

**STRATEGIC REGIONAL POLICY PLAN
OF THE
CENTRAL FLORIDA REGIONAL PLANNING COUNCIL**

EFFECTIVE

APRIL 28, 1997

**CENTRAL FLORIDA REGIONAL PLANNING COUNCIL
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EXECUTIVE SUMMARY

Overview:

The Central Florida Region is aptly named as it is located geographically in the center of the Florida peninsula. Its five counties (DeSoto, Hardee, Highlands, Okeechobee and Polk) consist of a land area of nearly 5,000 square miles. Our Region is unique among the eleven regions in the state in that it is the only one not to contain a coastal county in its boundaries. Primarily rural in nature, with the exception of northern Polk County's I-4 corridor, the area is agricultural based with small spread out towns. The region is characterized by a sub-tropical climate with abundant rainfall occurring mainly in the spring and summer. The combined population for the Central Florida Region in 1995 was 593,103; an increase of a little less than 50,000 persons since the 1990 census.

The following are specific county descriptions. Statistics are from Florida Statistical Abstract - 1995:

- DeSoto:** DeSoto County has a 1995 population of 26,260 persons with a land area of 637 square miles, yielding a density of 41 persons per square mile, which is 47th in the State for density and 48th in the State for population.
- Hardee:** Hardee County ranks 50th in population with a 1995 figure of 22,454 persons and with a population density of 35 persons per square mile; they rank 48th in the State. Hardee contains 637 square miles in their county.
- Highlands:** Highlands County had 75,860 persons within its borders in 1995. A land area of 1,029 square miles yields a population density of 74 persons per square mile, which is 38th in the State. Highlands ranks 35th in the State for population.
- Okeechobee:** With a 1995 population of 32,325 and a land area of 774 square miles, Okeechobee ranks 43rd in population and 46th in population density (42 persons per square mile).
- Polk:** Polk County has both the largest land area (1,875 square miles), and largest population (437,204) of the five counties in the region. This also means that the population and population density rankings are the highest of the counties in the Region. Polk ranks 8th in the State for population and with their population density of 233 persons per square mile; that

ranking is 19th highest in the State.

The Plan:

The Strategic Regional Policy Plan (SRPP) for the Central Florida Region provides a long range guide for the physical, economic, and social development of the Region. Unlike the regional plan it replaces, the SRPP is proposed not as a regulatory tool, but as a direction-setting document. Its focus is on strategically addressing certain systems which make up the Region. The systems or elements in the SRPP are those mandated by the Florida Legislature. The regional council has the option to address other issues in the future, through the amendment process. The overall purpose of the SRPP is to steer the Region toward a more healthy and sustainable future. The SRPP is not merely a plan for the regional planning council, it is a plan for the Region and all those who are active participants in shaping its future.

The SRPP contains the following five elements:

- Natural Resources
- Economic Development
- Regional Transportation
- Affordable Housing
- Emergency Preparedness

Another major component of the SRPP is the documentation of Natural Resources of Regional Significance and Significant Regional Facilities. This material is provided in text and mapped form and may be found in Appendix A. This material provides an excellent overview of the Region's network of remaining natural systems as they relate to developing urban and agricultural areas.

Natural Resources:

The Central Florida Region is completely inland, surrounded by South Florida's coastal population and resources. It is the point of origin for significant natural resource systems of much of peninsular Florida. The Green Swamp provides headwater features for five river systems in the jurisdiction of three water management districts. Two of these river systems provide critical fresh water inputs to federally designated National Estuary Programs. Another is the principal freshwater source for Lake Okeechobee and the Everglades. The Green Swamp is the potentiometric high for the principal ground water resource of the peninsula, the Floridan Aquifer.

These river systems are also the spine of significant ecosystems. These riverine ecosystems transcend arbitrary jurisdictional boundaries. Another ecosystem, the Lake Wales Ridge,

contains the remnants of a globally unique endangered habitat. The Central Florida Region is inextricably involved in the health of ecosystems throughout much of peninsular Florida.

Over the last decade, the way we look at natural resources has changed considerably. We have progressed from a focus on individual species to a recognition that species cannot exist apart from their habitat. We have come to the recognition that individual habitats exist in a larger ecosystem. We now realize that the viability of individual species cannot be separated from the health of the ecosystem. Our view has progressed from site to jurisdiction to regional and multi-regional.

Fundamental Regional Natural Resources Goals and Policies:

- ☐ Assure an adequate supply of water to meet all competing uses, including human and natural needs, deemed reasonable and beneficial.
- ☐ Protect the quality of surface water in the region, and improve and restore the qualities of waters not presently meeting water quality standards.
- ☐ Protect the quality of groundwater in the Region.
- ☐ Minimize damage from floods.
- ☐ Preserve, protect and restore natural Florida ecosystems in order to support their natural hydrologic and ecologic functions.
- ☐ Advocate a comprehensive resource protection perspective reflecting the interconnectedness of quality and quantity of surface water, ground water, aquatic and related land resources and the cumulative effects of activities which impact them within applicable plans, programs and development actions.
- ☐ Protect or conserve Natural Resources of Regional Significance.
- ☐ Protect, preserve and restore the natural functions of riverine systems. Prohibit new development in riverine floodways as identified by FEMA.
- ☐ Incorporate the protection of natural Resources of Regional Significance into planning for future growth within the region
- ☐ Mining practices shall not degrade regionally significant natural resources.
- ☐ Improve the present condition of ambient air quality and prevent its future degradation.

Economic Development:

The Central Florida Region is perhaps the State's most diverse. It is a Region comprised of three sparsely populated rural counties -- DeSoto, Hardee, and Okeechobee -- Highlands, a small, moderately populated rural county, and Polk, one of the State's largest land area counties. Polk, with the two largest cities in the Region, Lakeland and Winter Haven, has a population almost

three times the rest of the Region, and is one of Florida's twenty metropolitan areas. Even though it is urbanizing, citrus, cattle and phosphate mining are still important in Polk. Lying at the core of Peninsular Florida, the Region is surrounded by over 80% of the State's population.

Polk County produces more oranges annually than California, but in the last five years, the market value of prime citrus land has fallen from near \$20,000 per acre to barely \$10,000 an acre for the same groves. More than half of the total personal income in Highlands County is generated by "non-labor activities", and its per capita income is less than 83% of that of the State of Florida. Okeechobee County led the Region in job creation percentage from 1972 to 1992, but the County has the lowest per capita income in the Region.

For every indication that the economy of Central Florida is improving, there appears to be a downside for the economies of the five counties in the region. The nature of recent trends are analyzed in this section, so we can search for strengths upon which to build a vigorous economic future

Although there are major qualitative differences among the counties, economic activity in the Region is, for the most part, driven by activity in Polk County. Approximately 75% of total personal income in the Region is accounted for by Polk County alone. Highlands County in a distant second place with 13% of the Region's economic base, and the remaining three counties (DeSoto, Hardee and Okeechobee) divide approximately equal shares of the residual 12%.

The Region continues to be increasingly reliant on transfer payments, while the State and South Florida are more dependent on property income. The combined result is approximately the same. The Region derives 41.2% of its income from the transfer payments and property income combined, while in all of Florida they make up 41.5% of total personal income. Although the magnitude of increase is predicted to be lower in the next ten years due to a slowing of retiree in-migration, forecasts by the University of Florida (BEBR) indicate that the percentage of income derived from non-labor sources in the Region will increase by an additional three percent by the year 2005.

The Region has been losing high paying jobs in manufacturing and mining, while more and more people are employed in the lower paying service industries. Thus, growth in wage and salary earnings per capita has declined. Comparing 1992 per capita wage and salary earnings to those of 1970, shows that while national levels rose by 334% over the period, South Florida levels increased by nearly 350%, and the Region improved, but by a more moderate rate of 293%. According to long-term forecasts by the *Bureau of Economic and Business Research (BEBR)* at the University of Florida, future rates of annual personal income growth during the upcoming ten years are expected to run 6.6% Statewide and 5.8% in the Region. Thus, per capita income in Florida is expected to rise from \$22,393 in 1995 to \$35,663 in the year 2005. Over the same period, expectations for the Region are for an increase from \$17,297 to \$25,983. If this

prediction is accurate, *per capita income in the Region will fall another five percentage points behind that of Florida.*

Fundamental Economic Development Goals and Policies

- ☐ Unite local economic development endeavors to increase the wealth of the Central Florida Region.
- ☐ Promote business and agri-business development and expansion through partnerships among State, regional and local economic development organizations.
- ☐ Sustain county and municipal economic development.
- ☐ The Regional Planning Council will promote the efforts of county and city agencies, chambers of commerce and the efforts of local economic development organizations.
- ☐ Develop local and regional infrastructure throughout the Region to support economic development activities.
- ☐ Establish a revolving loan program.
- ☐ Establish the Central Florida Region as a major destination for tourists.
- ☐ Develop a strategy to increase tourism.
- ☐ Plan, develop, reinforce and link infrastructure systems to serve business and industrial location and expansion.
- ☐ Link existing municipal and county water distribution and sewer collection and treatment systems where it will insure the full and efficient supply of potable water for all urban demands, but especially the requirements of business activities that create new, quality jobs in the Region.
- ☐ Link existing municipal and county water distribution and sewer collection and treatment systems where it will insure the full and efficient supply of potable water for all urban demands, but especially the requirements of business activities that create new, quality jobs in the Region.

Regional Transportation:

The existing local mass transit service within the Region is limited to one regularly scheduled bus system which serves the city of Lakeland. The existing development pattern in the Region is

widely spaced, resulting in relatively long, low-occupancy vehicle trips. This is an inefficient use of the highway system. If development continues with this pattern of highway use, it can lead to unnecessary congestion. Without any mass transit system in place at the present time, such as bus service or light rail, congestion already exists in all major commercial areas.

The condition of the major roads in this Region is of great importance during any kind of an emergency, not only to this Region's citizens, but to those in the surrounding coastal areas. Evacuation routes that start elsewhere and end here must be clearly marked. But most importantly, funds must be set aside to improve these routes so that they can carry the amount of vehicles that will use them during a crises.

The Florida High Speed Rail Transportation Commission has designated the Tampa Bay Area and Dade County as termini and as areas of the State to be served, with lines running through this Region. This Region will be involved and directly affected by this regional form of transportation. The CFRPC will lobby the Commission to locate stations in this Region and to construct lines that can easily be added on to with north-south connecting lines. The impending construction of the high speed lines may fuel the fire for the planning of light rail service and bus service that will link the people throughout the Region.

The Central Florida Region is the only Aviation Planning Region in the State of Florida not served by commercial air service. However, due to the Region's projected population, economic growth, and Airport Free Trade Zone overall aviation activity is expected to increase dramatically.

Through the use of Federal Transit Administration (FTA) Section 18 funds, the Central Florida Regional Planning Council administers the Transportation Disadvantaged program for DeSoto, Hardee, and Highlands Counties. State-wide criteria is established to determine user eligibility.

