid waste generation in Lake Park a process similar to that discussed in the previous section is used. First, the permanent resident and seasonal units need to be projected. Using information from the FUTURE LAND USE element (Table 3-25) applied a similar distribution of occupied and seasonal units as that shown for 1987 for each of the projection periods shown in Table 6.2-3. Then, by assuming that the household size for single family and multi-family residential units remains constant through 1999, the equivalent population projections by unit type (i.e. including seasonal influences) is developed as shown in Table 6.2-4. The commercial and industrial waste generation is projected by using the acres shown by use in Table 3-26, Land Use Projections in the FUTURE LAND USE element for 1994 and 1999 which is summarized below:

Type	1994 Area in Acres	199 Area in Acres
Commercial	192.3	193.3
Commercial	140.0	141.0
Public Bldgs.	28.2	28.2
Institutional	18.1	18.1
Other Public Fac.	6.0	6.0
Industrial	107.7	118.2

TABLE 6.2-2
PERMANENT AND SEASONAL RESIDENTIAL POPULATION (1987)

USE	PERM. UNITS	OCCUP[1] UNITS	HSHLD. SIZE	OCCUP. POP.	SEAS. UNITS	HSHLD SIZE	SEAS. POP.	EQUIV. POP[3]	TOTAL EQUIV. POP.
SF	1367	1249	3.13	3909	10[2]	1.89	19	10	3919
MF[4]	1651	1509	-	2884	187	1.89	353	177	3061
2plx	142	130	2.58	335					
3plx	36	33	1.84	155					
4plx	92	84	1.84	155					
4+	1381	1262	1.848	2333					
Total	3018	2758		6793	197		372	10	6980

1 Ref. FUTURE LAND USE Section 3.3.4
2 Assumed 5% total seasonal units are S.F.
3 Two seasonal residents equal one permanent resident
4 Multi-family includes two or more units

lantbl6.2-2

TABLE 6.2-3
PERMANENT RESIDENT/SEASONAL UNIT PROJECTIONS

TYPE	1987	1994*	1999
Single Family			
Occupied	1249	1254	1258**
Seasonal	10	11	11
Multi-Family			
Occupied	1509	1546	1562
Seasonal	187	207	209

* From FUTURE LAND USE Element, Table 3-25
** Based on growth of 4 units/year with 5/28 factor applied to S.F. remaining to M.F.

TABLE 6.2-4
EQUIVALENT POPULATION PROJECTION BY
RESIDENTIAL UNIT TYPE

YEAR	TYPE	OCCUP. UNITS	HSHLD SIZE	PERM. POP	SEAS. UNITS	HSHLD SIZE	EQUIV.* PERM. POP	TOTAL
1987	SF	1249	3.13	3909	10	1.89	10	3919
	MF	1509	1.91	2884	187	1.89	177	3061
1994	SF	1254	3.13	3925	11	1.89	10	3935
	MF	1546	1.91	2953	207	1.89	196	3149
1999	SF	1258	3.13	3938	11	1.89	10	3948
	MF	1562	1.91	2983	209	1.89	198	3181

*Equivalent Perm. Residents: 2 seasonal residents = 1 permanent.

lptbl6.2-3/p1

Table 6.2-5
Town Solid Waste Generation Projections by Land Use Types

Type Use	1988 Los	Tons/9Mon	1994 Tons/yr.	199 tons/yr.
Residential SF-Res. MF-Res.	 5.25 lbs/cap/day 3.43 lbs/cap/day	 2817.6 1437.5	5741 3770 1971	5774 3783 1992
Commercial	112.56 lbs/ac/day	2900.31	3950	3971
Industrial	54.39 lbs/ac/day	707.94	1069	1173
Totals		7696.66	10760	10918

t6-2-3.lp/p2

By applying the Level of Service standards, as developed in the previous section, the Town of Lake Park solid waste generation by land use type is projected in Table 6.2-5.

6.4.3.3 Solid Waste Disposal Projections

When the Palm Beach County Solid Waste Authority's North County Regional Resource Recovery and Solid Waste Disposal facility opens in 1989, it will have the capacity of handling 2000 tons per day. Based upon the regional facilities capability, the Town of Lake Park will contribute only a minor share of the total solid waste disposed at the Regional site as shown in Table 6.2-6.

Table 6.2-6
Solid Waste Contribution to Landfill Disposal Site

Year	Lake Park SW (tons/yr)	Regional Capability (tons/yr)	Lake Park Contributions (%)
1994	10,538	1,624,000	1.69
1999	10,694	1,624,000	1.71

*Capacity based on 20Mtons per day and operating 52 weeks per year, 6 days per week.

6.5 DRAINAGE SUB-ELEMENT

6.5.1 Introduction

The DRAINAGE sub-element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(c), Florida Statutes, establishes the DRAINAGE sub-element requirement and Chapter 9J5.011, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This sub-element contains a summary of the data, analyses and support documentation necessary to form the basis for the future DRAINAGE goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the DRAINAGE sub-element is structured according to the following format:

- Regulatory framework summary;
- Existing conditions;
- Drainage Analysis; and
- Town Goal, Objectives and Policies

Initial data is presented on a county-wide drainage basin basis with -further sub-system levels utilized for purposes of defining Town specific service levels and-needs.

6.5.2 Drainage-Dade Summary

The following is provided as a brief overview of the laws and requirements of government that currently have jurisdiction over the regulation of drainage Section 208 of the Federal Water Pollution Control Act (PL92-500, 1972) is the directing Federal law with respect to water pollution abatement. In implementing the Act, the Environmental Protection Agency (EPA) identified pollutants carried in stormwater runoff as a major source of water contamination. To achieve the pollution abatement goals of the Act, EPA provided assistance to State and local governments to develop Areawide Water Quality Management Plans, or "208" Plans" as they are commonly known. The 208 Plans addressed a broad range of potential water pollution sources, including stormwater, and focused on identifying pollutant

sources and abatement needs, as well as development of regulatory programs to ensure implementation. At present, there are no Federal regulations for stormwater management concerning quantities of stormwater runoff.

The Florida Department of Environmental Regulation (FDER) has adopted a Stormwater Rule (Ch. 17-25, F.A.C.) to fulfill part of the State's responsibilities under Section 208 of the Federal Water Pollution Control Act. The basic objective is to achieve eighty to ninety-five percent removal of stormwater pollutants before discharge to receiving waters. This rule requires treatment of the first inch of runoff for sites less than one-hundred acres in size and the first one-half inch of runoff for sites one-hundred acres or greater in size.

Implementation of the Stormwater Rule is achieved through a permitting process. DER has delegated permitting responsibility to the South Florida Water Management District (SFWMD), which is the regional water management district with jurisdiction over Palm Beach County. Exemptions to the permit requirements are provided for: 1) facilities serving individual sites for single-family, duplex, triplex or quadruplex units; 2) facilities serving dwelling units on sites which are less than ten acres in total land area, have less than two acres of impervious area, and which comply with local stormwater management regulations or discharge to a permitted regional facility; and, 3) facilities for agricultural or silvacultural lands which have approved management plans.

The Central and Southern Florida Flood Control District (CSFFCD) was created, by Special Act of V the Florida Legislature in 1949 (Chapter 25270; Laws of Florida, 1949), to operate and maintain the Central and Southern Florida Flood Control Project. (Note: The Project was designed and constructed by the U.S. Army Corps of Engineers.) Originally, District Programs were designed to prevent damage to life and property from storm floods.

More recently, however, District priorities have become more oriented to alleviating the problems associated with water as a resource for consumptive use. The Water Resources Act of 1972 (Chapter 373, Florida Statutes) changed the name of the District to the South Florida Water Management District (SFWMD) and greatly expanded its scope of responsibilities to include water management and resource preservation and conservation.

Essentially, the SFWMD is charged with the responsibility to manage all waters, both surface waters and ground waters, within its jurisdictional area. The General Drainage Laws of Florida (Chapter 293, Florida Statutes) allows the FDER, or the majority of the owners of any contiguous body of wet or over-flooded land or lands subject to overflow, to form a Drainage/Water Management District. These Districts are distinguished from the SFWMD in that they are formed by landowners for the purpose of providing drainage or irrigation services for their own lands. Normally, these Districts are dependent upon the SFWMD project works to dispose of excess surface waters or provide irrigation water. Therefore, it can be said that these small

Districts provide "secondary" drainage and irrigation services that are dependent upon the "primary" system, operated by the SFWMD. As such, each District is subject to the Surface Water Management Permit System administered by the SFWMD.

The General Drainage Laws grant a rather wide range of powers to Drainage Districts in relation to the provision of drainage, irrigation, and water management services.. In addition, the laws are open-ended, in that provision is made for Drainage Districts to be granted the authority to provide virtually any additional municipal service by Special Act of the Florida Legislature.

Each District is required to prepare a Water Management Plan, which is a full and complete plan for draining and reclaiming lands, including specifications for the length, width and depth of any canals, ditches, dikes, levees or other works proposed. No related improvement can be undertaken that is not consistent with this Plan. At the present time, there are no Drainage Districts within the Town of Lake Park's corporate limits, and only one (1), Northern Palm Beach County Water Control District (Ref: Figure 6.3-1) that is directly upstream from the Town. Through the Town Public Works Department, regulation of new development is accomplished by local ordinances and cooperation with other regulatory agencies.

6.5.2.1 Climatological Conditions

The climate of the area is generally influenced by the warm waters of the Gulf Stream and the Atlantic Ocean. The range of temperatures throughout the year is comparatively small, with the average (mean) annual temperature being approximately 75 F. Annual rainfall for the area averages approximately sixty inches. The average wind speed is 9.4 miles per hour and the prevailing direction is from the east-southeast.

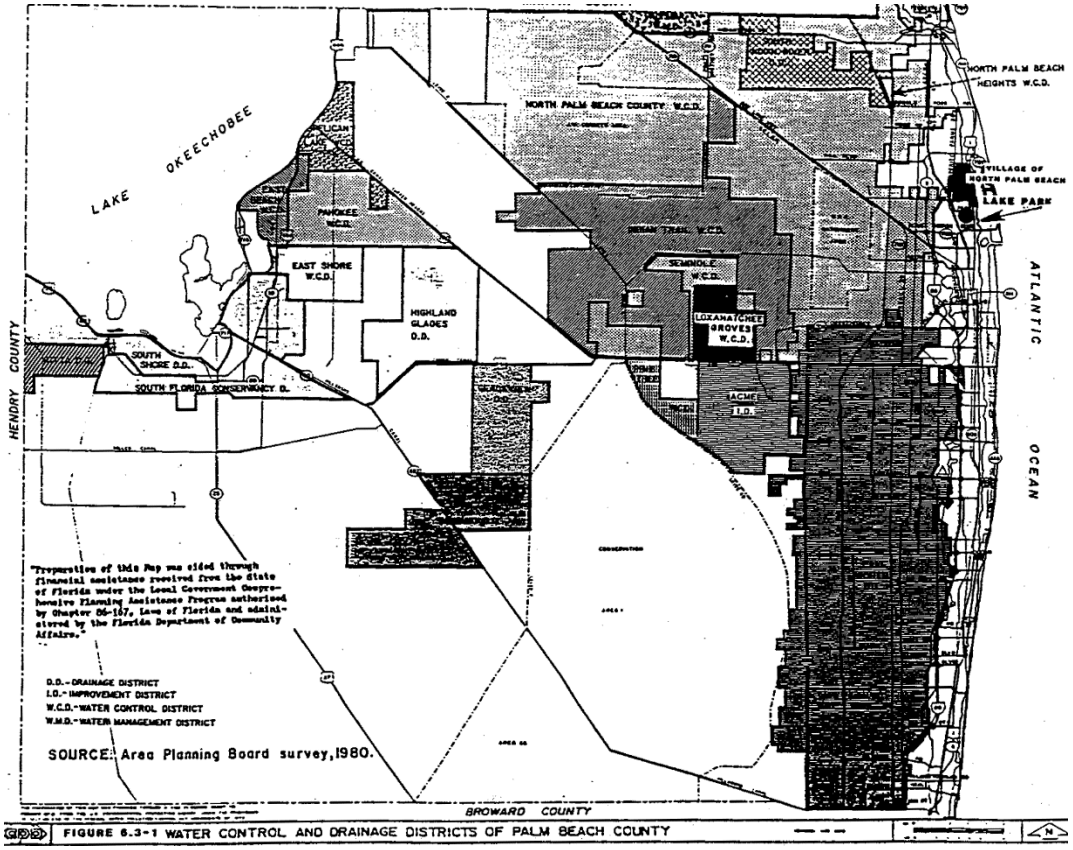
6.5.2.2 Primary Drainage Features

Palm Beach County is only one of sixteen Counties being served by a major project designed and constructed by the U.S. Army Corps of Engineers to prevent damage of life and property from storm floods. The SFWMD is the local agency charged with the responsibility to operate and maintain the project canals, structures and associated facilities. The surface water hydrology of the SFWMD is characterized by an extensive, heavily-managed canal network, a series of large capacity, low head pumping installations and several surface water impoundment areas that comprise more than one-thousand miles. The major systems are the Kissimmee Lakes and River; Lake Okeechobee; the Everglades region, including the Everglades Agricultural Area (EAA), Water Conservation Areas and Everglades National Park; the Lower East Coast Canal System (Dade, Broward and Palm Beach Counties); the Upper East Coast Canal System (Martin and St. Lucie Counties); and the Caloosahatchee Canal Basin.

The Lower East Coast Canal network is the system that has the most direct effect on the Town of Lake Park. Four major canals (i.e. the West Palm Beach, Hillsboro, North New River, and Miami Canals) serve as primary drainage outlets for excess water from the Everglades Agricultural Area and the Water Conservation areas, and as secondary outlets for excess water from Lake Okeechobee. The Coastal Canal networks of Palm Beach County provide primary drainage for the intensely

developed southeastern urban and agricultural areas. Stages in these canals are maintained at set levels that vary with the se0sons. During the wet season, canal stages are generally maintained at a low level to provide additional water storage capacity for runoff. During the dry season, canal stages are usually maintained at higher levels to provide additional ground water recharge and to prevent salt water intrusio

Figure 6.3-1 WATER CONTROL AND DRAINAGE DISTRIC175 OF PALM BEACHCOUNTY

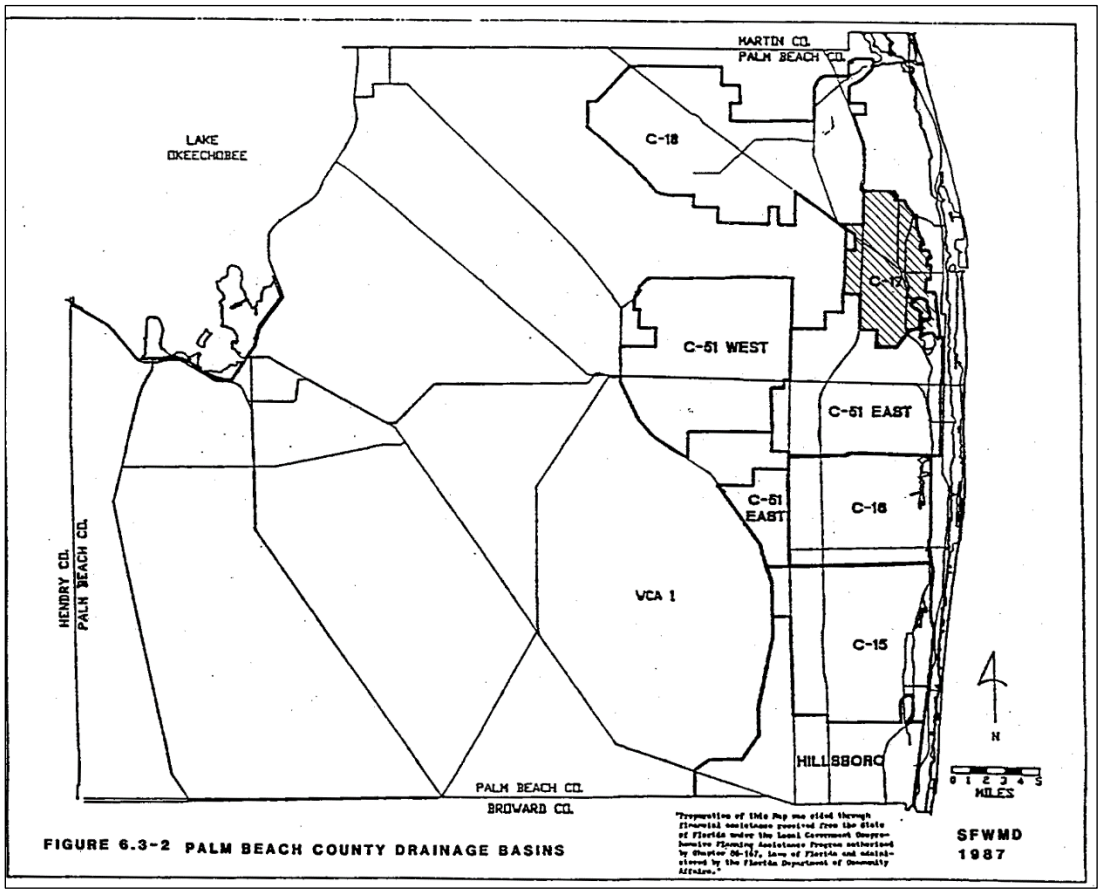


The coastal canals allow transfer of water from the Everglades Water Conservation Areas to coastal communities during times of drought. This water recharges major wellfields that are located near the canals and raises the ground water levels in coastal areas to provide additional water to self-supplied water systems. Generally, the coastal canals drain to the east toward the Atlantic Ocean. Water stages in the eastern reaches of these canals are controlled by a series of water, control structures, most of which are automatically operated (i.e. with manual overrides) to open and close in response to the water level in the canals.

The C-17 Canal is the coastal canal which the Town utilizes as one of its major stormwater discharge canals. The C-17 Basin has an area of approximately thirty-two square miles, as shown on FIGURE 6.3-2. The C-17b Canal is the only Canal in the' C-17. Basin. It has two functions: (1) to provide flood ' protection and drainage for the C-17 Basin, and (2) to maintain a ground water table elevation

near the lower reach of the C-17 Canal adequate to prevent saltwater intrusion into local ground water. Excess water in the Basin is discharged into tide water in Lake Worth/ICWW by way of the S-44 Salinity Control Structure. In general, the only water supply to the Basin is from local rainfall.

Figure 6.3-2 Palm Beach County Drainage Basins



The C-17 canal begins just south of 45th Street and east of I-95, and is a continuation of a City of West Palm Beach Canal C-17 is aligned north-south approximately parallel to and east -95. North of Northlake Boulevard the Canal turns to the east, discharging to the Intracoastal Waterway just north of`6-Singer island. Flow in the Canal is to the north and then to the east to the Intracoastal Waterway. Flows to the C-17 Canal are by various canals under the management of local municipalities and the Northern Palm Beach County Water Control District. Two important tributaries are the City of West Palm Beach Canals that drain the lands in the basin south of 45th Street and the second including the lands east of Lake Mangonia and Clear Lake. The M-Canal is not part of the C-17 basin system.

There is one SFWMD structure controlling flow in the C-17 basin. S-44 is a gated spillway located in the alignment of-C-17 just east of State Road Alternate A-1-A, just outside the western corporate limits of the Village of North Palm Beach, north of Northlake Boulevard. The structure controls water surface elevations in C-17, and regulates discharges to the Intracoastal Waterway. A headwater stage is maintained by S-44 adequate to prevent intrusion of saltwater into local ground water.

6.5.2.3 Local Drainage System

The Town of Lake Park prepared (i.e. March, 1986) a study, entitled Engineering Investigation and Report - Comprehensive Storm Drainage Improvements Program. Major objectives of the study were to: (1) Analyze the existing storm water drainage system to determine the capacity of the system and the adequacy of the system to collect and transport the storm water runoff imposed on the system by the design storm event; and (2) Recommend rehabilitation and/or improvements to the existing storm water drainage system in order to provide sufficient capacity to handle the design storm event.

The remainder of this Sub-element is a summary of pertinent data from the March, 1986 Report. The area of the Town lying, to the east of the Florida East Coast Railroad right-of-way (i.e. Planning Areas 1 and 2) is drained by a combination of systems, including ground surface percolation and positive underground gravity drainage through a series of conduits to outfalls into South Lake and Lake Worth. The remaining area (i.e. Planning Area 3) contains limited positive drainage with surface waters ultimately reaching outfalls either westward into the Earman River (C-17) or southward along the old Dixie Highway to the City of Riviera Beach Outfall No. 1 into Lake Worth, Figure 6.3-3 shows the existing drainage system of the Town. This map is the result of extensive field surveys, measurements and investigations and shows the locations of drainage structures, routings of drainage pipes and locations of outfalls in the Town's drainage system.

As shown in Table 6.3-1, the Town's existing drainage system contains approximately 28,577 feet of drainage pipe ranging in size from 10-inch diameter to 60-inch diameter. The existing drainage system also contains 190 inlets, 22 manholes and 13 outfalls. Of the existing outfalls, 7 discharge to Lake Worth, 1 discharges directly to the Earman River, 3 discharge to South Lake and 2 discharge to a local drainage ditch which connects to Canal C-17.

Also shown on Figure 6.3-3 are the drainage structures and pipe routings for those drainage systems which are owned, operated, and maintained by Palm Beach County and the Florida Department of Transportation (F.D.O.T.). These systems are located along U.S. Highway One, Old Dixie Highway, Northlake Boulevard, Tenth Street and Prosperity Farms Road.

TABLE 6.3-1

SUMMARY OF QUANTITIES
EXISTING DRAINAGE SYSTEM
TOWN OF LAKE PARK, FLORIDA

Drainage Basin Number	Reinforced Concrete Pipe (Lineal Feet)												Corrugated Metal Pipe (Lineal Feet)				
	12"	15"	18"	21"	24"	27"	30"	36"	42"	48"	54"	60"	10"	12"	15"	24"	36"
1	--	--	--	--	33	--	--	360	--	--	--	--	--	--	--	--	--
2	--	87	--	--	37	--	1,027	--	--	--	--	--	--	--	--	--	--
3	--	53	--	--	86	--	437	392	--	--	--	--	--	--	--	--	--
4	21	52	--	--	34	--	153	--	--	--	--	--	--	--	--	--	--
5	--	95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	37	284	512	220	78	86	221	--	--	--	--	--	--	--	--	--
10	--	--	32	--	--	--	32	409	--	--	--	--	--	--	--	--	--
11	--	823	763	--	36	--	324	--	--	--	--	--	--	15	--	--	--
12	178	486	434	--	654	--	1,685	1,891	514	1,858	674	2,168'	--	12	--	122	214
13	--	36	--	--	37	--	474	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	492	795	1,681	285	1,543	--	47	2,377	--	--	--	--	161	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	79	--	39	--	1,247	67	--	--	--	--	--	--	--	--	--
19	--	40	80	--	--	--	449	352	--	453	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTALS	691'	2,504'	3,414'	797'	2,719'	78'	5,961	6,069	514'	2,311'	674'	2,168'	161'	12'	115'	122'	214'

NOTE: The quantities shown above for various diameters of storm drainage pipe, manholes, and inlets are only for those storm drainage facilities owned and operated by the Town of Lake Park.

6.5.3 Drainage Analysis

6.5.3.1 Capacity Assessment

The majority of the fully developed areas of the Town are drained by grassy swales in residential neighborhoods leading to storm sewers having outfalls either into South Lake or-Lake Worth. The most extensive of' these system reaches from the vicinity of Ilex Court and Eighth Street in the northwestern residential area to the Lake Worth outfall which lies along the northern boundary of the Lake Park Marina. At that point the drainage conduit has a diameter of 60 inches. The positive drainage associated with U.S. Highway One between Palmetto Road and Cypress Drive, also ties into this particular system.

Much of the north-central and eastern residential areas north of Park Avenue are served by a diversion - retention system composed of grass swales leading to catchment basins or French drains or a single retention system consisting of grass swales leading to direct groundwater percolation. The northernmost residential areas are served by a combination of grass swale retention and 4 positive drainage into South Lake or the Earman River. The north and South Killian Drive area is served by a combination of grass swale retention and positive drainage into a local drainage ditch which runs south along the west Corporate Limit of the Town to approximately Watertower Road and then runs west to Canal C-17.

It is significant to note that of the seven outfalls into Lake Worth, only one is associated with drainage to the west of U.S. Highway No. 1. This is because each drainage easement to the east of U.S. Highway No. 1 is capable of handling storm water runoff from only a limited area. Each outfall lies at an elevation such that during seasonably high tides and during storm tidal surges, the tidal waters of Lake Worth cover the conduit outlets. To be effective, each drain conduit should convey water at a volume and velocity sufficient to force the storm water runoff into Lake Worth against tide level. However, such is not the case in this area. Instead, the slight difference between land surface elevation and that of Lake Worth does not provide the 1 needed hydrostatic pressure. The net result of this is that when even moderate rainfall occurs at a high tide, storm water runoff fills the drainage line and backs onto the street surfaces and 11 roadside properties causing flood conditions. During the fall and spring seasons when the maximum tidal levels occur, the Lake Worth waters have been observed to flow in reverse through the conduits and inlets causing flooding conditions even without a rainfall event occurring. Furthermore, the intrusion of Lake Worth waters into these outlets brings with it sand and silt deposits which contribute heavily to the clogging of these drains such that the subsequent rains bring about local flooding because their drainage pathway is blocked. Additional maintenance is required to periodically remove clogged material from these lines.

One of the most serious drainage problems in Lake Park at this time is that associated with Lake Shore Drive and its surrounding' environs. Because of the

conditions described in the previous paragraph, this area experiences frequent flooding. As the area has developed, the properties immediately to the east of Lake Shore Drive have become elevated to positions significantly higher than the general level of the adjacent road. Water draining to the east of the paved road surface is prevented from off-site discharge and if the positive drainage system is filled to capacity ponding occurs on the roadway and/or flows to the side of the roadway to pond adjacent properties. This situation has led to the serious deterioration of the roadway surface such that its original design function has been lost. The road frequently becomes impassable during rainstorms and for varying periods thereafter.

Another area of major concern is along Second Street from Palmetto Road to Silver Beach Road. This area is served by a single retention system consisting of grass swales leading to direct groundwater percolation. There are some limited catchment basins with French drains in this area but have long since become clogged and are ineffective. As a result severe ponding is experienced along this street both during rainfall events and for several days afterwards.
Other areas in Lake Park which are experiencing similar problems as a result of inadequate or non-existent storm drainage facilities are the Newman Road - Reed Road - Miller Road area near Silver Beach Road and Old Dixie Highway, the Crescent Circle area, the Seminole Boulevard area, Tenth Court at the southern end, Magnolia Drive and Laurel Drive east of Tenth Street, Ninth Street at Cypress Drive, various locations along Park Avenue, the Watertower Road and East Street area and numerous intersections where standing water disrupts the flow of traffic and heavily contributes to the deterioration of road surfaces.

An important element of Lake-Park drainage system is the use of grassed swales. Grassed swales are shallow grass-covered ditches with broad side slopes and slight gradients which are used to move runoff waters from rainfall slowly. The gentle gradients encourage the off road ponding of runoff water to permit infiltration into the soil supporting the grass cover. The grasses serve as a filter, trapping some of the sediments (particulate matter washed out of the air or off the adjacent paved surface) and, to a small degree, absorbing some dissolved pollutants. The type and conditions of the grass and soil is a .major factor in this respect. Swales can be used to remove from the streets and temporarily store large amounts of storm water runoff thus maintaining traffic flow and safety. The swales, by reducing the rapid concentrations of flow at downstream positive discharge systems, reduce the loading on those systems and therefore the magnitude and cost of those facilities. Grass swales are relatively easy to maintain and replace if necessary. In addition, swales can enhance the appearance of the area.

Another problem which is related to the storm drainage system is the deterioration of joints and pipes in the system. As joints and pipes deteriorate they begin infiltrating groundwater into the storm drainage pipe which also transports surrounding soils into the pipe. This process, if left unchecked, creates voids in the soils surrounding the pipe and also clogs the storm drainage pipes thus reducing their capacity to transport storm water runoff. Among the more notable examples is the 36-inch diameter corrugated metal drainage pipe which

failed along Sixth Street near Bayberry Drive in 1983, the road surface on West Jasmine Drive between Eighth and Ninth Streets, and the road surface on Third Street between Date Palm Drive and Cypress Drive. It is noted at this-point that Lake Park's drainage system is not the result of a long-range master plan for the implementation of a well-integrated ground surface percolation and positive underground piping storm water drainage system. To the contrary, it is the cumulative result of piecemeal development which has occurred over several decades and has been maintained more or less on an emergency basis.

A major conclusion to the study was that most of the existing drainage system did not have sufficient capacity to adequately dispose of surface runoff from a 3-year design storm, although actual 'levels-of-service were not calculated. This most likely was the result of not having a long-range master drainage plan to implement as the system grew. Another contributing factor is that the F.D.O.T. rainfall intensity-duration curves used in this study were revised in 1978 based on recent statistical rainfall data. The F.D.O.T. curves used previously for estimating rainfall intensity predicted values approximately 10 to 15 percent lower than the current curves predict. Therefore, either the existing system had to be replaced with pipes of greater capacity or the runoff in the system had to be reduced.

Because the Town is substantially developed in the areas under investigation, the use of surface retention/detention facilities is not feasible. The solution recommended in the study was to use exfiltration trenches, also referred to as French drains or seepage trenches, along the new drainage pipes constructed. In order to specifically define needed improvements, the Town was divided into 25 drainage basins. (Ref: Figure 6.3-3) with each basin having its own outfall. The conclusions and recommended improvements for each drainage basin are presented below. The recommended improvements will upgrade the Town drainage system to current engineering design standards for storm water drainage and provide capacity in the system to handle the design 3 year storm event.

Drainage Basins 1 through 6

The recommended improvements to these drainage basins include constructing additional inlets and drainage pipes, reconstructing two existing outfalls, removing or plugging existing inlets and drainage pipes not being retained, adjusting and/or constructing all inlet grates to a minimum elevation of 4.0 MSL, raising the centerline of pavement to a minimum elevation of 4.67 MSL, reconstructing concrete sidewalks and grassed swales to the typical street cross section and adjusting existing driveway turnouts as required. No exfiltration trenches are recommended in these drainage basins because of the high ground water levels present relative to the surface elevations.

Drainage Basin 7

No Improvements Recommended.

Drainage Basin 8

No Improvements Recommended.

Drainage Basin 9

The recommended improvements to this drainage basin includes constructing additional inlets and drainage pipes, exfiltration trenches, removing and/or plugging existing inlets and drainage pipes not being retained, adjusting existing inlet grates, eliminating existing Crossroad swales, reconstructing grassed swales to the typical street cross section and adjusting existing driveway turnouts as required.

Drainage Basin 10

The recommended improvements to, this drainage basin include constructing additional inlets and drainage pipes, exfiltration trenches, adjusting existing inlet grates, eliminating existing cross road swales, reconstruction grassed swales to the typical street cross section, reconstructing deteriorated pavement and concrete sidewalks and adjusting existing driveway turnouts as required.

Drainage Basin 11

The recommended improvements to this drainage basin include constructing additional inlets, manholes, and drainage pipes, exfiltration trenches, constructing a new transmission main along Greenbrier Drive east to a new outfall at Lake Worth, a pollution control structure, reconstructing grassed swales to the typical street cross section, removing or plugging

existing inlets and drainage pipes not being retained and adjusting existing driveway turnouts as required.

Drainage Basin 12

The recommended improvements to this drainage basin, include constructing additional inlets, manholes, and drainage pipes, exfiltration trenches, adjusting existing inlet grates, reconstructing grassed swales to the typical street cross section, removing or plugging existing inlets and drainage pipes not being retained, reconstructing concrete sidewalks and adjusting existing driveway turnouts as required.

Drainage Basin 13

The recommended improvements to this drainage basin include constructing additional inlets and drainage pipes, exfiltration trenches, adjusting existing inlet grates, eliminating existing cross-road swales, reconstructing pavement and

concrete sidewalk on orange Drive, reconstructing grassed swales to the typical street cross section and adjusting existing driveway turnouts as required.