It is important that the CFRPC lobby to keep these programs alive. Population pyramids have been studied for each county and the population will continue to age over the next decade. The citizens of the Region will continue to need this program.

Fundamental Regional Transportation Goals and Policies:

- ☐ As a priority, protect, maintain and improve existing transportation infrastructure with available transportation funds.
- ☐ The full development of transportation facilities shall be within existing rights-of-way, whenever possible.
- ☐ Plan, support and give priority to construct road drainage projects for regionally

significant highways that are designated hurricane evacuation routes and are susceptible to flooding.

- ☐ Development shall only occur in a manner consistent with Florida Statutes requiring the concurrent provision of adequate transportation facilities.
- ☐ Reduce average vehicle trip lengths on the transportation system, thereby lowering energy consumption per vehicle and reducing segment volumes.

Affordable Housing

Since 1980, two major trends have emerged, one involving wages, and the other involving farm worker housing. First, wages have not kept pace with inflation in Central Florida, largely because the majority of new jobs are being created in service, retail and agriculture, the three lowest paying sectors in the economy. In fact, the average real wage improved by *less than one percent* between 1984 and 1994, while the Consumer Price Index increased by more than forty points, and the median value of owner occupied house in Florida rose almost 71% between 1980 and 1990. Thus, home buyers and renters at the bottom of the economic scale are falling farther and farther behind. Renters who can handle a rent payment are faced with the first, last and deposit qualification requirement, which for a modest three bedroom, two bath apartment or house can amount to as much as \$1,500. Buyers in the same financial position might be able to afford a monthly mortgage payment, but cannot deal with the challenge of twenty percent down and closing costs, let alone the cost of maintaining the property.

Yet, according to the National Association of Home Builders (NAHB), the Lakeland-Winter Haven metropolitan area is one of the most affordable areas in the United States. In the first quarter of 1995, it ranked tenth in the nation among areas where a high percentage (81.5% in the local case) of the homes sold were within reach of the median-income household at the prevailing mortgage interest rate. "*Within reach*" means the sales price was about twice the local median income of \$33,100, and the purchaser was able to secure financing at the prevailing mortgage rate.

Lakeland-Winter Haven metro area, with a 1995 median income of \$33,100, is statistically more affluent than the rest of the Region. In 1990 for example, Polk County had a median household income of \$25,216, which was almost \$8,000 less than the metro area and \$2,000 below the State's median of \$27,483. Polk County's estimated median income for 1995 would only rise to \$29,200 with inflation taken into account, and remains well below the metro area median. The lack of definition, consistency and comparability in statistics related to housing and income has created a situation where no one really knows whether or not the public policies designed to rehabilitate or produce affordable housing, or assist the buyers and renters, are actually working.

In DeSoto and Hardee Counties, the first symptoms of the coming crisis were detected in the 1990 U.S. Census results. In DeSoto County forty-five of every one hundred new, permanent residents who came there during the 1980s, were minorities; Hardee County, whose population grew by only 120 persons during the entire decade, increased its minority population by more than 2,000 persons. Today, three of every ten residents of Hardee, and one of every four in DeSoto County are either Non-white and Non-Hispanic or of Hispanic origin. The huge influx of Hispanic residents, in particular, is due to the planting, tending and harvesting needs of the citrus and truck farming industries.

Despite the existence of governmental programs that have been implemented since the last regional policy plan was written, *conventionally constructed* affordable housing units are not being developed in the Region, although demand remains high. The attractiveness of the Region to industries that pay low wages has created a market for affordable units for employees who do not earn enough to purchase or rent expensive housing. The continued viability of the agricultural base of the Region and the inability to provide more farm worker housing has created another need, and market, for affordable units. Decent housing for migrant farm workers is almost nonexistent. The deplorable living conditions of farm workers were documented at least ten years ago, and were even the subject of a segment on the television program "60 Minutes". Some efforts to supply housing have been made, but a large influx of farm worker families seeking permanent residency has changed the situation for the worse. Nowhere in the Region is any county or community keeping up with the demand.

The only segment of the housing market that has answered the call for affordable units is the mobile/manufactured housing industry. Mobile homes, both in planned communities and sold as individual units, have the largest market share in the affordable category, because they are generally less expensive than conventional housing and often require as little down payment as a car, but they present unique problems in the Region. Ineffective local policies governing the placement of mobile homes, which are reinforced by the State's misplaced assumption that permissive regulations and minimum infrastructure makes them affordable housing, only adds to the depreciation of the housing stock in Central Florida counties. In addition, the spread of mobile homes dramatically increases the risk of storm damage to a growing portion of the population. *Mobile home communities*, which are generally safer than individually sited units due to tougher development standards, are not being developed to meet the demand for affordable units among the two groups who *need* them the most: the farm workers and the low income wage earners.

Fundamental Affordable Housing Goals and Policies:

- ☐ Increase the supply of affordable housing within the Central Florida Region.
- ☐ Develop a Regional Affordable Housing Strategy for the improved provision of

affordable housing.

- ☐ Establish an affordable housing data center at the regional planning council.
- ☐ Reduce the cost of housing construction by eliminating unnecessary regulatory practices which add to the cost of housing.
- ☐ Increase the quality and quantity of housing for farm workers.
- ☐ Rehabilitate existing sub-standard affordable housing and maintain and improve the existing affordable housing stock.

Emergency Preparedness

Emergency preparedness in Central Florida is about *protection*. It is about preventing the loss of life and property from emergencies. It is about what local government should be doing to protect their people, and what the people should be doing to protect themselves.

Separated into four phases: preparedness, response, recovery, and mitigation, this element addresses issues relating to each phase by looking at potential and known deficiencies in existing programs and policies. A paramount concern is the severe shortage of adequate emergency public shelter space. Without either increased shelter space, or policies to reduce the need for evacuation and thus lowering the population seeking shelter during an emergency, the present deficit will only increase as the population of southern Florida increases.

Without addressing individual hazards, the emergency preparedness element focuses on mitigating the causes of the emergency. Whether the emergency is a hazardous materials spill or a hurricane which threatens the region, emergency preparedness protocols deal with responding to the threat (i.e. Evacuation of threatened areas, mass care shelter operations, and public information about emergencies).

It is the intent of this element to address pertinent issues relating to the four phases of emergency preparedness and offer possible solutions to the questions that arise.

Fundamental Emergency Preparedness Goals and Policies:

- ☐ Protect public and private property and human lives from the effects of natural and man-made disasters.
- ☐ Maximize regional evacuation capability and emergency shelter capacity.
- ☐ A region-wide inventory of primary/alternate evacuation routes is available and updated

at regular intervals.

- ☐ Hazardous materials will present the minimum feasible risk to the citizens of the region.
- ☐ Encourage private facilities to install public warning systems.
- ☐ Regulations contained in the Emergency Planning and Community Right-to-Know Act of 1986/SARA Title III shall be adhered to by public and private industry within the region.
- ☐ Mitigation techniques reduce exposure and vulnerability of development, so recovery from natural disasters is timely and cost effective.
- ☐ Minimize future risk to life in new and existing mobile home and recreational vehicle parks from the effects of natural disasters.

Mapping of Natural Resources of Regional Significance

The SRPP contains maps of Natural Resources of Regional Significance. The State (Rule 27E-5.002(4)FAC) defines these as follows:

a natural resource or system of interrelated natural resources, that due to its function, size, rarity or endangerment retains or provides benefit of regional significance to the natural or human environment, regardless of ownership.

The Rule goes on to require that natural resources identified as regionally significant in the Plan must be mapped.

These maps provide an excellent regional planning tool and identify regional opportunities for better land use planning. These maps are to be used for regional planning purposes only. These maps are to be used only in conjunction with the SRPP. Information regarding specifics on how they will be used and implemented are addressed elsewhere in the Plan.

GUIDING PRINCIPLES

Background in Law:

In 1980, the Florida Legislature passed the "Florida Regional Planning Council Act" and declared, among other things, that "There is a need for regional planning agencies to assist local governments to resolve their common problems, engage in areawide comprehensive and functional planning, administer certain federal and state grants-in-aid, and provide a regional focus in regard to multiple programs undertaken on an areawide basis." (Chapter 186.502(1)(b), F.S.) To that end the Legislature also said, "It is the declared purpose of this act to establish a common system of regional planning councils for areawide coordination and related cooperative activities of federal, state, and local governments; ensure a broad-based regional organization that can provide a truly regional perspective; and enhance the ability and opportunity of local governments to resolve issues and problems transcending their individual boundaries." (Chapter 186.502(2), F.S.)

After a good deal of debate about the future role of regional planning councils in Florida's overall planning and growth management process, the 1993 Legislature made a number of statutory changes that redirected and expanded the activities of the councils. The three most significant changes were, (a) acknowledgment that the regional planning councils are Florida's only multi-purpose regional entity that is in a position to plan for and coordinate intergovernmental solutions to growth-related problems on greater than local issues; (b) the requirement that each regional planning council develop and adopt a rule for voluntary dispute resolution for growth management and planning issues; and (c) the requirement to develop a strategic regional policy plan to replace the current comprehensive regional policy plan.

A strategic regional policy plan, required by Section 186.507, F.S., is a long range guide for physical, economic, and social development of a region, stated in the form of regional goals and policies. This document is a consensus document that reflects the needs and characteristics of the Central Florida Region. The Strategic Regional Policy Plan has been developed through a collaborative process, and emphasizes consensus and coordination between local governments, regional entities, state and federal agencies, other organizations, and the public. *The plan is a plan for the region*, not merely for the regional planning council.

A strategic regional policy plan is required to identify and address significant regional resources and facilities. As these plans are strategic rather than comprehensive in nature, they do not need to address all goals and policies in the State Comprehensive Plan. However, goals and policies included in a strategic regional policy plan are *required to implement and further the State Comprehensive Plan*.

The purposes of the Strategic Regional Policy Plan (Chapter 27E-5.003 F.A.C):

1. To implement and further the goals and policies of the State Comprehensive Plan with regard to the strategic regional subject areas and other components addressed in the plan.
2. To provide long range policy guidance for the physical, economic, and social development of a region.
3. To establish public policy for the resolution of disputes over regional problems, needs, or opportunities through the establishment of regional goals and policies, and to provide a regional basis and perspective for the coordination of governmental activities and the resolution of problems, needs, and opportunities that are of regional concern or scope.
4. To establish goals and policies, in addition to other criteria established by law, that provide a basis for the review of developments of regional impact, regional review of federally assisted projects, and other activities of the regional planning council. In addition, the plan may recommend specific locations or activities in which a project, that due to its character or location, should be a development of regional impact within the region. Standards included in strategic regional policy plans shall be used for planning purposes only and not for permitting or regulatory purposes. A regional planning council shall not adopt a planning standard that differs materially from a planning standard adopted by rule by a state or regional agency, when such rule expressly states the planning standard is intended to preempt action by the regional planning council.
5. To establish goals and policies to assist the state and the councils in the determination of consistency of local comprehensive plans with regional and state comprehensive plans. Strategic Regional Policy Plans shall serve as a basis to review the resources and facilities found in local government comprehensive plans.
6. To establish land development and transportation goals and policies in a manner that fosters region-wide transportation systems.
7. To serve as a basis for decisions by the regional planning council.
8. To guide the administration of federal, state, regional, and local agency programs and activities in a region to the extent provided for by law.
9. To identify significant regional resources and facilities, infrastructure needs, or other problems, needs, or opportunities of importance to the region.
10. To identify natural resources of regional significance and promote the protection of those resources.
11. To set forth economic development goals and policies that promote regional economic growth and improvement.

12. To set forth goals and policies that address the affordable housing and emergency preparedness problems and needs of the region.

Implementation:

Unlike the local government comprehensive plans, the Strategic Regional Policy Plan (SRPP) is not implemented through a set of land development regulations and accompanied by a capital improvements program. Instead, the SRPP must be implemented through the programs and activities of the Regional Planning Council, and through the actions of Federal, State and Regional agencies, and the local governments of the Region. The ability of Council to carry out its responsibilities is intergovernmental in nature. Council provides technical assistance, shares information, offers dispute resolution, and carries out activities that depend on multi-jurisdictional efforts for their success. The strength of the SRPP is in identifying regional/multi-jurisdictional issues and proposing strategies to address them in ways that are logical and feasible local governments throughout the Region, as well as officials at other levels of government.

Although the Regional Planning Council is primarily an agency that behaves in an advisory capacity, the successful implementation of the Regional Plan can occur in a number of ways. Perhaps most importantly, the SRPP is implemented through technical and planning assistance to local governments provided by the Regional Planning Council to aid them in the accomplishment of the various goals and policies contained in the Plan. The SRPP also depends on the successful attainment of local government comprehensive plan goals and objectives, which by Statute (Chapter 163) must be consistent with the Regional Plan. Finally, the Council's program activities are valuable, but perhaps more significant are the collective activities of other organizations and agencies, both public and private who see the Regional Plan as a set of good solutions to issues that really matter.

Identified in the following paragraphs are the *Eleven Principles* that establish the foundation and the context for the application and implementation of the Strategic Regional Policy Plan. The Goals, Policies, and Strategies contained in the Plan represent a consensus that reflects the needs and characteristics of the Central Florida Region. The Eleven Principles are the basis for interpretation of the Goals, Policies, and Strategies and provide a coherent basis for understanding and executing the Plan as a whole.

First Principle:

The Plan shall be construed and applied as a whole, and no specific goal or policy in the Plan shall be construed or applied in isolation from the other goals and policies in the Plan. As they pertain to the development of local government comprehensive plans, land development regulations, and local development orders that do not require regional planning council review, all verbs that are directive in nature, such as "shall, will, must and should", shall not be interpreted to abrogate, displace or override the decision making and fiscal prerogatives of the local government.

Second Principle:

The goals and policies contained in the Central Florida Regional Planning Council's Strategic Regional Policy Plan (SRPP) shall be reasonably applied where they are economically and environmentally feasible, shall not be contrary to the public interest, and shall be consistent with the protection of private property rights. Specifically in regard to private property rights, nothing in this SRPP shall provide the basis for the abrogation of vested rights in private property nor an action that constitutes a taking of private property.

Third Principle:

The SRPP is intended to be a direction setting document. Its goals and policies will be implemented only to the extent that financial resources are available from local revenue sources, legislative appropriations, grants or appropriations of any other public or private agency or entity, and is in keeping with the provisions of the Florida Constitution, Article VII, Section 18.

Fourth Principle:

This SRPP does not create regulatory authority or authorize the adoption of agency rules, criteria or standards not otherwise authorized by law.(Section 187.101(2), F.S.) Further, the Florida Legislature has expressly stated that “a council shall not act as a permitting or regulatory entity.”(186.502(4),F.S.) Rule 27E-5.003(4) states that “standards included in strategic regional policy plans may be used for planning purposes only and not for permitting or regulatory purposes”. As a result, nothing in this SRPP places requirements on local government to adopt planning standards that exceed those adopted by competent authority, nor to duplicate or exceed the regulatory or permitting programs or the authority of any Federal, State or regional agency.

Fifth Principle:

This Strategic Regional Policy Plan cannot and does not establish binding level of service standards for public facilities and services provided or regulated by local governments (Section 186.507(14),F.S. & Rule 27E-5.001(3), F.A.C.). Therefore, local governments shall not be required to adopt and/or implement regulations or rules "not otherwise authorized by law".

Sixth Principle:

The Regional Planning Council is prohibited from adopting a planning standard that differs materially from a planning standard adopted by rule by a state or regional agency, when such rule expressly states the planning standard is intended to preempt action by the Planning Council.

Seventh Principle:

Privately owned lands, development or facilities that are located within an area designated as Natural Resources of Regional Significance shall retain the property and development rights

associated with every classification or designation granted under the Local Government Comprehensive Plan and land development regulations. Such lands, development or facilities shall not be condemned, simply on the basis of the designation in this SRPP as lying within an area of Natural Resources of Regional Significance. The sale of property, transfer of development rights or the acceptance of a management agreement that limits development and property rights is purely voluntary and a matter of business between a willing buyer and seller.

Eighth Principle:

Local Government Comprehensive Plan Amendments that have been recommended for approval to a local governing body by its Local Planning Agency (LPA), prior to the effective date of the adoption of this Strategic Regional Policy Plan by the Central Florida Regional Planning Council, are exempt from the requirements of this Plan. The Comprehensive Regional Policy Plan, Rule 29G-2, F.A.C. remains the basis for regional review until the SRPP is adopted.

Ninth Principle:

Development Orders lawfully issued by a local government prior to the effective date of this SRPP are exempt, in accordance with Chapter 163.3167(8), F.S., from any requirement hereof, unless and until such time as they may be amended in such a way as to require a Local Government Comprehensive Plan Amendment, other than a small scale amendment, or the land and development that is the subject of the Final Development Order should become a Development of Regional Impact.

Tenth Principle:

In accordance with its purposes, the Strategic Regional Policy Plan of the Central Florida Regional Planning Council is the basis for the design, review, encouragement, support and approval of new development and redevelopment that improves the physical, economic, and social development of a Region.

Eleventh Principle:

The strategies contained herein are meant to serve as amplification only of the Goals and Policies and not as additional requirements. The strategies will be considered as advisory in nature only and not as a mandatory requirement. Any apparent conflicts between strategies, goals, and policies will be interpreted per the meaning and intent of these guiding principles.

INTRODUCTION

"If you want to make enemies, try to change something."

- - - President Woodrow Wilson

Nothing says we have to change anything when we draw up the Strategic Regional Policy Plan for Central Florida, but many people and organizations will see the work as change. The challenge has been to involve people and organizations, and by doing so, educate them to our aims. The first step in the process was to establish a means of communicating, so this introduction contains definitions of terms that can be ambiguous, and clarifies the opportunities and the limits to policy planning.

Making a Run at Some Definitions.

We use words and we think we are communicating. Teachers struggle every day to use the right words to educate their students; and when you think about it, most communication is aimed at *educating* someone else. So, it is basic to any activity that we work with a common understanding of key words. Unless we establish a common vocabulary, communication deteriorates and education is impossible.

The meaning of many words change with time, but people learn a word and find it difficult to adjust. We also use words that seem common to us, but we have never taken time to look them up, and then we are surprised to learn what else they mean, and how others might be using them.

Here, the binding definitions are stated along with some other ways that words and combinations of words can be used to convey ideas.

Strategic Regional Policy Plan:

Government plans are full of definitions and so are the laws and rules that "govern" them. The law on the Strategic Regional Policy Plan (SRPP) contains ten definitions and the rule has twelve, but what you need to know is what it is and how it effects you, and what makes this plan any different than the last one that was called a *Comprehensive* Regional Policy Plan (CRPP).

For openers, the Strategic Regional Policy Plan is unlike the previously required comprehensive plan for the Region or any of the Comprehensive Plans of counties and cities, because neither the format nor the outcomes are strictly dictated by the law or the rules. Rather, the Plan that we refer to as the SRPP must contain goal statements, polices and actions that direct the Region's efforts to deal with the issues that Regional Planning Council believes are of most importance to

the Region at this time, and perhaps to change the way things are done and offer alternates to achieve future successes.

Officially, the **Strategic Regional Policy Plan** is *"a long-range guide for physical, economic, and social development of a comprehensive planning district, which identifies regional goals and policies."* (Chapter 186.503(10), *Florida Statutes*)

Policy:

The word *policy* includes a very broad range of definitions. In simple terms, it is derived from Middle English and French to mean "government regulation", and that is the way most of us react to the word. The second meaning is a written contract, as in insurance *policy*, but modern usage takes us to the third meaning, which includes descriptions of procedures and processes, and ways of explaining how things get done. The staff of the Executive Office of the Governor developed the rule for the preparation of the SRPP and defined it this way;

"Policy means the ways in which programs and activities are conducted to achieve identified goals." (Rule 27E-5.002(6), *Florida Administrative Code*).

The application of policy is not always so simple. Often, policy is directly associated with a company, a government or an agency, but also with individuals. More and more we hear "it's my policy to do or to be ... such and such", as a substitute for "I believe, I will or I have decided, and even yes or no". Some might say having a policy or two or three is a good way of dealing with complexity and change, whether government, business or person. Others would say it's a good way to guarantee consistency and to diffuse the tense situations governments and individuals face on a daily basis. What underlies both of these approaches is that policy is somehow a rule and remains static, even when it does not quite apply to the situation. What policy is, how it is created, how individuals interpret it, and what effects it has are all part of our investigations, which makes writing a plan that includes the word policy in its title more than a little challenging.

Strategic (Strategy):

Strategic just means "relating to or marked by strategy." Like policy, the word *strategy* is no easier to grasp. It is a noun, the name of something, but its definition is a set of very complex *actions*. Webster says that a strategy is,

"The science and art of employing the political, economic, psychological, and military forces of a nation or group of nations to afford the maximum support to adopted policies in peace or war."

There is that word *policy* again. But a little farther down among the definitions, we find

something more interesting. It says a strategy is "*a complex (set) of adaptations that serve ... an important function in achieving evolutionary success.*" Adaptations! Again from Webster, "to adapt implies modifications according to changing conditions." This extra definition serves to remind us that change is an essential element in acting to achieve future successes. And from the Governor's Office;

"Strategic means proactive, future and results oriented with a focus on important long term priorities, needs and problems of the region." (Rule 27E-5.002(9), *Florida Administrative Code*)

A Region:

It may or may not be a surprise to you that regions are not always defined as groups of counties or other governmental entities. Webster depicts them as areas of the world that are characterized by climate, biological relationships or communities, and geography. In this light, the Central Florida Region is a fragment of a region that might best be described as *South Florida*. The lower portion of the Florida Peninsula has a subtropical climate, examples of biota found nowhere else on Earth, and a land form distinctive from the rest of the State. Beyond these features, there are large numbers of people who inhabit *South Florida* and depend upon the natural regional economy that has developed around them for their sustenance. Isolating Central Florida, which has only five (5) percent of the population and claims less than five (5) percent of the economy, from *South Florida*, would be akin to ignoring the donut and having the hole with your morning coffee; so throughout the SRPP we have attempted to see the whole picture and to deal with the implications of the surrounding mass as we define the policies for Central Florida.