Drainage Basin 14

The recommended improvements to this drainage basin include constructing additional inlets and drainage pipes, exfiltration trenches, reconstructing grassed swales to the typical street cross section and adjusting existing driveway turnouts as required.

Drainage Basin 15

The recommended improvements to this drainage basin include constructing additional inlets and drainage pipes, exfiltration trench, adjusting existing inlet grates, reconstructing deteriorated pavement and sidewalks, removing or plugging existing inlets and drainage-.pipes not being retained, reconstructing grassed swales, to the typical street cross section and adjusting driveway turnouts as required.

Drainage Basin 16

The recommended improvements to this drainage basin include constructing additional inlets and drainage pipes, exfiltration trench and restoring the existing paved surface disturbed.

Drainage Basin 17

No Improvements Recommended.

Drainage Basins 18 and 19

The recommended improvements to these drainage basins include constructing additional inlets and the drainage pipes, reconstructing the grassed swales to the typical street cross section, stabilizing the swales to prevent further erosion and adjusting existing driveway turnouts as required.

Drainage Basin 20

The recommended improvements for this drainage basin include constructing inlets and drainage pipe, exfiltration trench, an outfall structure, reconstructing the grassed swales to the typical street cross section, stabilizing the swales to prevent further erosion, adjusting existing driveway turnouts as required and obtaining a drainage easement to Canal C-17.

Drainage Basins 21, 22 and 23

No Improvements Recommended.

Drainage Basin 24

The recommended improvements for this drainage basin include constructing inlets and drainage pipes, exfiltration trench, an outfall structure, reconstructing the grassed swales to the typical street cross section and adjusting existing driveway turnouts as required. Because this basin eventually discharges to Canal C-17 the drainage system improvements will have to -satisfy the water quality and quantity requirements of the S.F.W.M.D.

Drainage-Basin 25

No Improvements Recommended.

In addition to the above basin-specified improvements, several general maintenance type recommendations were included in the study. The Town's existing drainage system contains approximately 28,577 feet of drainage pipe ranging in size from 10-inch diameter, to 60-inch diameter, 22 manholes and 190 inlets and manholes. The recommended drainage system improvements includes constructing 57,661 feet of drainage pipe ranging in size from 15-inch diameter to 60-inch diameter, 31,175 feet of exfiltration trench and 418 inlets. The recommended improvements include either removing or plugging and abandoning 11,922 feet of drainage pipe and 101 inlets or manholes which are now part of the existing drainage system. Therefore, after the recommended improvements are completed there will remain 16,655 feet of drainage pipe and 111 inlets or manholes which are not part of the existing drainage system.

It is imperative that those portions of the existing drainage system be cleaned, evaluated and repaired as necessary to restore their original hydraulic capacity and structural integrity.

6.5.3.2 Expected Life of the Drainage System

The Town drainage system has an indefinite life expectancy. When problems occur, the system will be repaired on an as-needed basis and by preventative maintenance performed to maintain system effectiveness. A routine drainage inspection schedule should be established in order to adequately plan and budget future repairs or improvements to the system.

6.5.3.3 Drainage System Impact on Natural Resources

The Town drainage system impacts upon adjacent natural resources are considered to be minimal. Since the Town is currently eighty-five percent developed with buildout projected in 1995, it is reasonable to assume that the

future development will have a minor impact on the surrounding natural resources provided proper planning and current regulations are implemented.

6.5.3.4 Major Natural Drainage Features

The major natural drainage features in Lake Park are primarily the surface water bodies that border and run through or pass near the Town, including Lake Worth; C-17 Canal; South Lake and the Earman River. The highest elevations occur in the interior of the Town approaching 40.0 feet NGD, then generally gently slopes .toward the water bodies. All other drainage features are due to the design and construction of the current system.

6.5.3.5 Existing Regulations

The regulation of new development is accomplished by local ordinances and cooperation with other regulatory agencies. Town ordinances requiring permits prior to construction and development are administered through the Public Works Department .and include the following:

1) Subdivision Ordinance

2) Ocean Setback Ordinance;

3) Bulkhead, Dock and Wharves Ordinance;

4) Standard Building Code;

5) Flood Damage Prevention Ordinance;

6) Coastal Zone Construction Code; and

Further, for new developments to be constructed in the Town, the following minimum design standards must be met to comply with adopted Town Ordinances:

1) Minimum street grade shall exceed calculated flood levels resulting from a ten year storm tide, plus rainfall runoff;

2) The finished floor of, all structures shall exceed the one-hundred year tidal flooding and rainfall runoff level;

3) Storm drainage facilities, including swales, inlets and conduits, shall be designed on runoff predicted from a three year intensity rainfall curve in general use in the Town area;

4) Open channels and outfall ditches for the purpose of conveying storm runoff are not allowed;

5) In order to minimize the degradation of water quality in receiving water bodies, landscaped areas, grass areas or other natural vegetated areas must be used to receive runoff from buildings, pavement or other impervious areas to the degree that pollutants from -these areas may be absorbed by the vegetation or percolated into the soil;

6) No runoff from buildings, pavement or other impervious areas shall be discharged directly into any inlet or storm-sewer without first being given the opportunity to pass through a natural vegetated area;

7) At all potential areas of soil erosion shall be protected to minimize siltation transport by flowing water; and

These regulations are implemented through the Town development approval process.

The Palm Beach County 208 Plan recommended that several nonstructural storm water related Best Management Practices (BMP's) be implemented on a County-wide basis. These BMP's are designed to be a cost effective approach to reduce the detrimental impacts of pollution from storm water runoff. The Town should consider the adoption of these BMP's for inclusion into the site plan review process.

In addition, the Town remains receptive to future regulations that further protect the environment and the quality of life of residents and their neighbors.

6.6 POTABLE WATER SUB-ELEMENT

6.6.1 Introduction

The POTABLE WATER sub-element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(c), Florida Statutes, establishes the POTABLE WATER sub-element requirement and Chapter 9J5.011, Florida Administrative Code, establishes minimum criteria to guide it's preparation.

The sub-element contains a summary of the data, analyses and support documentation necessary to form the basis for the future potable water goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the POTABLE WATER sub-element is structured according to the following for Mat:

- Potable Water Data;

- Potable Water Analysis; and

- Town Goal, Objectives and Policies. Initial potable water data is presented on a system-wide basis; however, for the purposes of defining Town specific service levels and needs, the sub-system level may be used.

6.6.2 Potable Water Data Summary

The Federal government has established quality standards for the Protection of water for public use, including operating standards and quality controls for public water systems. These regulations are provided in the Safe Drinking Water Act, Public Law 93-523.

This law directed the Environmental Protection Agency (EPA) to establish minimum drinking water standards. The EPA standards are divided into "primary" (those required for public health) and "secondary" (recommended for aesthetic quality) categories.

In accordance with Federal requirements, the Florida Legislature has adopted the Florida Safe Drinking Water Act, Sections 403.850 403.864, Florida-Statutes. The Florida Department of Environmental Regulation (FDER) is the State agency responsible for implementing this Act. In this regard, FDER has promulgated rules classifying and regulating public water systems under Chapter 17-22, Florida Administrative Code. The primary and secondary standards of the Federal Safe Drinking Water Act are mandatory in Florida.

The South Florida Water Management District (SFWMD) is responsible for managing water supplies to meet existing and responsible future demands. Regulation of consumptive use is achieved through a permitting system, through which water resources are allocated among the permitted consumers. The SFWMD rules pertinent to Palm Beach County are contained in Chapter 40E, Florida Administrative Code.

The Environmental Sciences and Engineering Division of the Palm Beach County Health Department is responsible for enforcement of rules adopted by the FDER regulations. Water quality and production records are submitted by each public water system supply operator to the Environmental Sciences and Engineering Division for determination of compliance with FDER regulations.

6.6.2.1 Operational Entity and Service Area

There has been no centralized, countywide potable water systems planning effort in Palm Beach County. Regional wastewater planning in Palm Beach County was promoted by grant programs under the Federal Water Pollution Control Act; however, such programs were not made available for water supply system planning. As a result, without the impetus of funding assistance, similar Countywide or regional planning for water supply systems has not been

performed. Rather, system planning has been accomplished by individual operators (i.e. County or municipal governments and privately-owned utilities).

Seacoast Utilities Inc., a privately owned utility company, provides potable water service to the Town of Lake Park. Seacoast,,, Utilities, Inc., has received e Certificate issued by the Florida Public Service Commission (i.e. Certificate #W-29) to provide t. potable water to a large portion of northern Palm Beach County. The certificated area is illustrated on FIGURE 6.4-1. In addition to Lake Park, North Palm Beach, Juno Beach (portion), Palm Beach Gardens and a portion of the unincorporated area of Palm Beach County-r are served by this utility company. Seacoast Utilities, Inc. also provides emergency back-up water supply services, under a contractual agreement to the Town of Jupiter and to the remainder of Juno Beach.

Seacoast Utilities, Inc. owns, operates and maintains three separate, but interconnected systems to meet potable water supply needs within its certificated area. General service areas for the three systems (i.e. Hood Road; Lilac Street; and Richard Road), including the location of wellfields, treatment plants-and storage facilities, are illustrated on FIGURES 6.4-2 and 6.4-3. While each individual system consists of a separate wellfield, treatment plant, storage facilities and distribution network, they are all linked via a series of interconnections and It distribution line loops. In this manner, Seacoast Utilities 'Inc., has the capability to channel potable water to any point within its certificated service area, depending upon specific needs at any given time; however, for the purposes of this overview, only one of the systems (i.e. Hood Road and Richard Road) will be surveyed since their designated service areas encompass the Town corporate limits. The old Dixie wellfield which provides a portion of the potable water supply for the Richard Road Plant is physically located within the corporate limits of the Town, although the treatment facility is not. Water main locations are illustrated on FIGURE 6.4-

FIGURE 6.4-3 SEACOAST UTILITIES, INC. WATER TREATMENT FACILITIES

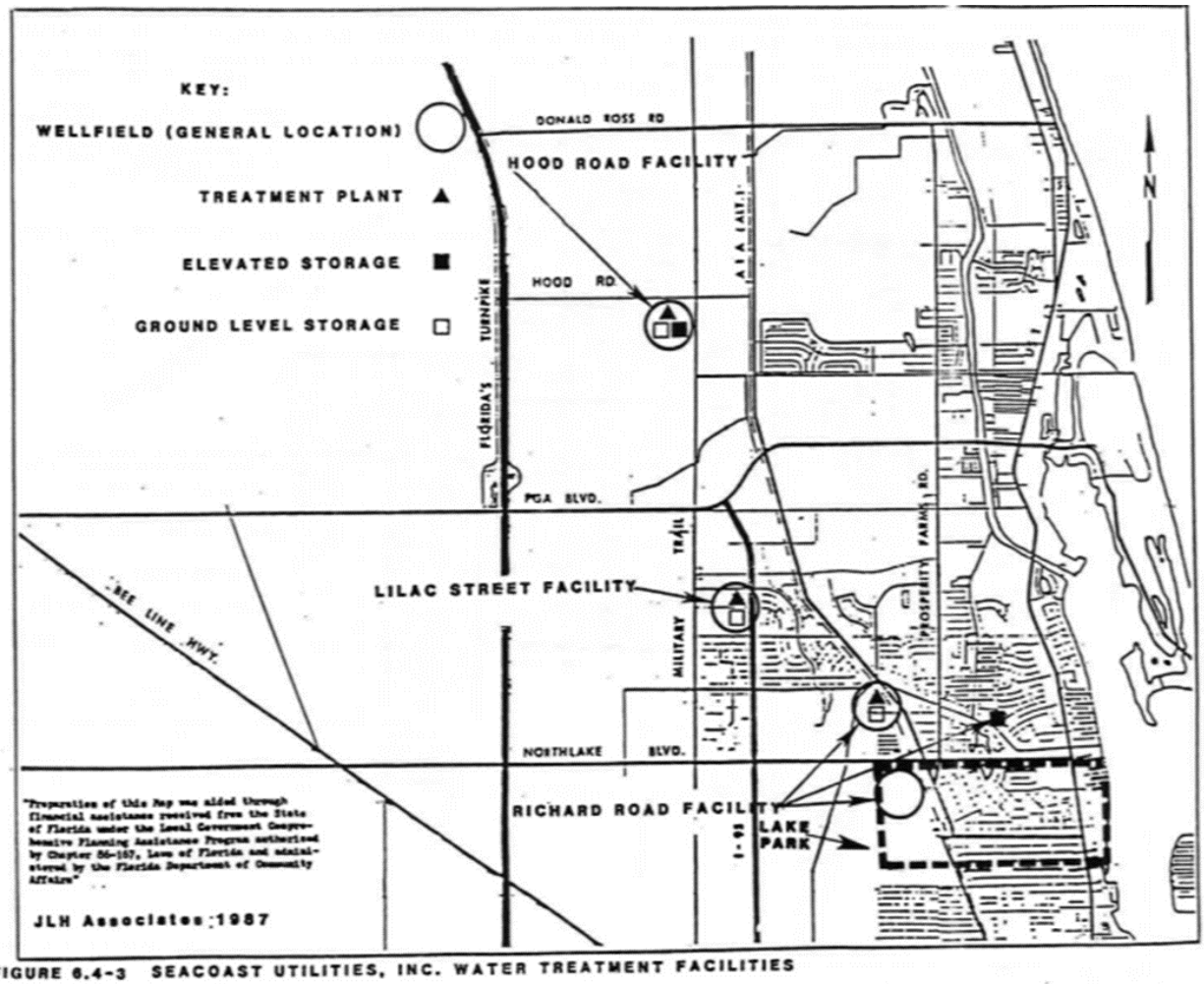


FIGURE 6.4-3 SEACOAST UTILITIES, INC. WATER TREATMENT FACILITIES

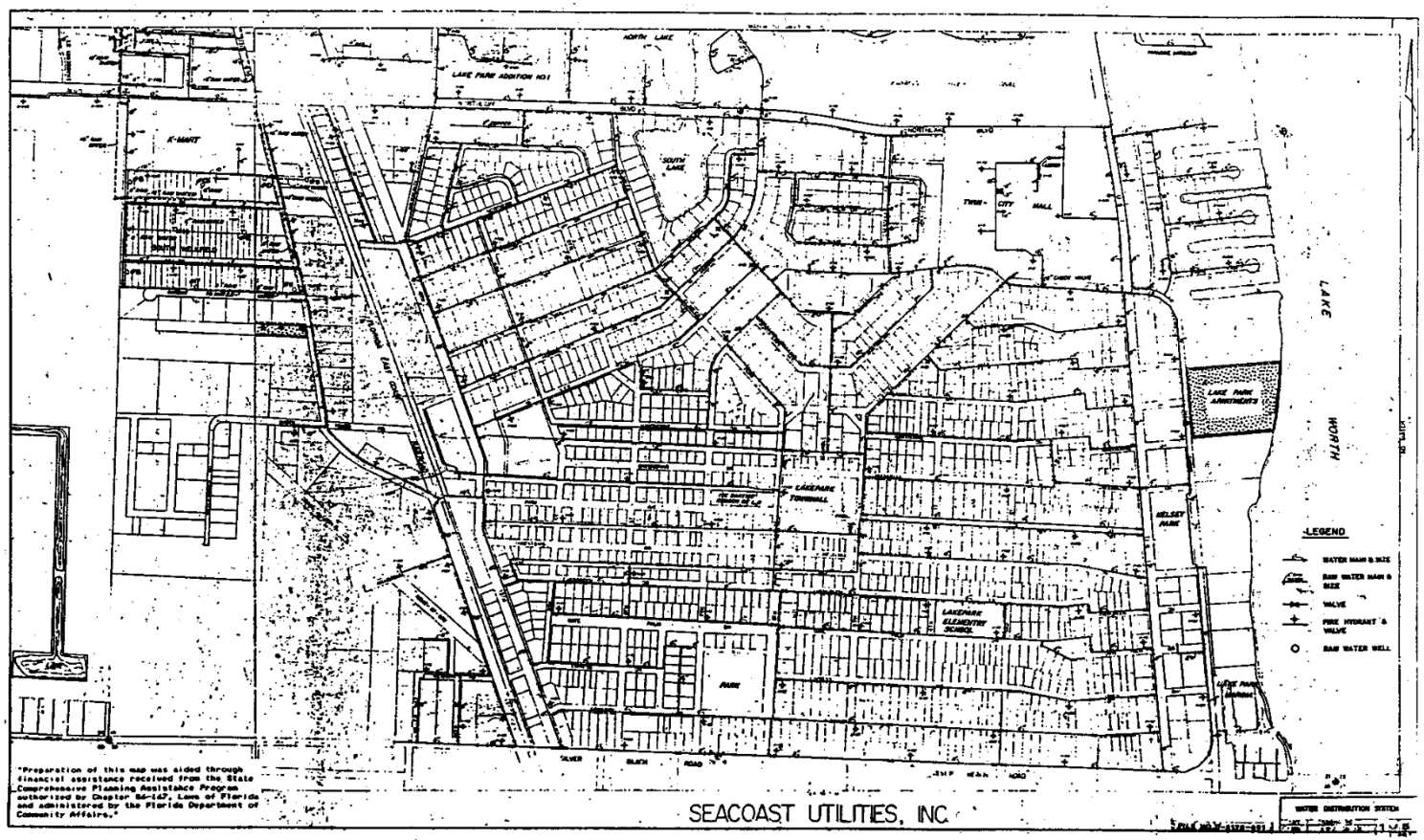


FIGURE 6.4-4 LAKE PARK WATER DISTRIBUTION SYSTEM

6.6.2.2 Design Capacity

Seacoast Utilities, Inc., system components are located on FIGURE 6.4-3. Four wellfields provide the raw potable water supply source for the three Seacoast Utilities Inc. treatment plants. Single wellfields, located at the treatment plant sites, currently provide the potable water supply source for both Hood Road and Lilac Street plants, while two wellfields, one located at the treatment plant site and the other located south of Northlake Boulevard and west of Alternate A-1-A, serve the Richard Road treatment facility. Current statistical information regarding each wellfield is presented below:

The four wellfields, in combination, are served by a total of thirty-eight wells, the average depth of which is approximately one hundred (100) feet, with diameters ranging in size from twelve inches to sixteen inches. Permitted capacity (i.e. by the South Florida Water Management District) is expressed both on an average day and a maximum day basis. Total permitted average day withdrawal is 19.3 MGD (i.e. including both wellfields that serve the Richard Road Plant), while total permitted maximum day, withdrawal is 31.5 MGD. The defined wellfield protection area of the Old Dixie Wellfield is within the Town limits Design capacity at each of the three treatment facilities is equivalent to the maximum day water withdrawal rate permitted by the South Florida Water Management District (SFWMD). The following information illustrates the relationship between plant design capacity and actual potable water treatment activities (i.e. 1986) at each of the three plants:

	Hood Road	Lilac Road	Richard Road
Plant Capacity	20.0 MGD	4.0 MGD	7.5 MGD
Average Daily Flow	6.6 MGD	1.2 MGD	3.1 MGD
Maximum Daily Flow	9.7 MGD	1.7 MGD	4.6 MGD

From the above, it can be seen that maximum daily flow to plant capacity. Ratios for each plant areas as follows: Hood Road - 48.5%, - Lilac Street - 42.5%; and Richard Road - 53.3%. On an overall system basis, the maximum daily flow to plant capacity ratio is 61.3%.

Seven facilities, with a combined capacity of 7.6 MGD, provide potable water storage for the three Seacoast Utilities, Inc. systems. The distribution among the three treatment facilities is illustrated below:

	Hood Road	Lilac Street	Richard Road
Type	0.3 MGD	None	
Elevated Storage	1.0 MGD	1.0 MGD	0.3 MGD
Ground Level Storage	2.0 MGD	1.0 MGD	2.0 MGD

All storage facilities, with the exception of the elevated storage facility serving the Richard Road Plant (i.e. located at the Anchorage Road Wastewater Treatment Plant), are located at the water treatment plant sites.

6.6.2.3 Current Demand and Level or Service

The following three system wide water demand characteristics are important for assessing the capacity of water treatment, pumping and transmission facilities to serve customers according to industry standards.

- Annual Average Daily Flow (AADF) - total system water demand for the year divided by 365 days

- Maximum Daily Flow (MDF) - the largest water demand during a single 24-hour day in the year of interest.

Peak Hour Plow (PHF) - the largest demand over a 1-hour period in the year of interest.

Table 6.4-1 presents 1986 water flows for the Eastern and Western Service areas. The Eastern service area coincides with the Richard Road plant service area, while the Western service area includes the service areas of the Hood Road and Lilac Street plants.

Within the Eastern service area, single family and multi-family customers used an estimated 99 gallons per capita per day (gpcd) in 1986. Within the Western service area single-family and multi-family customers used an estimated 92 gpcd. During 1986, non-residential water customers within the Eastern service area utilized 0.8 mgd on an annual average day basis. Within the Western service area, non-residential water customers utilized 1.5 MGD on an annual average day basis.

Based upon the above flow projections and per capita rates, it is concluded that Eastern area population currently being served is, 23,535 and the Western area population is 62,727. Therefore, average daily non-residential potable water consumption can be expressed on the following basis: Eastern service area - 32.7 gallons per capita per day; and Western service area - 24.6 gallons per capita per day. Total consumption, therefore, can be expressed on the following basis: Eastern service area - 131.7 gallons per capita per day; and Western service area - 116.6 gallons per capita per day. Maximum Daily Flow (i.e. calculated in the same manner as above) is therefore expressed as follows: Eastern service area - 195.5 gallons per capita per day Western

Table 6.4-1
Seacoast Utilities, Inc.
1986 Potable Water Flows (MGD)

Customer Group	Eastern Area	Western Area	Entire System
AADF –			
Residential	2.33	6.21	8.54
Non-Residential	0.77	1.54	2.31
Total AADF	3.10	7.75	10.85
Total MDF	4.60	11.40	16.00
Total PHF	6.50	13.90	20.40

AADF is useful for estimating annual operation and maintenance costs and annual revenues from water sales. AADF is generally not used to size transmission, storage, or treatment units because sizing must be based on peak flows.

MDF is utilized for sizing water supply facilities-, such as wellfields, raw water mains, and treatment facilities. Generally, finished water transmission and distribution pipelines are sized to meet the MDF plus flows required for fighting fires.

PHF is used for sizing water storage and pumping facilities. Typically, demands exceeding the MDF are met by water available in storage facilities. PHF is also used in sizing finished water transmission mains.' Pipe performance is checked for both PHF and for MDF with fire flows, and the more severe condition is used to size the mains. Seacoast water facilities currently meet the applicable design criteria and water industry standards.

SOURCE: Seacoast Utilities, Inc.
1986 Flows'(MGD)

	Eastern Area		Western Area	
	Total	Lake Park	Total	Lake Park
AADF	3.1	1.12	7.75	0.58
MDF	4.6	1.70	11.40	0.72

Projections of water consumption, for Lake Park, based upon per capita consumption rates developed above in section consumption are presented on the following Table, for five and ten year projection periods.

Average Daily Maximum Daily			
Year	Population	Flow (mgd)	Flow (mgd)
1986	6,795	0.89	1.33
1994	7,222	0.95	1.41
1999	7,270	0.96	1.42

Based upon the above projections, it is concluded that both current capacities to accommodate projected growth within the Town for both the five year and ten year projection periods. Also, combined plant capacity at the three treatment plants (Eastern and Western service areas) is 31.5 MGD. Utilizing maximum daily flow figures for the year 1999, 4.5% of the plant capacity should be reserved for the Town. Eastern service area potable water treatment facilities have

6.6.2.4 General Performance Evaluation

Although plant capacity is adequate to accommodate current and projected future needs within the Town, the overall system does have problems that are currently being addressed by Seacoast Utilities, Inc. The following comments are excerpted from the report entitled: Analysis of the Seacoast Utilities System for Palm Beach Gardens by Lindahl, Browning, Ferrari and Hellstrom, prepared in 1987.

Well fields

The Old Dixie Wellfield, located within Lake Park, is old and in a deteriorated condition. The wellfield originally contained nine wells. In 1983, the first well was removed from service due to high levels of trichlorethylene. Subsequently, three additional wells have been shut down as a result of contamination. Only three wells are currently in use with two other wells in a standby condition due to trace levels of contamination. The current capacity of the wellfield is 1.18 MGD with the largest well out-of-service. The Old Dixie Wellfield supplies water to the Richard Road Plant. The Richard Road Wellfield also supplies water to the Richard Road Plant. The wellfield is currently comprised of eight wells with a firm pumping capacity of 3.78 MGD with the largest well out of service, according to the Seacoast Water and Wastewater Master Plan. However, a permit application to the DER for use of chloramine for disinfection dated November, 1982, indicates the firm capacity at 2.3 MGD.

Well No. 1 has experienced high chloride levels and will need to be watched closely. However, the chloride levels from this wellfield have not been increasing. Seacoast currently conducts a SWIM (Salt Water Intrusion Monitoring) Program for this wellfield, and this will need to be continued. With the loss of the Old Dixie Wellfield and the current limitations on the Richard Road Wellfield, new wells will need to be developed.

The Lilac Street Wellfield consists of seven wells with a firm capacity of 4.0 MGD. This capacity is with the largest well out of-service and the loss of Well #11 to intrusion of volatile organic chemicals. Of the current six wells, Seacoast is planning to discontinue the use of Well #4 (500 gpm) due to its proximity to Well #11. The shallow monitoring wells in the vicinity of Well #11 have not yielded any data to consider additional Volatile Organic Carbon (VOC) contamination.

The Hood Road Wellfield consists of 14 wells with a capacity of 23.0 MGD with the largest well out-of-service. This wellfield has had water quality problems since its inception. The water from the wellfield has a higher level of total dissolved solids, calcium and more color than the other Seacoast Wellfields. The raw water from this wellfield is pretreated at the wellfield prior to pumping to the Hood Road plant for softening. The pretreatment consists of storage and treatment with potassium permanganate and chlorine. The storage tank presents problems since it was built without any solid collection equipment thus dictating removal from service for periodic solid removal. However, the water while of poorer quality is still within the parameters for lime softening treatment to meet the drinking -water standards service area - 181.7 gallons per capita per day. Since Lake Park is entirely within the Eastern service area, consumption figures for that system are used. Therefore consumption figures for Lake Park are shown on the following Table:

1986 Water Flows – Lake Park

Customer Group	Total
AADF –	
Residential	0.67
Non-Residential	0.22
Total AADF	0.89
Total MDF	1.33

On the basis of the above calculation, it is estimated that the Town of Lake Park currently uses 28.9% Seacoast Utilities, Inc. potable water flows i.e. on an MDF basis) in the eastern service. Overall potable water consumption by Lake Park, within the entire Seacoast Utilities Inc. service area is estimated at 8.1% (i.e._ on an MDF basis).

For planning purposes, the following levels of service should be used for planning in the Town: average daily consumption-131.7 gallons per capita per day; and maximum daily consumption - 195.5 gallons per capita per day.

6.6.3 Potable Water Systems Analysis

6.6.3.1 Facility Capacity Analysis

Plant capacities for the Seacoast Utilities, Inc. plants are as follows: Eastern Area (i.e. Richard Road Plant) - 7.5 MGD; and Western Area (i.e. Hood Road Plant and Lilac Street Plant) 24.0 MGD. Current flows are as follows:

<u>Treatment</u>

The Richard Road Water Treatment Plant was initially constructed in 1956 with a capacity of 1.5 MGD utilizing the lime softening method of treatment. In the early

1960's, the plant was expanded to its current capacity of 7.5 MGD with a 6.0 MGD addition. As stated in the Seacoast Plan, major maintenance is required at this facility. The walkways, aerators, and internal steel components of the softening and filtration tanks are in need of repair and painting or replacement.

The Lilac Street Water Treatment Plant was initially constructed in the middle 1950's. In 1965, a 4 MGD lime softening unit was added. The current rated capacity is 4.0 MGD. As stated in the Seacoast Utilities Water and Wastewater Master Plan, major maintenance is required at this facility. The walkways and internal steel components of the softening and filtration tanks are corroded and in need of repair and painting. The onsite buried steel diesel fuel tank may have to be replaced or leakage monitoring equipment installed. The filter rate of flow controller and valve actuator need replacement.

The Hood Road Water Treatment Plant was initially constructed in 1977, with a capacity of 6.0 MGD. A 1979 expansion increased the capacity to 10 MGD and in 1985, another expansion increased the capacity to 17.5 MGD. The Seacoast Utility Master Plan states that a simple rerating can bring the plant to 20 MGD. As stated in the Seacoast Utility Water and Wastewater Master Plan, major maintenance is required at the Hood Road Plant.

Storage

The Richard Road Water plant has 2,425,000 gallons of storage capacity on site. In addition, the Carolinda Repump Station, which consists of two 750t000 gallon ground level pre-stressed tanks could be placed back into service. The Carolinda station was taken off line in 1981, but Seacoast claims to have maintained the tank. Prior to coming off line, the station was ineffective in maintaining an adequate monochloramine residual in the storage tanks. Prior to placing the Carolinda pump station on line a detailed analysis of its usefulness would be needed. The tanks at the Richard Road are

Ground Storage

- 1 (Clearwell) at 125,000
- 2 Prestressed concrete at 1,000,000 each

Elevated

- 1 steel tank at 300,000.

The steel tank does not serve a storage function as the height of the tank is too low to be functional. Therefore, the firm storage capacity at Richard Road is 1,125,000 which should be adequate for the system

The Lilac Street Water Plant has 2,120,000 gallons of storage capacity. The tanks are all ground level and consists of the following:

- 1 Concrete (Cleanwell) at 120,000 gallons
- 1 Prestressed Concrete at 1,000,000 gallons

- 1 Steel at 1,000,000 gallons

The storage for this system appears adequate.

The Hood Road Plant has 3,300,000 gallons of storage tanks. The tanks consist of the following:

Ground level”

- 1 Prestressed Concrete at 2,000,000 gallons
- 1 Steel at, 11000,000 gallons

Elevated

- 1 Steel at 300,000

However, the storage tanks at Hood Road have a problem. The elevated tank is too low to be effective. The ground storage tanks are only approximately 50% useful due to their elevation relative to the high service pumps. In effect, the storage at this plant is 1,500,000 which is much too low for a system of its size. If high service pumping changes can be made and the system remains connected to the Lilac Street Plant, an additional storage capability of 1,000,000 should be considered.

Transmission System

All three plants are interconnected in the Seacoast system. The water transmission and distribution system consists of 1,050,000 linear feet of pressure mains. Of those mains approximately 640,000 feet are asbestos-cement pipe. Seacoast Utilities, Inc. staff reports the pipe to be in excellent condition.

The water and sewer master plan of Seacoast Utilities Inc. stated the existing pumping and transmission system was capable of maintaining pressure in excess of 40 psi based on 1986 peak hour flow conditions with the exception of the area south of Northlake Boulevard and east of Florida's Turnpike (i.e. outside of the Town *limits). The analysis indicated this area may have pressures near 30 psi. The same analysis of maximum day plus fire flow indicated the system could deliver the fire flows with the exception of Wellesley Gardens (i.e. outside of the Town limits)

Each of the problems outlined above are being addressed by Seacoast Utilities, Inc., and are not the responsibility of Lake Park, in terms of capital expenditures. The only area of the Town where substantial potable water distribution system improvements remain to be implemented is in Planning Area 3.

Any improvements (i.e. local distribution lines, pump stations and transmission mains) will be financed through developer's agreements between property owners and Seacoast Utilities, Inc. as specific projects are approved.

6.6.3.2 Individual Water Wells

It is not known whether or not there are individual wells in use in the Town at this time. However, it is concluded that if there are any in service, the number is minimal. On this basis, it is concluded that there is minimal, if any, impact upon the water supply caused by individual wells in Lake Park. It is not anticipated that any additional development in the Town will be served by individual wells.

6.7 NATURAL GROUNDWATER AQUIFER RECHARGE AND NATURAL GROUNDWATER AQUIFER RECHARGE SUB-ELEMENT

6.7.1 Introduction

The NATURAL GROUNDWATER AQUIFER RECHARGE sub-element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(c), Florida Statutes, establishes the NATURAL GROUNDWATER AQUIFER RECHARGE sub-element requirement and

Chapter 9J5.011 Florida Administrative Code, establishes minimum criteria to guide its preparation.