South Florida:

There are many, many uses of the words "*South Florida*". It is often a description for the tip of the Peninsula where we find Miami-Dade, the Everglades and the Keys. There is a water management district known as South Florida, which through the southern one-third of Orange County, and approximately two-thirds of Osceola County on the north down through Lake Okeechobee to the Everglades and the Keys, and covers two counties on the Gulf Coast. In March 1994, the Governor established the Commission for a Sustainable South Florida and it covers the same lands as SFWMD. There are also a Southwest Florida Water Management District and Regional Planning Council. We believe that South Florida is the combination of south and southwestern entities, and much more.

There are geological, hydrological, demographic, economic and geopolitical reasons why South Florida actually stretches from Pasco County above Tampa across the State to Volusia County and takes in all of the Peninsula to the Keys. First, deep beneath the surface of the land are the continental plates; geologic structures that are composed largely of granite and other very hard compressed rock. Across the Florida Peninsula, some four thousand feet down there is

something known as the *Ocala Uplift*, which marks the edge of the continental plate of North America. The Uplift is "reflected" in the ground water storage structures and the surface of the land as a divide between the northern and southern parts of the Florida Peninsula.

Second, we can approximate the geologic-hydrologic divide on the surface by using the boundaries of counties. The exact combination of counties may be open to question, but the ones that approximate the line described as the *Uplift* -- Pasco, Sumter, Lake and Volusia -- form the northern boundary of *South Florida*. The map on the following page displays the area covered by twenty-eight counties. If *our South Florida* were a State, it would be the fifth largest in population with more than eleven (11) million residents, and it would be greater in land area than twelve other States, bigger than Maine and only slightly smaller than Indiana. Its sister State, *North Florida*, with three (3) million residents, would be 30th in population .

Third, the University of Florida's Bureau of Economic and Business Research (BEBR) estimates that there are 11,010,988 people in *South Florida*, which is more than seventy-nine (79) percent of the entire year round population of Florida. The concentration of so many people at the end of a peninsula creates demands on land and water resources unlike any other place in the United States. Elsewhere, for example, States that do not have sufficient water resources within their boundaries make arrangements with neighboring States to borrow, barter or buy water for urban, industrial and agricultural users. Being bound by the limits of our broad peninsula, requires Floridians to look to other solutions.

Fourth, nine million of the eleven million people in *South Florida* live in the confined space at the rim of the peninsula, a fact that illustrates how, and perhaps why, people first came to Florida. From the Spanish Conquistadors to the earliest winter visitors and Caribbean immigrants, people came to Florida on ships, and much later, they came down Flagler's Railroad. It also reminds us they came to settle before the interior was conquered, drained and opened to development. The pattern of settlement has not changed much, and predictions are that it will not, even if Florida someday becomes home to 90 million people! Put another way, is it likely that any State, regardless of population, would encourage disinvestment in its established urban centers to develop its hinterlands? No, too much risk and capital have been spent to build a valuable public and private infrastructure that supports its business and its future.

And fifth, people came to invest and to keep a connection to the rest of America and the World, in order to get the things they wanted and needed, and to sell the things they produced. Though our *South Florida* economy is many times more complex today, the basic structure has changed very little. It is an import-export economy that produces very little of what it consumes, and is therefore largely dependent on the outside.

1. NATURAL RESOURCES

We are all controlled by the world in which we live, and part of that world has been and will be constructed by men. The question is this: Are we to be controlled by accidents ..., or by ourselves ..?"

B.F. Skinner

The Central Florida Region is the point of origin for significant natural resource systems of much of peninsular Florida. The Green Swamp provides headwater features for five river systems (Withlacoochee, Hillsborough, Peace, Kissimmee and Oklawaha) in the jurisdiction of three Water Management Districts. Two of these river systems, the Peace and Hillsborough, provide critical fresh water to federally designated National Estuary Programs (NEP). Another, the Kissimmee, is the principal freshwater source for Lake Okeechobee and the Everglades. The Green Swamp is the potentiometric high for the principal ground water resource of the peninsula, the Floridan Aquifer. Collectively, these river systems are also the spines of significant ecosystems -- riverine ecosystems that transcend arbitrary jurisdictional boundaries. The only other ecosystem in the Region that is not a riverine system is the Lake Wales Ridge, which contains scrub communities that are remnants of a globally unique endangered habitat.

Over the last decade, the way we look at natural resources has changed considerably. We have progressed from a focus on individual species to a recognition that species cannot exist apart from their habitat. We have come to the acknowledgment that individual habitats exist in a larger ecosystem. We now realize that the viability of individual species cannot be separated from the health of the ecosystem. Our view has essentially gone from site to jurisdiction to regional and multi-regional.

The Central Florida Region is inextricably involved in the health of ecosystems throughout much of peninsular Florida. Numerous riverine ecosystems originate in the interior, in central Florida. Riverine ecosystems are critical components of coastal estuarine systems. Fresh water from the interior creates the estuary. It is not lost when it joins the sea. A key to our developing understanding of ecosystem management is the recognition that coastal and interior systems are interdependent.

Water Resources:

The Central Florida Region contains the headwaters of surface water systems that are shared with surrounding regions. The Peace and Kissimmee river systems are the focus of massive federal and state resources. Actions within the Central Florida region that affect water quality and

quantity directly affect coastal resources. Policy initiatives addressing coastal concerns impact interior jurisdictions. These resources must be managed in a manner that reflects the interest of the entire system.

Alafia River: The Alafia River drains approximately 460 square miles. The river flows 24 miles through coastal lowlands from its headwaters in a swamp and prairie area south of Mulberry, before entering the southern end of Hillsborough Bay. This basin is within the Southern Water Use Caution Area (SWUCA), partly in the Most Impacted Area (MIA), and is facing serious constraints within the ground water system. As a result of ground water limitations, the main stem and the South Prong of the Alafia River were identified in the Southwest Florida Water Management District (SWFWMD) Needs and Sources Plan as potential water supply sources. Much of the Alafia basin, within Polk County contains agriculture, range land and barren land reflective of phosphate mining and processing activities. A major power plant is under construction with associated water cropping and landscape reclamation activities.

The Alafia River Task Force was organized in 1992 and included members of the Florida Phosphate Council, Department of Environmental Protection, and individual industrial interests along the north prong of the Alafia River. The task force produced the Alafia River Management Practices Plan in 1995. This management plan shall be utilized in conjunction with the SRPP where feasible.

Concern #1: Are mine reclamation and power plant construction activities affecting the base flow and water quality of the Alafia river system.

Green Swamp: The Green Swamp is an area of approximately 870 square miles situated in Polk, Lake and Sumter Counties, roughly in the center of the Florida Peninsula. It is a mosaic of cypress swamps, hardwood forests, and marshes, with slightly elevated areas of pine flatwoods and sandhills interspersed randomly throughout. A portion of the Green Swamp has been designated as an Area of Critical State Concern. The Area of Critical State Concern consists of approximately 322,690 acres, of which 220,000 acres is within Polk County and the Region.

The Green Swamp is the clearest expression we have of the relationship of surface and groundwater systems. The Green Swamp is the highest point of the Floridan aquifer. It is the point at which the Floridan Aquifer comes to the surface, or near the surface, clad only in a layer of sand. It is a critical resource both ecologically and hydrologically, because it occupies a large land area, and because it contains headwater features of the Withlacoochee and Little Withlacoochee, the Oklawaha, the Hillsborough, the Peace and the Kissimmee, in order of contribution from largest to smallest.

The Green Swamp is an open space system, lying between two of Florida's largest and fastest growing population centers. It is a system that filters water, supports a diversity of habitats for plants and animals, stores flood water, yields cypress, peat and sand for industry, and offers

Floridians unique recreational opportunities. In all, it contributes enormously to the preservation of *biodiversity* in Central Florida, and the comfort and very existence of people throughout South Florida. Development activities such as the construction of I-4 and US 27 have obstructed water and wildlife movement to the river systems, affecting the biodiversity of the Florida peninsula.

Surface water in the central part of the Florida peninsula, rising in the Green Swamp moves out in all directions through the five river systems. Ground water in the central part of the Florida Peninsula moves outward in all directions from the Green Swamp. The swamp is the potentiometric high of the Floridan aquifer. The potentiometric high, often referred to as the “Polk High”, occurs in the southeastern corner of the Green Swamp.

The total groundwater in the Floridan aquifer is estimated to have about one fifth the volume of the Great Lakes. Much of this quantity is needed to maintain the Floridan aquifer’s hydrologic pressure against saltwater intrusion, and is thus unavailable for direct use. This large amount of ground water was once thought to be a virtually inexhaustible resource. A difficulty in development of the freshwater resource, and a matter of concern, is the ***underlying and surrounding saltwater zone*** on which the less dense freshwater floats. As the freshwater is drawn off by wells, the mass of freshwater that acts to repel the movement of saltwater is correspondingly reduced. This reduction may allow both lateral and upward movement of saline water within the aquifer toward the point of withdrawal. A one foot decrease at the potentiometric high in the Green Swamp results in roughly a forty foot movement at the underlying saltwater interface. Although a very large body of freshwater exists, it is easily contaminated by saltwater through excessive or improperly managed withdrawals.

The potentiometric level maintained in west-central Florida by the Green Swamp high causes ground water to flow outward to surrounding areas where the water is withdrawn for potable use. The potentiometric level can be defined as the height to which ground water, under pressure in the aquifer, would rise if unconfined. In general, during the dry season, the potentiometric surface ranges from approximately 125 feet Mean Sea Level (MSL) in the southeastern portion of the Green Swamp, to 70 of 80 feet MSL in the western reaches of the area. It has been estimated that the average ground water outflow from the Green Swamp is equivalent to 83 million gallons per day. Large scale ground water withdrawals from the Floridan aquifer near the Green Swamp area would have the potential to lower the potentiometric surface of the Floridan aquifer. Other effects may also occur such as: a reduction of the ground water outflow from the Floridan aquifer; reduction of stream flows; a reduction of the swamp’s potentiometric pressure; drainage of marsh areas and wetlands; and, increased sinkhole occurrences.

Concern #2: Will pumpage from the City of Lakeland’s existing well field to the Green Swamp Area of Critical State Concern impact the potentiometric high of the Swamp and therefore create unacceptable environmental impacts to overall natural systems?

The potential of the Green Swamp area to serve as a source of public water supply has been

considered in response to development pressures in the surrounding Tampa and Orlando metropolitan areas. However, the SFWMD Needs and Sources Plan, which identified regional sources to meet demand through the year 2020, did not include any sites within the Green Swamp. It was determined that there were more suitable sources, in closer proximity to demand centers, to meet water supply needs for the next thirty years. Additionally, Polk County Comprehensive Plan Policy 2.132-E7 prohibits the County from permitting any new regional well fields in the Green Swamp Area of Critical State Concern.

Concern #3: Are current state and local growth management strategies effective in protecting the hydrologic characteristics of the Green Swamp?

Concern #4: Can linkages between the Green Swamp and the river systems that have been obstructed by development activities be restored?

Hillsborough River: The Hillsborough River originates in the Green Swamp near the origin of the Withlacoochee River, and flows to Hillsborough Bay. During certain hydrologic conditions the flows of the Withlacoochee and the Hillsborough interchange near the Polk-Hillsborough county line. The Hillsborough River is, and will continue to be used as a potable water supply source. The Hillsborough River and the associated Tampa Bypass Canal supplies about 75% of the drinking water for the City of Tampa. Hillsborough river water quality and quantity plays an important role in the health of the Tampa Bay estuary.

Concern #5: By protecting the Green Swamp potentiometric high, are we protecting flow of the Hillsborough River?

Kissimmee River and Lake Okeechobee: The Kissimmee River system contains the Upper Chain of Lakes and the Kissimmee River Valley. The chain of lakes at the north end of the system form the headwaters of the Kissimmee River, which eventually discharges into Lake Okeechobee and is a major source of surface water flow into the lake. The Kissimmee river was channelized during the 1960s to improve flood protection to the central Florida area. The 103 mile long, shallow, meandering river was replaced with a 56 mile long, 30 foot deep channel. This resulted in the drainage of 43,000 acres of floodplain wetlands. The South Florida Water Management District (SFWMD) is currently engaged in an effort to reintroduce flows to remnant river oxbows and restore 26,500 acres of wetlands in the river floodplain. Construction of this project is expected to be completed in 2009.

Lake Okeechobee is the second largest natural freshwater lake completely within the contiguous United States, occupying approximately 730 square miles. The lake is a water supply for agricultural and urban users. The lake receives water primarily from rainfall and from the Kissimmee River, Taylor Creek and Fisheating Creek basins. Historically, during extremely wet periods, lake levels rose sufficiently to overflow the banks and allow sheet flow southward into the Everglades. Today, the lake is mostly surrounded by levees, which were constructed to

provide flood protection to adjacent areas. Water levels are managed according to a regulation schedule for flood protection and water supply purposes. Water levels above a certain stage require release according to a regulation schedule for flood control purposes. Changes in lake stages have adversely affected the plant and wildlife community of the littoral zone.

In recent years, the lake has exhibited evidence of accelerated eutrophication, which has been attributed to high levels of nitrogen and phosphorus in the lake water. Dairy farms north of the lake were identified as the primary source of phosphorus. The SFWMD adopted its Works of the District Rule (Chapter 40E-61, F.A.C.) as a result of the *Lake Okeechobee Surface Water Improvement and Management (SWIM) Plan*. This rule limits the phosphorus loads entering the lake from non-dairy uses. The Department of Environmental Protection implemented the Dairy Rule, which uses Best Management Practices, to divert and treat water draining from the dairies. Studies of vegetation in the lake's littoral zone indicate a diverse wetland plant community that provides habitat for aquatic birds and other marsh wildlife.

While the majority of this basin is within the boundaries of the South Florida Water Management District, a sizable portion encompasses the Lake Wales Ridge area within the Southwest Florida Water Management District (SWFWMD). Dotted with many lakes, the watershed is experiencing a decrease in lake levels, which may be due to years of below average rainfall, ground water withdrawals and drainage projects from previous decades. Conservation should be the primary water supply focus to offset lake level impacts from ground water withdrawals.

Concern #6: Are we maximizing water conservation by agricultural, industrial, commercial, and residential water users?

Given the low lake levels in the watershed, flooding is currently improbable. Lake edges have a strong potential for development activity. Restoration of historical water levels may result in flooding of poorly located development activities.

Concern #7: Can we protect and restore the natural water storage and conveyance functions of flood prone areas? Are we doing enough to assist local governments to minimize damage from floods in developed areas?

Major water contamination problems occurred in the ground water system in the Kissimmee River watershed largely due to agricultural activities. Current measures seek to prevent contaminated ground water in newly constructed wells and to hook residents up to central water supplies where available. A surface water component of this problem may be the encroachment of contaminated ground water where the aquifer discharges to surface waters. Increasing development pressures around the numerous lakes has created pollution problems related to septic tanks and storm water runoff.

Concern #8: Are we maintaining and protecting the water quality in lakes and

other surface water systems, including the prevention of contamination of surface waters from contaminated ground water?

The Highlands Ridge contains some of the last pristine scrub communities in the State. Communities that are globally unique. In addition to providing habitat for listed flora and fauna species, the deep sands of the Ridge provide important recharge and storm water treatment benefits. The lakes in this watershed have attracted people because of their beauty and climate moderating effects. Crooked Lake, for example, is a designated Outstanding Florida Water. Preservation of these aesthetic and economic amenities is important to the biota of the area.

Concern #9: Are we doing enough to restore, preserve and protect scrub communities and lakes in the Lake Wales Ridge area?

Concern #10: How can we promote and encourage water conservation and reuse by agricultural, industrial, commercial, and residential water users, and develop non-potable supplies for mining and agricultural interests to offset potable ground water use?

Storm Water:

As development activities alter the landscape, the role of storm water management has become a critical factor concerning the hydrology and health of natural systems. Storm water pollution is the chief cause of accelerated lake eutrophication. The management of storm water is the critical issue relating to maintenance of stream flow, including rate, volume and timing. The same issue relates to maintenance of natural wetland hydro-period. Due to its critical role in surface water systems, storm water is a regional issue and resource.

Peace River: The Peace River originates in the Green Swamp and some of the numerous lakes of central Polk County. It becomes a defined stream at the confluence of Saddle Creek and the Peace Creek Drainage Canal north of Bartow and flows southwest for approximately 105 miles to Charlotte Harbor. The Peace River is the major source of fresh water to the Charlotte Harbor estuary. Charlotte Harbor is a SWIM priority water body, and an approved National Estuary Program (NEP) project. Numerous lakes and large areas of poorly drained swamps in the headwaters of the Peace River act as important recharge areas for the Floridan Aquifer.

The Peace River is a source of potable water and will be increasingly used a major water supply source. Shell Creek, near its confluence with the Peace, has been impounded for drinking water. The Peace River/Manasota Regional Water Supply Authority is operating a plant in DeSoto County producing potable water for its members. Since recent information has shown a long-term trend in decreased river flows, it is imperative that this source be protected from overdraft and degradation to ensure its viability into the future.

Concern #11: How do we maximize water conservation and reuse, and ensure an

adequate supply of water from the Peace River for appropriate reasonable and beneficial uses, now and in the future, while protecting and maintaining water quality and river and estuarine flows?

The headwaters of the Peace River are formed by large marshes or lakes and the river itself has wide flood plains and a meandering main channel. The system is rainfall driven with little influence from ground water springs. There is tidal flooding along the coast and in the lower reaches of the river. Additionally, the Peace River is crossed by numerous bridges which become potential dams during flood events.

Flood damage occurs where there is development in flood prone areas. Retaining natural flood attenuation properties of flood prone areas and channel conveyance must be the focus of flood protection in the Peace River basin. Significant urban development has already occurred in portions of Polk County. Additional urbanization may also occur in Wauchula, Arcadia and southern DeSoto County. Local governments authorize land uses so they are the first line of defense in prevention.

Concern #12: Do local governments need assistance to minimize the potential for damage from floods by protecting and restoring the natural water storage and conveyance functions of flood prone areas and the river channel?

Many surface water bodies within the Peace River basin exhibit fair to poor water quality, and are impacted by a variety of point and nonpoint source discharges associated with development. Others (e.g., Shell Creek, Horse Creek, Joshua Creek, and Prairie Creek) currently possess good water quality and are crucial to the maintenance of current and future potable water supplies. The worst water quality problems originate in the upper portion of the basin. Lake Parker, Lake Hancock and their tributaries have some of the poorest water quality in the State. In addition, there are identified contaminant plumes in the area's ground water which may pose a future surface water threat.

Prior to 1975, phosphate mining activities were not required to reclaim mined lands and restore land form and drainage features. Numerous tributaries to the Peace River have been destroyed through older mining activities. Restoration of the hydrologic function of these historical tributary drainage sub basins is vital to restoration of historical flow levels of the Peace River. The phosphate industry, the Council, and the Bureau of Mine Reclamation are working together to achieve reclamation results which help restore riverine systems and benefit wildlife. Further, individual phosphate companies have made commitments to entire ecosystems as evidenced by the voluntary establishment of wildlife habitat areas and sanctuaries. The industry, the Council and the FDEP are continuing to cooperate in the development and implementation of ecosystem management policies. Ecosystem management is a critical tool in the restoration of impacted

riverine systems in central Florida.

Concern #13: Are we doing enough to protect and restore water quality of lakes in developed areas, the Peace River and coastal and recharge areas through implementation of SWIM and other management plans, by working with local governments and the public, and enforcement of regulations?

Concern #14: How can we restore tributaries of the Peace River which were impacted by phosphate mining, and other development activities?

The Peace River watershed begins in the Green Swamp, an Area of Critical State Concern and the potentiometric high of the Floridan Aquifer. The basin contains some of the last remaining examples of scrub habitat, along with significant riverine flood plains, and other freshwater wetlands. In addition to providing habitat to numerous listed species, these areas provide important recharge, runoff attenuation and water quality treatment benefits.

Concern #15: How can we protect, preserve and restore important upland, wetland and estuarine systems, including areas of the Green Swamp and scrub ecosystems where feasible. Can we establish and maintain minimum flows in the Peace River to help ensure the health of Charlotte Harbor?

Withlacoochee River: The Withlacoochee River originates in the Green Swamp near the junction of Lake and Polk counties. The Withlacoochee River flows west and north for approximately 157 miles and drains 2,090 square miles of west central Florida before discharging into the Gulf of Mexico. Due to its relatively large drainage basin and substantial base flow from ground water discharges, the Withlacoochee River at Lake Rousseau is considered a potential productive surface water supply source.

Concern #16: Are development controls in the Green Swamp protecting the quantity and quality of flow in the Withlacoochee River?

Groundwater Resources:

Ground water is the chief source for all water uses within the Region. In four of the counties, Polk, Highlands, Hardee and DeSoto, there are generally three distinct aquifers; the surficial, intermediate and Floridan. In areas where these three aquifers exist together they are separated by confining layers that restrict the vertical movement of water between the aquifer systems. The Floridan aquifer is the most productive of the three aquifers. Industrial, mining, agricultural and public supply water uses account for the majority of withdrawals from the Floridan aquifer.