This sub-element contains a summary of the data, analyses and support documentation necessary to form the basis for future NATURAL GROUNDWATER AQUIFER RECHARGE goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.006 Florida Administrative Code, the NATURAL GROUNDWATER AQUIFER RECHARGE sub-element is structured according to the following format:

- Regulatory Framework Summary;
- Existing Conditions;
- Natural Groundwater Aquifer Recharge Analysis; and
- Town Goal, Objectives and Policies.

The following is provided as a brief overview of the laws and requirements by various levels of government that currently have Jurisdiction in the regulation of groundwater resources or aquifer protection.

In 1986, the Federal Safe Drinking Water Act (PL 93-523) was amended to strengthen protection of public water system wellfields and aquifers that are the sole source of drinking water for a community. The amendments for wellfield protection require states to work with local governments to map wellfield areas and develop land use controls that will provide long-term protection from contamination for these areas. The aquifer protection amendments require EPA to develop criteria for selecting critical aquifer protection areas. The program calls for State and local governments to map these areas and develop protection plans, subject-to EPA review and approval. Once a plan is approved, EPA may enter into an agreement with the local government to implement the plan. As of this writing, EPA has not completed development of the criteria needed to implement this program.

In implementing the Florida Safe Drinking Water Act (Chapter 403, F.S.), DER has developed rules classifying aquifers and regulating their use (Chapter 17-22, Part III, F.A.C.). These rules are currently being amended to strengthen protection of sole source aquifers and wellfields tapping them. 'DER has also established regulatory requirements for facilities which discharge to ground water (Section 17-4.245, F.A.C.) and which inject materials directly underground (Chapter 17-28, F.A.C.). The task of identifying the nature and extent of ground water resources available within the State has been delegated to the regional water management districts. Each district must prepare and make available to local governments a Ground Water Bas Resource Availability Inventory (GWBRAI), which the local governments are to use to plan for future development in a manner which reflects the limits of available resources. The criteria for the inventories, and legislative intent for their use, are found in Chapter 373, Florida Statutes, which reads: "Each water management district shall develop a ground water basin resource availability inventory (GWBRAI) covering those areas deemed appropriate by the governing board. This inventory shall include, but not be limited to, the following:

1) A hydrogeologic study to define the ground water basin and its associated recharge areas.

2) Site specific areas in the basin deemed prone to contamination or overdraft resulting from current or projected development.

3) Prime ground water recharge areas.

4) Criteria to establish minimum seasonal surface and ground water levels.

5) Areas suitable for future water resource development within the ground water basin.

6) Existing sources of wastewater discharge suitable for reuse, as well as the feasibility of integrating coastal wellfields.

7) Potential quantities of water available for consumptive uses.

Upon completion, a copy of the ground water basin availability inventory shall be submitted to each affected municipality, county, and regional planning agency. This inventory shall be reviewed by the affected municipalities, counties, and regional planning agencies for consistency with the local government comprehensive plan, and shall be considered in future revision of such plan. It is the intent of the Legislature that future growth and development planning reflect the limitations of the available ground water or other available water supplies (Section 373.0395, F.S.).

The Florida Legislature has-also directed local governments to include topographic maps of areas designated by the water management districts as prime recharge areas for the Floridan or Biscayne aquifers in local comprehensive plans, and to give special consideration to these areas in zoning and land use decisions (Section 163.3177(6)(c), F.S.). As of this writing, The South Florida Water, Management District (SFWMD) has not completed the GWBRAI for Palm Beach County. Further, the SFWMD has not adopted or designated any areas as prime recharge areas within Palm Beach County. However, the SFWMD regards all undeveloped and open space areas in Palm Beach County as high recharge areas due to the Shallow Aquifer/Surficial Aquifer supporting the County.

The Board of County Commissioners of Palm Beach County, under the authority granted in the Palm Beach County Charter has proposed a Countywide Ordinance known as the Palm Beach County Wellfield Protection Ordinance. This Ordinance will be used for the protection of wells and wellfields by providing criteria for regulating and prohibiting the u.se, handling, production and storage of certain deleterious substances which may impair present and future public potable water supply wells and wellfields. All provisions of this Ordinance are to be effective within both the incorporated and unincorporated areas of Palm Beach County, Florida. Palm Beach County has recently established an Environmental Resource Management Department whose responsibility it will be to administer this Ordinance within the County.

6.7.2 Natural Groundwater Aquifer Recharge Data Summary

During the Ice Age of the Pleistocene period, which occurred approximately one million years ago, glacial movement created tremendous fluctuations in the levels
of the seas. Intrusion and withdrawal of the seas across the peninsula greatly influenced the geology of the region by eroding much of the sand from beaches in Central Florida. These sands, mixed with shellfish, were deposited in an area extending from southern Palm Beach County north to St. Augustine. This deposit of sand and shell material called the Anastasia Formation, underlies the Town of Lake Park and much of eastern Palm Beach County.

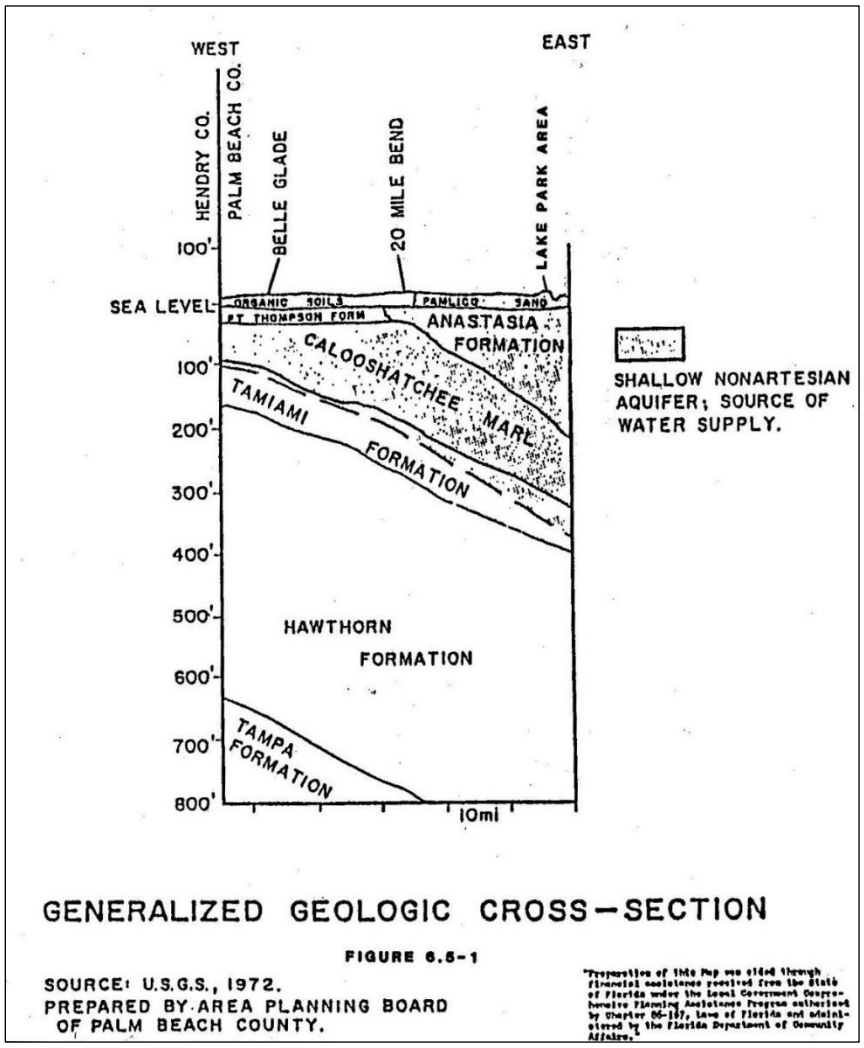
Much of the Anastasia deposit in Lake Park is composed of loose sand and shell covered by a thin layer of sand. The remaining rock formations in this area are the Caloosahatchee Marl of the Pliocene Age, and the Ft. Thompson Formation, and the Miami Oolite from the age of the glaciers, the Pleistocene Age. (See FIGURE 6.5-1).

6.7.2.1 Hydrogeologic Divisions

Geologic formations can be divided hydrogeologically into aquifers, units which produce water, and confining zones, units which separate aquifers and retard the movement of water from one aquifer to another. The hydrogeologic units underlying Palm Beach County are the components of the Surficial Aquifer System (i.e. commonly referred to as the Shallow Aquifer), the intermediate Aquifer System (Hawthorn Confining Layer), and the Floridan Aquifer System, which are further described below:

The Surficial Aquifer System provides almost all of the ground water used in Palm Beach County. It covers the entire County and ranges from about one-hundred-fifty to three hundred-fifty feet thick. FIGURE 6.5-2 identifies the base of this Surficial Aquifer System. Regionally, the system is composed of unconsolidated sand and shell with discontinuous clay and silt lenses overlying limestone and sandstone. The relative percentages of these different components vary considerably throughout the County and may change rapidly over short distances. As a result, the productivity of the system also varies considerably. Transmissivity, which is a measure of the ease with which water can move through an aquifer, ranges from less than 10,000 to greater than 1,000,000 gallons per day per foot.*South Florida Water Management District, Data Documentation for Palm Beach County, 5/3/87

Figure 6.5-1



GENERALIZED GEOLOGIC CROSS-SECTION

FIGURE 6.5-1

SOURCE: U.S.G.S., 1972.
PREPARED BY AREA PLANNING BOARD OF PALM BEACH COUNTY.

"Preparation of this Map was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-187, Laws of Florida and administered by the Florida Department of Community Affairs."

Figure 6.5-2

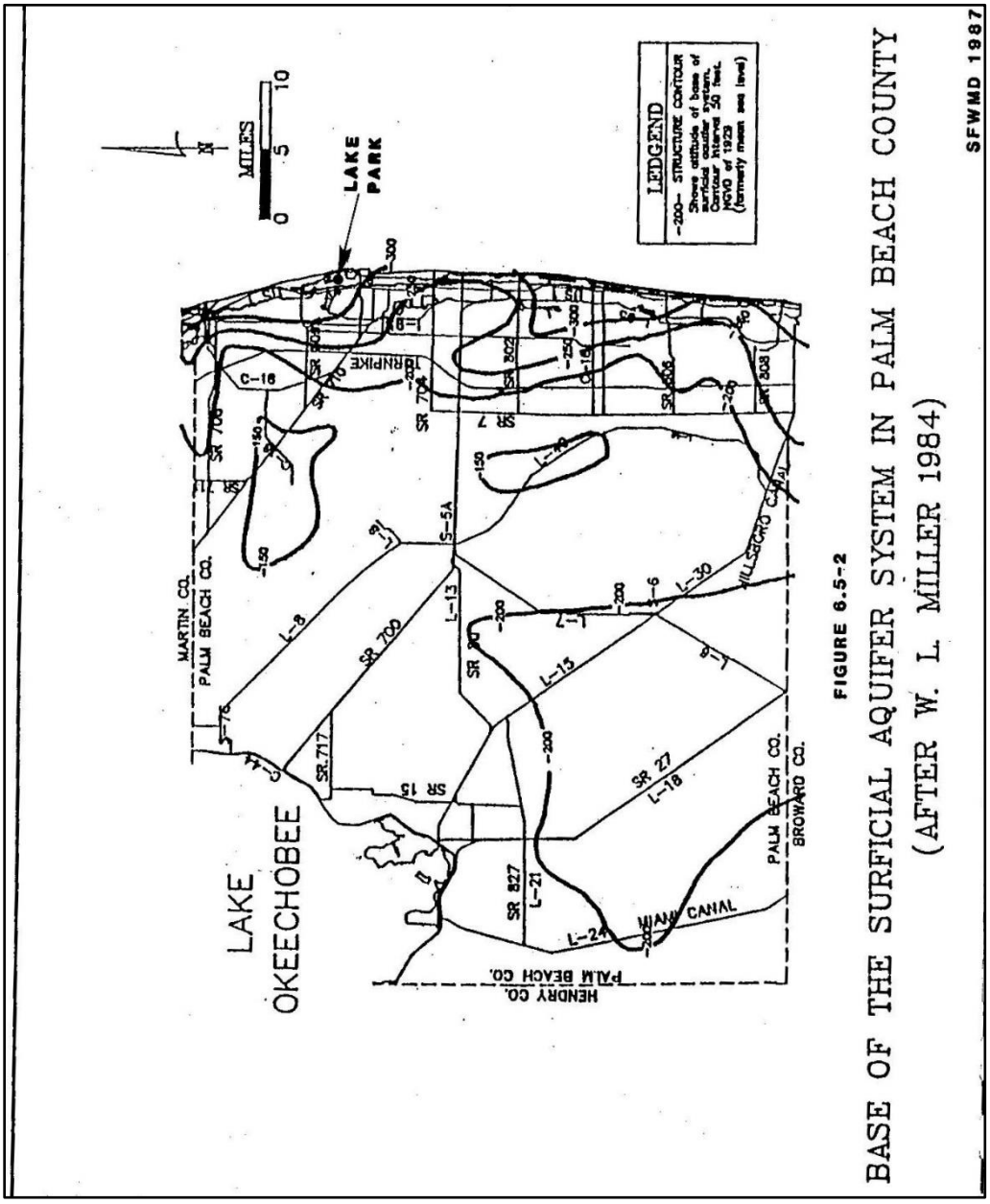


FIGURE 6.5-2

BASE OF THE SURFICIAL AQUIFER SYSTEM IN PALM BEACH COUNTY
(AFTER W. L. MILLER 1984)

SFWMD 1987

The most productive portion of the Surficial Aquifer System is the zone of secondary permeability in the eastern one-third of the County extending from Juno Beach south to the Broward County line. (Note: Refer to FIGURE 6-16, page 6.46 of the North Palm Beach, Support Documentation for the Comprehensive Plan which shows the extent of this secondary permeability zone). This zone, also referred to as the Turnpike aquifer or cavity riddled zone, is the northern extension of the Biscayne Aquifer. The zone is composed of limestone, cemented shell, and sandstone in which the cementing materials have been dissolved to varying degrees. The dissolution of toe cementing material creates small holes and tubes in the rock which form passageways allowing the water to flow easily through the dissolved zones. The zone of secondary permeability is generally about ninety-two feet thick with its top averaging about forty-five feet below sea level, and its bottom averaging about one-hundred-thirty-seven feet below sea level. Transmissivities of greater than 1j000j000 gallons per day per foot have been reported for the zone of secondary permeability and, in general, its productivity is up to double that of the nonsolutioned part of the system in the eastern part of the County.

The aquifer in the western two-thirds of the County is significantly less permeable than in the eastern one-third due to a higher clay and silt content and poorer sorting of aquifer materials. This portion of the aquifer is overlain by a nearly impermeable fresh water marl ranging from a few inches to several feet thick. Residual sea water is common in this part of the aquifer due to low permeabilities.

Water levels in the Surficial Aquifer System range from a high of twenty-two feet NGVD in the north-central part of the County to close to sea level at the coast Water levels in the Surficial Aquifer System are largely controlled by the canal netwo4k extending from Lake Okeechobee. Recharge to the system is through infiltration from rainfall, canals, the conservation area and Lake Okeechobee. Lake Okeechobee is particularly important during dry periods when water is moved from the Lake to the canals and then into the aquifer through infiltration.

Ground water flows from areas with high water levels to areas with lower water levels. In the Surficial Aquifer System, this causes several different regional flow patterns in the County. In the southeastern portion of the County, ground water flows primarily eastward from Florida's Turnpike. Ground water flow from this mound is east toward the coast in the northeast part of the County and southeast toward the C-51 Canal in the north-central part of the County. In the western portion of the County, flow is away from both sides of major canals into ground water depressions located between canals. The flow patterns described are regional; ground water flow on the smaller scale may differ as a result of the influence of wells or smaller canals.
Water quality in the Surficial Aquifer System is generally best in the zone of secondary permeability. Water quality to the west is poorer due to residual sea water. Water quality is also poorer along the east coast of the County as a result of saltwater intrusion.

The Hawthorn Formation underlies the Surficial System and serves as a confining layer separating the Surficial and Floridan Systems. The formation is made up of semipermeable to impermeable green clays and silts and is several hundred feet thick.

The top of the Floridan Aquifer System in Palm Beach County ranges from about eight-hundred feet below land surface along the southeast shore of Lake Okeechobee, to about one-thousand feet below land surface in the Boca Raton area. It is composed primarily of limestone and dolomite, is about one-thousand feet thick, and is artesian. Artesian wells dug to the Floridan Aquifer System naturally flow to the land surface.

The water quality of the Floridan Aquifer System in Palm Beach County is poor with chloride levels and dissolved solids generally greater than 1,000 mg/l and 3,000 mg/1, respectively. Because the water is both highly mineralized and relatively corrosive, the Floridan Aquifer System is not generally used as a source of water in Palm Beach County. The Floridan aquifer does have potential for use either as a source of brackish water for reverse osmosis, or as a reservoir for storage and recovery of fresh water.

Dense, low permeable limestones and dolomites occur throughout the Floridan Aquifer System. These. low permeable units divide the Floridan Aquifer System into several semi-confined aquifers. The occurrence of a regionally extensive impermeable sequence divides the Floridan into two parts: The upper portion, which contains water generally below,10,000 mg/1 total dissolved solids; and the lower portion, which contains water similar to sea water. The aquifers in the lower portion are extremely cavernous and have been informally referred to as the Boulder Zone.

The Boulder Zone is a highly transmissive dolomitic limestone. It is also named because its drilling characteristics are similar to those of boulders; however, there are no actual boulders in the zone. Water quality in the Boulder Zone is very poor and not suitable for use. The Boulder Zone is artesian, but, because of the high density of the saltwater in the zone, it does not flow to the land surface. The Boulder Zone is significant because it is extensively used for waste disposal through deep injection wells.

6.7.2.2 Topography

The Town of Lake Park is situated on the Coastal Ridge which parallels the Atlantic Ocean. Elevations across the most of the Town range between five and fifteen feet mean sea level (msl); however, elevations of up to forty feet occur in isolated areas.** Specifically, this occurs along the crest of the coastal ridge, in the vicinity of Old Dixie Highway.

The Town is bordered to the west by the sandy flatlands which has elevations ranging from ten to fifteen feet msl. West of these areas is the Everglades region

which consists primarily of flat swamps less than fourteen feet in elevation. (Ref: FIGURE

6.7.2.3 Soils

A description and mapping of the soils present in Lake Park is contained within the FUTURE LAND USE element. Reference that for detailed information. Based upon the SANITARY SEWER sub-element, there is a limited number of septic tanks in use at the present time. Even though general soil types within the Town are not conducive to the use of septic tanks, most sites using this system have been adequately improved in the form of demucking and filling to alleviate this concern. Since the Town is eighty-five percent developed with no future intention to allow new septic tanks, potential detrimental impacts created by their use to either the soils or to the ground water aquifer recharge capability is deemed minimal with improvement expected as future sewer service is made available.

**HUD, Federal Flood Insurance Study: Town of Lake Park.(1978), p. 4.

6.7.2.4 Saltwater Intrusion

The Town of Lake Park has no significant problem resulting from excessive saltwater intrusion. Saltwater normally moves inland through the lower part of the shallow-aquifer, which is in contact with Lake Worth. As the saltwater moves inland, it decreases in salinity. This allows it to rise to the base of the fresh water portion of the aquifer. The diffused saltwater then tends to follow natural hydraulic gradient back toward the sea. This "zone of diffusion" may naturally extend inland approximately fifteen (15) to fifty (50) feet, depending on the permeability of the aquifer in hydraulic contact with the saltwater body.

The barrier island separating Lake Worth from the Atlantic Ocean is subject to saltwater intrusion from two directions.

The prime cause of excessive saltwater intrusion in Palm Beach County is municipal water pumping. This can locally reduce the seaward hydraulic gradient and result in allowing saltwater seepage into the aquifer. The primary municipal water supply for Lake Park is drawn from two wellfields serving the Richard Road Plant (Ref: POTABLE WATER Sub-element), one of which is located in the Town. If pumpage withdrawals are allowed to increase without restriction, wellfield cones of depression could adversely affect the seaward gradient in the area.

6.7.2.5 Climate

The climate encompassing the Town is considered subtropical, having an average annual temperature of approximately 75 F. Rainfall is seasonal with approximately sixty-five percent of the annual rainfall occurring during the rainy season from June through October. The average annual rainfall in the Town, as well as surrounding areas is approximately sixty inches.

6.7.3 Natural Groundwater Aquifer Recharge Analysis

The Surficial Aquifer System supplies almost all the ground water used in Palm Beach County. It is the water source for thirty-three public water supplies as well as for numerous private users. The Surficial Aquifer System is expected to-continue to be the primary source of ground water in the future. However, because the productivity within the system varies greatly as previously discussed, the potential for future development within the system also varies greatly. The zone of secondary permeability (the Turnpike Aquifer) has the best potential for additional development within the Surficial Aquifer System. It presently provides over one-half the ground water used by public water supplies and private users in Palm Beach County. Its high productivity and good water quality make it an excellent ground water source, except in areas along the coast where saltwater intrusion is a threat. With proper management, the Turnpike Aquifer should be capable of meeting the County's future ground water needs.

The Surficial Aquifer System north of the zone of secondary permeability presently provides water for several water supplies and is expected to continue to do so in the future. However, additional development of the Surficial Aquifer in this area is likely to be limited by low transmissivities and the threat of saltwater intrusion. The development potential of the Surficial Aquifer System west of the zone of secondary permeability appears marginal as a result of low transmissivities and poor water quality.
Saltwater intrusion is presently a problem at several wellfields_ in Palm Beach County and is expected to become a problem at others in the future. Saltwater intrusion in the County can occur from the Ocean and Intracoastal Waterway to the east, from residual saltwater--to the west, and from the Loxahatchee River in the northeast. This intrusion can be caused by wells located too close to the saltwater front, or as a result of regional declines in the ground water level. Regional declines in water levels may be caused by the cumulative impacts of many wellfields, or by decreased aquifer recharge. Thus, extensive development in the west could potentially cause regional ground water declines resulting in saltwater intrusion in the east. Wellfield management on a regional scale could help prevent such a problem. At the present time, insufficient information is available to alloy the County or Town to institute a site specific comprehensive aquifer recharge area protection program. This problem should be resolved with the completion of the Ground Water Basin Resource Availability Inventory (GWBRAI) for Palm Beach County by the South Florida Water Management District (SFWMD). Until the GWBRAI becomes available, the County has adopted interim measures in the form of the County's Wellfield Protection Ordinance to promote protection of aquifer recharge functions based on known characteristics of development within the County and general knowledge of aquifer recharge principles.

According to the FUTURE LAND USE element, the Town is eighty-five percent developed with a majority of remaining land projected to be developed by 1999. Thereafter, it is assumed that the Town will stabilize as-far as services and impacts provided there are no annexations or major zoning changes. Thus, the major impact to the Town prior to 1999 regarding ground water recharge will be from the limited reduction of land area

remaining within the corporate limits available for recharge to the immediate groundwater aquifer.

6.7.3.1 Local Groundwater Regulation Review

Palm Beach County has recently adopted a wellfield Protection Ordinance to regulate the existing and new nonresidential residential use, handling, storage, and production of hazardous and toxic materials within certain zones of influence of the major potable water wellfields in the incorporated and unincorporated areas of the County. A major wellfield is defined as one which produces or is planned to produce 100,000 gallons or more per day of potable water.

A wellfield is subject to the Ordinance only when zones of influence maps have been developed which is the case for the Seacoast Utility Wellfield (i.e. Old Dixie Highway) that supplies the Town with potable water (Ref: FIGURE 6.5-6). There ,are three regulation zones (i.e. zones of influence) developed around each regulated wellfield - Zone 1 is in the land area
situated between the well and the thirty day travel time contour line; Zone 2 is in the land area between the thirty day and the two-hundred ten day travel time contour lines; Zone 3 is the land located between the two-hundred ten day and the one foot drawdown contour line, whichever is greater. In general, Zone 1 is a prohibition zone, and Zones 2 and 3 are permitting zones.

The types of requirements which the Ordinance provides for the permitting of the use of regulated substances in Zones 1, 2 and 3 are common sense management practices and structural devices which serve to isolate high-risk contamination points from entering the adjacent ground water.

Based upon -the review of the Zone of Influence Map developed for the Seacoast Utilities, Inc. (i.e. Old Dixie Wellfield) -wellfield which supplies the Town, all three zones, lies within the industrial park 4real making it vulnerable to contamination from uses within this area. Therefore, a concerted effort should be taken to monitor the uses within this area, identify uses in violation of the zones and develop a program in conjunction with the issuance of an occupational license to allow only those uses acceptable in the Palm Beach County Wellfield Protection Ordinance.

Wellfield zone maps will be required to be reviewed annually for possible adjustment based upon changed circumstances such as increase pumpage permit allocations, growth in the industrial park area, or other new information. Therefore, the Town will be affected in the near future and should annually review the Old Dixie Wellfield Zone Map prepared by the Palm Beach County Environmental Resource Management Department. Further, the Town should cooperate and coordinate closely with the County, neighboring municipalities and the private utility to ensure the protection and future adequacy of the groundwater supply.

The adoption of the Palm Beach County Wellfield Protection Ordinance is a major milestone towards ensuring a potable water supply of adequate quality for the County. However, a few issues exist that have not yet been addressed. Since the Town is over ninety percent occupied with limited revenue sources, there are only limited measures the Town can employ which can have any beneficial impact to the overall condition. Also, many of the municipalities within the County are medium size, as is Lake Park, or small and have limited expertise and/or financial resources to implement, monitor or enforce this regulation within their respective jurisdiction. Therefore, it is crucial that the Town cooperate and coordinate closely with the County, neighboring municipalities and any private utility in its area to ensure the protection and future adequacy of the County groundwater supply.

6.8 GOAL, OBJECTIVES AND POLICIES

6.8.1 Town Goal Statement

Existing and needed future public facilities shall be provided arid maintained in a manner to: (1) provide consistent service levels throughout the Town; (2) protect public and private investments; (3) promote orderly, compact urban growth, and (4) assure the health, safety and welfare of Town residents.

6.8.2 Objectives and Policies

Objective 1:

The Town shall ensure through the land development approval process that adequate public facility capacity is available or will be available in accordance with its Concurrency Management System.

Policy 1.1:

Public facility Level of Service standards as displayed on Table 6.6-1 are hereby adopted and shall be used as the basis for estimating the availability of capacity and demand generated by a proposed development project.

Policy 1.2:

All development and/or redevelopment activities shall be undertaken in a manner consistent with adopted Level of Service standards.

Policy 1.3:

The Public Works Department shall, in cooperation with public utility service providers, develop procedures to update facility demand and capacity information, as development permits are issued.

Policy 1.4:

Prohibit the installation of additional septic tank systems within the Town and require all new developments to be served by the central wastewater system. Require all new developments to be served by central potable water systems.

Policy 1.5:

Prohibit the installation of individual wells in Planning Area 3 due to proximity to the one-foot drawdown contour (Zone 3).

Policy 1.6:

The Town shall consider the feasibility of establishing an impact fee schedule in order to ensure that the public facilities and services at the adopted level of service

are available concurrent with the impacts of development and in conformance with the Capital Improvements Element.

Policy 1.7:

The Town, in coordination with Palm Beach County, shall continue to regulate businesses potentially generating pollutants.

OBJECTIVE 2:

The Town shall establish and maintain a five-year schedule of capital improvement needs, to be updated annually, in conformance with the Capital Improvements Elements, in order to maintain and improve Town infrastructure and comply with all State statutory requirements.

Capital Improvements needs: IMPROVEMENTS are defined as: (1) '-those improvements necessary to correct existing deficiencies.' in order to maximize the use of existing facilities; or (2) those improvements necessary so meet projected future needs without encouraging urban sprawl.

Policy 2.1:

Existing deficiencies will be addressed by undertaking improvements in accordance with the Capital Improvements Schedu

Policy 2.2:

The Town administration, including key department heads, shall evaluate, and recommend capital improvement projects for inclusion in the five-year Capital Improvements Schedule.

Policy 2.3:

The Town shall update the Master Drainage Plan every five years, and shall include identified projects in the Capital Improvements Schedule.

Policy 2.4:

The Town shall review the South Florida Water Management District's Lower East Coast Water Supply Plan, and the water supply facility workplans of agencies that have jurisdiction over and/or provide its potable water supply, as they are adopted and/or periodically updated in order to identify alternative projects that will increase its water supply, and shall coordinate as appropriate with these agencies in the implementation of these projects. In addition, the Town shall prepare a Ten-Year Water Supply Facilities Workplan in accordance with State requirements.

OBJECTIVE 3:

The Town of Lake Park shall continue to provide solid waste collection services and drainage services to meet existing and projected future demands.

Policy 3.1:

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

1) Maintain a high level of service for the residents of the Town with a system that ensures the lowest possible cost to Lake Park taxpayers relative to the highest level of service.

2) Enlist the solid Waste Authority of Palm Beach County in analyzing the efficiency of collection routes in the Lake Park area.

3) Maintain a public information service in order to keep the citizens of the Town aware of collection schedules and placement of refuse containers, yard clippings, and other special wastes for collection.

4) Maintain a collection service that best serves the residents of Lake Park.

5) Develop and maintain regulations which should address, but not be' limited to, the location of containers and other solid waste to be collected, requirements of residents to place solid-waste for collection at a reasonably determined time prior to collection, and the enforcement of said regulations to avoid potential health hazards from solid waste being scattered about.

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

Policy 3.2:

The basic drainage policy shall consist of the following components:

1) Continue routine maintenance of catch basins and conduits.

2) Regulate swale plantings and sodding.

3) Encourage appropriate land use activities in flood prone areas.

4) Protect environmentally sensitive areas by controlling adjacent activities.

5) Investigate the use of street sweeping.

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

7) Enforce the flood protection ordinance to maintain the flooding protection provided by natural features.

Policy 3.3:

The Town shall implement a study by June 1, 1991 to collect data defining the existing and future drainage facility needs of the Town. The data shall be used to compile an analysis which implements the Town goal of preserving and enhancing the Quality and quantity, of waters f lowing into, -Lake Worth. The data collection and analysis will be completed by fiscal year 1992.

Policy 3.4:

The Town shall during the annual review of its capital improvements program, amend the capital improvements element of the comprehensive plan during the next available amendment cycle to incorporate the capital improvements which the study analysis indicates will implement the Town goal of preserving and enhancing the quality and quantity of waters flowing into Lake Worth.

Policy 3.5:

The Town shall implement a long-term stormwater management program to improve drainage patterns and flows within one year after completion of the study referenced in Policy 3.3 above

Policy 3.6:

The Town shall continue its ongoing program of upgrading swale systems and constructing new swale systems as an interim measure to address ongoing drainage problems in accordance with the stormwater standards of the South Florida Water Management District set forth in Fla. Admin. Code ch. 40E but not to include the exemptions for parcels less than ten acres.

Policy 3.7:

The Town shall develop land development regulations for new development and redevelopment that require the implementation of the stormwater standards of the South Florida Water Management District.

Objective 4:

The Palm Beach County Solid Waste Authority shall continue to provide solid waste disposal services to the Town of Lake Park to meet existing and projected future demands.

Policy 4.1:

Maintain a liaison with the Solid Waste Authority (SWA) of Palm Beach County in order to ensure the Town's input to the management of established landfill sites and the purchase/development 9f any future landfill sites, or other alternative manner of solid waste disposal.

Policy 4.2:

Encourage the community to get involved in a local resource recovery program and establish efficient public information for this cause.

Policy 4.3:

Continue to support the SWA regional resource recovery program and encourage the recycling of solid waste whenever feasible.

Objective 5:

Seacoast Utilities, Inc., the operator of the "Palm Beach Gardens" Sub-regional Systems shall continue to provide sanitary sewer and potable water facilities and services to meet existing and projected future demands within the Town of Lake Park.

Policy 5.1:

Require a high level of service for the residents of the Town by Seacoast Utilities

Policy 5.2:

Ensure constant monitoring of rate structures so that the lowest possible cost results to Town taxpayer.

Policy 5.3:

Maintain a high level of coordination between the Town. and Seacoast Utilities as regards quality maintenance and operation of the water supply system.

Objective 6:

Town stormwater drainage regulations, incorporated within the Subdivision Regulations Ordinance, shall provide for protection of natural drainage features and ensure that future development utilizes stormwater management systems in a manner to protect the functions of recharge areas and natural drainage features.

Policy 6.1:

Limit post-development runoff rates and volumes to pre-development conditions and preserve existing natural drainage features.

Policy 6.2:

Protect and preserve water quality by use of construction site techniques such as on-site retention, use of pervious surfaces and native vegetation.

Objective 7:

The Town shall actively participate in Potable Water conservation programs both ori an ongoing and an emergency basis.

Policy 7.1:

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

Policy 7.2:

Xeriscape practices shall be promoted by the Town when considering all proposals for development and/or redevelopment.

Policy 7.3:

The Town shall promote the use of low volume fixtures when reviewing all building permit applications.

Objective 8

The Town shall comply with its 1 -year Water Supply Facilities Work Plan (Work Plan) adopted May 2020 , as required by section 163.3177(6)(c), F.S. within 18 months after the governing board of the South Florida Water Management District approved its Lower East Coast Water Supply Plan Update on November 8, 2018. The Work Plan will be updated, at a minimum, every 5 years. The Town's Work Plan is designed to: assess current and projected potable water demands; evaluate the sources and capacities of available water supplies; and, identify those water supply projects, using all available technologies, necessary to meet the Town's water demands for a 1 -year period.

Policy 8.1

Comply with the Town of Lake Park's 1 -Year Work Plan and incorporate such Work Plan by reference into the Town of Lake Park Comprehensive Plan.

Policy 8.2

Coordinate appropriate aspects of its Comprehensive Plan with the South Florida Water Management District's regional Water Supply Plan adopted November 8, 2018 and with the Seacoast Utility Authority The Town shall amend its Comprehensive Plan and Work Plan as required to provide consistency with the District, Seacoast Utility Authority, and Palm Beach County plans.

Monitoring Measure: The Work Plan shall remain consistent with the Seacoast Utility Authority, Water Use Permit renewals and with the projects listed in the South Florida Water Management District’s Lower East Coast Regional Water Supply Plan. The Work Plan will be updated, at a minimum, every 5 years and within 18 months after the South Florida Water Management District's approval of an updated Lower East Coast Regional Water Supply Plan.

7 COASTAL MANAGEMENT

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

7.2 COASTAL MANAGEMENT

The Town of Lake Park is required to prepare a COASTAL MANAGEMENT element pursuant to Chapter 9J-5, F.A.C., and Chapter 163, Part .II, Florida Statutes. The data, information and graphics presented in this element are intended to meet the data and analysis requirements of Chapter 9J-5.012, COASTAL MANAGEMENT element. The goals, objectives and policies presented are designed to restrict activities that would damage or destroy coastal resources.

The purpose of the COASTAL MANAGEMENT element is to provide information and analyses necessary to plan for development activities that may directly or indirectly affect coastal resources. By conducting an inventory of existing land uses, natural resources, and the existing infrastructure (i.e. utilities, drainage and transportation systems, etc.), a data base is established, whereby future development activities can be evaluated and coastal land use conflicts minimized.

7.3 DATA AND ANALYSIS REQUIREMENTS

Pursuant to Chapter 9J-5.012(2), COASTAL MANAGEMENT DATA AND ANALYSIS REQUIREMENTS, F.A.C., and requirements of Florida Statutes, the following inventory and analysis of coastal zone resources and concerns are presented.

7.3.1 Land Use

The Town of Lake Park is predominantly a single-family, residential community. Two major waterbodies - the Intracoastal Waterway/Lake Worth and South Lake provide waterfront for residential and water-related land uses and a variety of opportunities for recreational activities and water-dependent land uses such as marinas, beaches, fishing areas and parks (Figure 7-1). The coastal area of the Town includes these waterbodies as well as the upland areas adjacent to them (Figure 7-2).

All waterbodies within the coastal zone are characterized as typical tidally-influenced estuarine waters. South Lake is directly connected to North Lake' (Village of North Palm Beach) by means of a narrow, navigable (i.e. small boats) canal extending under Northlake Boulevard. North Lake is contiguous to the Earman River (C-17 Canal), a tidally-influenced waterway that provides drainage relief to developed areas west of the Town. Freshwater discharge to the Earman River is controlled by the S¬44 water control structure regulated by the South Florida Water Management District (SFWMD). The salinity of the Earman River is therefore subject to periodic changes depending on the frequency and volume of discharge Water-dependent and water-related land uses are depicted-in Figure 7-1 and outlined in Table 7-1. These land uses include the Municipal Marina, South Lake and Lake Shore Park.

South Lake is a 13-acre, tidally influenced estuarine basin that provides drainage relief to the north-central portion of Town. Single-family residential development is the

predominant land use along South lake, although multi-family units and commercial land uses (i.e. restaurant and retail shores) abut the basin on its northern boundary of the Town. Private docks extend waterward from the residential lots, providing recreational access to the Earman River, Lake Worth and the Atlantic Ocean. There are no commercial marinas or other existing water-related uses in the lake.

The Municipal Marina, located in the extreme southeastern portion of the Town, is public facility open to both residents and nonresidents year-round. The marina has four boat ramps, two in the northeast corner of the marina and two in the south-central portion. The ramps were installed -in the early 1970's and the north ramps have been recently refurbished. The marina has the capacity to accommodate 223 boats in as many docking slips. There are no dry storage facilities and the marina is not available for commercial fishery operations. Parking is provided for 240-260 vehicles, including trailers.

The marina is protected from boat wakes and the storm waves n Lake Worth by a seawall that extends along the established Town bulkhead line. The entire internal length of the marina is constructed of bulkhead. A sixty (60) foot opening in the bulkhead provides access to Lake Worth. A channel extending from the marina to the Intracoastal Waterway (ICWW) is maintained by the Town, through Florida Department of Environmental Regulation (FDER) and Palm Beach County Health Department (PBCHD) permit review. According to the Town Sources, the channel has not required maintenance dredging since the early 1970's.

Table 7-1
WATER-DEPENDENT AND WATER RELATED LAND USES

Municipal Marina	9.1 acres	240-slip marina; 4 boat raps parking area and control building
Lake Shore Park	8.3 acres	4 tennis courts; sandy beach; park benches and shady trees
South Lake	8.9 acres	Several private docks

TABLE 7-2

MARINE AND WILDLIFE SPECIES LIST

SPECIES OF SPECIAL CONCERN

Source: Treasure Coast Regional Planning Council

Scientific Name	Common Name	Designated Status[1]			
		FCREPA[2]	FGFWFC[3]	FDACS[4]	USFWS[5]
FISH					
Agonostomus monticola	Mountain mullet	R			
Awaous tajasica	River goby	R			
Bairdiella sanctaeluciae	Striped croaker	R			
Centropomus undecimalis	Common snook		SSC		
Cyprinodon cf variegatus	Sheepshead minnow	SSC			
Fundulus grandis saguanus	Southern gulf killfish	SSC			
Fundulus similis	Longnose killfish	SSC			
Gobionellus stigmaturus	Spottail goby	SSC			
Lucania cf parva	Rainwater killfish	SSC			
Oostethus lineatus	Opossum pipefish	R			
Peocilia cf latipinna	Sailfin molly	SSC			
Rivulus marmoratus	Rivulus	T	SSC		
AMPHIBIANS					
Rana areolata	Gopher frog		SSC		UR
REPTILES					
Alligator mississippiensis	American alligator	SSC	SSC		T
Carretta carretta carretta	Atlantic loggerhead turtle	T	T		T
Chelonia mydas mydas	Atlantic green turtle	E	E		E
Dermochelys coriacea	Leatherback turtle	R	E		E
Drymarchon corais couperi	Eastern indigo snake	SSC	T		T
Eretmochelys imbricata imbricata	Atlantic hawksbill turtle	E	E		E
Gopherus polyphemus	Gopher tortoise	T	SSC		UR
Nerodia fasciata taeniata	Atlantic salt marsh snake	E	T		T
Sceloporus woodi	Florida scrub lizard	R			UR

Table 7-2 cont.

Scientific Name	Common Name	Designated Status[1]			
		FCREPA[2]	FGFWFC[3]	FDACS[4]	USFWS[5]
BIRDS (continued)					
Pelecanus occidentalis	Brown pelican	T	SSC		
Picoides borealis	Red-cockaded woodpecker	E	T		E
Picoides villosus auduboni	Hairy woodpecker	SSC			
Plegadis falcinellus falcinellus	Glossy ibis	SSC			
Polyborus plancus	Crested caracara	T	T		UR
Rallus longirostris scottii	Florida clapper rail	UR			
Rostrhamus sociabilis	Snail kite	E	E		E
Rynchops niger	Black skimmer	SSC			
Sterna antillarum	Least tern	T	T		
Sterna maxima	Royal tern	SSC			
Sterna sandvicensis	Sandwich tern	SSC			
Vireo altiloquus	Black-whiskered vireo	SSC			
MAMMALS					
Eptesicus fuscus	Big brown bat	R			
Felis concolor coryi	Florida panther	E	E		E
Mustela frenata peninsulae	Florida long-tailed weasel	R			UR
Mustela vison evergladensis	Everglades mink	T	T		UR
Mustala vison lutensis	Florida mink	R			UR
Neofiber alleni	Round-tailed muskrat	SSC			UR
Peromyscus floridanus	Florida mouse	T	SSC		UR
Plecotus rafinesquii	Southeastern big-eared bat	R			UR
Sciurus niger shermani	Sherman's fox squirrel	T	SSC		UR
Trichechus manatus latirostris	West Indian manatee	T	E		E
Ursus americanus floridanus	Florida black bear	T	T		UR
PLANTS					
Acrostichum danaeifolium	Giant leather fern			T	
Adiantum capillus-veneris	Venus-hair fern	R		E	
Asclepias curtissii	Curtiss milkweed	R		T	

Table 7-2 cont.

Scientific Name	Common Name	Designated Status[1]			
		FCREPA[2]	FGFWFC[3]	FDACS[4]	USFWS[5]
PLANTS (continued)					
Asimina tetramera	Four-petal pawpaw	E		E	E
Avicennia germinans	Black mangrove	SSC			
Cereus eriophorus var. fragrans	Frangrant wool-bearing cereus			E	E
Coccothrinax argentata	Silver palm	T			
Commelina gigas	Climbing dayflower	T		T	UR
Conradina grandiflora	Large-flowered rosemary				UR
Cucurbita okeechobeensis	Okeechobee gourd	T		E	UR
Dennstaedtia bipinnata	Cuplet fern	E		E	
Dicerandra immaculata	Lakela's mint			E	E
Encyclia tampensis	Butterfly orchid			T	
Ernodia littoralis	Beach creeper	T		T	
Gossypium hirsutum	Wild cotton	E		E	
Habenaria odontopetala	Rein orchid (unnamed)			T	
Jacquemontia reclinata	Beach clustervine	E		E	UR
Lechea cernua	Nodding pinweed				UR
Lilium catesbaei	Catesby lily			T	
Lygopodium microphyllum	Climbing fern (unnamed)			T	
Mallotonia gnaphalodes	Sea lavender	T		E	
Monotropa brittonii	Scrub Indian pipes				UR
Okenia hypogaea	Burrowing four-o'clock	E		E	
Oncidium variegatum	Dancing-lady orchid	T		E	
Ophioglossum palmatum	Hand adder's tongue fern	E		E	UR
Paronychia chartacea	Paper-like nailwort				T
Phlebodium aureum	Golden polypody			T	
Remirea maritima	Beach star	E		E	
Rhizophora mangle	Red mangrove	SSC			
Sabal etonia	Scrub palmetto			T	
Sabal minor	Dwarf palmetto			T	
Salvinia rotundifolia	Water spangles			T	
Schizaea germanii	Tropical curly-grass fern	R		E	UR
Selaginella arenicola	Sand spikemoss			T	
Thelypteris interrupta	Aspidium fern (unnamed)			T	
Tillandsia balbisiana	Air plant (unnamed)			T	
Tillandsia flexuosa	Twisted air plant	T		T	

Table 7-2 cont.

Scientific Name	Common Name	Designated Status[1]			
		FCREPA[2]	FGFWFC[3]	FDACS[4]	USFWS[5]
PLANTS (continued)					
Tillandsia paucifolia	Air plant (unnamed)			T	
Vanilla mexicana	Vanilla (unnamed)			T	
Vittaria lineata	Shoestring fern			T	
Zamia floridana	Florida coontie	T			

1) E = Endangered; R = Rare; T = Threatened; SSC = Species of Special Concern; UR = Under Review
2) Florida Committee on Rare and Endangered Plants and Animals
3) Florida Game and Fresh Water Fish Commission
4) Florida Department of Agriculture and Consumer Services
5) United States Fish and Wildlife Service

The marina does not provide any fueling facilities or sewer pump-out facilities and live-aboards are prohibited. Although the Town limits do not include the waters of Lake Worth, the coastal land uses that border this water body are included in this Section. The 3,500 linear feet of shoreline north of the marina, included within the Town's corporate limits, has three existing land uses recreational open space, high density residential (condominiums) and vacant (high-density zoning).

Lake Shore Park provides both active and passive recreational opportunities for the Town residents. Tennis court and large grassy open spaces provide active recreational opportunities while the scenic park benches and sandy beachfront provides opportunities for more passive recreational uses. Fishing and windsurfing are common recreational pastimes in the park. Water-body contact is not encouraged and "No Swimming" signs are posted by the Town.

A series of high-density apartments and condominiums are located directly north and south of Lake Shore Park along Lake Worth. Four (4) private dock extend waterward into Lake Worth in this area. The shoreline is stabilized by existing bulkheads.

An 11.5 acre vacant tract (high-density zoning district) is located at the northern end of the coastal area immediately south of the Town limits. This tract, approved for 220 multi-family units, is expected to be developed in much the same way as the existing high-rise developments.

Land uses in the coastal zone are limited to single and multi-family residential, commercial and public lands. All 11.5-acre vacant, waterfront tract of land on the northern limits of Town has recently been approved for 220 multi-family units. This is the last remaining undeveloped tract in the coastal area. The economic base of the coastal zone is primarily associated with the residential character of the-development in the area, although commercial business along Northlake Boulevard do contribute to the economy of the coastal zone. The municipal marina represents the only water-related development within the coastal zone and appear to meet the current demand for water-related recreational facilities (see RECREATION AND OPEN SPACE element). There are no identified redevelopment areas within the coastal zone since most of the residential development in the area is well-maintained and stable.

Conflicts among shoreline uses occur when one land use is deemed incompatible with another. Since there are no land uses other than residential and recreation and open space areas (with limited commercial strip development along the northern boundary of South Lake), no conflicts among shoreline uses exist in the Town.

'The Town is approximately eighty-four percent (84%) developed. The FUTURE LAND USE element identifies the existing land use classifications within the Town and concludes that less than sixteen percent (16%) of the land is available for development,, This undeveloped land is located outside of the coastal area and is therefore not considered in this element.

7.3.2 Natural Resources

Figure 7-3 depicts the natural resources (i.e. marine grasses) located immediately east of the corporate limits of Town. South Lake, a dead-end basin, and the Municipal Marina are the only two water bodies within Lake Park. Neither supports marine or coastal vegetation that would be considered natural resources.
The majority of the coastal shoreline along the western shores of Lake Worth and the Intracoastal Waterway (ICWW) is protected by bulkheads. A sandy beach area existing in the area of Lake Shore Park but no vegetation exists that would be considered a natural, resource. No mangroves are present along the shoreline of the Town and no fish or wildlife habitats are identified. There are no known historic resources or sites in the coastal area of the Town.

Table 7-2 provides a partial list for species that may be found in coastal areas of Town.

7.3.3 Estuarine Pollution Assessment

There are no water quality monitoring stations located in or adjacent to the Town of Lake Park. The Palm Beach County Health Department (PBCHD) has several water quality monitoring stations located in Lake Worth and has reported improvements in water quality in recent years, although violations of State standards

Non-point sources contributing to the degradation of water quality within the Town include boat and marina waste oil, runoff from lawn fertilizers and pesticides, and untreated effluent from boat anchorage areas. These sources, several of which have been identified in the Area wide 208 Plan, continue to persist, according to sources and the Palm Beach County Health Department.

One of the potential major contributors to stormwater-related pollutants is leachate from septic tanks and sanitary landfills. Since the Town provides collection of solid waste and hauling to landfills located well outside its corporate limits, solid waste disposal is not a potential contributor to water quality degradation.

The Town of Lake Park is provided community water and sewage treatment by Seacoast Utilities, Inc. All residences and businesses in the coastal zone are served by sanitary sewer systems; therefore, leachate from septic tanks is not a potential source of water quality contamination.

Traffic circulation within the Town is typical of most coastal municipalities in Palm Beach County in that it is served by a major east-west arterial (Northlake Boulevard), several north-south arterials and collectors (U.S. #1 and Old Dixie Highway).

7.3.4 Natural Disaster Planning

The Palm Beach County Peacetime Emergency Management Plan (1985), prepared by the Department of Public Safety, Division of Emergency Management, provides an orderly system for-the timely evacuation of residents and visitors determined to be residing in high risk areas as a consequence of a hurricane. This Plan provides a means for the County to discharge its responsibilities relative to hurricane evacuation for municipalities like Lake Park who participate in the program.

Palm Beach County is divided into fifty-four (54) Traffic Evacuation Zones. Zones one (1) through eighteen (18) are considered to be vulnerable to storm surges for a hurricane of any intensity. The Town of Lake Park is located within Traffic Evacuation Zones six (6) and twenty-eight (28).

Table 7-3 lists the Traffic Evacuation Zones, zone boundaries, route assignment zone and shelters.

TABLE 7-3			
HURRICANE EVACUATION PLAN FOR STORM SURGE VULNERABLE ZONES			
Zone	Boundaries	Route Assignment	Shelter
6	South of Earman River Canal, east of U.S. #1, north of Silver Beach Road/Lake Worth Inlet, west of Atlantic Ocean	Blue Heron Blvd., west to Military Trail (809) north to Holly Drive, east to shelter, 4245 Holly drive	Palm Beach Gardens High School
28	South of PGA Blvd., east of Florida Turnpike north of Blue Heron Blvd., west of U.S. #1, south of Northlake Blvd., west to Interstate I-95	NOT IN STROM SURGE VULNERABLE ZONE	

The U.S. Weather Bureau now forecasts tidal stages during tropical storms and hurricanes. It maintains continuous service and is constantly improving its warning capabilities. This service, in combination with emergency mobilization, aids in preventing loss of life and property. The estimated evacuation time for a Category 1-3 storm exiting at Pompano Beach is estimated to be twelve (12) hours, according to the Palm Beach County Division of Emergency Management. A 17.5 hour evacuation time is projected for a Category 4-5 storm making a landfall at Boynton Beach. However, estimates of 7 hours for daylight and 9.5 hours for nighttime evacuation are used by the Division of Emergency Management.

There are no drawbridges separating residents of the Town from the major evacuation routes identified in TABLE 7-3. There are no hospitals within the Town nor have any special evacuation needs of the elderly or handicapped been identified.

7.3.5 Coastal High-Hazard Areas and Post Disaster Redevelopment

For the purposes of this Element, coastal high-hazard areas are defined as those areas within the Federal Emergency Management Agency (FEMA) designated V zones. The Town has no development seaward of the Coastal Construction Control Line (C.C.C.L.) nor does it have any developed areas that have experienced severe damage due to coastal storms.

The area of the Town along the western shores of Lake Worth is located within FEMA Zone V5. This zone is defined as being within an area of a 100-year coastal flood with velocity (wave action) and base flood elevations and flood hazard factors determined. The area is and immediately adjacent to South Lake is also within Zone V5. The vast majority of the Town is located within Flood Zones B and C.

Post-disaster redevelopment is provided for in Chapter 161, Florida Statutes, Beach and Shore Preservation, and Palm Beach County Ordinance 72-i2, Palm Beach County Coastal Construction and Excavation Setback Ordinance. Chapter 161, F.S., defines the coastal building zone as the land area from the high-water line landward to a line 1500 feet landward from the C.C.C.L.

Since the Town's corporate limits do not extend east of the ICWW and therefore do not include areas on the barrier island, post-disaster redevelopment concerns are minimal. There are not land areas on or seaward of the Coastal Construction Control Line (C.C.C.L.) within the Town. Post-disaster redevelopment, therefore, would come under the same review as any other non-coastal municipality.

7.3.6 Beach and Dune Systems and Public Access

The Town of Lake Park, although a coastal municipality, does not have any ocean beaches or dune systems. The only beach area in44 Town is that portion of Lake Shore Park that extends along the western shores of Lake Worth and which is designated as a no bathing area. Public access is provided to Lake Shore Park and the municipal marina. Ample parking is available at both facilities.

7.3.7 Existing Infrastructure

Existing Infrastructure in the coastal area includes: roadways, water and sewer distribution and the existing stormwater drainage system. The roadway system is discussed at length in the TRAFFIC CIRCULATION element, including capacity of roads, their condition and projected future demands. Similarly, the drainage system and sewage treatment plant are addressed in the SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUND WATER AQUIFER RECHARGE element, with

respect to condition, proposed improvements, and in the case of the sewage treatment plant, its potential for phase out. The estimated costs, funding sources and phasing requirements will be addressed in the CAPITAL IMPROVEMENTS element.

The following three maps were adopted as part of the EAR based amendments in 2017, showing Sea Level Rise impacts at one, two and three feet.

Northlake Blvd
Federal Hwy
Park Ave
Park Ave
Silver Beach Blvd
AE
X500
Town of Lake Park
Sea Level Rise -
1 ft Affected Areas
Legend
City Boundary
Flood Zones
Likely to be inundated
May be inundated
0 650 1,300 2,600 Feet
Print: 4-24-2017
GIS

Fit to page
Page view
Read aloud
Add notes
Federal Hwy
Northlake Blvd
Park Ave
Park Ave
Silver Beach Blvd
10th St
Town of Lake Park
Sea Level Rise -
2 ft Affected Areas
Legend
City Boundary
Flood Zones
Likely to be inundated
May be inundated
Print 4-24-2017
GIS

Northlake Blvd
Federal Hwy
Park Ave
Park Ave
Silver Beach Blvd
10th St
AE
X500
Town of Lake Park
Sea Level Rise -
3 ft Affected Areas
Legend
City Boundary
Flood Zones
Likely to be inundated
May be inundated
0
425
850
1,700
Feet
Print: 4-24-2017
GIS

7.4 GOAL, OBJECTIVES AND POLICIES

7.4.1 Town Goal Statement

Protect, conserve and enhance remaining coastal resources while providing for water-dependent land uses and-the general health, safety and welfare of Town residents and visitors.

7.4.2 Objectives and Policies

Objective 1:

Maintain or improve the environmental integrity of existing wetlands, marine habitats and coastal resources.

Policy 1.1:

Prohibit development in the coastal area that will-'adversely impact existing marine habitats and resources.

Objective 2:

Maintain or improve estuarine environmental quality.

Policy 2.1:

Utilize urban Best Management Practices (BMP's) to reduce non-point source pollutant loadings to estuarine waters via-the Town’s stormwater drainage system.

Policy 2.2:

Require all new marinas and major improvements marinas to provide sewage pump-out service to boats thirty (30) feet or’ more in length.

Objective 3.0:

Maintain or reduce hurricane evacuation times, address general hazard mitigation, and implement the recommendations of the applicable emergency management plans and interagency hazard mitigation reports as appropriate.

Policy 3.1:

Identify Town residents who need special 7.22 assistance during emergency evacuation and notify the appropriate civil and emergency management agencies of same.

Policy 3.2:

Provide constant input to emergency management center with respect to road conditions, accidents, flooding, etc., during hurricane evacuation periods through Town police, fire and public safety departments.

Policy 3.3:

Land development regulations shall ensure the consistency of emergency management plans and development order approvals.

Policy 3.4:

The Town will review applicable emergency management plans and interagency hazard mitigation reports on an annual basis and adopt land development regulations to incorporate emergency management plan or mitigation report recommendations into the development review process.

Objective 4.0:

Provide infrastructure and services at adopted levels of service in the coastal area.

Policy 4.1:

Policy 4.1: Continue to provide for water-dependent and water-related uses in the coastal area including the provision and expansion of the Town Marina, in conjunction with the goals, objectives and policies of this Comprehensive Plan.

Policy 4.2:

The Town shall establish a Marina Siting Plan consistent with 163.3178(6), F.S.

Objective 5:

The Town shall annually review its comprehensive plan and land development regulations to verify the accuracy of its designated coastal high hazard areas.

Policy 5.1:

The Town shall define its coastal high hazard areas as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake and Overland Surges from

Hurricanes (SLOSH) computerized storm surge model. The Coastal High Hazard Area is identified on the Future Land Use Map Figure 3-9A

Policy 5.2:

The Town shall utilize its land development regulations to discourage population concentrations and development or redevelopment in, limit public expenditures that subsidize development or redevelopment in, and relocate or replace infrastructure away from coastal high hazard areas if not contrary to the health, safety or welfare of the residents of Lake Park. Public expenditures shall be limited to maintenance and purchase of public open space, drainage improvements, elimination of existing septic systems, upgrading existing roads, and repair or replacement of the seawall.

Policy 5.3:

Redevelopment in coastal high hazard areas is not permitted if the proposed redevelopment results in increased land use'-intensities.

Policy 5.4:

The Town shall, through its land development regulations, set standards for post disaster redevelopment in coastal high hazard areas within the Town.

Policy 5.5:

The Town shall maintain an inventory of any historic buildings and sites in the coastal high hazard area.

Policy 5.6:

Land development regulations shall protect any existing or future historic buildings in the coastal high hazard area.

Policy 5.7:

In regulating development and redevelopment in all areas, including the Coastal High Hazard Area, the Town shall maintain hurricane evacuation times in accordance with Section 163.3178(9), F.S.

Policy 5.8:

Land development regulations shall be consistent with the provisions of the Florida Building Code, Standard Mechanical Code, Standard Plumbing Code, Standard Gas

Code, and National Electric Code as they pertain to general hazard mitigation and other issues.

Policy 5.9:

Infrastructure in coastal -high hazard areas that is subject to repeated storm damage shall be removed, relocated or structurally modified.

Objective 6:

Coastal area population densities shall be coordinated with the Palm Beach County Peace Time and Emergency Management Plan prepared by the Department of Public Safety, Division of Emergency Management.

Policy 6.1:

The annual review of the comprehensive plan by the Town shall insure that coastal area population densities are coordinated with the Palm Beach County Peace Time Emergency Managing Plan.

Objective 7

Eliminate unsafe and inappropriate development, and mitigate the flood risk to existing and planned development in coastal areas that are of high risk of flooding due to storm surge, high tide events, flashflood, stormwater runoff, and seal level rise.

Policy 7.1

New development and redevelopment in areas at high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff and seal level rise shall be required to utilize building design specifications, engineering solutions, site development techniques, and management practices (i.e. requiring higher minimum floor elevations, retrofitting buildings for increased flood risk, designing infrastructure that can withstand higher water levels such as raising seawalls and installing tidal valves, implementing natural drainage features such as bioswales) that reduce the risk and losses due to flooding. Corresponding requirements for implementation shall be adopted within the Town's land development regulations by June, 2018.

Policy 7.2

New development and redevelopment in areas with a high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff, and sea level rise shall meet or exceed the flood-resistant construction requirements of the

Florida Building Code (I.e. requiring higher minimum floor elevations, retrofitting buildings for increased flood risk, requiring the use of flood damage-resistant materials).

Policy 7.3

Construction activities seaward of the Coastal Construction Line established pursuant to S. 161.053, F.S. shall be consistent with Chapter 1616F.S.

Policy 7.4
The Town shall continue to participate in and comply wit the National Flood Insurance Program (NFIP) regulations.

Policy 7.5

The Town shall continue to participate in the Community Rating System J(CRS) program, which involves managing and documenting activities that the Town performs to gain points under FEMAs CRS Program. This voluntary program rewards communities that improve their flood protection activities with flood insurance discounts for its residents.

Policy 7.6

New development and redevelopment shall be consistent with or more stringent than the floodplain management regulations set forth in 44 C.F.R., part 60, as required by 163.3178(2)(f)(4).

Objective 8

The Town shall continue to reduce flood risks to persons and property.

Policy 8.1: Development within floodplains, specifically 100-year flood V and VE zones shall be prohibited.

Policy 8.2: The town shall prioritize stormwater system upgrades within areas identified as having experienced or being prone to flood hazard to ensure that all new development (s) will meet the Town's adopted level of service standards for the drainage.

Policy 8.3: The town shall provide adequate funding to continue to implement Town projects and programs funded by the Stormwater Utility Fees to reduce hazards associated with flooding.

Policy 8.4: The Town shall continue its drainage system maintenance program which involves drain cleaning, mowing of Town rights -of-way, swale areas, street sweeping services, and jet vacuuming clogged drainage systems.

Policy 8.5: The Town shall continue flood inspections which are used to prioritize various drainage projects being designed for construction improvements.

Policy 8.6: The Town shall require that proven methods be utilized in the design and construction of all drainage systems that provide flood protection, add water quality improvements to the system. and reduce pollution found in stormwater runoff.

Policy 8.7: The Town will continue to participate in the Local Mitigation Strategy (LMS) program which aids in disaster recovery. The LMS is a community-wide group that assesses a community's potential vulnerabilities in the event of a disaster and develops activities or projects that would reduce those vulnerabilities. If a disaster does occur. The LMS has ready lists of related projects a community can implement to prevent or reduce damages from a similar disaster. The Town shall strive to complete or participate in activities and projects that proactively reduce vulnerabilities.

Objective 9

The Town shall continue to promote flood awareness and analyze areas that are vulnerable to flooding.

Policy 9.1: The Town shall utilize the Town's floodplain regulations which include the 50% rule. This rule requires compliance with current elevation and construction requirements if any structure is damaged or improved to an amount greater than 50% of the structure's market value.

Policy 9.2: The Town shall continue to work with local, state, and federal partners to target repetitive loss properties for acquisition or mitigation of flood hazard through hard and soft structural, and non-structural adaptation strategies including elevating existing structures.

Policy 9.3: The Town shall continue to prohibit development within floodplains in recognition of the important following functions they perform: allowing rainfall to drain, filtering stormwater runoff, reducing flooding, and recharging the regions drinking water supply.

8 Conservation

"Preparation of this document was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-1679 Laws of Florida and administered by the Florida Department of Community Affairs."

8.2 CONSERVATION

The CONSERVATION element is prepared pursuant to Chapter 163, Part II, Florida Statutes, and Chapter 9J-5, Florida Administrative Code. The data, information and material presented as support documentation is intended to specifically meet the requirements of Chapter 9J5.013(1), CONSERVATION DATA AND ANALYSIS REQUIREMENTS. The goal, objectives and policies are presented in order to establish long-term development restrictions to promote resource conservation.

The necessity of proper management and conservation of the natural environment is an important element in all types of planning activities. The natural environment and its various physical systems should be identified and understood in order to assure proper management and conservation.

Much of the data and information contained within this element is either highly interrelated with other elements of the Comprehensive Plan, or may be contained in other elements (i.e., COASTAL MANAGEMENT; FUTURE LAND USE; SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUND WATER AQUIFER RECHARGE). In these cases, it is so noted.

8.3 DATA AND ANALYSIS REQUIREMENTS

Pursuant to Chapter 9J-5.013, CONSERVATION DATA AND ANALYSIS REQUIREMENT, F.A.C., and requirements of Florida Statutes, the following inventory and analysis of natural resources and concerns are presented.

8.3.1 Natural Resources

Many of the natural resources to be addressed in this element have been analyzed and mapped in either the COASTAL MANAGEMENT element or the FUTURE LAND USE element located-within the Town of Lake Park having significant natural or institutional use limitations that require special precautions prior to conversion or development. As discussed in the COASTAL MANAGEMENT element, the majority of the shoreline of the Town is protected by vertical bulkheads and there are no areas of significant wetland vegetation.