Polk County has the highest water use of any county within the SWFWMD. Water use in the County is primarily associated with agricultural and mining/dewatering activities. During 1990, Polk County used an average of 396 million gallons each day. This figure represents approximately 24 percent of the average daily water use for the entire SWFWMD. Phosphate mining and related uses have been subject to stringent conservation practices resulting in recycling rates of up to 96% in the phosphate mining industry and over 80% at phosphate fertilizer manufacturing facilities. While mining/dewatering water use is projected to decrease, power generation and agricultural water uses are projected to increase substantially.

Within the South Florida Water Management District, Polk is the only county where overall water use is projected to decrease over the next twenty years. This projection may be attributed to conservation practices and water use efficiencies becoming more widely adopted and recent trends for citrus to migrate further south to avoid the threat of future freezes..

Hardee County used an average of 87.4 million gallons of water each day in 1990. This is expected to increase to 129.9 MGD in 2010. Agriculture is the County's dominant water user, accounting for approximately 94% in 1992. A major issue for Hardee County is the magnitude of the projected increase in water use demand for mining, because a large part of the County is currently owned by phosphate mining interests and mining has only begun. Significant mining of these lands is anticipated as phosphate reserves are depleted in Polk County. Hardee County is the smallest water consumer within the CFRPC. The County is concerned that measures proposed by the SWFWMD to address over permitting and over pumping within the coastal jurisdictions will place an inordinate burden on Hardee County.

DeSoto County used an average of 123.9 MGD in 1990. This is projected to increase to 199.9 MGD by the year 2010. Agriculture and mining reflect the bulk of the increase. Currently, ground water is the source for most potable water consumption in DeSoto County. Most of that is drawn from the surficial or intermediate aquifer as the Floridan aquifer at this location is highly mineralized.

Okeechobee County had a nonagricultural demand of 1,700 million gallons per year (MGY) in 1990. This is projected to increase to 2,640 MGY in 2010. The agricultural demand for the same time period is projected to increase from 14,263 MGY in 1990 to 17,879 in 2010. Water and sewer services in the City of Okeechobee and surrounding area are now provided by the Okeechobee Utility Authority, replacing the City of Okeechobee and the Okeechobee Beach Water Association as providers. The authority uses both surface and ground water sources for its water supply.

Ground water is the primary source of supply in unincorporated Okeechobee County. The Floridan Aquifer System is the principal source of irrigation and stock water, accounting for 74% of SFWMD permitted use. Water quality in the Floridan aquifer tends to decline with depth and distance to the south. In the central and northern portion of the county, Floridan water is of good

quality, requiring little or no treatment for potable use. Waters in the southern and eastern portions of the county may contain chloride concentration in excess of 1,000 mg/l, and require desalination for potable use.

The surficial aquifer system also provides potable ground water in the county. Productivity in the aquifer tends to increase with depth, but most wells yield less than 100 gallons per minute. Water from the surficial aquifer is generally potable with minimal treatment, except in the southeast portion of the county, where chloride concentrations in excess of 250 mg/l have been measured. Lake Okeechobee and the Kissimmee River are the primary sources of surface water in the county. With the exception of the Okeechobee Utility Authority, which uses water from Lake Okeechobee for public water supply, surface water is used solely for agricultural irrigation and livestock.

Highlands County consumed an average of 144.2 MGD of fresh water in 1990. This is projected to increase to 200.2 by the year 2010. Again, the agricultural sector accounts for almost all of the projected increase. The upper Floridan aquifer is the most productive of the County's three aquifers and ground water is the major source for most water uses. A major issue for Highlands County is the conservation and future utilization of its existing water resources. Ground water and surface water levels on the Highlands Ridge have steadily declined in recent years. Lake level declines are a particular concern.

The SFWMD has designated the Lake Istokpoga-Indian Prairie Basin of Highlands County a Restricted Allocation Area. Additional surface water allocations over and above existing allocations will not be allowed in this area. SFWMD's Basis for Review for consumptive use permitting strongly discourages additional increases to current permitted surface water withdrawals.

In addition to designating the Lake Istokpoga-Indian Prairie Area a Restricted Allocation Area, the SFWMD has designated it a Critical Water Supply Problem Area. To address water supply problems throughout the Kissimmee Basin, including eastern highlands County, the SFWMD will develop the Kissimmee Basin Water Supply Plan. This plan will offer solutions to water supply problems, including the provision for minimum flows and levels of water for the environment, and water to meet the demands of urban and agricultural areas.

The SWFWMD declared the Highlands Ridge area of Polk and Highlands counties a Water Use Caution Area (WUCA) in 1989. Designating this area a WUCA set into motion specific requirements for all users to conserve water resources. This WUCA has since been incorporated in to the Southern Water Use Caution Area.

Southern Water Use Caution Area:

Most of Polk County, along with all of Hardee and DeSoto, and part of Highlands County, is located within the Southern Ground Water Basin (SGWB) of the SWFWMD, an area that is experiencing ground water level declines. This area is also within the Southern Water Use Caution Area (SWUCA), a “Critical Water Supply Problem Area” that reflects the serious demands placed on existing resources. Projections indicate that significant increases in agricultural and thermo-electric power generation water use within the SWFWMD are expected.

The portion of Polk County within the SFWMD is in the least problematic area of that District. Water resources in this area are not now critical, nor are they anticipated to become critical over the next twenty years.

The Southern Water Use caution Area (or SWUCA) evolved from recognition by the District that the entire Southern Ground Water Basin (including the Eastern Tampa Bay, and Highlands Ridge WUCA’s) is a unified water resource system that must be addressed accordingly. As the result of a multi-year hydrologic study, the District determined that ground-water withdrawals from the Floridan aquifer within the Southern Water Use Caution Area exceed the sustainable yield, or safe yield of that aquifer. The District believes the resulting effects of exceeding safe yield include salt-water intrusion and lowered lake levels. To prevent further adverse effects resulting from excessive withdrawals, the district proposed rules that, (1) allow no new quantities to be produced from the Floridan aquifer within the SWUCA until the aquifer levels have risen to a point that results in no further aquifer or environmental degradation, and (2) require existing ground-water users to increase water conservation efforts. For the SWUCA, major provisions of the rule are as follows:

1. Provides that new ground water quantities are permitted only when the potentiometric level in the Floridan aquifer level is above the minimum level established in 40D-8.628 for a sustained period.
2. Provides incentives for the development, delivery and use of alternative sources of water, such as reclaimed water and storm water.
3. Provides for redistribution of existing permitted quantities of Floridan aquifer ground water within the SWUCA boundaries.
4. Requires increased efficiency of irrigation uses, and phases the efficiency requirements over a 10-year period.
5. Requires decreasing per-capita rates for public supply uses, and phases the decrease over a 10-year period.
6. Requires metering of withdrawals in the area not encompassed by the Highlands

Ridge and Eastern Tampa Bay Water Use Caution Areas for permits of 100,000 gallons per day and greater annual average daily quantity.

The SWUCA rule has been challenged by a number of parties including Hardee and DeSoto Counties. The rule will not go in effect until the challenge is resolved.

The designation of the SWUCA and development of district regulations to protect the water resource clearly illustrates the integration of water resources between the coast and central Florida. As the regulations are applied, the regulatory impact on other resource issues will become clearer. Smaller inland communities have fewer alternatives to draw upon than larger coastal communities. Recent experience indicates that these regulations may have the consequence of encouraging the use of private wells and septic tanks rather than centralized community utility systems. Consequently, water resource management objectives may come into conflict with growth management objectives.

Concern #17: Are we effectively coordinating growth management and water resource protection objectives?

Water Resource Regulation:

Local governments in central Florida are caught in a difficult dilemma. Water is a State resource. Neither local governments or private property owners “own” the water flowing through or occurring under their jurisdiction or property. In Florida, permitting authority for the development of water resources, including transfer of water between basins has been delegated to the water management districts. The Districts are clearly “resource” managers. Their mission is the protection of the water resource. This mission is often carried out in a manner where local development concerns are clearly subordinate to water resource management.

Local governments have been delegated the authority and responsibility for controlling land development. This responsibility has often been carried out in a manner where water resource management concerns have been subordinate to land development concerns.

Current constraints to the availability of cheap fresh water have lead to the widespread discussion of developing inland water resources for the use of coastal jurisdictions. Such a transfer would be contrary to current state policy. Such a transfer would also be the death warrant for future economic development in central Florida.

Our local governments recognize that state law does not provide for approval of such transfers by affected jurisdictions. Our local governments also recognize that state policies often change, usually to the benefit of the areas with the most voters.

Consequently, local governments in central Florida need to be more involved in the decision

making process concerning water resource regulation and the potential transfer of water resources between basins. Water management districts need to be more cognizant of the unanticipated effects of water resource regulations and factor those effects into cost/benefit analysis.

Wastewater Treatment:

Wastewater in central Florida is treated and disposed of by a variety of methods. Most incorporated units have municipal wastewater treatment plants. Some cities and counties operate municipal scale plants and a variety of package plants of differing sizes. Many developments operate package plants for individual developments. Counties issue utility franchises to private firms. Individual septic tanks are the most common method of treatment at lower residential densities. Polk County alone has over 189 wastewater treatment plants of differing sizes. There are more than 170,000 septic tanks in the county. There are forty trucking companies involved in sludge disposal in Polk County.

Smaller package plants, owned and operated by individual developments have been a problem. Inefficient design, poor operation and maintenance, and lack of oversight has contributed to water quality violations and government sanctions. Cities and counties are often pressured by regulatory agencies to take over smaller package plants, or incorporate the development into municipal collection systems.

In the DRI process, it has been the policy of the CFRPC to discourage utilization of developer operated treatment systems. Residential wastewater is most safely and efficiently treated in large municipal or multi-jurisdictional systems. Where that option is not feasible, larger, government operated and maintained package plants can be an appropriate treatment alternative. Individual septic tanks can be a viable solution at low residential densities provided they are well maintained and are located on well drained soils not subject to flooding.

The most common method of wastewater treatment in central Florida are septic tanks. A septic system, properly designed, installed and maintained can be an economical and efficient method of disposing of wastewater from lower density residential development. Septic systems must be constructed on appropriate, well drained soils. The drain field must be of sufficient size to discharge the quantity of effluent discharged by the household. Finally all septic tanks must have accumulated sludge removed on a regular basis. The sludge must be disposed of safely .

Properly designed septic systems located on well drained soils fail if they are not properly maintained. When accumulated sludge is not removed, it gradually fills much of the tank. Effluent entering the tank is then discharged directly to the drain field without treatment, clarification or settling of solids. Although the system may appear to be functioning properly for some time, inadequately treated effluent is being discharged and contaminants may be impacting the underlying aquifer. Eventually, when the drain field becomes so clogged that the effluent

backs up into the home, the homeowner recognizes the failure and attempts to correct the problem. Unfortunately, much of the problem may actually remain undetected underground, and gradually moves down gradient within the water table, potentially contaminating wells or connecting surface waters. The literature is clear that septic systems fail long before clogged toilets force corrective action. The issuance of a septic tank permit pursuant to state rule does not provide assurance that a septic system installed pursuant to the rule will perform acceptably. Pursuant to rule 10D-6, F.A.C., a permit must be issued if there is no alternative system available. Subdivision of land with soil characteristics unsuitable for septic systems results in the permitted installation of septic systems that will fail, unless an alternative system is made available.