The COASTAL MANAGEMENT element explains that the Town does not support either a coastal dune system or an extensive estuarine environment. Although Lake Worth and the Intracoastal Waterway form the eastern boundary of the Town, the only two water bodies South Lake and the Municipal Marina - are dead-end basins. It is the intent of this section to identify any additional information regarding natural resources as required by the CONSERVATION element.

A) Surface Waters and the Estuarine System

It has been explained in the COASTAL MANAGEMENT and SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUND WATER AQUIFER,

RECHARGE elements that the Town contains only two surface water bodies, each of which is a basin that provides access to Lake Worth and the Atlantic Ocean, The Town of Lake Park contains approximately 14 acres of surface water within its corporate limits Table 3-5, Existing Land Use, includes the marina water acreage as recreation/open space.

As noted in the COASTAL MANAGEMENT element, all surface water bodies are designated as Class III waters by the State. Class III waters are used extensively for recreational activities such as boating, water skiing and fishing.

The following definition has been developed for Class III waters by the State: Definition For the purposes of this report, Class III waters shall be defined as all inland waters not otherwise classified. This includes bays, rivers, lakes, estuaries and open waters of the territorial sea. Priority use of Class III waters shall be for recreation, and fish and wildlife propagation and management.

B) Wetlands

The wetland vegetation immediately east of Lake Park (i.e. Lake Worth) has been identified in the COASTAL MANAGEMENT element as containing marine grasses. There are no identified wetland areas within the Town's corporate limits.

C) Floodplains

Floodplains, as defined in Chapter 9J-5.003(30). F.A.C., include V or A flood zones as designated by the Federal Insurance Administration, An 11.5 acre undeveloped area, located in the northeast corner of the Town is also included in an A zone, according to the National Flood Insurance Rate Map for the Town

(Figure 3-4, Flood Map, FUTURE LAND USE Element). Areas identified in Figure 3-4 as being in A or V zones are subject to inundation by a 100-year flood.

D) Fisheries and Wildlife Habitats

There are no commercial fisheries within the Town, although recreational fisheries, in the form of a public marina and docks, are supported by a4fleet of small, medium and large recreational vessels. Recreational fisheries of the Atlantic Ocean, Lake

Worth and inland estuarine waters are easily accessible and available to Town residents and visitors.

Wildlife habitats such as mangroves, sea grasses, mudflats, beach hammocks, dune systems, sandy beaches and associated habitats are found within the Town limits. A partial list of species of concern that are found in the Lake Park area is presented in the COASTAL MANAGEMENT element, Table 7-2.

E) Minerals and Soils

The Town has no known sources of commercially valuable minerals. There are no existing mining operations nor does the Town's Zoning Code allow for-any mining activities.

Most of the developed portions of the coastal area have seawalls along the inland waterways and basins. The exception to this includes the area in the vicinity of Lake Shore Park. Erosion has not been a problem in this area

F) Air Quality

Present air quality conditions for Palm Beach County, including Lake Park, are generally designated as good. However, the County has been placed in a non-attainment category for atmospheric-ozone levels.

Air pollution is monitored daily throughout Palm Beach County at fifteen (15) locations. In December of 1977 it was determined by the Department of Environmental Regulation through the local program office that Palm Beach County was in violation of allowable atmospheric ozone levels. The Metropolitan Planning Organization has been charged with the task of developing control measures which will ultimately be carried out at the local level. In direct relation to air pollution programs, the Metropolitan Planning organization developed a-Transportation Control Program (TCP) to measure and provide mean to reduce emissions of mobile sources. Likewise, the Palm Beach County Health Department has developed RACT, Reasonably Available Control Techniques programs, to measure and reduce emissions from fixed sources. Both of these programs were instituted as a result of the County being placed in a non-attainment category by FDER because it was in violation of allowable atmospheric ozone levels. All of Palm Beach County is considered in these planning efforts.

8.3.2 Recreation and Conservation Land Uses

The surface water bodies' in the Town provide a recreational and leisure time resource to the residents and general public. The Municipal Marina and South Lake provide docking for recreational boats and direct access to the Intra-coastal Waterway and the Atlantic Ocean.

There are no commercial uses of the natural resources described in this Section, and no such designations are anticipated.

The FUTURE LAND USE element provides an acreage breakdown of recreation/open space and conservation areas in Lake Park.

8.3.3 Hazardous Waste Disposal

Although it was stated in the SOLID WASTE Sub-element (REF., Section 6.2.3.1) that there are no known hazardous wastes generated within Lake Park, many common household, commercial and light-industrial waste products requiring care in disposal are generated within the Town, including car batteries, pesticides, degreasing solvents and petroleum Waste products. In addition, service stations and marinas are a potential source of fuel and solvent waste products and leaks to ground and surface waters. Regulation of these substances and/or generators can be accomplished through the Town's occupational licensing procedure.

8.4 GOAL, OBJECTIVES AND POLICIES

8.4.1 Town Goal Statement

Protect, conserve and-enhance existing natural resources including vegetative communities, fish and wildlife habitats and species of special concern.

8.4.2 Objectives and Policies

Objective 1:

Protect air quality within the Town.

Policy 1.1:

Construction practices such as seeding, wetting and mulching which minimize airborne dust and particulate emission generated by construction activities shall be undertaken in accordance with all applicable National Pollutant Discharge Elimination System standards.

Policy 1.2:

Open burning of land clearing debris shall be prohibited in those areas served by an established resource recovery facility.

Objective 2:

Protect and enhance water quality of surface waters within the Town.

Policy 2.1:

Consider incorporation of Urban Best Management Practices (BMPs) as identified in the area wide Waste Treatment Management Plan (208) into the Town's development regulations.

Policy 2.2:

In water management systems where use of canals or ponds is necessary, any modification to, or construction of, canals or ponds should consider water and habitat quality enhancement features such as planted littoral zones or shallow shelves, bank slopes conducive to shoreline vegetation and immediate vegetative stabilization of any bare ground adjacent to canals or ponds in accordance with all applicable National Pollutant Discharge Elimination System standards.

Objective 3:

Conserve potable water supplies during periods of water shortage.

Policy 3.1:

Institute water conservation techniques and programs in cooperation with water, utilities managers and South Florida Water Management District.

Objective 4:

Conserve soil and native plant communities.

Policy 4.1:

Develop erosion control plans for areas experiencing continued erosion of shoreline or banks.

Objective 5:

Conserve, appropriately use and protect the quality and quantity of waters that flow into estuarine waters.

Policy 5.1:

The Town shall implement a long term stormwater management program to improve the quality and quantity of waters that flow into Lake Worth.

Policy 5.2:

During the annual review of the Capital Improvements Element, stormwater management improvements shall be included as part of that review.

Policy 5.3:

The Town of Lake Park shall review all proposed development requests to determine potential adverse impacts to the quality and quantity of waters that flow into Lake Worth.

Policy 5.4:

Town engineers shall suggest modifications to proposed development or redevelopment to further a no further degradation goal regarding Lake Worth and address identified potential adverse impacts.

Policy 5.5:

Land development regulations shall be established regarding the removal of debris and dirt in public and private parking lots.

Policy 5.6:

The Town shall continue its ongoing program of upgrading existing swale systems.

Objective 6:

The Town of Lake Park shall review all proposed development requests to determine the conservation, use and protection of fisheries, wildlife, wildlife habitat, marine habitat marine resources, native vegetative communities, endangered and threatened wildlife, soils, lakes, water resources, water recharge areas, estuaries, and flood plains

Policy 6.1:

The Town shall develop land development regulations so that no development order shall be issued that fails to further Objective 6.

Policy 6.2:

Town engineers or project review personnel shall suggest modifications to proposed development or redevelopment to reduce identified natural resource impacts.

Policy 6.3:

The Town shall develop a land development regulation to designate environmentally sensitive lands.

Policy 6.4:

The Town shall amend the conservation map to identify designated environmentally sensitive lands.

Policy 6.5:

The Town shall develop a land development regulation that shall include as, part of the development review process, restoration or enhancement measures regarding disturbed or degraded natural resources including wetlands upland native vegetation and Lake Worth. For proposed development that may result in loss or habitat or impact on endangered or threatened or rare animal and plant species or species of special concern, restoration or enhancement of disturbed, or degraded natural resources shall be a primary mitigation measure as opposed to cash payments or land to be set aside.

Policy 6.6:

The Town shall review the South Florida Water Management District's Lower East Coast Water Supply Plan, and the water supply facility work plans of agencies that have jurisdiction over and/or provide its potable water supply, as they are adopted and/or periodically updated in order to identify alternative projects that will increase its water supply, and shall coordinate as appropriate with these agencies in the implementation of these projects. In addition, the Town shall prepare a Ten- Year Water Supply Facilities Work plan in accordance with State requirements.

Policy 6.7:

Implementation of the 1-year Work Plan shall ensure that adequate water supplies and public facilities are available to serve the water supply demands of any population growth that the Town may experience

Objective 7:

The Town shall preserve the Lake Park Scrub Area.

Policy 7.1:

During the annual review of the Capital Improvements Element, projects for improvement and continued protection of Town's natural area(s) shall be included, to the extent that such projects are programmed and funded

9 RECREATION AND OPEN SPACE

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

9.1 INTRODUCTION

The RECREATION AND OPEN SPACE element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6),(e), Florida Statutes, establishes the recreation and open space element requirement and Chapter 9J5.014, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for recreation and open space goals, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.014 Florida Administrative Code, the RECREATION AND OPEN SPACE element is structured according to the following format:

Existing recreational and open space site and facilities;
Recreation and open space analysis; and
Recreation and open space Goals, Objectives and Policies.

9.2 EXISTING RECREATION AND OPEN SPACE SITES AND FACILITIES

The Town of Lake Park operates and maintains a number of parks and recreation facilities. Those facilities and activities offered are listed in Table 9-1. The recreation areas and facilities provided by the Town are classified either as "neighborhood" or "community" facilities or as "active" or "passive" type activities. Neighborhood type facilities are located within or near residential areas and are designed primarily to serve Town residents. Community type facilities are designed to serve the general community, both Town and non-resident populations.

"Active" recreation facilities represent an array of special activity facilities that can be provided in close proximity to population centers. They often require specially constructed fields, courts or other apparatus which lend themselves to a particular user-oriented activity. Since active recreation facilities are more easily accommodated in large open spaces, they do not normally require a significant natural resource base as do most passive activities. "Passive" recreation facilities require a resource base, either natural or manmade, with which the user interacts. Oceans, lakes, woodlands and other natural areas offer a variety of passive recreational experiences. Generally, large resource-based areas provide the best setting for passive recreation. However, smaller areas may serve a special need.

The community public library and Mirror Ballroom provide various leisure time activities. The library provides year-round reading and educational programs to preschool and elementary school age children and an on-going cultural program for adults. The library is centrally located adjacent to the Town Hall on Park Avenue. The Mirror Ballroom, a multi-purpose room on the second floor of The Town Hall, provides a variety of recreational and leisure activities.

Five (5) multi-family residential apartments/condos offer a swimming pool as a project amenity. Although not accessible to the general public, these are the only private recreational facilities in Lake Park.

South Lake, located in the north-central portion of the Town, provides private docking and limited access to the Earman River (C-17 Canal), the Intracoastal Waterway (ICWW) and the Atlantic Ocean.

In addition to providing the facilities and parks identified in Table 9-1 and Figure 9-1, the Town also offers a variety of recreation and leisure activities to all age groups. Programs offered to Town residents and, in some cases, non-residents, are listed below.

1) Supervised recreation programs for youth provided after school hours.

2) Daytime recreational programs provided during the summertime.

3) Arts and crafts, exercise, ballet, gymnastics, and other interests based on demand provided to all age groups.

4) Organized baseball, softball, basketball and a men's flag football program.

5) Year-round, adult softball, tennis and shuffleboard programs.

6) Leisure time activity clubs for senior residents.

7) Special events geared toward certain holidays (e.g. Christmas-in-Dixie Parade, Easter Egg Hunt, etc.) and other types of events such as concerts in Kelsey Park.

County and State owned recreation areas offer additional recreation and open space opportunities to residents and visitors to the Town. There are a number of major recreational facilities that are easily accessible to Lake Park within a short driving distance (one-half hour). In the Jupiter-Tequesta area, recreation and open space facilities such as Jupiter Beach Park, DuBois Park, Carlin Park, Burt Reynolds Park and Coral Cove Park are all in close proximity to each other. Loggerhead, Juno, Juno Beach and Bert Winters Parks are also available in the Juno-Juno Beach area and, to the south of Lake Park, Phil Foster Park and Ocean Reef Park offer a variety of recreational opportunities. Jonathan Dickinson State Park is located at the southern end of Martin County, providing camping, picnic areas, boating, horseback riding and other activities. The John D. MacArthur Beach State Park, presently under development, is located northeast of Lake Park, across the Intracoastal Waterway (ICWW). Descriptions of types, activities and jurisdictions of each of the above facilities are presented on Table 9-2.

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TABLE 9-1

RECREATION AND OPEN SPACE FACILITIES

NAME	SIZE (acres)	TYPE	FACILITIES/ACTIVITIES
Lake Shore Park	8.3	Neighborhood, Active Passive	4 tennis courts, sandy beach, park benches, large open spaces, grassy areas with shade trees
Kelsey Park	5.4	Neighborhood, Active Passive	2 tennis courts, 4 shuffleboard courts, volleyball court, pro shop pavillion, recreation room ,restrooms, shower, snack bar, shade trees, benches
Lake Park Marina	9.1*	Community, Active	240-slip marina with 4 boat ramps, parking area and control building
Ballfield (6th Street)	5.5	Neighborhood, Active	4 fields- little league (lighted); senior league (lighted); girls ballfield and button field with pavillion and picnic area
Lake Park Elementary School	1.5	Neighborhood, Active	2 basketball courts, playground area with swings and climbing apparatus
S.J. Blakely Park	0.3	Neighborhood, Passive	Green space with shade trees
Lottie Mae Miller Park	0.4	Neighborhood, Passive	Green space with park benches
Ilex Park	0.4	Neighborhood, Passive	Shade trees, green space and park benches
Banyan Tree Park	0.5	Neighborhood, Passive	Green space with shade trees and park benches
Kiddie Park	0.5	Neighborhood, Active	Playground apparatus, park benches

Figure 9-1 Parks and Recreation Facilities

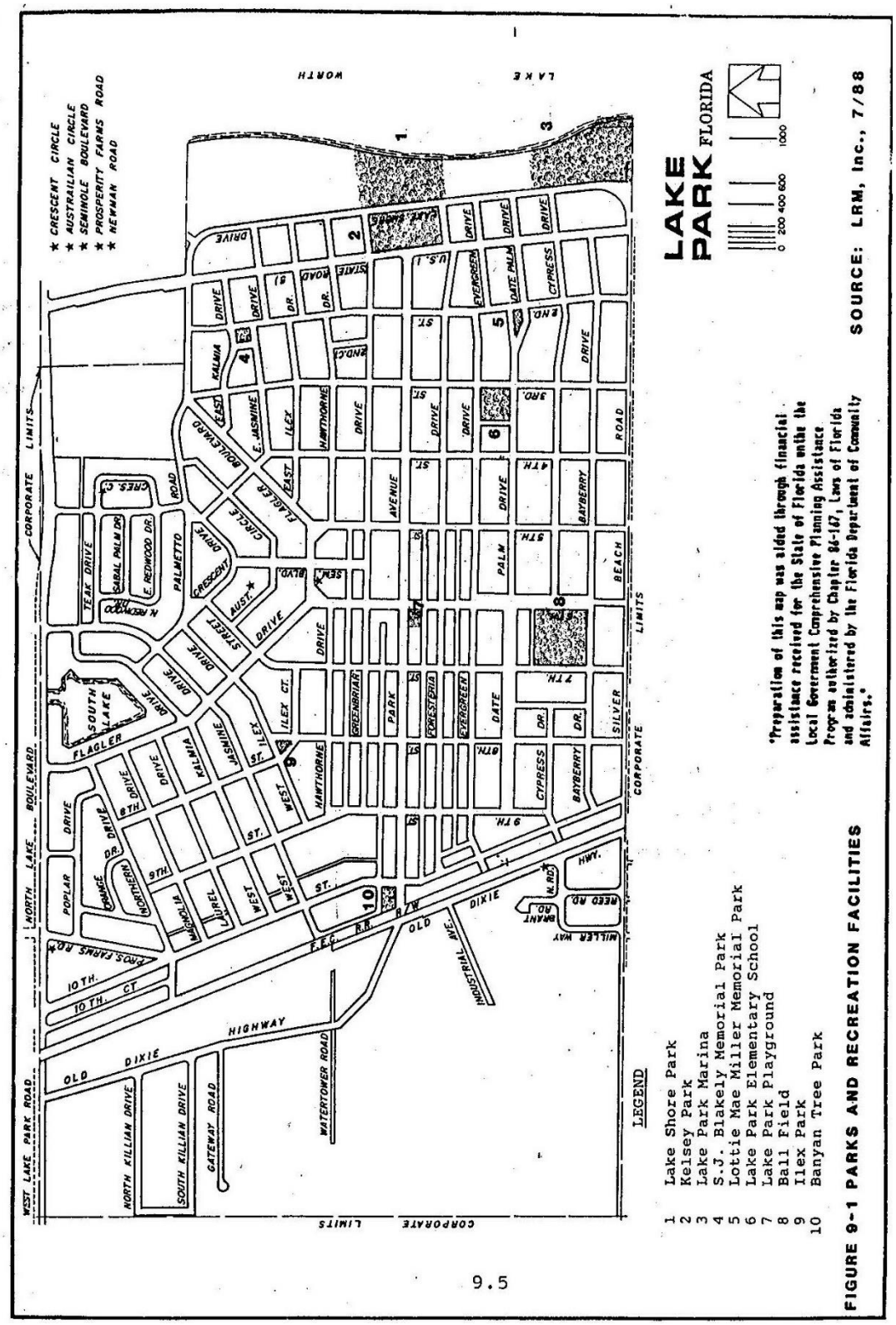


TABLE 9-2

MAJOR RECREATIONAL AND OPEN SPACE SITES/FACILITIES

- Palm Beach County -

	NAME	JURISDICTION	"ACTIVE" FACILITIES	"PASSIVE" FACILITIES
1.	Jupiter Beach Park	Palm Beach County	- One (1) volleyball court. - One (1) tot lot.	- Seven (7) acres of picnic areas. - 1700 ft. of Ocean beach. - 120 Ocean beach car stalls. - One (1) fishing site.
2.	DuBois Park	Palm Beach County	- None.	- Five (5) acres of picnic areas. - One (1) historical site. - Thirty-nine (39) Ocean beach car stalls. - One (1) fishing site. - Twenty-two (22) marina boat slips.
3.	Carlin Park	Palm Beach County	- One (1) Little League baseball field. - Two (2) tennis courts. - One (1) volleyball court. - Two (2) tot lots. - Two (2) 10-station exercise trails.	- Three (3) acres of picnic areas. - 3000 ft. of Ocean beach. - 313 Ocean beach car stalls. - One (1) fishing site.
4.	Burt Reynolds Park	Palm Beach County	- None.	- Three (3) acres of picnic areas. - One (1) fishing site. - Four (4) boat launch ramps.
5.	Coral Cove Park	Palm Beach County	- One (1) tot lot.	- One (1) mile of nature trail. - 600 ft. of Ocean beach. - Eighty-three (83) Ocean beach car stalls. - One (1) fishing site.

TABLE 9-2 (Con't.)

NAME	JURISDICTION	"ACTIVE" FACILITIES	"PASSIVE" FACILITIES
6. Loggerhead Park	Palm Beach County	- Four (4) racquetball courts. - Two (2) tennis courts. - One (1) tot lot. - Two (2) 10-station exercise trails.	- One (1) mile of nature trail. - Two (2) acres of picnic areas. - One (1) historical site. - One (1) community center. - 900 ft. Ocean beach. - 216 Ocean beach car stalls. - One (1) fishing site.
7. Juno Park	Palm Beach County	- Two (2) Little League baseball fields. - One (1) basketball court. - Two (2) tennis courts. - Two (2) tot lots.	- One (1) acre of picnic areas. - One (1) fishing site. - One (1) boat launch ramp.
8. Juno Beach Park	Palm Beach County	- None.	- Two (2) acres of picnic areas. - 300 ft. of Ocean beach. - 318 Ocean beach car stalls. - One (1) fishing site.
9. Bert Winters Park	Palm Beach County	- One (1) Junior Major League baseball field. - One (1) Junior football/soccer field. - Two (2) tennis courts. - One (1) tot lot.	- One (1) acre of picnic area. - Two (2) boat launch ramps.

TABLE 9-2 (Con't.)

NAME	JURISDICTION	"ACTIVE" FACILITIES	"PASSIVE" FACILITIES
10. Phil Foster Park	Palm Beach County	- One (1) tot lot.	- Four (4) acres of picnic areas. - One (1) fishing site. - Four (4) boat launch ramps. - One (1) boat rental.
11. Ocean Reef Park	Palm Beach County	- One (1) tot lot.	- One (1) miles of nature trail. - 700 ft. of Ocean beach. - 240 Ocean beach car stalls.

SOURCE: Palm Beach County Parks and Recreation Department, 1985.

9.3 RECREATION AND OPEN SPACE ANALYSIS

Overall population, based on U.S. Bureau of Census figures, University of Florida estimates and projections by mathematical extrapolation, are used to measure the potential recreational demands created by the Town's population growth. Population projections to the year 1999 are used for calculating demand and ultimately the need for future parks and recreational facilities.

Guidelines and standards for park classes, beaches, special uses (i.e. marinas, boat ramps, golf courses), active and passive recreation facilities are presented in order to calculate need based on estimated demand and availability of existing recreation sites and facilities.

9.3.1 Guidelines and Standards

Park Classification	Standard	Service Area	Site Size	Population Served
Neighborhood	2.5 acres/1000	under 0.5 mi.	Under 10 acres	Up to 5,000
Community	2.5 acres/1000	0.5 – 3.0 mi	5-60 acres	Up to 25,000

Source: Needs Assessment Study, 1985
Palm Beach County Parks and Recreation Department

Recreation Area	Standard (unit/pop)	User Guideline	Turnover/da?
Beaches	1 mi/25,000	4224/day	2
Marinas	1 slip/2,000	4/day	1
Boating	1 ramp/5,000	160/day	40
Golf Course	9 holes/25,000	240/day	60

Source: Needs Assessment Study, 1985
Palm Beach County Parks and Recreation Department

Recreation Activity	Standard (unit/pop)	User Guideline	Turnover/Da?
Swimming	1 pool/25,000	389/day	2
Tennis	1 court/2,000	24/day	8
Basketball	1 court/2,000	72/day	6
Shuffleboard	1 court/5,000	22/day	8
L.L. Baseball	1 field/3,000	100/day	5
Sr. Baseball	1 field/6,000	100/day	5
Adult Softball	1 field/6,000	100/day	5
Football/Soccer	1 field/4,000	140/day	5
Exercise Trail	10 station/10,000	200/day	20
Handball and Racquetball	1 court/5,000	32/day	12
Playground	1 area/3,000	160/day	8
Volleyball	1 court/6,000	144/day	8

Source: "Regional Comprehensive Development Plan" APB 1976
"Outdoor Recreation in Florida, 1981"

9.3.2 Projections of Park and Recreation Needs

In order to establish current and future needs for recreation sites, open space are recreation facilities, the existing supply must be analyzed in terms of the demand created by the present and growing population base. By utilizing data presented in Table 9-1, Recreation and Open Space Facilities, demand may be projected by comparing existing and projected population figures to the established park and recreation standards. Needs, on the other hand, may be measured in terms of the amount by which the demand exceeds the existing supply for a given park class or facility. The methodology utilized is as follows: The existing or projected population figures are multiplied by the appropriate standard to determine total demand. The existing supply is then compared to the result in order to arrive at the respective need.

Table 9-2 identifies the major recreational and open space facilities in Palm Beach County in close proximity to the Town. While current and future needs of recreational and open space facilities are based on demand generated by the population base of Lake Park, it is apparent that some of this demand is being met by County-owned privately-owned facilities and open space areas within or in close proximity to the Town limits. The facilities and areas outside the Town limits are not assigned a percentage of the demand but are noted in each instance.

The Palm Beach County Parks and Recreation Department provides for the community and regional recreation and open space needs of County residents and visitors. According

to County planners, the County system is designed to provide approximately 20% of the recreation and open space needs of the resident population, based on the standards referenced in Section 9.3.1 of this element. The remaining 80% is anticipated to be provided by municipal and privately-operated recreational facilities.

Using the 80% figure as a guide, the level of service standards for open space and recreation facilities for the Town of Lake Park have been established accordingly. These standards are identified as the existing inventory or Town recreation and open space facilities and listed in Table 9-4.

9.3.3 Present and Future Population Base

The following population data, as presented in the FUTURE LAND USE element (Section 3.3.4), are used to calculate demand of recreational and open space facilities within the Town.

	1987	**1994**	**1999**
Resident	6,793	7,222	7,270
Seasonal	578	618	622
Total	7,371	7,840	7,892

(Note: 1989 represents the current population; 1994, the 5-year projection; and 1999, the 10-year projection.)

9.3.4 Summary of Current and Future Recreation and Open Space Needs

Table 9-3 identifies the various park classifications, recreation areas and activities within the Town and analyzes each in terms of current and future demand. The analysis presented in this table identifies areas of current and future needs. Future recreational uses (i.e. those identified under the current and future needs assessments) are to be included in the Future Land Use Map (August, 1988).

TABLE 9-3

RECREATION AND OPEN SPACE ANALYSIS

PARK CLASSIFICATION	STANDARD (UNIT/POPULATION)	EXISTING SUPPLY	DEMAND CURRENT[1]	DEMAND FUTURE[2]	NEED CURRENT	NEED FUTURE
Neighborhood	2.5 acres/1,000	22.3 acres	18.5 acres	19.8 acres	-	-
Community	2.5 acres/1,000	6.0 acres	18.5 acres	19.8 acres	12.5 acres	13.8 acres
RECREATION AREA						
Marinas	1 slip/2,000	240 slops	4 slops	4 slips	-	-
Boating	1 ramp/5,000	4 ramps	2 ramps	2 ramps	-	-
Golf Course	9 holes/25,000	-	-	-	-	-
					-	-
RECREATION ACTIVITY					-	-
Swimminf	1 pool/25,000	-	-	-	-	-
Tennis	1 court/2,000	6 courts	4 courts	4 courts	-	-
Basketball	1 court/2,000	2 courts	4 courts	4 courts	2 courts	2 courts
Shuffleboard	1 court/5,000	4 courts	2 courts	2 courts	-	-
Baseball/Softball	1 field/6,000	4 fields	2 fields	2 fields	-	-
Football/Soccer	1 field/4,000	-	2 fields	2 fields	2 fields	2 fields
Handball/Racquet.	1 court/5,000	-	2 courts	2 courts	2 courts	2 courts
Playground[3]	1 area/3,000	2 areas	3 areas	3 areas	1 area	1 area
Volleyball	1 court/6,000	1 court	2 courts	2 courts	1 court	1 court

1 Current Demand based on total 1987 resident population of 6,793.

[2] Future demand based on total resident buildout population of 7,270.

[3] Playgrounds and tot lots

SOURCE: LAND RESEARCH MANAGEMENT, INC.; 2/88

9.3.5 Analysis

The Town of Lake Park is virtually built-out, with a present resident population of approximately 6,793. Even with the recently approved 11 acre multi-family project developed at the northeast corner of the coastal area, resident and seasonal population is not anticipated to exceed 8,000 during the 10-year planning period. (Assuming the Town remains within its current boundaries and residential land is not acquired by Annexation).

The total of all existing public recreation and open space is 31.9 acres. Add to this the private facilities of approximately 1.75 acres, and the total is 33.65 acres. When public areas such as the library and the recreational rooms inside City Hall are also counted, the facilities and area devoted to recreation/ open space appear to be adequate.

In addition to these in-town neighborhood and community facilities, the inventory indicates a series of County and State facilities within a 10 mile radius. These include the community district and regional parks, beaches, and nature preserves.

Assuming this ultimate population of 8,000 and using Palm Beach County standards for park facilities*, the existing in-town facilities meet the needs of the residents.

*PBC Parks and Recreation Dept., Needs Assessment Study, 1985.

Table 9-4
Level of Service Standards

Park Classification	**Standard (acres/population)**
Neighborhood	2.5 acres/1000 residents
Community	0.5 acres/1000 residents
Recreation Activity	**Standard (unit/population)**
Swimming	1 pool/25,000
Tennis	1 court/2,000
Basketball	1 court/4,000
Shuffleboard	1 court/5,000
L.L. Baseball	1 field/4,000
Sr. Baseball	1 field/8,000
Adult Softball	1 field/8,000
Football/Soccer	1 field/8,000
Exercise Trail	10 stations/10,000
Handball/Racquetball	1 court/8,000
Playground	1 area/4,000
Volleyball	1 court/8,000

9.4 GOAL, OBJECTIVES AND POLICIES

9.4.1 Town Goal Statement

Ensure that the existing and future recreation and open space facilities and programs are improved and maintained in order to meet projected needs to Town residents.

9.4.2 Objectives and Policies

Objective 1:

Continue to provide a high level of maintenance of all existing facilities.

Policy 1.1:

Provide funding through the annual budgeting process and review user and permit fees.

Objective 2:

Plan for a long-range Capital Improvement Program for facilities.

Policy 2.1:

Initiate five-year Capital Improvement Program planning for existing facilities through annual updating.

Policy 2.2:

Institute a long-range Capital Improvement Program for land and Facilities to accommodate the needs and desires of the projected Ultimate population.

Policy 2.3:

Require recreational site dedications for new developments as part of the sub-division ordinance.

Objective 3:

Expand leisure programs to meet current and future needs.

Policy 3.1:

Expand library cultural programs for all ages.

Policy 3.2:

Continually plan expansion of all programs to satisfy population increases with the aid and advisement of citizen advisory boards.

Objective 4:

The Town shall require a minimum of 2.5 acres of developed recreation and open space per 1,000 residents.

Policy 4.1:

The Town shall consider the feasibility of establishing an impact fee schedule within the Town in order to ensure that the recreation and open space facilities at the adopted level of service are available concurrent with the impacts of development and in conformance with the Capital Improvements Element.

Policy 4.2:

The Town will identify properties available for acquisition and/or vacant or underutilized properties, and consider acquiring these properties in order to expand its inventory of usable recreation and open space.

Policy 4.3:

The Town shall update its Land Development Regulations to require certain percentages of open space to be provided for all new developments or redevelopment projects within the Town.

10 INTERGOVERNMENTAL COORDINATION

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

10.1 INTRODUCTION

The INTERGOVERNMENTAL COORDINATION element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 16.3177(6)(h), Florida Statutes, establishes the INTERGOVERNMENTAL COORDINATION element requirement and Chapter 9J5.015, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for intergovernmental coordination goal, objectives and policies.

In keeping with the requirements of Chapter 9J5.005 and 9J5.015 Florida Administrative Code, the INTERGOVERNMENTAL COORDINATION element is structured according to the following format:

Intergovernmental Coordination Data Summary;
Intergovernmental Coordination Analysis; and
Intergovernmental Coordination Goal, Objectives and Policies

Initial data is presented on a generalized basis, highlighting current intergovernmental coordination activities of the Town of Lake Park.

Including mechanisms utilized and the reasonable municipal official. Analyses are performed on a more specific basis, by implementing intergovernmental coordination needs are presented in the Goal, Objective and Policies section.

10.2 INTERGOVERNMENTAL COORDINATION DATA SUMMARY

Those entities with which Lake Park maintains intergovernmental relationships are listed on Table 10-1. Mechanisms are defined as either informal (i.e. review and comment, meetings between officials on specific issues or participation with non-binding groups) or formal (i.e. intergovernmental agreements, services agreements, contracts or membership in an official organization).

10.2.1 Adjacent Governments

Adjacent governments are defined as those municipalities (i.e. including Palm Beach County) which share a common boundary with the Town. Adjacent governments include: (1) The City of Palm Beach Gardens; (2) The Village of North Palm Beach; (3) the City of Riviera Beach; and (4) Palm Beach County. The location of each, in relation to the Town corporate limits, is shown on Figure 10-1. Additional detail regarding existing land use patterns and current zoning within adjacent government jurisdictions is shown on Figure 3-7 (Ref: FUTURE LAND USE element). Coordination of land use planning and development of properties adjacent to Lake Park is accomplished on an informal basis

through available notification, review and comment mechanisms during comprehensive planning and land development approval processes. Additional coordination with various public and private entities on specific issues is further discussed in sections of this element that follow. The Town Manager is primarily responsible for implementing coordination of planning with adjacent governments for Lake Park. Approval processes. Additional coordination with various public and private entities on specific issues is further discussed in sections of this element that follow. The Town Manager is primarily responsible for implementing coordination of planning with adjacent governments for Lake Park.

Figure 10-1 Surrounding Municipalities

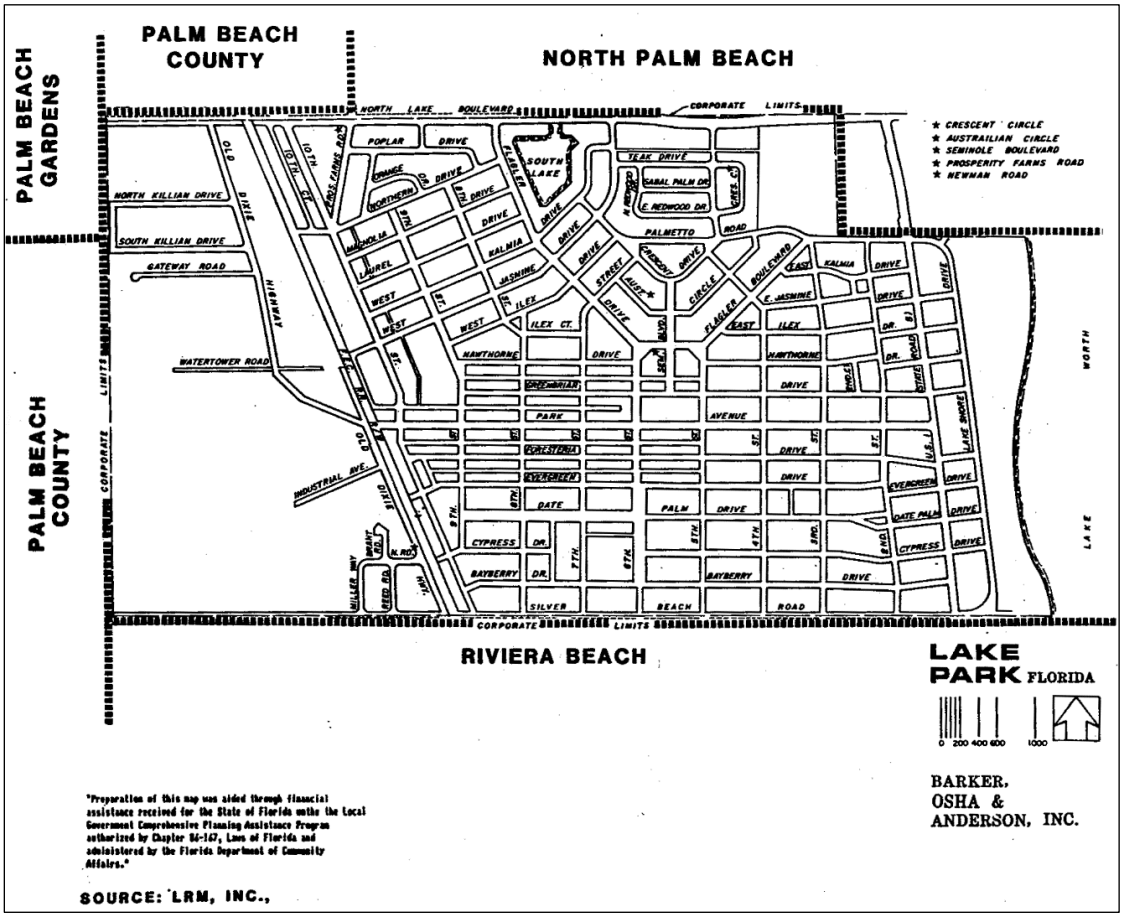


Table 10-1
Agencies and Organizations with which Lake Park Coordinates its activities

Federal Agencies	
	U. S. Department of Transportation
	U. S. Department of Housing and Urban Development
	U. S. Coast Guard
	U. S. Army Corps of Engineers
State Agencies	
	Florida Department of Community Affairs
	Florida Department of Environmental Regulation
	Florida Department of Transportation
	Florida Department of Natural Resources
	Florida Game and Freshwater Fish Commission
	Florida Division of Historical Resources
Regional Agencies	
	Treasure Coast Regional Planning Council
	South Florida Water Management District
County Agencies	
	Palm Beach County (i.e. County Commission or Specific Departments)
	Palm Beach Countywide Planning Council
	Palm Beach County Solid Waste Authority
	Palm Beach County School Board
	Palm Beach County League of Municipalities
	Palm Beach County Division of Environmental Resources Management
Special Districts	
	Northern Palm Beach County Water Control District
Private of Semi-Pubic Service Providers	
	Florida Power and Light Company
	Southern Bell
	Seacoast Utilities Authority
	Inter-City First Aid Services
	Lake Park Baptist Church
	Florida Public Utilities, Inc.
	Centel
	Private Waste Haulers

10.2.2 Summary of Intergovernmental Coordination Mechanisms

Intergovernmental coordination activities of the Town with entities listed on Table 10-1 are summarized in the sections that follow. Sections are organized on a functional (i.e. type of service or activity coordinated) as opposed to an agency basis. Specific applications of key intergovernmental coordination mechanisms summarized in this element are included, as appropriate, in other Plan elements. Intergovernmental coordination problems and/or needs are also identified in the particular element that is affected, and, if applicable, the means to resolve problems are also identified.

10.2.2.1 State Planning and Permitting

Various planning and permitting activities within Lake Park often require coordination with specific State planning agencies. The Town is mandated to prepare a Comprehensive Plan and associated documentation pursuant to the Local Government Comprehensive Planning and Land Development Regulation Act. Comprehensive Planning Assistance Funds have been provided to the Town to help fund this effort. Likewise, any development, marinas or bulkheads along Lake Worth generally requires approval permits from appropriate State environmental permitting agencies.

Required permits are discussed in detail in other elements of this Plan. In those instances, the Florida Department of Environmental Regulation (FDER) and Florida Department of Natural Resources (FDNR) are coordinated with. Development projects within the Town are required to procure appropriate State permits prior to commencing construction.

Coordination with various State agencies is the responsibility of Town Manager and the various appropriate Department Directors.

10.2.2.2 Regional and County Planning

The Town in located within the jurisdiction of Treasure Coast Regional Planning Council (TCPRC). Consistency of the Town Comprehensive Plan with the Regional Comprehensive Policy Plan is mandated by State law.

The Palm Beach Countywide Planning Council (PBCPC) created in November, 1987, by County Charter Amendment, is responsible for coordinating lake use planning throughout Palm Beach County. An initial policy, requiring that

all municipalities define and plan for future annexation areas, was adopted by PBCPC in May, 1988. Coordination with the PBCPC and implementation of activities related to the annexation policy are the responsibility of the Town Manager.

The Palm Beach County School Board is responsible for operating the public school system on a Countywide basis, including site selection, construction, districting, operations and maintenance. Lake Park Elementary School is the only public school currently located within the Town limits. The Town Manager is responsible for conveying official input regarding public school matters to the School Board; however, most decisions such as budgets and districting also allow for general public input through public hearing process.

Lake Park is a member of the Florida League of Municipalities, as well as the Palm Beach County Municipal League. These organizations are concerned with various common municipal issues. The Manager and a representative of the Town generally represent the Town at Palm Beach County Municipal League meetings. The Manager is primarily responsible to keep the Town informed regarding municipal matters and to coordinate any activities related thereto.

10.2.2.3 Transportation Planning and Traffic Engineering Services

The Palm Beach County Metropolitan Planning Organization (MPO) is a State created agency responsible for coordinating State and local transportation planning in Palm Beach County, while the Florida Department of Transportation (FDOT) and Palm Beach County are responsible for preparing five-year road improvements programs which are updated annually. Programs include schedules for right-of-way acquisition, engineering and construction. Annual public hearings are held for the purpose of obtaining local input to scheduling decisions reflected in these programs. The Town Manager is responsible for notifying the appropriate agency regarding any input the Town may have in these processes. In addition, the U. S. Department of Transportation, FDOT and Palm Beach County are responsible for maintaining roadways under their jurisdiction within the Town. The Director of Public Works is responsible for coordinating with these entities regarding roadway maintenance activities.

The Town has entered into intergovernmental agreements with Palm Beach County to provide certain transportation maintenance services. Under the terms of these Agreements, the County has agreed to accept and perform various services on certain roadways in Lake Park. The County performs road maintenance functions on Silver Beach Road and maintains traffic control devices on the following roads: Park Avenue; Tenth Avenue; U.S.

Highway No. 1; Northlake Boulevard; and Old Dixie Highway. The following functions in regard to the above facilities have been transferred to the County: install stop or yield signs; maintain, operate and upgrade traffic signals; where warranted; prohibit or restrict traffic movements; install and maintain pavement markings; designate one-way streets; establish no parking, standing and stopping regulations; establish emergency or experimental regulations; establish on-street truck and passenger loading zones; establish speed limits; establish no passing zones; prohibit use of streets by trucks; establish bridge loading restrictions; and establish traffic control guidelines for all roadway construction and maintenance operations.

Various signalized intersections and areas along Northlake Boulevard were jointly installed by the Town, North Palm Beach and Palm Beach County, and are now maintained by the County. Those signals are at the following intersections: Northlake Boulevard and U. S. Highway #1; Northlake Boulevard at the Twin City Mall and Bank entries; Northlake Boulevard and Southwind Drive; and Northlake Boulevard and Prosperity Farms Road. Also, under an written Agreement with the Florida Department of Transportation, Lake Park provides sanitary maintenance functions along the utility strip bordering U. S. Highway #1.

The Director of Public Works of the Town is primarily responsible for coordinating these activities with the County and administering the Agreement on behalf of the Town.

10.2.2.4 Police Protection/Law Enforcement Services

Although the Town provides police protection and law enforcement services to its residents, additional services are occasionally required and municipal cooperation is necessary to accomplish this end. The Town has an on-going Agreement with the Palm Beach County Sheriff for use of the County Jail facilities to detail prisoners. Under the terms of this Agreement, the Sheriff agrees to permit Lake Park to hold prisoners in the County Jail prior to filing either Municipal or State charges for a period not to exceed twenty-four hours. The Town agrees to pay a nominal fee ($5.00) per prisoner per day for use of the facility. However, the Sheriff agrees that Lake Park shall have use of the jail to hold or confine prisoners when they have been booked on a valid State Criminal Statute Violation, misdemeanor or felony, and are being processed in a criminal court of Palm Beach County without a per diem charge for such services.

The Town has also entered into mutual-aid agreements (by Resolution) with the City of Palm Beach Gardens, and the Village of North Palm Beach in the event that one, or all, need assistance from the others in the provision of police protection services. The agreements are similar and specify the duties of each party. Specifically, the Town agrees to render emergency police assistance to any point within the cooperating jurisdictions. It is agreed that each jurisdiction shall provide compensation for their own employees, and that no charges shall be levied for mutual assistance. The mutual-aid agreements further stipulate how

equipment shall be dispatched to a police emergency and how that equipment shall be furnished and used. The police officers of Palm Beach Gardens, and North Palm Beach are sworn in by the Town and have all powers and duties of the Lake Park Police under these Agreements. Likewise, Lake Park police officers are sworn in by Palm Beach Gardens and North Palm Beach by their respective departments for the same purposes.

The Police Chief is primarily responsible for coordination of these police protection and law enforcement arrangements.

10.2.2.5 Civil Defense/Disaster Planning and Preparedness

The Town of Lake Park participates in the civil defense program of Palm Beach County. Local government jurisdictions have entered into a mutual-aid agreement for disaster planning and preparedness. Under the terms of this agreement, the Town and County agree to assist each other during times of emergency and/or disaster. Assistance will be provided in accordance with the agreement and consistent with the State Emergency Operations Plan which is administered by the State Department of Community Affairs. The County Civil Defense Director and the Town Manager are to coordinate activities under this program.

10.2.2.6 Local Option Gas Tax

The Town participates with Palm Beach County and other municipalities of the county in the distribution of proceeds from this tax. Lake Park has entered into an Inter-local Agreement with Palm Beach County to become a participant. Under the terms of this Inter-local Agreement, six cents of local option gas tax has been enacted by Ordinance of the Board of County Commissioners and distributed among the participating parties. The proceeds are divided two-thirds to the County and one-third to the cities collectively. The one-third municipal share is divided using a formula that is based seventy percent upon lane miles (i.e. those roads located within Lake Park which the Town maintains) and thirty percent upon the population of the municipality.

The Town Manager is responsible for administering the program on behalf of Lake Park.

10.2.2.7 Recreation Facilities

Development and maintenance of recreation facilities in the Town have been partially accomplished through agreements and lease agreements between Lake Park and other entities. The Town has had an on-going lease agreement with the Lake Park Baptist Church to utilize the land at the corner of 6th Street and Park Avenue for recreational purposes. The Lease Agreement has been and is in effect

at a lease rate of one dollar per year. Under terms of the Lease Agreement, the Town agreed to construct and maintain various recreation facilities.

The Town also has an agreement with the Palm Beach County School Board for the summertime USE of the playground facility at Lake Park Elementary School for recreational programs.

These lease arrangements are administered and coordinated by the Town Recreation Director.

10.2.2.8 Fire Protection Services

The Town cooperates with the City of Palm Beach Gardens, the Village of North Palm Beach, and the City of Riviera Beach in providing fire protection services when necessary. Although formalized agreements do
no exist regarding these services, these municipalities have operated with the mutual understanding that each of the fire fighting forces are available to the others for backup and assistance when called upon. Fire protection services are provided through the Town Fire Department. This Department has the responsibility of coordinating additional support services when needed.

10.2.2.9 Emergency Medical Services

Inter-City First Aid Squad (Inter City) provides emergency medical transport services to the Town. The Fire Department has trained paramedics and other emergency personnel; however, there are no transport vehicles. Therefore, the Town utilizes Inter-City for these services. Inter-City is also available, on an emergency basis, for advanced life support services. Inter-City serves Zone 2 of the County, including Lake Park. As a result, no special contractual arrangement or agreement is necessary. The coordination for dispatch of these services is provided by the Town Fire Department.

10.2.2.10 Flood Insurance

The Town participates in the National Flood Insurance Program (i.e. Federal Insurance Administration, Department of Housing and Urban Development). The State of Florida has environmental regulatory authority within the Town under this program. It is the purpose of this program to promote the general health, safety and welfare and to minimize public and private losses due to flood conditions in special flood hazard areas.

The Director of Public Works is responsible for coordinating this program.

10.2.2.11 Low Income Housing

Lake Park entered into an interlocal agreement with Palm Beach County to cooperate in the implementation of the goals and objectives of the Palm Beach County Housing Assistance Plan, as approved by the U. S. Department of Housing and Urban Development. Participation by the Town, and other municipal governments, assures continuance of the Community Development Block Grant Program within the County. Under the Agreement, Palm Beach County has the responsibility for selecting program activities and annually determining the allocation of funds. No
programs have been planned for implementation within the Town limits. Responsibility for coordinating activities under this Agreement rest with the Town Manager.

10.2.2.12 Utilities Provision

The Town has formal arrangements (i.e. franchises, franchise ordinances or business licenses) with the providers of several utilities within the corporate limits, including: (1) electricity; (2) telephone; (3) cable television; (4) commercial solid waste collection; (5) potable water and wastewater; and (6) LP and natural gas. Responsibility for implementation and administration of these mechanisms within the Town rests with the Town Manager and various department heads. The following Table lists the utility provider, service provided and the implementing mechanism:

Provider	**Service**	**Implementation Mechanism**
Florida Power & Light	Electricity	Franchise Agreement
Southern Bell	Telephone	Franchise Agreement
Centel	Cable TV	Franchise Agreement
Private Waste Haulers	Large-scale Commercial Solid Waste Collection	Occupational License
Seacoast Utilities Inc.	Potable Water and Wastewater	Public Service Commission Certificate
Florida Public Utilities Inc.	LP and Natural Gas	Franchise Agreement
Palm Beach County Utility Corp.	Natural Gas	Franchise Agreement

10.3 INTERGOVERNMENTAL COORDINATION ANALYSIS

As indicated in the previous section, the Town utilizes a variety of intergovernmental coordination mechanisms to provide needed planning and services for its residents. An analysis of these mechanisms and the identification of problems or needs requiring additional intergovernmental coordination efforts are presented in the paragraphs that follow. Effectiveness and needs

analyses are formatted in a manner to be consistent with applicable elements of the Town Comprehensive Plan.

10.3.1 Future Land Use

The Town Manager and Director of Public Works are responsible for coordinating future land use planning activities with the adjacent municipalities and Palm Beach County. This coordination is primarily accomplished by means of the state's comprehensive planning process, which is coordinated in this part of the state by the Treasure Coast Regional Planning Council (TCRPC). TCRPC is also responsible, by state law, for reviewing Development of Regional Impact (DRI) projects, as defined by state law, in a four-county area that includes Palm Beach County. In addition, the Palm Beach Countywide Planning Council (PBCPC) is in the process of preparing guidelines and policies to be used as the basis for resolving land-use disputes between local governments in Palm Beach County. The initial effort on the part of the PBCPC is the development of a policy which will be used by local governments as a basis for defining and planning for municipal annexation areas. It is concluded that these mechanisms are an effective means of addressing intergovernmental land use issues.

Problems and Needs

Based upon an examination of the plans of adjacent local governments, no land use issues have been identified which require the implementation of additional intergovernmental mechanisms. However, should the Town consider annexation to the west, Palm Beach County and Palm Beach Gardens should be coordinated with, in terms of defining annexation areas and developing compatible land use plans.

Issues related to annexation can be addressed by the adoption and implementation of the Palm Beach Countywide Planning Council (PBCPC) policy on annexation. It is recommended that the Town immediately pursue the implementation of PBCPC policy by performing an annexation study according to the guidelines established therein.

10.3.2 Traffic Circulation

Effectiveness of Existing Mechanisms

The Palm Beach County Metropolitan Planning Organization (MPT) is responsible for coordinating federal, state and local transportation planning for the urban area of the County, including the Town of Lake Park. This responsibility is established by State law, which requires such organizations to coordinate transportation planning in counties that have an estimated population of greater than 50,000. In addition the Town has contracted with Palm Beach County to provide engineering services on Prosperity Farms Road and several signalized intersections. It is concluded that these basic planning and engineering mechanisms have effectively served the needs of the Town.

Problems and Needs

Although the Town has been adequately served by existing mechanisms, several specific issues have been identified, including: (1) the need for the widening of Northlake Boulevard bridge across South Lake to improve traffic performance levels; and (2) the future need for widening U.S. Highway #1 to assure LOS C standards, from Silver Beach Road to Palmetto Road. Although this facility is not under the Town's jurisdiction, Lake Park should coordinate with FDOT to implement appropriate timely improvements.

10.3.3 Housing

Effectiveness of Existing Housing

It is concluded that the private sector delivery process is currently meeting the housing needs of Town residents. However the Town does not recognize the need for public sector and public-private sector ventures to meet the low and moderate income housing needs in Palm Beach County. In this regard, Lake Park has executed in "Interlocal Agreement between Palm Beach County and the Town of Lake Park" detailing Town participation in the implementation of the Palm Beach County Housing Assistance Plan as approved by the U. S. Department of Housing and Urban Development. On this basis, it is concluded that current mechanisms are effectively addressing housing issues within the Town.

Problems and Needs

It was concluded that the Town should review the Zoning Code for the purpose of determining the feasibility of including amendments oriented to permitting additional group home facilities licensed by the Florida Department of Health and Rehabilitative Services (DHRS). It is therefore recommended that technical assistance be sought from DHRS in the development of potential Zoning Code revisions.

10.3.4 Sanitary Sewer, Solid Waste, Drainage Potable Water and Natural Groundwater Aquifer Recharge

Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge

The provision of infrastructure services in Lake Park is provided by several operators and implemented by several mechanisms which are summarized in the following Table:

Infrastructure Service	Provider	Implementing Mechanism
Sanitary Sewer		
Collection, Transmission	Seacoast Utilities	Interlocal

Treatment and disposal	Authority	Agreement
Solid Waste		
Collection		
Residential	Lake Park	Operating Budget
Commercial	Lake Park	Operating Budget
	Private Hauler	Occupational License
	Palm Beach County Solid Waste Auth.	Special State Act
Drainage		
Primary System (C-17 Canal only)	So. Fla. Waste Management District	Fla. Statutes, Chapter
Secondary (Local) System	Lake Park	Subdivision Reg. Ordinance; Operating Budget
Potable Water		
Treatment, Transmission And Distribution	Seacoast utilities Authority	Interlocal Agreement
Aquifer Recharge		
Surface Water Manag.	So. Fla. Water Management Dist.	Chapter 40-E, Fla. Admin. Code
Emergency Water Rationing	So. Fla. Water Management Dist. & N. Palm Beach	Chapter 40-E, Fla. Admin. Code Ordinance

Discussion of each of the above infrastructure services, providers and implementing mechanisms are discussed in the SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE element. It is concluded that the basic implementing mechanisms governing the provision of infrastructure services is adequately serving the needs of the Town.

Problems and Needs

Although adequate coordination mechanisms are in place, several specific planning or facilities related issues have been identified. These issues are discussed, by infrastructure service, in the paragraphs that follow.

Seacoast Utilities exercises complete responsibility for providing sanitary sewer to the Town as well as the remainder of its service area. It is concluded that existing capacity is adequate to serve buildout of the Town. However, effluent discharge toxicity problems persist at the Anchorage Treatment Plant. This problem may serve to limit additional connections if not corrected. Seacoast Utilities and the Florida Department of Environmental Regulation are currently working to correct this problem. If the problem

is not resolved under the conditions of the current Temporary Operating Permit (TOP) other alternatives are available, such as additional treatment process, construction of a deep effluent injection well or conversion to a repump facility for transmission of effluent to another treatment facility.

Although the Anchorage Plant is not within the corporate limits, the Town should closely monitor the toxicity situation and participate, if necessary, in the development of alternative disposal techniques.

Solid waste collection and disposal is currently being adequately administered through a coordinated system of public and private.

Collection and disposal at the Palm Beach County Solid Waste Authority Facility (SWA). Capacities of each participating entity are sufficient to accommodate Town needs through buildout. However, it is recommended that a formal request be sent to the SWA to initiate a pilot refuse separation program within the Town.

An evaluation of the Town drainage facilities indicates that the system is in need of improvements. A majority of the improvements will require expenditures on the part of the Town; however, coordination will be required with the South Florida Water Management District to obtain the recommended drainage easement to the C-17 Canal to supplement improvements in Drainage Basin 20.

Seacoast Utilities exercises complete responsibility for providing potable water services to the Town, as well as the remainder of its service area. Current capacity of the system is concluded to be adequate to serve the Town through buildout. However, age and condition of some system components have been defined as potential problem areas. Seacoast Utilities through a number of corrective programs, is currently addressing each. The Town should continually monitor the progress of these activities, on an informal basis, to assure that potential impacts on the current rate structure are minimized.

Groundwater recharge has been defined as being an issue within the wellfield zones of the Old Dixie Wellfield (Ref Figure 6.5-6). Coordination with Palm Beach County and the Florida Department of Environmental Regulation is essential to protecting the resource, particularly in terms of implementing the County's Wellfield Protection Ordinance. Also, participation in the Emergency Water Shortage Program, administered by the South Florida Water Management District, insures Town participation in conserving water resources during periods of low rainfall.

10.3.5 Coastal Management

The Palm Beach County Health Department, Florida Department of Environmental Regulation, Florida Game and Freshwater Fish Commission, Florida Department of Natural Resources, the U.S. Army Corps of Engineers and the Town of Lake Park all have statutory mandates to protect water quality, wildlife habitats and coastal vegetation within or adjacent to the Town. It is concluded that a potentially effective network of environmental controls is currently in place. The Town also participates in the hurricane

evacuation program for the County, which provides an effective means of evacuation of residents in the case of an emergency.

Problems and Needs

No additional problems have been identified which require the implementation of addition intergovernmental mechanisms.

10.3.6 Conservation

Effectiveness of Existing Mechanisms

Coordination mechanisms and administering agencies responsible for implementing conservation related programs within the Town have been discussed in other sections of this element.

Problems and Needs

It is recommended that the Palm Beach Soil and Water Conservation District be contacted to perform a vegetative analysis of Planning Area 3 for the purpose of identifying plant and/or animal species to be preserved when this area is developed.

10.3.7 Recreation and Open Space

Effectiveness of Existing Mechanisms

Lake Park currently provides recreation facilities to Town residents using primarily municipal owned facilities. In addition, several County State and privately owned facilities in the vicinity are utilized by Town residents.

Needs and Problems

It is concluded that Lake Park is adequately providing for the recreational needs of its residents, although level-of-service standards are below those recommended by Palm Beach County. It is further concluded that, if lease or contractual arrangements with other jurisdictions and/or private entities are consummated, the defined need for "field" facilities (e.g. soccer, football, etc.) can be accommodated. The Palm Beach County Parks and Recreation Department should be contacted in this regard.

10.3.8 Regional Planning Coordination

The Treasure Coast Regional Planning Council (TCRPC) is the agency responsible for coordinating and implementing regional planning for a four county area, including Palm Beach County. In this regard, TCRPC has adopted a Regional Policy Plan (RPP) oriented to

implementing, from a regional perspective, the 25 goals of the State Comprehensive Plan. An in depth review of the RPP document was undertaken, in terms of the goals, objectives and policies prepared as part of the Town of Lake Park comprehensive planning effort. Where necessary and appropriate, language has been included in each plan element to further RPP goals and policies. On this basis, it is concluded that the Town Comprehensive Plan is consistent with the RPP prepared by Treasure Coast Regional Planning Council and that additional coordination mechanisms, other than those discussed in Section 10.3, above, are not required at this time.

10.3.9 Areas of Critical State Concern

There are no designated areas of Critical State Concern within the Town limits. Therefore, coordination with the rules, principles for guiding development, and development regulations in such areas do not apply.

10.4 GOAL, OBJECTIVES AND POLICIES

10.4.1 Town Goal Statement

Maintain and initiate, where necessary, an efficient and effective network of intergovernmental coordination mechanisms oriented to addressing issues and needs necessary to implement the goals and objectives of the Lake Park Comprehensive Plan. Further, Intergovernmental coordination shall be oriented to maintaining the current character of the Town, while addressing issues and heeds necessary to maintain adopted levels of service standards.

10.4.2 Objectives and Policies

Objective 1:

Maintain development and planning coordination with adjacent municipalities, Palm Beach County, Palm Beach County School Board, and current service providers, the Treasure Coast Regional Planning Council and the State of Florida.

Policy 1.1:

All relevant information necessary for review and comment by affected governments shall, upon request, be supplied by the Town.

Policy 1.2:

The Town shall participate in the Palm Beach County Intergovernmental Coordination Program and Intergovernmental Plan Amendment Review Committee (IPARC) regarding pending Comprehensive Plan amendments. Formally notify appropriate governments of pending planning or development activities on lands adjacent to their borders. Comments from adjacent municipalities shall be formally considered prior to making a land use planning or development decision in these areas.

Policy 1.3:

Formally consider regional goals and objectives during the land development decision-making process.

Policy 1.4:

The Town, where appropriate, shall coordinate its annexation policies with Palm Beach County and adjacent local governments.

Policy 1.5:

Provide opportunities for group homes in Lake Park in accordance with State requirements and in coordination with the appropriate agencies, including the Florida Department of Children and Families.

Policy 1.6:

Coordinate as appropriate with Palm Beach County's Solid Waste Authority in the implementation of programs for waste separation within the Town.

Policy 1.7:

The Town will carefully monitor and reevaluate its contract for Police and Fire-Rescue Services with Palm Beach County on an ongoing basis

Policy 1.8:

The Town will closely work with the Palm Beach County Sheriff's Office and Palm Beach County Fire Rescue on public health, safety and welfare issues.

Policy 1.9:

The Town will continue working with the Palm Beach County Sheriff's Office to promote the work done by the Sheriff's Office Fire-Rescue Division and the public safety officers within the Town. The Town will assist these agencies to increase awareness of existing

public safety programs available to Lake Park citizens and promote new programs to benefit public health, safety and welfare.

Policy 1.10:

The Town will develop and define partnerships with the Metropolitan Planning Organization, Palm Tran, the Florida Department of Transportation and other applicable agencies or groups with respect to mass transit as well as other transportation planning issues. The Town will coordinate with the Florida Department of Transportation to evaluate and mitigate impacts on the State highway system that result from projects that are not reviewed as developments of regional impact.

Objective 2:

The Town, in coordination with Palm Beach County and neighboring municipalities, shall consider annexation requests from property owners who wish to voluntarily become a part of the Town and whose properties are contiguous to existing municipal limits, and/or shall identify and move to annex areas when such annexations are deemed to be in the best interest of the Town and the area to be annexed.

Policy 2.1:

Actively participate in the comprehensive planning processes of neighboring municipalities and Palm Beach County to identify areas in need of annexation.

Policy 2.2:

Actively participate in the comprehensive planning process of Palm Beach County, North Palm Beach and Riviera Beach regarding the protection of existing land uses in Lake Park from potential adverse impacts of development on properties in adjacent municipal jurisdictions.

Policy 2.3:

Should annexations occur, the Town shall confer with all affected jurisdictions to ensure an equitable and smooth transition.

Policy 2.4:

Any petition to annex properties into the Town of Lake Park should not be approved if such annexation will adversely affect the supply and delivery of public facilities and services or otherwise present an unreasonable burden to the citizens of Lake Park.

Objective 3:

Coordinate level of service standards consistent with those of adjacent local governments and current service providers, while recognizing potential differences in local circumstances.

Objective 4:

Coordinate and cooperate with agencies and governments charged with planning and/or review responsibilities at all levels of government.

Policy 4.1:

Periodically evaluate and strengthen existing interlocal agreements, as necessary, in mutual aid for fire and police protection and emergency medical services communications.

Policy 4.2:

Maintain high standards and responsible performance in the development and execution of interlocal agreements with other jurisdictions.

Policy 4.3:

Continue to participate in the management of the Lake Worth esturine system, under the guidance of County, State and Federal regulatory agencies, in conservation and management programs.

Policy 4.4:

Assist Palm Beach County in the implementation of the Wellfield Protection ordinance through the Town's occupational license procedure.

Policy 4.5:

Pursue the implementation of a drainage easement from the South Florida Water Management District to improve drainage in Drainage Basin 20.

Policy 4.6:

Planning activities mandated by the Comprehensive Plan will be coordinated with the State.

Policy 4.7:

The Town shall review the South Florida Water Management District's Lower East Coast Water Supply Plan, and the water supply facility work plans of agencies that have jurisdiction over and/or provide its potable water supply, as they are adopted and/or periodically updated in order to identify alternative projects that will increase its water supply, and shall coordinate as appropriate with these agencies in the implementation of these projects. In addition, the Town shall prepare a Ten-Year Water Supply Facilities Work plan in accordance with State requirements.

Objective 5:

The Town of Lake Park will ensure that development within its jurisdiction will be reviewed with surrounding units of Local government to determine impacts to their respective jurisdictions.

Policy 5.1:

Any development which may necessitate an amendment to the comprehensive plan of the Town of Lake Park shall be reviewed with respect to the relationship such development may have upon compatibility with comprehensive plans of surrounding units of local and regional government. The Town shall participate in the Palm Beach County Intergovernmental Coordination Program and Intergovernmental Plan Amendment Review Committee (IPARC) in the coordination and review of proposed Comprehensive Plan amendments.

Policy 5.2:

The Town of Lake Park shall insure that its activities are coordinated with Palm Beach County, Palm Beach Gardens, North Palm Beach, Riviera Beach, Treasure Coast Regional Planning Council, South Florida Water Management District, and the appropriate state agencies to provide for coordinated management of the resources of Lake Worth.