Nationally, septic tanks and cesspools have been documented to be the second largest source of groundwater contamination. This discharge source ranks highest in total volume of wastewater discharged through soil to groundwater, (more than 1 trillion gallons per year) and is the most frequently reported cause of groundwater contamination. The overflow of septage or sewage, primarily from septic tanks or cesspools, is responsible for 41% of disease outbreaks and 66% of the illness caused by contaminated groundwater. Bacteria in wastewater include Salmonella, Shigella, enteropathic Escherichia coli, Vibrio, and Mycobacterium. Associated diseases are typhoid and paratyphoid fever, gastroenteritis, cholera, tuberculosis, dysentery and diarrhea. Bacterial migration of more than 30 meters (100 feet) is common.

There are over one hundred different types of infections caused by viruses present in human feces. Associated diseases include gastroenteritis, meningitis, poliomyelitis, conjunctivitis, hepatitis, diarrhea and upper respiratory illness. Viruses appear even more mobile than bacteria, with documented viral migration distances of up to 400 meters (1300 feet).

Phosphorous and nitrogen released from septic tanks can contribute to eutrophication of water bodies, if introduced into surface waters. Phosphate ions, however, readily undergo biological utilization, chemisorption and precipitation reactions in soil solutions, and their concentration normally decreases with distance from the source more rapidly than does the concentration of the less reactive nitrate ion. Nitrate concentration also is of concern, because of its association with methemoglobinemia in humans and livestock and because of its possible association with carcinogenesis, mutagenesis, and teratogenesis.

Residential development has been permitted within the Central Florida Region on flatwoods soils, which have a seasonal high water table at or near the surface for much of the year. Due to previous agricultural drainage practices to improve pasture characteristics, many of these areas exhibit artificially improved dry weather drainage characteristics. However, given typical rainy season conditions, these soils quickly exhibit their naturally saturated characteristics.

Florida permitting criteria, as implemented by the Florida Department of Health and

Rehabilitative Services, allow construction of mounded septic system drain fields in areas with a seasonal high water table at or near the surface for much of the year. A substantial amount of fill is brought in with the intention of providing sufficient separation between the drain field and ground water levels. Unfortunately, this system can become saturated, even if sufficient separation is provided, due to capillary action within the soils, which elevate the water table up into the mound.

State Water Supply Goals:

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 (State Comprehensive Plan, s. 187.201(8)(a), F.S.).

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 (s. 373.0395, F.S.).

The encouragement and promotion of water conservation, and reuse of reclaimed water, as defined by the department are State objectives (s. 403.064, F.S., and s. 373.205, F.S.).

State Water Quality Goal:

It is declared to be the public policy of this state to conserve the waters of the state and to protect, maintain, and improve the quality thereof for public water supplies, for the propagation of wildlife and fish and other aquatic life, and for domestic, agricultural, industrial, recreational, and other beneficial uses and to provide that no wastes be discharged into any waters of the state without first being given the degree of treatment necessary to protect the beneficial uses of such water (s. 403.021(2), F.S.).

Legal Basis for Management:

Florida Statutes and rules contain an abundance of general guidance on protection and management of water resources and related natural systems, including the following provisions pertinent to water supply:

Ensure that new development is compatible with existing local and regional water supplies. (S. 187.201(8)5. F.S.)

Reserve from use that water necessary to support essential non-withdrawal demands,

including navigation, recreation, and the protection of fish and wildlife. (s. 187.201(8)(b)14, F.S.)

Encourage the development of local and regional water supplies within water management districts instead of transporting surface water across district boundaries (s. 187.201(8) F.S.)

It is the policy of the state that the citizens of Florida shall be assured of the availability of safe drinking water. (s.403.851, F.S.)

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. (s. 373.0395, F.S.)

The encouragement and promotion of water conservation, and reuse of reclaimed water, as defined by the department, are state objectives. (s. 403.064, F.S.; also s. 373.250, F.S.)

To obtain a [consumptive use] permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: (a) Is a reasonable-beneficial use as defined in s. 373.019(4); (b) Will not interfere with any presently existing legal use of water; and (c) Is consistent with the public interest. (s. 373.223, F.S.)

Assure availability of an adequate and affordable supply of water for all reasonable-beneficial uses. Uses of water authorized by a permit shall be limited to reasonable-beneficial uses. (s. 62-40.301(1)(a), F.A.C.)

Provide for the management of water and related land resources (s. 373.016(2)(a), F.S.)

Champion and develop sound water conservation practices and public information programs. (s. 62-40.301(1)(c), F.A.C.)

Encourage the use of water of the lowest acceptable quality for the purpose intended. (s. 62-40.301(1)(e), F.A.C.)

Encourage demand management and the development of alternative water supplies, including water conservation, reuse of reclaimed water, desalination, storm water reuse, recharge, and aquifer storage and recovery. (s. 62-40.310(1)(g), F.A.C.)

In implementing consumptive use permitting programs, a reasonable amount of reuse of reclaimed water shall be required within water resource caution areas, unless objective evidence demonstrates that such reuse is not economically, environmentally, or

technically feasible. (s. 62-40.416(2), F.A.C.)

Protect aquifers from depletion through water conservation and preservation of the functions of high recharge areas. (s. 62-40.310(1)(h), F.A.C.)

It is the intent of the Legislature that utilities develop reclaimed water systems, where reclaimed water is the most appropriate alternative water supply option, to deliver reclaimed water to as many users as possible through the most cost-effective means, and to construct reclaimed water system infrastructure to their owned or operated properties and facilities where they have reclamation capability. (s. 373.1961(2), F.S.)

It is the intent of the Legislature that the water management districts which levy ad valorem taxes for water management purposes should share a percentage of those tax revenues with water providers and users, including local governments, water, wastewater, and reuse utilities, municipal, industrial, and agricultural water users, and other public and private water users, to be used to supplement other funding sources in the development of alternative water supplies. (s. 373.1961(2), F.S.)

The governing boards of the water management districts where water resource caution areas have been designated shall include in their annual budgets an amount for the development of alternative water supply systems, including reclaimed water systems, pursuant to the requirements of this subsection. (s. 373.1961(2)(a), F.S.)

In the performance of, and in conjunction with, its other powers and duties, a water management district shall not deprive, directly or indirectly, any county wherein which water is withdrawn to the prior right to supply reasonable and beneficial needs of the county or any of the inhabitants or property owners therein. (s. 373.1961(5), F.S.)

Regional Goal 1.1: Assure an adequate supply of water to meet all competing uses, including human and natural needs, deemed reasonable and beneficial.

Indicators:

- a. Reduction in per capita water consumption in local utilities to 110 gpppd by the Year 2001.
- b. The establishment of local wellhead protection programs in twenty percent of the Region's water distribution utilities.

Policies:

- 1.1.1 Promote water conservation to reduce per capita consumption.s.187.201(8)(b)11, F.S.

- 1.1.2 Institute strategies for water demand reduction, which include, water conservation education, xeriscaping, rate structures and water saving devices. s. 187.201(8)(b)1, F.S.

Strategies:

- 1.1a Use water conserving plumbing fixtures for all new construction and remodeling. s. 187.201(8)(b)11, F.S.
- 1.1b Use drought-resistant native and non-native plants in landscaping preserve existing native vegetation, and install rain sensor devices for irrigation systems. s. 187.201(8)(b)11, F.S.
- 1.1c In all applications, use the most practical, economically feasible and efficient irrigation methods available and the timely replacement or improvement of less efficient systems. 187.201(8)(b)11, F.S.
- 1.1d Help local governments to devise measures which develop widespread citizen compliance with water shortage restrictions. s. 187.201(8)(b)1, F.S.
- 1.1e Use technical assistance available from the water management districts in formulating and implementing water conservation plans.
- 1.1.3 Plan and develop alternative water supplies, including the use of reclaimed water, desalination, storm water, or other alternative sources. s.187.201(8)(b)1, F.S.

Strategies:

- 1.1f The Regional Planning Council shall coordinate Water Management Plans and the Florida Water Plan with local comprehensive plans and development regulations. s.187.201(8)(a), F.S.
- 1.1g The Regional Planning Council will assist local governments and State and regional agencies in cooperatively developing consistent planning standards for the planning and development of water supply sources on a regional basis. s.187.201(8)(b)3, F.S.
- 1.1h Use local and regional water availability information contained in water management district water supply studies in land use planning and development decisions.
- 1.1i Water management districts will assist local governments to develop criteria that will ensure the delivery of adequate potable water supplies. s187.201(8)(b)5, F.S.

- 1.1j Public supply utilities will use water management district approved methodologies for making water supply projections.
 - 1.1k Facilitate linkages between alternative water suppliers (e.g. reuse water providers) and end users. s. 187.201(8)(b)11, F.S.
 - 1.1l Use the lowest quality water reasonably available, suitable and environmentally appropriate to a given purpose. s. 187.201(8)(b)11, F.S.
 - 1.1m Identify and develop environmentally acceptable effluent disposal alternatives, to achieve 100 percent reuse throughout the region. s.187.201(8)(b)13, F.S.
 - 1.1n The Water Management Districts shall identify and develop alternatives to prevent new groundwater withdrawals when such withdrawals would significantly increase salt water intrusion, interfere with existing uses of water, or cause damage to regionally-significant ecosystems. s.187.201(8)(b)9,10, F.S.
 - 1.1o The Regional Planning Council will assist local governments and State and regional agencies in adopting development standards that protect groundwater recharge characteristics by encouraging open space areas, clustered development and increased use of pervious materials. (s. 187.201(8)(b)3, F.S.
 - 1.1p Mining operations will continue to devise innovative water reuse systems as opposed to increased groundwater withdrawals.
- 1.1.4 Protect wellheads for public water supplies. s. 187.201(8)(b)10, F.S.

Strategies:

- 1.1q Water Management Districts will assist local government in the scientific delineation of wellhead protection areas.
 - 1.1r The Regional Planning Council will assist local governments and State and regional agencies in identifying development actions that are incompatible with the location of current and future public supply wells. s. 187.201(8)(b)5, F.S.
 - 1.1s The Regional Planning Council and water management districts will facilitate coordination among adjacent local governments to implement wellhead protection programs where protection areas overlap jurisdictions. s. 187.201(8)(b)5,10, F.S.
- 1.1.5 Any proposal for the transfer of water between basins shall take into consideration the environmental, economic and social implications, and be considered only after local

sources, and demand management measures have been developed to the greatest extent feasible. 187.201(8)(b)3, F.S. Any transfers should be subject to approval by the affected local governments.

1.1t Legislative policy for Florida should be modified to make any interbasin transfers subject to approval by the affected local governments.