Objective 6:

The Town shall maintain existing and promote increased economic stability within the boundaries of Lake Park. This commitment to economic development shall be considered when conducting Town business including the execution of all contracts and interlocal agreements.

Policy 6.1:

The Town shall explore the establishment of economic development zones or other mechanisms to retain and attract businesses.

Policy 6.2:

The Town shall consider conducting market studies to determine types of businesses needed in the downtown, mixed use, and/or commercially or industrially designated areas.

Policy 6.3:

The Town shall explore alternative sources for funding or tax relief.

Policy 6.4:

The Town shall continue communication and cooperation with the Palm Beach County Office of Economic Development, and shall coordinate as appropriate with other agencies in the implementation of economic development strategies in the Town, County, region and State.

Objective 7:

To coordinate planning efforts with the municipalities of Jupiter, Riviera Beach, North Palm Beach, Palm Beach Gardens, Mangonia Park and Palm Beach County (the North Palm Beach County partners) in order to jointly identify land parcels in northern Palm Beach County which will provide opportunities for the development of bioscience research/biotechnology uses and will help secure those parcels against conversions to retail, commercial or residential land-use designations.

Policy 7.1:

Develop a unified vision in coordination with the North Palm Beach County partners and assign a Bioscience Research Protection Overlay (BRPO) to land parcels within the Town in order to provide opportunities for bioscience research/biotechnology uses.

Policy 7.2:

To assure greater cooperation with the North Palm Beach County partners, the Town shall maintain its representation on the Bioscience Land Protection Advisory Board (BLPAB) as set out in the Interlocal Agreement to ensure the protection of bioscience uses within the BRPO.

Objective 8

Support climate and seal level rise initiatives.

Policy 8.1

Support the SUA, Palm Beach County, Florida DEP, Florida Fish and Wildlife Commission and SFWMD in any efforts to evaluate the consequences of seal level

rise, changing rainfall patterns, temperature effects, and cumulative impacts to existing structures and existing legal uses.

Policy 8.2

Participate in the Southeastern Florida Regional Climate Change Compact to support regional planning efforts and initiatives to adapt to rising sea level in the LEC Planning Area.

Policy 8.3

Work collaboratively with the county, SUA, Florida DEP, Florida Fish and Wildlife Commission and the SFWMD to identify the utility wellfields and other users at potential risk of saltwater intrusion within the LEC Planning Area

Monitoring Measure:

The Town shall enact legislation supporting efforts of the SUA, Palm Beach County and SFWMD to evaluate climate change and its impacts.

11.0 CAPITAL IMPROVEMENTS

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

11.1 INTRODUCTION

The CAPITAL IMPROVEMENTS element is required to be included within the Comprehensive Plan per requirements of State planning law and rule criteria. Specifically, Chapter 163.3177(6)(f), Florida Statutes, established the CAPITAL IMPROVEMENTS element requirement and Chapter 9J5.016, Florida Administrative Code, establishes minimum criteria to guide its preparation.

This element contains a summary of the data, analyses and support documentation necessary to form the basis for future capital improvements goals, objectives and policies.
In keeping with the requirements of Chapter 9J5.005 and 9J5.010 Florida Administrative Code, the CAPITAL IMPROVEMENTS element is structured according to the following format:

- Capital Improvements Data;
- Capital Improvements Analysis; and
- Capital Improvements Goal, Objectives and Policies

Data and analyses presented are important to the development of goal, objective and policies statements in that localized issues can be identified and targeted.

11.2 CAPITAL IMPROVEMENTS DATA SUMMARY

An overview of conditions pertinent to the preparation of the capital improvements goal, objectives and policies are presented in the sections that follow.
The following is the text adopted in 1989 as part of the Comprehensive Plan. By 2016, this text had disappeared. It is presumed to have been inadvertently deleted, and is being placed back with the August 2020 update. Tables reflect data from original Plan

11.2 CAPITAL IMPROVEMENTS DATA SUMMARY

An overview of conditions pertinent to the preparation of the capital improvements goal, objectives and policies are presented in the sections that follow.

11.2.1 Financial Resources

In order to effectively plan for needed current or future capital improvements, and to systematically arrange for necessary financing through the budgeting process, a logical preliminary step is to inventory the various major sources of funding available to the Town of Lake Park. Revenue sources identified in the following section comprise a working inventory of financial resources available to the Town. Importantly, the discussion that follows includes all major financial resources available to the Town and is not limited to those sources which will necessarily be used for capital improvement projects included i this element's Five-Year Schedule of Improvements.

11.2.1.1 Revenue Resources Currently Being Utilized by the Town

Revenue sources currently available to the Town can be grouped into two primary sources: General Fund sources and Enterprise Fund sources. General Fund revenues are those sources which may be used for any legal, authorized purpose. General Fund revenues, therefore, include all sources except those which are required to be accounted for in another fund and are used to finance the ordinary operations of the Town. General Fund revenue sources, utilizing Fiscal Year (FY) 1986/87 figures, are summarized on Table
11-1.

TABLE 11-1
GENERAL FUND REVENUES - 1986/87

CATEGORY / SOURCE		PERCENT REVENUES ($)	TOTAL LESS OF TOTAL	PERCENT OF FY 1986/87 CARRYOVERS	
Local Taxes	Ad Valorem Taxes	1,496,384		40.1	47.9
	Franchise Fees[1]	359,507		9.6	11.5
	Utility Taxes	15,530		0.4	0.5
Licenses/ Permits	Occ. Licenses/	180,259		4.8	5.8
	Bldg. Permits	44,869		1.2	1.4
Inter-	State Revenue Sharing[3]	253,135		6.8	8.1
Governmental	License & Tax Rebates	459,566		12.3	14.7
	comp. Plan Grant	16,093		0.4	0.5
	School Crossing Guards	31,047		0.8	1.0
Service Charges	Parks & Recreation	17,177		0.5	0.6
	Other	1,019		0.0	0.0
Fines	Court Fines/Library	97,093		2.6	3.1
Misc.	Interest	68,823		1.8	2.2
	Contribution Form Marina Fund	58,720		1.6	1.9
	Misc.	23,329		0.6	0.7
	SUBTOTAL		3,122,551	83.6	100.0
CARRYOVERS	PREVIOUS YR. BAL.		61.2,164	16.4	
	TOTAL		3,734,715	100.0	

[1] Electricity; telephone; gas; cable TV; solid waste

[2] Telephone

[3] Cigarette tax; alcoholic beverage; licenses; sales tax; gas tax; local option gas tax; and municipal fuel refund.

SOURCE: TOWN OF LAKE PARK AUDITED FINANCIAL STATEMENTS AND OTHER FINANCIAL INFORMATION; Ernst & Whinney, 3/24/88; Land Research Mgt., Inc.; 12/88

The following analysis excludes Fiduciary Funds (i.e. Pension Trust Fundsand Expendable Trust Funds).

An enterprise fund is established to account for Town operations that are financed and operated in a manner similar to private business where the costs of providing goods or services on a continuing basis are financed primarily through user charges.
The Town Marina Fund is an enterprise fund established to finance the operations of the Lake Park Marina, with the Sanitation Fund (i.e. newly opened in FY 1986/87) is an Enterprise Fund established to finance residential and commercial solid waste collection services within the Town. Since the Sanitation Fund is newly operational, revenue

and expense statistics are not available for use in this analysis. Further, Marina Fund monies are not available to finance general capital improvements projects.
In addition to operating revenues, Lake Park has authorized the issuance of two special assessment revenue bonds to finance water and sewer system, paving and drainage improvements in Planning Bond amounts are summarized as follows:

Series	Amount	Maturation Date
1988A	$960,000	2008
1988B	540,000	2008

Bonds are secured by a lien and pledge of net revenues derived from special assessments to be levied against 35 parcels of land within the 45 acre Special Assessment District No. 1, as illustrated on Figure 11-1. The ratio of Revenue Bonds to the debt service within the Town is currently 100% Annual debt service on the Series 1988A issue is shown on Table 11-

11.2.1.2 Revenue Sources Available But Not Being Utilized By The Town.

Depending upon priorities assigned by the Town Commission and the availability of other revenue sources, it may be necessary to seek additional funding sources. The following sources of revenue represent some of the more commonly used options available to the Town to finance capital improvements.

1. Impact Fees. These fees are charged in advance of development and are designed to pay for infrastructure needs, but not operating costs, which directly result from new projects
These fees must be equitably allocated to the specific group(s) which will directly benefit from the capital improvement, and the assessment levied must fairly reflect the true costs of these improvements. The Town does not currently utilize impact fees.

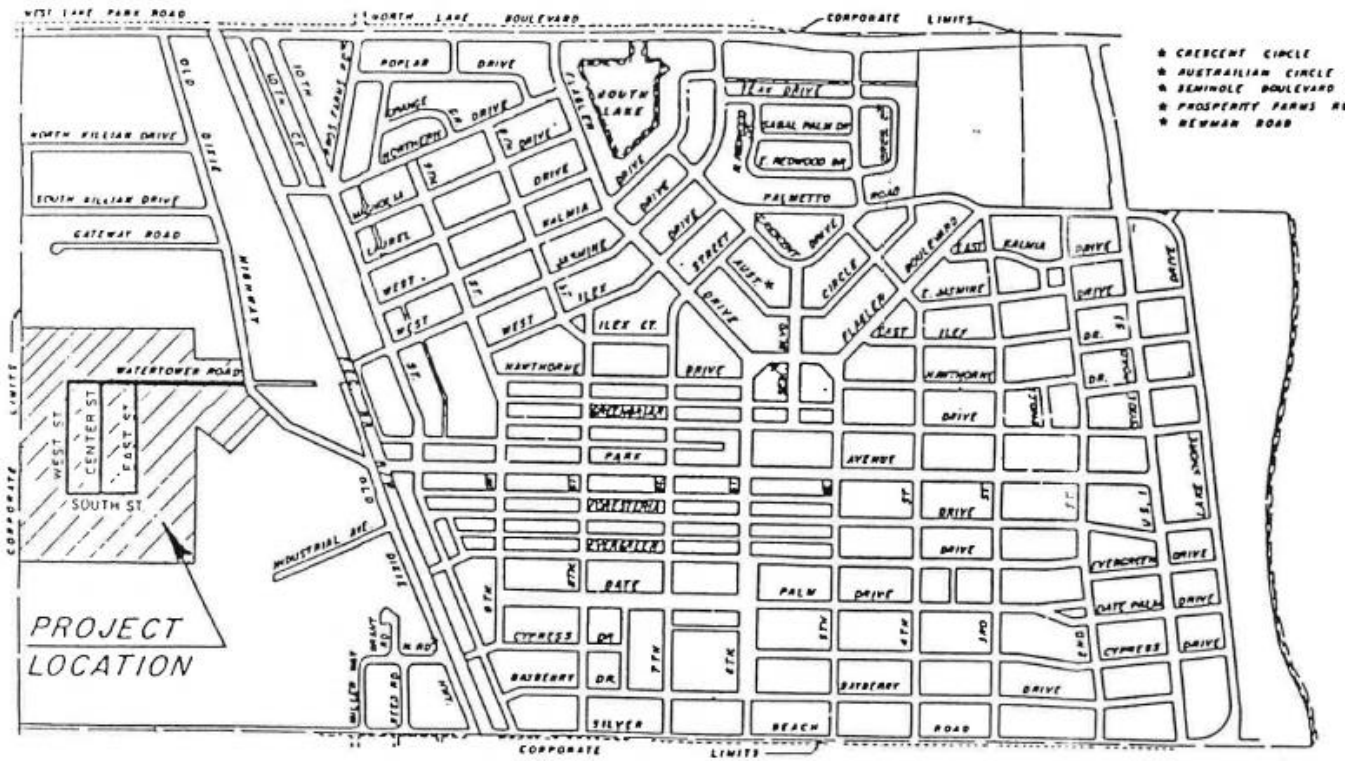
2. Special Assessments. Like impact fees, special assessments are levied against residents, agencies, or districts who directly benefit from the new service or facility.
For example, a drainage system for an existing neighborhood can be financed through a special assessment of that neighborhood's homeowners, rather than through the Town's General Fund. Water, wastewater, paving and drainage improvements are being financed in Special Assessment District No. 1 using these funds to finance two bond issues totaling $1,500,000.

3. General Obligation Bonds. These bonds are backed by the full faith and credit of the local government, and are required to be approved by voter referendum. General obligation bonds offer lower interest rates than other bonds as they are, in effect, secured by the taxing power of the government. Revenues collected from the ad valorem taxes on real estate and other sources of general revenue are used to service the government's debt. Capital improvements financed through general obligation bonds should benefit the Town as a whole rather than particular areas or groups. The Town does not have any current general obligation bond issues.

FIGURE 11-1

SPECIAL ASSESSMENT DISTRICT NO. 1

WATERTOWER ROAD AREA
TOWN OF LAKE PARK, FLORIDA



"Preparation of this map was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-147, Laws of Florida and administered by the Florida Department of Community Affairs."

4. Additional Revenue Bonds. Unlike general obligations bonds, revenue bonds are financed by those directly benefitting from the capital improvement. Revenue obtained from the issuance of these bonds is used to finance publicly-owned facilities. Charges collected from the users of these facilities are used, in turn, to retire the bond obligations. In this respect, the capital project is self-supporting. Interest rates tend to be higher than for general obligation bonds, and issuance of the bonds may be approved by the Town Council without voter referendum. Any revenue generating facility may be eligible for the use of this source. Revenue bonds are not used by the Town at this tim

5. Industrial Revenue Bonds. This type of bond is issued by a local government, but is actually assumed by companies or industries who use the revenue for construction of plants or facilities. The attractiveness of these bonds to industry is that they carry comparatively low interest rates due to their tax-exempt status. The advantage to the local government is that the private sector is responsible for retirement of the debt and that new employment opportunities are created within the community. The Town does not use this source at this time.

6. Grants and Loans. The U.S. State and Local Fiscal Assistance Act of 1972, which formerly provided for a system of federal general revenue sharing, has now been substantially modified. Federal funds are currently either: a) allocated to state agencies which administer block grants in accordance with the programs which they monitor; or b) reserved at the federal agency level and are disbursed as block grants directly to state and local agencies or other eligible organizations and individuals.
The latitude by recipients of the block grant program is to enable greater recipients in actual use of the funds, although are still required to use the funds for specific Categories of projects. These funds are not distributed by allocation, but rather, require competitive applications. Consequently, these grant monies are generally a non-recurring source of funds, and as such cannot be accurately projected for budgeting purposes. In addition to block grants, several federal agencies offer direct loan programs, but their applicability to capital improvement projects is extremely limited. State loans, on the other hand, are usually available to finance such capital projects as land acquisition for low-income housing.

The Department of Community Affairs' Bureau of Housing administers loans and grants for these purposes through eligible local governments. The Town does not use this source at this time.
A partial list of grant and loan programs is included on Table 11-3.

11.4.2 Capital Improvements Needs Assessment

Current and projected capital improvements needs are derived by analyzing the following: (1) impacts upon municipal services created by major public facilities expansions; and (2) current and projected needs defined in the other Comprehensive Plan elements.

11.2.2.1 Major Public Facilities Expansions

There is one major public facility within the Town of Lake Park; Lake Park Elementary School, located on 3rd Street, west of U.S. Highway No. 1. This facility, along with the associated school district boundaries, is located on Figure 11-2.
Scheduled expansion at Lake Park Elementary School includes: a media center; conversion of the multi-purpose area to five resource rooms; conversion of the media center to a storage area; and classroom renovations. Current capacity of the School is 384 students; however, the expansion program is oriented to addressing current overcrowded conditions and the addition of supplementary facilities. As a result, student capacity will not increase. Therefore, impacts upon municipal services are projected to be minimal.

TABLE 11-3
AVAILABLE GRANT & LOAN PROGRAMS (Partial List)

A. Farmers Home Administration FmHA

Contact: Glenn Walden
Farmers Home Administration
Room 214, Federal Building
401 S.E. 1st Avenue
Gainesville, Florida 32602
904/376-6107

1. Water & Waste Disposal Loans & Grants

Uses: Installation of or improvements to central community water systems, sewage disposal systems and solid waste disposal systems.

Service Area: Rural communities of not more than 10,000. Priority given to local public bodies.

Types of Assistance: Loans providing service to communities of 5,500 or less. Grants may cover up to 75% of project costs.

2. Community Facilities Loans

Uses: Build/improve public-use facilities such as hospitals, health clinics, fire & police departments, community centers, roads & streets, libraries, schools, recreation centers, and other essential community service facilities. Covers cost of equipment installation as well as cost of construction.

Service Area: Same as above.

Types of Assistance: Loans. No grants.

3. Business & industry Loan Guarantee Program

Uses: Purchase of land, building, & equipment. Working capital. Some debt refinancing.

Service Area: Areas of 50,000 or less. areas of 25,000 or less.

Preference to:

Types of Assistance: 90% guaranteed loan program backed by FmHA. $500,000 - $10 Million.

Special Assistance: Women owned businesses, Minority owned businesses, job producing enterprises in deeply distressed areas.
Modernizing and upgrading distressed business centers in rural communities

4. Industrial Development Grants
Uses: Grants for rural areas to help finance development
of Industrial sites necessary to attract private business enterprises. Acquisition & development of land.
Construction of buildings, plants, access roads, parking areas & utility extensions.
Purchase equipment & pay fees.

Service Area: Areas of 50,000 or less. areas of 25,000 or less.
Preference to:
Types of Assistance: Grants.

B. Florida League of Cities

Contact: Ann Jenkins
Florida League of Cities
201 W..Park Avenue
Tallahassee, Florida 32301
904/222-9684

Low Interest Loan Pool

Uses: Exterior, repainting, plaster, bricking for facade improvements.

Service Area: redevelopment.
Downtown business areas in need of help

Types of Assistance:
Program is intended to improve the visual
Only exterior improvements can be made.

C. Community Development Block Grants

Contact: Thomas Yeatman
Bureau of Community Assistance
Community Redevelopment Section
Department of Community Affairs
Tallahassee, Florida 32301
904/487-3644

1. Neighborhood Revitalization

Uses: Streets, water & sewer, drainage, senior citizens centers, handicapped centers.

Service Area: Contact Department of Community Affairs (DCA) for eligibility determination.

Types of Assistance: Grants up to $650,000 per funding year.

2. Commercial Revitalization

Uses: Street Improvements, loan pool for commercial facade Improvements. Downtown parking, building exterior rehabilitation, and infrastructure.

Service Area: Contact DCA for eligibility determination.

Type of Assistance:

3. Economic Development

Grants up to $650,000 per funding

Uses: Can be used to attract or fund a specific business. Project may include infrastructure.
Service Area: Contact DCA for eligibility determination. Types of Assistance: Grants & loans up to $650,000 per funding year requiring a 1 to 1 private match.

4. Housing

Uses: Rehabilitation, demolition and construction of single and multi-family housing units.

Service Area: Contact DCA for eligibility determination.
Type of Assistance:
Grants up to $650,000 per funding year.

D. Urban Development Action Grants

Contact: Mr. Jeff Forsgren
u.s. Department of Housing and Urban Development
325 West Adams Street
Jacksonville, Florida 32202
(904) 791-3587

Uses: Gap financing for industrial and business development projects. Eligible activities include: land acquisition, purchase of machinery and equipment, construction and renovation.

Service Area: Variable, consult with HUD regarding your project's eligibility.
Types of Assistance: Grant to eligible local government with no set dollar ceiling.

E. Economic Development Administration

Contact: Margaret Mcintosh
Economic Development Administration
1365 Peachtree Street Northeast
Atlanta, Georgia 30309
(404) 347-7861

1. Public Works and Development Facilities

Uses: Construction of public facilities to initiate job creation in areas of high unemployment. Activities include sewer, water, roads, railroad sidings or spurs, port facilities, public tourism facilities, and site improvements for industrial parks.

Service Area: Contact EDA for eligibility determination and project designation.

Type of Assistance: Guaranteed/insured loans up to 80 percent of private lending Institutions loan exposure.

2. Business Development Assistance

Uses: To provide financial assistance to businesses for job creation or retention. Activities include start-up or expansion of plants. May be used for working capital.
Service Area: Contact EDA for eligibility determination. Type of Assistance: Guaranteed/Insured loans up to eighty
percent of private lending institutions loan exposure.

Source: Land Research Management; 9/88

11.2.2.2 Comprehensive Plan Directed Capital Improvements

The analyses performed in the preceding Lake ·Park Comprehensive Plan elements have identified facility improvements needed to meet the demands of existing and future development. The impacts of new or improved public educational and public health care systems and facilities on the provision of infrastructure are examined in Section 11.2.2.1. Based upon plans submitted for the expansion of
the elementary school, it is concluded that no additional infrastructure facilities will be needed beyond those already in existence in order to adequately satisfy the projected demand and maintain adopted level of service standards, as proposed in the other elements of this Comprehensive Plan.
The inventory that follows is concerned with those needed improvements which are relatively large scale, are of generally non-recurring high cost, and which may require multi-year financing. Criteria utilized by the Town for budgeting purposes classify capital improvements as any expenditure for a fixed asset, including the construction,
acquisition or installation of facilities or for acquisition of land. Useful life of the asset should be one year or more and there are no cost criteria. The needed improvements derived from the preceding elements of this Plan which qualify as capital improvements are listed in Table
11-4.

These capital improvements were ranked in order of priority by the Director of Public Works and Town Manager based upon the proposed guidelines contained in the Goal and Objectives section of this element.

Table 11-4 lists the capital improvements identified for the years 1990-1995, since the plan is scheduled for adoption in 1989. This is consistent with the provision of Section 9J-5.016, Florida Administrative Code, which requires this element to address existing and future capital improvements needed for at least the first five fiscal years after the adoption of the comprehensive plan. Capital improvements needed for the latter part of the planning period will be evaluated during the required annual review of this element.
Table 11-4 provides a brief description of each of the capital improvement projects, indicates whether the project is needed to correct existing deficiencies or address projected needs, and provides an estimate of the total project cost. Projects are grouped by Comprehensive Plan element. Capital improvement projects have been identified for Drainage and Solid Waste.

TABLE 11-4

5-YEAR SCHEDULE OF IMPROVEMENTS 1990 - 1995

NOTE: This table has been deleted, as out of date, 2020. Refer to Schedule now contained in the Goals, Objectives, and Policies section.

The projected cost of improvements set forth in the 5-year schedule, Table 11-4 were derived from discussions with employees of the Town of Lake Park Public Works Department, engineering estimates supplied by Barker, Osha, Anderson, Inc., consulting engineers for the Town of Lake Park, and review of historical Town costs

11.2.2.3 The fiscal implications of deficiencies and future needs which have been identified will be negligible. The completion and implementation of proposed studies required by the comprehensive plan may result in the identification of additional capital projects. It is not anticipated that the Town will incur increases in its annual operating costs as a result of proposed· capital improvements. The majority of identified deficiencies require reviewing and updating ordinances. Deficiencies which require expenditures have been identified to include sources of funds. There are no deficiencies currently identified which require funding beyond the 1995 fiscal year. In the event deficiencies are identified as a result of development and/or the Congress Avenue extension in Planning Area 4, the identified deficiency will be addressed as required by olicy 1.6 of this Element and the Town Comprehensive Pl

Text for section missing since at least 2016, being placed back in 2020.

11.3 CAPITAL IMPROVEMENTS ANALYSIS

11.3.1 Local Policies and Practices

The Town of Lake Park uses several formal means (i.e. policies and/or practices) that, in combination, guide the allocation of capital funds. In addition, there are additional practices which may be employed to further guide capital funds allocation.
The following discussion includes practices which the Town currently utilizes or may wish to incorporate within the capital improvements decision-making process.

1. Level of Service Standards. Level of service (LOS) standards are indicators of the extent or degree of service provided by, or proposed to be provided by a facility based upon and related to the operational characteristics of the facility.
LOS indicates the capacity per unit of demand of a particular public facility. They are, in short, a summary of existing or desired public facility conditions.
Chapter 163, Florida Statutes, and Chapter 9J-5, Florida Administrative Code, now require LOS standards to be included for public facilities addressed by local governments in their comprehensive plans. Specifically, these LOS standards will be established for the purpose of issuing development orders or permits to ensure that adequate facility capacity will be maintained and provided for future development.

LOS standards can also effect the timing and location of development by encouraging development in areas where facilities may have excess capacity. On the other hand, development will not be permitted unless needed facilities and services are provided
Such provision and development may occur in a phased sequence over time.

CURRENT STATUS: The Town had not formally adopted LOS standards for public facilities prior to the completion of this Comprehensive
Plan. However, within the other elements of this Comprehensive Plan. LOS standards have been proposed.

2. Capital Improvement Program (CIP) . A capital improvement program (not to be confused with the Capital Improvements Element of this Comprehensive Plan) is a plan for capital expenditures to be incurred each year over a fixed period of years to meet anticipated capital needs. It sets forth each capital project, or other contemplated expenditures, which the Town plans to undertake and, further, presents estimates of the financial resources needed to finance the project.

The CIP will be consistent with the CIE of the local comprehensive plan, as it will reflect the goal, objectives and policies of the element and its implementation strategies, including the Five-Year Schedule of Improvements. It is, however, more inclusive than the CIE, as contains those projects of relatively small scale and low cost (less than $10,000.00) which are generally recurring and do not require multi-year financing. Also the CIP is not limited to those public facilities addressed in the Comprehensive Plan. Time periods covered by a CIP may range up to ten years, but most are typically six-year programs. In many cases, the first year of the CIP is converted into the annual capital budget with long range expenditures depicted in a supplementary five-year program. The capital budget entails enacting appropriations for projects in the first year of the CIP. Like the CIE, the CIP is reviewed on an annual basis.

CURRENT STATUS: Lake Park currently does not prepare a five-year CIP; however, an annual capital budget for both the General Fund and Enterprise Funds are prepared.

3. Impact Fees. Impact fees arc imposed by many local governments on new development to offset the costs of new capital facilities necessitated by that development. This financing technique may be used by local governments as one strategy for implementing the Capital Improvements Element. Chapter 163, Florida Statutes, includes impact fees as an innovative technique that may be integrated into land development regulations.
Impact fee development is one logical outgrowth of Capital Improvements Element preparation. The assessment required for the local government's capital improvement needs and its capability in providing for those needs, as required by Chapter 9J-5, F.A.C., may be a rational basis, for developing an impact fee ordinance.
CURRENT STATUS: Lake Park does not currently utilize impact fees.

4. Urban Service Areas. The demarcation of urban service areas within a comprehensive plan or capital improvement program may be used to indicate the areas for which the local government intends to provide public facilities and services. When used in conjunction with the Capital Improvements Element and CIP, this tool may orchestrate the timing of public facility and service provision within areas planned for development. Additionally, the use of urban service areas may offer the following benefits:
1. Encourage efficient growth patterns; and
2. Provide the basis for controls on facility extensions.

CURRENT STATUS: Due to the compact nature and development status of Lake Park, it is concluded that the Urban Service Area concept does not need to be utilized at this time. However, should the Town pursue large-scale annexation activities to the west, use of this concept should be revisited.
,
5. User Charges and Connection Fees. User charges are designed to recoup the costs of public facilities or services by charging those who benefit from them. They are employed in many areas of local government service and are a common source of funds for paying off revenue bonds.

CURRENT STATUS: The Town of Lake Park currently employs the following user fees: Solid waste disposal and trash collection; use of marina facilities; use of recreational facilities and programs and library charges.

6. Adequate Facilities Ordinance. An adequate facilities ordinance controls the timing and location of development by conditioning development approval upon a showing that sufficient facilities and services are present or will be provided in order to maintain adopted LOS standards. It may, in effect, implement the

1985 Legislative mandate (Chapter 163, Florida Statutes) which requires public facilities to be available to support the impacts of development.
The ordinance may make development approval contingent upon the local government's ability to provide facilities and services in order to maintain adopted LOS standards. Additionally, adoption of an adequate facilities ordinance may offer the following benefits:

1. Assure consistency of the Capital Improvements Element with the Future Land Use Element
2. Provide for the orderly expansion of public facilities; and
3. Stabilize capital improvements expenditures and taxing structures for capital improvements.

Typically, an adequate facilities ordinance interacts with the development approval process by conditioning zoning, subdivision, or planned unit development (PUD) approval on demonstrated compliance with the ordinance. An adequate facilities ordinance may also function at the building permit state. The ordinance may, in this context, control development in areas that are already approved but not as yet built out, such as pre-platted subdivision.

CURRENT STATUS: No such ordinances has been adopted by the Town; however, this vehicle may be incorporated within the Town of Lake Park Zoning Code by amending Article IX - Performance Standards.

8. Mandatory Dedications or Fees in Lieu Of.

The Town may require, as a condition to plat approval, that subdivision developers dedicate a certain portion of land in the development to be used for public purposes such as roads, parks and schools. Dedication may be made to the governing body or to a private group such as a homeowners association.

When a subdivision is too small or topographical conditions such that a land dedication cannot reasonably be required, the local government may require the developer to pay a fee in lieu of dedication which is equivalent to the amount of land that would otherwise have been dedicated. The fee may be deposited into a separate account for future use toward. provision of such facility.

CURRENT STATUS: This practice is currently used by Lake Park (Ref: Section 32-57(6) (1) of the Zoning Code) to provide public recreation facilities. Also, streets, access waterways easements, limited access strips and canals may be dedicated to the Town, as per requirements of the Subdivision code. The Code also contains the flexibility to negotiate other types of dedications, on an as deeded basis.

9. Moratoria. A moratorium, or stop-gap ordinance, may temporarily halt or freeze development for a specified period of time on an emergency basis. It may be imposed upon building permits, development approvals, or governmental services such as potable water connection, sanitary-sewer extensions or hook-ups. Moratoria may generally be imposed for a "reasonable time" to allow for necessary planning activities, including comprehensive Plan preparation, adoption, or amendment. Florida courts have found development moratoria to be a valid measure of last resort for the protection of local public health, safety, and welfare when adopted in accordance with applicable procedures.

Additional considerations in adopting a moratorium include:

1. Determining the legal status of existing permit applications and approvals to define the extent of "vested rights" for developments approved prior to ordinance adoption;
2. Specifying the geographic extent of the moratorium
(Whether it will be jurisdiction-wide,: or limited to specific hazard area$ or areas with existing service insufficiencies); and
3. Specifying the time frame and conditions under which the moratorium will be imposed.

CURRENT STATUS: The Town has implemented moratorium measures to coordinate and control development including within Planning Area 4.

10. Intergovernmental Contracts. Intergovernmental contracts are similar to user fees, with the exception that they are designed to partially recoup the costs of public facilities or services by providing such facilities or services to another municipality or unincorporated area under the terms of a contract.

CURRENT STATUS: Lake Park does not use the intergovernmental contract mechanism to provide or receive any of the infrastructure services addressed in this Comprehensive Plan.

11.3.2 The Use of Capital Expenditures To Support Efficient Land Development

Most major infrastructure systems, including water and sewer and roads and streets are currently in place to accommodate Lake Park and no major facility expansions are planned to accommodate additional growth within the current corporate limits through buildout of the Town in Planning Areas 1, 2, and 3. Projected future growth in Lake Park is expected to be accommodated by in- fill activities within existing developed areas in Planning Areas

1 and 2 and by mixed commercial/industrial development in Planning Area 3. Therefore, the lack of additional expansion plans by major service providers will not adversely affect growth and development within Lake Park. Infrastructure systems necessary for development of Planning Area 4 will be identified and funds committed as required by this Element.

11.3.3 Fiscal Assessment

This section begins the examination of the Town's ability to fund the capital improvements listed on Table 11-4. The purpose of this section is to determine whether sufficient revenue will be available within the existing budgeting framework utilized by Lake Park to fund the needed improvements at the time they will be required.

The assessment process consists of estimating future receipts of revenues which the Town uses for capital improvement financing and then, balancing these receipts against anticipated expenditures for capital improvements. Using this' process, it is possible to quantify annual revenue surpluses and shortfalls; providing a basis for examining opportunities for financing needed capital improvements.

11.3.3.1 Accounting System

The accounting system employed by the Town records financial transactions in individual accounts which are called 11 funds11 • Records for each fund provide a complete accounting of fund assets, liabilities, reserves, equities, revenues and expenditures. The following is a brief description of the funds which the Town has established for capital improvement financing.

GENERAL FUND: The General Fund is the basic operating fund of the Town. All revenues not required to be accounted for in other funds are accounted for in the General Fund. Historically, the Town has utilized a portion of this fund's revenues to finance all facility improvements for which the Town is responsible, on an annual basis and no long-term debt has been incurred.

MARINA FUND: The Marina Fund (i.e. an enterprise fund) is the basic operating fund for the maintenance and operation of the Lake Park Marina. Revenues consist of user fees. Historically, the Town has utilized portions of this Fund's revenues to: (1) finance marina improvements; (2) finance marina operating expenses; and (3) transfers to the General Fund.

COMMERCIAL SANITATION FUND: Being an entirely new operation, the Commercial Sanitation Fund was seeded with General Fund monies. Once in full operation, the General Fund will be repaid plus additional contributions.

11.3.3.2 Projected Capital Improvements Revenues and

Budget Potential

GENERAL FUND: The Town's tax base is projected to increase assuming an annual 6.38% rate of growth for the adjusted taxable value of real and personal property (including new construction) as shown on the Table below. The assessment ratio is assumed to remain stable at 95%. Figures are in 1986 dollars.

Fiscal Year	Tax Base ($Million)
1989/90	291.6
1990/91	310.1
1991/92	330.0
1992/93	351.0
1993/94	373.4

Ad valorem tax yields are projected assuming the maintenance of compound annual increases in adjusted taxable value and millage rates evidenced during the Fiscal Year 1985/86 to 1988/89 period. Figures are in 1987 dollars.

Fiscal Year	Tax Base ($ Million)	Millage Rate	Tax Yield ($ Million)
1989/90	291.6	6.5123	1.90
1990/91	310.1	6.7318	2.09
1991/92	330.0	6.9586	2.30
1992/93	351.0	7.1931	2.52
1993/94	373.4	7.4356	2.78

Assuming that the current ratio '(i.e. FY 87/88) of capital expenditures (i.e. General Fund) to ad/valorem tax yields is maintained, capital budgets during the 1989-1994 period are projected on the following Table. Figures are in 1987 dollars.

Tax Yield

Capital Budget

Fiscal Year	($ Million)	Potential ($000's)
1989/90	1.90	320.6
1990/91	2.09	352.6
1991/92	2.30	388.0
1992/93	2.52	425.2
1993/94	2.78	469.0

COMMERCIAL SANITATION FUND: Commercial Sanitation Fund revenues are used to finance solid waste collection and operations, and annual capital expenses. Historical revenue and expense data is not available at this time. Further, capital equipment to meet service needs for the near-term future has been purchased with General Fund revenues. on this basis, it is concluded that capital needs have been met for the five-year planning period, other than annual budgets for equipment replacement, estimated at $75,000 on Table 11-4.

MARINA FUND: Marina improvements and seawall improvements are capital projects projected to be funded through this source. Current year carryover (1987/1988) was $203,817. In order to finance proposed improvements, additional revenues must be procured during the 1989 to 1991 period. Decreases in General Fund transfers, increases in user fees or revenue bonds are available to the Town to finance planned improvements.

Based upon the above analyses, and assuming no additional bond issues, any capital improvement project during the 1989-1994 period must be financed as an annual capital outlay from the General Fund. (i.e. including the Special Fund) or the Marina Fund. Available capital funding for projects identified in this element can be projected by comparing proposed project costs (i.e. as defined in Table 11-4) from the capital budget potential figures prepared in this section. Available capital funding projection figures, for the 1989-1994 period, are displayed on Table 11-5. These figures can be used, in comparison to Table 11-4 as a means of determining the capabilities of the Town to fund capital improvements without utilizing new financing mechanisms. A review of the two tables indicates that planned expenditures in FY 1989/90 and FY 1991/92 either need to be financed using alternative sources of revenue, or shifted to alternative fiscal years. It is recommended that drainage improvements be spread over the first four years.

11.3.3.3 It is not anticipated that the identified capital improvements will result in additional operating costs to the Town of Lake Park. The Town is currently conducting an initial study to identify future necessary capital improvements, operating cost considerations associated with those improvements, and estimated debt capacity. The initial study is scheduled for completion on or before October 1, 1990. Town Staff and consultants will review the initial study and recommend to the Town Commission necessary amendments to the comprehensive plan and/or land development regulations as required by the initial study. Amendments to the plan and/or regulations will be completed at the next scheduled comprehensive plan and/or land development regulation amendment hearing.

In the interim, the operating costs set forth in the current budget will remain available for expenditure as required by the implementation of identified capital improvements projects.

TABLE 11-5

CAPITAL IMPROVEMENTS EXPENDITURE POTENTIAL GENERAL FUND

FISCAL YEAR	CAPITAL BUDGET POTENTIAL ($000'S)		LESS PLANNED* EXPENDITURES ($000'S)	AVAILABLE CAPITAL ($000'S)
1989/90	320.6	318.3	2.3	
1990/91	352.6		68.3	284.3
1991/92	388.0		568.3	(180.3)
1992/93	425.2		35.0	390.2
1993/94	469.0		35.0	434.0

*Traffic circulation, drainage and recreation improvements from Table 11-4

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11.4 GOALS, OBJECTIVES, AND POLICIES

Objective 1:

Capital improvements will be provided to: (1) correct existing deficiencies; (2) accommodate desired future growth; (3) achieve or maintain the adopted Level of Service Standards; (4) assist in the achievement of Comprehensive Plan goals, objectives and policies, and/or; (5) replace worn-out or obsolete facilities, as indicated in the 5-Year Schedule of Improvements of this element.

Policy1.1:

The Town shall include all projects identified in the elements of this Comprehensive Plan and determined to be of relatively large scale and high cost ($15,000 or greater), as capital improvements projects for inclusion within the 5-Year Schedule of Improvements.

Policy 1.2:

The Town shall, as a matter of priority, schedule for funding any capital improvement projects in the 5-year Schedule of Improvements which are designed to correct existing public facility deficiencies.

Policy 1.3:

The Town administration, including key Department heads, shall evaluate, rank and recommend capital improvement projects for inclusion in the five-year Capital Improvements Schedule.

Policy 1.4:

Proposed capital improvement projects shall be evaluated and ranked in order of priority according to the following guidelines:

1) Whether the project is needed to protect public health and safety, to fulfill the Town's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities;
2) Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs, provides service to developed areas lacking in full service, or promotes in-fill development; and
3) Whether the project represents a logistical extension of facilities and services within a designated Town Planning Area. 289

Policy 1.5:

The Town shall implement a Capital Improvement program as part of its annual budget process. This will include the current capital improvement budget and a plan for funding anticipated capital improvements identified in the Capital Improvements Element and subsequent amendments, for the next 5 years.

Policy 1.6:

The Town shall review the available capital improvements plans of other agencies having jurisdiction over infrastructure and services which impacts its adopted Level of Service Standards in order to monitor its ability to meet its Level of Service Standards through the planning period, and ensure the financial feasibility of the Comprehensive Plan. Projects deemed necessary to maintain the Level of Service standard as a result of this review shall be referenced in the Town's Capital Improvement Program and Schedule.

Policy 1.7:

The Town shall maintain records to determine whether a cumulative 110% de minimus transportation impact threshold has been reached and shall submit such documentation as part of its annual updates to the Capital Improvements Schedule.

Policy 1.8:

On or before the statutory deadline, the Comprehensive Plan shall be amended to include a financially feasible Five-Year Capital Improvements Schedule that documents all projects necessary to achieve and/or maintain the Level of Service Standard or that otherwise implement the Comprehensive Plan. The schedule shall be updated annually through the Comprehensive Plan amendment process. In addition to Town projects, the Capital Improvements Schedule shall include projects to be implemented by other agencies that impact its ability to achieve or maintain the adopted Level of Service Standards, including transportation projects that may be implemented in whole or in part through proportionate fair share mitigation options.

Policy 1.9:

The Town shall update the Master Drainage Plan an ongoing basis and shall include identified projects in the Capital Improvements Schedule. During the annual review of the Town's capital improvements needs, the Town shall consider and accordingly prioritize drainage improvements as recommended by the Town's Master Drainage Plan.

Policy 1.10:
The Town shall periodically evaluate the transportation network and implement an improvement schedule in conformance with the Capital Improvements Element.

Policy 1.11

The following Capital Improvements Schedule, as it is annually updated in accordance with State growth management requirements, includes all projects scheduled to meet or improve the adopted Level of Service Standards during the five-year planning period, and other projects that further implementation of this Comprehensive Plan and its goals, objectives and policies

TOWN OF LAKE PARK FIVE YEAR CAPITAL IMPROVEMENT SCHEDULE[1,] FY 2019/20 – 2023/24

Project Category	Project Name	19/20	20/21	21/22	22/23	23/24	Funding Source
2, 4	Lake Shore Drive Drainage Improvements	$8,200,000					Grants ($5.6M LMS and HMGP) / $600K State Appropriations Fund / $2M One Cent Sales
2	Replacement of all emergency generators (Town Hall; Public Works and PBSO building)	$750,000					Public Works – Facilities (General Fund)
2, 4	10th Street south of Park Avenue – drainage, lighting, paving, trees – Green Infrastructure Project		$4,000,000				Grant (LMS), Stormwater Utility Assessment (50/50 split each FY)
2,4	FEC Railroad Intersection/pedestrian connections for quiet zone improvements		$100,000				CRA Funding

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[1] Note: The Town's ability to implement certain projects in accordance with this schedule is contingent upon the receipt of grant funds as identified in "Funding Source" column

Project category	**Project Name**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24**	**Funding Source**
2, 4	Park Avenue from Federal Highway to 7th Street (improved sidewalks; landscape medians; striping and signalization – complete street design)		$4,200,000				Grant
2, 4	Records Retention Building		$500,000				General Fund
4	Town Hall Renovations (Town Hall Roof, Exterior Painting, Ceiling Clerk's Office, Ll Exterior Doors,		$500,000 (including required assessments)				General Fund
2	Sanitary Sewers in Tri-City Industrial Park; Lake Park Public Works; and Water Tower Road/Old Dixie Highway (north of Water Tower, east of Old Dixie) commercial property; Gateway Road Reconstruction and Sanitary Sewer along the south side *(approx. 1,250 linear feet)*		$1,325,000				Special Assessment
2	Outfall to C-17 Canal – Berm Improvement Project		$537,000				Grant
2	Southern Outfall Retrofit Project				$3,500,000		Grant
2	Coastal Link/Tri-Rail/Palm Tran Extension Improvements for parking and feeder system improvements on the Town-owned property behind Fire Station 68 – including green infrastructure			$1,100,000			Grant

Project Category	Project Name	19/20	20/21	21/22	22/23	23/24	Funding Source
2	Bert Bostrom Park Improvements (Master Plan for future improvements)	$30,000					Grant
2	Complete Streets Initiative/Safe Streets Program (Federal Highway – approx. 4,100 linear feet)	$6,000,000					Grant (TPA, FDOT, other)
1	Community Development Security (bullet proof glass, door, slots, hearing device)	$50,000					General Fund
2, 4	Town-wide green infrastructure improvements	00					Grant

2,4	Library Improvements Upgrade of Public Computers to Laptop Kiosk – Two 12 slot kiosk with a single card reader Replacement of shelving; Eight 21 lf fixed stacks; $1,000. Per stack. $8,000. Thirty five 72 lf modular mobile units. At 1,000 per unit. $35,000 Carpet with vinyl flooring 9200sf. $37,000. @$4.00 pf including install >Replace worn, damaged seating. Approximate cost for bench, chair seating approximately $16,000. 30 seats, benches combination seating throughout. Large bench grouping; $5,000 per nine grouping.	$40,000 $96,000					General Fund; LSTA Grant (split 50/50) General Fund

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	Two computer power lounge chairs with tablet table; $2 per $1000. Four bench grouping; $2,000. Per grouping Addition of ADA compliant second level loft above east wing (addition of elevator) and patio enclosure Interior renovation; >Second level loft above east wing with glass wall (addition of elevator) and patio enclosure approximately $1,920,000 >Elevator install – 2 story commercial - new: approximately $70,000. >Annual Maintenance cost for elevator: $5000.or less Exterior renovations; entrances		$50,000	$2,440,000			General Fund; Grant (30/70 split) General Fund; Grant (50/50 split
2	CRA Parking Garage (Permanent)		$7,500,000				$5M Appropriations /$ 2.5M Grant
2	Lamda Rail Improvements (Fiber Optic) – **PHASE** Town Hall to Kelsey Park AND Kelsey Park to Marina.	$180,000					One Cent Sales Tax
	Total	**$15,346,000**	**$45,312,000**	**$3,540,000**	**$3,500,000**	**$0**	

Project Category Codes
1 – Project necessary to achieve Level of Service
2 – Project will enhance ability to continue to meet Level of Service
3 – Project will enhance ability to meet Level of Service for Optional Element
4 – Project will further the achievement of Comprehensive Plan goals, objectives and policies.

TOWN OF LAKE PARK ESTIMATED FUNDING SOURCES FOR CAPITAL IMPROVEMENTS FY 20119/20 – 2022/23

Funding Source	19/20	20/21	21/22	22/23
General Fund	$916,000	$1,025,000	$1,220,000	$231,000
Stormwater Utility Assessment		$2,000,000		
Grants	$11,650,000	$33,387,000	$2,320,000	$3,500,000
Special Assessment		$1,325,000		
CRA Funding		$100,000		
State Funds	$600,000	$5,000,000		
One Cent Sales Tax	$2,180,000			
Total	$15,346,000	$45,312,000	$3,540,000	$3,500,000

Ordinance 02-2020, February 2020

Objective 2

Public expenditures that subsidize private development interests in high hazard coastal areas will be limited to those improvements included in the Post Disaster Redevelopment Plan referenced in the Coastal Management Element.

Policy 2.1:

The Town shall expend funds in high hazard coastal areas for the replacement and renewal of facilities.

Policy 2.2:

The Town shall continue to provide or require provision of recreational facilities within high hazard coastal areas.

Policy 2.3:

The Town shall continue to expend funds to maintain existing facilities and services at their capacity.

Objective 3

Future development shall bear a proportional cost of facility improvements in order to maintain adopted LOS standards.

Policy 3.1:

The Town shall require local street improvements of any new development necessitated by that development.

Objective 4

The Town shall manage its fiscal resources to ensure the provision of needed capital improvements.

Policy 4.1:

Prior to the issuance of certificates of occupancy, the Town shall ensure that all public facilities are available to serve development for which development orders were previously issued but construction has not been completed. Certificates of occupancy for redevelopment or major renovation shall be issued in accordance with Policy 5.1 and 5.3 of this Element and the land development regulations of the Town.

Policy 4.2:

In providing capital improvements, the Town shall limit the maximum ratio of outstanding indebtedness to no greater than 15% of its property tax base

Policy 4.3:

The Town shall annually adopt a 5-year capital improvement program and capital budget as part of its budgeting process.

Policy 4.4:

Efforts shall be made to secure grants or private funds whenever possible to finance the provision of capital improvements. In accordance with Policy 1.6 of this element, a review of grants or private funds shall be conducted to identify funding sources.

Objective 5

Decisions regarding the issuance of development orders and permits will be based upon coordination of the development requirements included in this Plan, the Town land development regulations, and the availability of necessary public facilities needed to support such development at the time needed.

Policy 5.1:

The Town shall implement its Concurrency Management System (CMS) to ensure that at the time a development order is issued adequate facility capacity is available when needed to serve the development, or as otherwise provided for in Rule 9J05.0055, FAC. The CMS shall be adopted in the Town's Land Development Code and include:

a. methodology for concurrency evaluation;
b. terms for satisfying concurrency evaluation;
c. provisions for reserving facility capacity; and
d. monitoring procedures.;
e. proportionate fair share mitigation options for transportation impacts, as appropriate.

CONCURRENCY MANAGEMENT SYSTEM

Sanitary Sewer, Solid Waste, Drainage and Potable Water
Prior to the issuance of any development order for new development or redevelopment, sanitary sewer, solid waste, drainage and potable water facilities needed to support the development at adopted LOS standards must meet one of the following timing requirements: the necessary facilities are in place, or; the necessary facilities will be in place when the impacts of the development occurs, or; the necessary facilities are guaranteed in an enforceable development agreement which includes the provisions of Rules 9J-5.0055(2)(a)1-3, Florida Administrative Code. The enforceable development agreement may include, but is not limited to, the development agreements pursuant to Section 163.3220, Florida Statutes (F.S.), or an agreement or development order issued pursuant to Chapter 380, F.S.
Recreation and Open Space
Prior to the issuance of any development order for new development or redevelopment impacting recreational and open space facilities, recreation and open space public facilities needed to support the development at adopted level of service standards must meet one of the following timing requirements: the necessary facilities and services are in place, or; the necessary facilities and services will be in place when the impacts of the development occurs, or; the necessary facilities and services are the subject of a binding executed contract which provides for the commencement of actual construction of the required facilities or the provision of services within one year, or; the necessary facilities and services are guaranteed in an enforceable development agreement which requires the commencement of the actual construction of the facilities or provision of services within one year. The enforceable development agreement may include, but is not limited to, the development agreements pursuant to Section 163.3220, Florida Statutes (F.S.), or an agreement or development order issued pursuant to Chapter 380, F.S.

Transportation
Prior to the issuance of any development order for new development or redevelopment (excepting development and redevelopment determined to have a de mimimus impact of transportation facilities in accordance with State requirements), transportation facilities needed to support the development at adopted LOS standards must meet one of the following timing requirements: the necessary facilities are in place, or; the necessary facilities will be in place when the impacts of the development occurs, or; the necessary facilities are under construction, or; the necessary facilities and services are guaranteed in an enforceable development agreement which requires the commencement of the actual construction of the facilities or provision of services within three years of the date of the development order. The enforceable development agreement may include, but is not limited to, the development agreements pursuant to Section 163.3220, Florida Statutes (F.S.), or an agreement or development order issued pursuant to Chapter 380, F.S. In addition, transportation concurrency is demonstrated if improvements necessary to achieve the Level of Service Standard are included in the Five-Year Capital Improvements Schedule, and are scheduled to commence within three years of the date of the development order. In addition, a development permit or development order may be issued subject to the satisfaction of transportation currency requirements through the payment or contribution of the calculated proportionate fair share for transportation, pursuant to all rules and requirements of Chapter 163.3180, F.S.
Educational Facilities
As directed in the Public Schools Facilities Element.

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Policy 5.4:

The Town shall review the South Florida Water Management District's Lower East Coast Water Supply Plan, and the water supply facility workplans of agencies that have jurisdiction over and/or provide its potable water supply, as they are adopted and/or periodically updated in order to identify alternative projects that will increase its water supply, and shall coordinate as appropriate with these agencies in the implementation of these projects. In addition, the Town shall prepare a Ten-Year Water Supply Facilities Workplan in accordance with State requirements.

Policy 5.5:

The Town shall allow traffic concurrency requirements to be satisfied in accordance with provisions contained in F.S. 163.3180 (5)(h).

Policy 5.6:

The Town shall incorporate capital improvements affecting Town levels of service by referencing the Capital Improvements Schedules of Palm Beach County, state agencies, regional water supply authorities and other units of government providing services but not having regulatory authority over the use of land into its 5-Year Schedule of Capital Improvements. The Town Capital Improvement Element Schedule shall be maintained and updated annually and shall demonstrate that level of service standards will be maintained during the next five-year (20190 /2020 through 2024/2025) planning period.

12.0 PUBLIC SCHOOLS FACILITIES ELEMENT

12.2 GOALS. OBJECTIVES AND POLICIES

Goal 1: PUBLIC SCHOOL CONCURRENCY

It is a Goal of the Town to provide for future availability of public school facilities consistent with the adopted level of service standard. This goal shall be accomplished recognizing the constitutional obligation of the school district to provide a uniform system of free public schools on a countywide basis.

OBJECTIVE 1: LEVEL of SERVICE

To ensure that the capacity of schools is sufficient to support student growth at the adopted level of service standard for each year of the five-year planning period and through the long-term planning period.

Policy 1.1

The LOS standard is the school's utilization, which is defined as the enrollment as a percentage of school student capacity based upon the Florida Inventory of School Houses (FISH). The level of service (LOS) standard shall be established for all schools of each type within the School District as 110 percent utilization, measured as the average for all schools of each type within each Concurrency Service Area. No individual school shall be allowed to operate in excess of 110% utilization, unless the school is the subject of a School Capacity Study (SCS) undertaken by the School District, working with the Technical Advisory Group (TAG) which determines that the school can operate in excess of 110% utilization. The SCS shall be required if a school in the first FTE student count reaches 108% or higher capacity. As a result of an SCS, an individual school may operate at up to 120% utilization. Upon determination by TAG, if a school is planned and under contract or construction which will relieve capacity of an existing school, the existing school shall be allowed to exceed the 120% maximum utilization for a period not to exceed 2 years. The former is intended to prevent the movement of students more than once.

Policy 1.2

If as a result of a School Capacity Study (SCS), a determination is made that a school will exceed 120% utilization or cannot operate in excess of 110% utilization, then the School District shall correct the failure of that school to be operating within the adopted LOS through 1) program adjustments, 2) attendance boundary adjustments, or 3) modifications to the Capital Facilities Program to add additional capacity. If. as a result of the SCS a determination is made that the school will exceed 110% and can operate within adopted guidelines, the

identified school may operate at up to 120% utilization. If as a result of one or more School Capacity Studies that demonstrate that the schools of a particular type can operate at a higher standard than the 110% utilization standard of the CSA, the Comprehensive Plan will be amended to reflect the new LOS for that school type in that CSA. Coordinate planning with the School District regarding population projections, school siting, projections of development and redevelopment for the coming year, infrastructure required to support public school facilities, and amendments to future land use plan elements consistent with the requirements of the Interlocal Agreement.

Policy 1.3

The School Capacity Study CSCS) shall determine if the growth rate within an area, causing the enrollment to exceed 110 percent of capacity, is temporary or reflects an ongoing trend affecting the LOS for the 5 year planning period. The study shall include data which shows the extent of the exceedance attributable to both existing and new development. Notification shall be provided to the local government within whose jurisdiction the study takes place. At a minimum, the study shall consider:

1. Demographics in the school's Concurrency Service Area CCSA);
2. Student population trends;
3. Real estate trends (e.g. development and redevelopment);
4. Teacher/student ratios; and
5. Core facility capacity.

Policy 1.4:

Concurrency Service Areas (CSA) shall be established on a less than district-wide basis, in accordance with the following:

1. The criteria for Concurrency Service Areas shall be:

Palm Beach County is divided into twenty-one CSAs. Each CSA boundary shall be delineated considering the following criteria and shall be consistent with provisions in the Interlocal Agreement:

a. School locations, student transporting times, and future land uses in the area.
b. Section lines, major traffic-ways, natural barriers and county boundaries.

2. Each CSA shall demonstrate that:

a. Adopted level of service standards will be achieved and maintained for each year of the five-year planning period; and
b. Utilization of school capacity is maximized to the greatest extent possible, taking into account transportation costs, court approved desegregation plans and other relevant factors.

3. Consistent with s.l63. 3180(13)(c)2.,F. S., changes to the CSA boundaries shall be made only by amendment to the PSFE and shall be exempt from the limitation on the frequency of plan amendments, Any proposed change to CSA boundaries shall require a demonstration by the School District that the requirements of 2 (a) and (b), above, are met.

Policy 1.5

The Town shall consider as committed and existing the public school capacity which is projected to be in place or under construction in the first three years of the School District's most recently adopted Five Year Plan, as adopted by reference into this Plan, when analyzing the availability of school capacity and making level of service compliance determinations.

Policy 1.6

The Town shall amend the Capital Improvements Schedule of the Capital Improvement Element when committed facility capacity is eliminated, deferred or delayed to ensure consistency with the School District Five Year Plan.

Policy 1.7:

The Town shall suspend or terminate its application of School concurrency upon the occurrence and for the duration of the following conditions:

1. School concurrency shall be suspended in all CSAs upon the occurrence and for the duration of the following conditions:

    a. The occurrence of an "Act of God", or;
    b. The School Board does not adopt an update to its Capital Facilities Plan by September 15th of each year, or;
    c. The School District's adopted update to its Capital Facilities Program Plan does not add enough FISH capacity to meet projected growth in demand for permanent student stations at the adopted level of service standard for each CSA and ensures that no school of any type exceeds the maximum utilization standard in any CSA, or;
    d. The School District Capital Facilities Plan is determined to be financially infeasible as determined by the State Department of Education, or as defined by the issuance of a Notice of Intent to Find an Amendment to a Capital Improvement Element not in compliance as not being financially feasible, by the Department of Community Affairs, or;
    e. by a court action or final administrative action, or;
    f. If concurrency is suspended in one-third or more of the CSAs pursuant to 2. below.

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2. School Concurrency shall be suspended within a particular CSA upon the occurrence and for the duration for the following conditions:

    a. Where an individual school in a particular CSA is twelve or more months behind the schedule set forth in the School District Capital Facilities Plan, concurrency will be suspended within that CSA and the adjacent CSAs for that type of school, or;
    b. The School District does not maximize utilization of school capacity, allowing a particular CSA or an individual school to exceed the adopted Level of Service (LOS) standard, or;
    c. Where the School Board materially amends the first 3 years of the Capital Facilities Plan and that amendment causes the Level of Service to be exceeded for that type of school within a CSA, concurrency will be suspended within that CSA and the adjacent CSAs only for that type of school.

3. The Town shall maintain records identifying all Concurrency Service Areas in which the School District has notified the Town that the application of concurrency has been suspended.

4. Once suspended, for any of the above reasons, concurrency shall be reinstated once the Technical Advisory Group (TAG) determines the condition that caused the suspension has been remedied or the Level of Service for that year for the affected CSAs have been achieved.

5. If a Program Evaluation Report recommends that concurrency be suspended because the program is not working as planned, concurrency may be suspended upon the concurrence of33% of the PARTIES signatories of the "Palm Beach County Interlocal Agreement with Municipalities of Palm Beach County and the School District of Palm Beach County to establish Public School Concurrency".

6. Upon termination of the Interlocal Agreement the Town shall initiate a Comprehensive Plan Amendment to terminate school concurrency.

Goal 2: SCHOOL FACILITY SITING AND DEVELOPMENT COORDINATION

It is the Goal of the Town to maintain and enhance joint planning processes and procedures for coordination of public education facilities for planning and decision-making regarding population projections, public school siting, and the development of public education facilities concurrent with residential development and other services.

OBJECTIVE 2: SCHOOL FACILITY SITING

To establish a process of coordination and collaboration between the Town, the County, other local governments, and the School District in the planning and siting of public school facilities in coordination with planned infrastructure and public facilities.

Policy 2.1:

The Town shall coordinate and provide for expedited review of development proposals with the School District during the development review process to ensure integration of public school facilities with surrounding land uses and the compatibility of uses with schools.

Policy 2.2:

There shall be no significant environmental conditions and significant historical resources on a proposed site that cannot be mitigated or otherwise preclude development of the site for a public educational facility.

Policy 2.3:

The proposed site shall be suitable or adaptable for development in accordance with applicable water management standards, and shall not be in conflict with the adopted or officially accepted plans of the South Florida Water Management District, or any applicable Stormwater Utility or Drainage District.

Policy 2.4:

The proposed location shall comply with the provisions of the Coastal Management Element of the comprehensive plan, if applicable to the site.

Policy 2.5:

The Town shall encourage the location of schools proximate to urban residential areas by:

1. Assisting the School District in identifying funding and/or construction opportunities (including developer participation or capital budget expenditures) for sidewalks, traffic signalization, access, water, sewer, drainage and other infrastructure improvements;
2. Providing for the review for all school sites as indicated in Policy 2.1 above; and,
3. Considering schools as an allowable use within all urban residential land use categories.

Policy 2. 6:

The Town shall coordinate with the School District for the collocation of public facilities, such as parks, libraries, and community centers with schools, to the extent possible, as sites for these public facilities and schools are chosen and development plans prepared.

OBJECTIVE 3: INTERGOVERNMENTAL COORDINATION

To establish and maintain a cooperative relationship with the School District, the County and other municipalities in coordinating land use planning with development of public school facilities which are proximate to existing or proposed residential areas they will serve and which serve as community focal points.

Policy 3.1:

The Town shall abide by the "Palm Beach County Interlocal Agreement with Municipalities of Palm Beach County and the School District of Palm Beach County to establish Public School Concurrency", which was fully executed by the parties involved and recorded with the Clerk of the Circuit Court of Palm Beach County on January 25. 2001, consistent with ss.163.3177(6)(h)l. and2. F.S. and 163. 3180 F.S.

Policy 3.2:

The Town of Lake Park supports the concept of a Technical Advisory Group (TAG) as established by the County, participating local governments, and the School District. The five-member TAG will be comprised of a Certified Public Accountant, a General Contractor, a Demographer, a Businessperson, and a Planner, nominated by their respective associations as indicated in the Interlocal Agreement to establish Public School Concurrency. The Technical Advisory Group shall review and make recommendations including but not limited to the following:

1. The Capital Facilities Plan;
2. The Ten- and Twenty-Year work programs;
3. Schools that trigger a School Capacity Study;
4. Concurrency Service Areas boundaries;
5. School District Management Reports; and
6. Operation and effectiveness of the Concurrency Program;
7. Program Evaluation Reports.

Policy 3.3:

As requested, the Town shall provide the County and School District with annual information needed to maintain school concurrency, including information required for the School District to establish:

1. School siting criteria;
2. Level of service update and maintenance;
3. Joint approval of the public school capital facilities program;
4. Concurrency service area criteria and standards; and
5. School utilization.

Policy 3.4:

The Town shall advise the School District of a proposed public school site's consistency with the Town's Comprehensive Plan and land development regulations, including the availability of necessary public infrastructure to support the development of the site.

Policy 3.5:

The Town shall provide opportunity for the School District to comment on comprehensive plan amendments, rezonings, and other land-use decisions which may be projected to impact on the Public Schools Facilities Plan.

Policy 3.6:

The Town shall coordinate with the County, local municipalities, and the School District on emergency preparedness issues which may include consideration of:

1. Design and/or retrofit of public schools as emergency shelters;
2. Enhancing public awareness of evacuation zones, shelter locations, and evacuation routes;
3. Designation of sites other than public schools as long term shelters, to allow schools to resume normal operations following emergency events.

Policy 3.7:

The Town hereby adopts by reference the School District of Palm Beach County FY 2009-2013 Plan & Capital Budget, adopted on September 10, 2008, and which shall be updated annually by amendment.

Policy 3.8:

The Town shall provide the School District with its Comprehensive Plan, along with the five-year Land Use and population projections, to facilitate development of school enrollment projections and shall annually update this information. The Town shall coordinate its Comprehensive Plan and the Future Land Use Map with the School District's long range facilities maps to ensure consistency and compatibility with the provisions of this Element.

OBJECTIVE 4:

To cooperate with the joint process of coordination and collaboration between the Town, the County, other local governments and the School District in the planning and decision making on population projections.

Policy 4.1:

The Town commits to working with the County and School District and the municipalities to improve this methodology and enhance coordination with the plans of the School District, the County, and other local governments. Population and student enrollment projections shall be revised annually to ensure that new residential development and redevelopment information provided by the municipalities and the County as well as changing demographic conditions are reflected in the updated projections. The revised projections and the variables utilized in making the projections shall be reviewed by all signatories through the Intergovernmental Plan Amendment Review Committee (IPARC). Projections shall be especially revisited and refined with the results of the 2000 Census. The responsibilities of local governments and the School District on population projections are described in Section VIII-B of the Interlocal Agreement.

Policy 4.2:

The Town shall coordinate with the County's efforts to convert the BEBR projections into both existing and new residential units and disaggregate these units throughout incorporated and unincorporated Palm Beach County into each CSA, using BEBR's annual estimates by municipality, persons- per-household figures, historic growth rates and development potential considering the adopted Future Land Use maps of all local government Comprehensive Plans. These projections are shown in Exhibit E of the Interlocal Agreement as "Projected Units Table'' which shall be amended annually and provided to the School District.

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