1.1.6 Manage storm water as a valuable regional resource.

Strategies:

1.1u Support the initiatives and restoration projects identified in the SWIM plans for storm water-related issues. s. 187.201(8)(b)12, F.S.

1.1v The Regional Planning Council will analyze the need for revisions to the Strategic Regional Policy Plan that will incorporate storm water management strategies identified in the adopted Charlotte Harbor National Estuary Program's Comprehensive Conservation and Management Plan. s. 187.201(8)(b)12, F.S.

1.1w The Regional Planning Council and water management districts will assist local government to identify and promote water reclamation and reuse alternatives for storm water disposal to surface water bodies, as appropriate. s. 187.201(8)(b)12, F.S.

1.1x Support the preparation and implementation of comprehensive basin wide storm water management master plans. s. 187.201(8)(b)12, F.S.

1.1y Encourage multi-purpose facilities for storm water management which complement open—space, recreation and conservation objectives. s. 187.201(8)(b)12, F.S.

1.1z Water management districts will help local governments develop and implement storm water management programs based on watershed basins, which include:

- a. basin master plans;
- b. drainage and storm water management control criteria including appropriate required Best Management Practices and non-structural techniques such as using wetlands and floodplains for detention and cleansing of storm water runoff ;

- c. coordination with storm water management systems and utilities of neighboring jurisdictions;
- d. appropriate and continued maintenance of storm water management and treatment facilities; and,
- e. public education regarding nonpoint source management and watershed protection. s. 187.201(16)(b)6, F.S.
- f. Develop level of service standards for storm water management that are attributes of a basin and include both water quantity and water quality.) s. 187.201(8)(b)4, F.S.

Regional Goal 1.2: Protect the quality of surface water in the region, and improve and restore the qualities of waters not presently meeting water quality standards.

Indicators:

- a. Number of water bodies whose quality improves or remains the same.

Policies:

- 1.2.1 Develop plans and/or planning standards to prevent, and control surface water and groundwater pollution so that the resource meets state standards. s. 187.201(8)(b)10, F.S.
- 1.2.2 Conduct land use and transportation planning and development activities in a manner that protects surface water quality. s. 187.201(8)(b)12, F.S.
- 1.2.3 Develop strategies to reverse significant storm water pollution. s. 187.201(8)(b)12, F.S.
- 1.2.4 Eliminate the discharge of inadequately treated wastewater and storm water runoff into the waters of the State. s. 187.201(8)(b)12, F.S. verbatim.

Strategies:

- 1.2a The Regional Planning Council will assist local government in considering the pollutant loading targets to be established by the Charlotte Harbor National Estuary Program for the Charlotte Harbor watershed, and the pollutant load reduction goals of the applicable Water Management district for the remaining parts of the Region. s. 187.201(8)(b)10, F.S.

- 1.2.b FDEP and the Water Management Districts will assist local government in identifying and developing alternatives to pollutant loading from permitted point sources and the number of sources which negatively impact the quality of receiving waters. s. 187.201(8)(b)12, F.S.
- 1.2.c Local governments and State and regional agencies will discourage dredge and fill activities, channelization, diversion, damming or other alterations that result in water quality degradation to regionally-significant natural riverine systems and riverine habitats. s. 187.201(8)(b)7, F.S.
- 1.2.d Use Best Available Control Technologies and/or Best Management Practices in the management of agricultural runoff to minimize its impact upon receiving waters. s. 187.201(8)(b)10, F.S.
- 1.2.e Use the most appropriate method of wastewater treatment.
 - a. At urban residential densities, as defined by local government, encourage the use of municipal or multi-jurisdictional system where such a system is reasonably available.
 - b. At urban residential densities, as defined by local government, where a municipal system is not available, consider the use of package plants only on an interim basis.
 - c. At lower residential densities, where a municipal system or package plant is not available, a properly designed, installed and maintained septic system can be used as an economical and efficient method of disposing of wastewater.
 - d. Avoid the utilization of small package plants for sewage treatment when connection to regional or municipal systems is feasible. s. 187.201(8)(b)13, F.S.
- 1.2f Advance pollutant load reductions through storm water treatment. s.187.201(8)(b)13, F.S.
- 1.2g Assist local governments in the establishment of dedicated storm water funding mechanisms, such as storm water utilities. s. 187.201(8)(b)12, F.S.
- 1.2h The Regional Planning Council, FDEP and applicable water management districts will assist local governments in developing strategies within comprehensive plans

and land development regulations that are consistent with Surface Water Improvement and Management (SWIM) plans, Aquatic Preserve plans and the National Estuary Program (NEP) to restore and protect water quality s. 187.201(8)(b)10, F.S.

- 1.2i Pursuant to Chapter 163, F.S., use the regional dispute resolution process to coordinate comprehensive planning and implementation of land development regulations to improve or protect water quality in shared water bodies. s. 187.201(8)(b)10, F.S.
- 1.2j The Council shall facilitate coordination between the Department of Transportation, Water Management Districts, Metropolitan Planning Organizations, and local government programs to minimize the impacts of transportation systems on surface water quality. s. 187.201(8)(b)10, F.S.
- 1.2k New surface water management systems built within or adjacent to Natural Resources of Regional Significance should be constructed in a manner that approximates the natural freshwater flows into such areas, both in timing, quantity and quality s. 187.201(8)(b)4, F.S.
- 1.2l Support the development of SWIM Plans, Water Supply Plans, and other regional plans which provide for water resource management and long-range planning. Such plans should complement local government land use plans. s. 187.201(8)(b)10, F.S.
- 1.2m The Regional Planning Council and FDEP will assist in the establishment of regional wetland mitigation banks, when appropriate, which optimize ecological system functions. s. 187.201(8)(b)10, F.S.
- 1.2n Support measures which set out to control and eliminate invasive exotic plant species. s. 187.201(10)(b)10, F.S.

Regional Goal 1.3: Protect the quality of groundwater in the Region

Indicators:

- a. Number of antiquated gasoline tanks removed or repaired.
- b. Number of unlined gypsum stacks meeting closure standards.

Policies:

- 1.3.1 Institute strategies to identify, prevent, abate and control groundwater pollution so that the

resource meets appropriate standards. s. 187.201(8)(b)10, F.S.

Strategies:

- 1.3a Advance programs to monitor and minimize inflow and infiltration into fractured or ruptured sanitary sewer lines, in order to preserve treatment capacity and prevent adverse impacts on groundwater by eliminating outflow and exfiltration.
 - 1.3b The Regional Planning Council will assist local governments in identifying and providing options to land use planning and development decisions that result in substantial degradation of existing groundwater quality. s. 187.201(8)(b)10, F.S.
 - 1.3c Promote the development of centralized sewer systems, especially in identified septic tank problem areas and areas planned for or experiencing urban development densities. s. 187.201(8)(b)10, F.S.
 - 1.3d The Regional Planning Council, and FDEP will assist local governments in the development of comprehensive waste management programs that ensure the proper management and disposal of solid, hazardous, and toxic wastes. s. 187.201(8)(b)10, F.S.
 - 1.3e The Regional Planning Council will assist local government in the identification of land uses and the development of land development regulations that are compatible with the protection of ground water quality in areas susceptible to contamination. s. 187.201(8)(b)9, F.S.
 - 1.3f The Department of Agriculture and Consumer Services and the Department of Community Affairs Division of Emergency Management will promote the proper use of pesticides and fertilizers through education and/or regulation. s. 187.201(8)(b)10, F.S.
- 1.3.2 Identify and protect the functions of groundwater recharge areas and provide standards for their conservation. s. 187.201(8)(b)14, F.S.

Strategies:

- 1.3g The water management districts will provide best available data to the Regional Planning Council and local government identifying the location and quantifying the functions of groundwater recharge areas.
- 1.3h The Regional Planning Council, water management districts, and local governments will cooperatively develop standards for the protection and

conservation of groundwater recharge areas and assist with implementation.

- 1.3i The Regional Planning Council will assist the phosphate industry and FDEP in facilitating the permitting of new lined phosphogypsum storage facilities and closure of unlined phosphogypsum storage facilities.
- 1.3j The Regional Planning Council and FDEP will assist local government in fulfilling their responsibilities in compliance with the federal mandate of elimination or retrofitting of all underground storage tanks by 2009. s. 62-761.510 F.A.C.

Flood Protection:

State Flood Protection and Floodplain Management Goals:

Require local governments, in cooperation with regional and state agencies, to adopt plans and policies to protect public and private property and human lives from the effects of natural disasters. (s. 187.201(7)(b)25, F.S.)

Encourage the development of a strict floodplain management program by state and local governments designed to preserve hydrologically significant wetlands and other natural floodplain features. (s. 187.201(8)(b)8, F.S.)

Legal Basis for Management:

Florida Statutes contain a variety of expressions of intent regarding public safety and protection of human lives and property from the effects of floods and other natural disasters. The WMDs are specifically authorized by Chapter 373, F.S. to construct and operate flood control structures, and a major benefit of land acquisition programs implemented by DEP and the WMDs is the reservation of significant floodplain and flood prone areas from future development. However, local governments (cities, counties, and special districts) have the primary responsibility for controlling land uses in privately-owned flood prone areas. While DEP and the WMDs regulate how development projects in floodplains and flood prone areas are constructed, operated and maintained, their powers to directly control land uses are restricted primarily to properties owned by the agencies. The thrust of their efforts is to use rulemaking authorities under the Water Resources Act (Chapter 373, F.S.) To implement legislative intent related to water, and where possible, to support goals and policies expressed in the State Comprehensive Plan (Chapter 187, F.S.). Examples include the following:

Protect and restore the ecological functions of wetlands systems to ensure their long-term environmental, economic, and recreational values. (s. 187.201(10)(b)7, F.S.)

Promote restoration of the Everglades system and of the hydrological and ecological functions of degraded or substantially disrupted surface waters. (s. 187.201(10)(b)8, F.S.)

Develop and implement a comprehensive planning, management, and acquisition program to ensure the integrity of Florida's river systems. (s. 187.201(10)(b)9, F.S.)

Protect and use natural systems in lieu of structural alternatives and restore modified systems. (s. 187.201(8)4, F.S.)

Consider, in land use planning and regulation, the impact of land use on water quality and quantity; the availability of land, water, and other natural resources to meet demands; and the potential for flooding. (s. 187.201(16)(b)6, F.S.)

Avoid transportation improvements which encourage or subsidize increased development in coastal high-hazard areas or in identified environmentally sensitive areas such as wetlands, floodways, or productive marine areas. (s. 187.201(20)(b)12, F.S.)

To develop and regulate dams, impoundments, reservoirs, and other works and to provide water storage for beneficial purposes. (s. 373.016(2)(c), F.S.)

To prevent damage from floods, soil erosion, and excessive drainage. (s. 373.016(2)(d), F.S.)

Encourage nonstructural solutions to water resource problems and give adequate consideration to nonstructural alternatives whenever structural works are proposed. (s. 62-40.310(3)(a), F.A.C.)

Manage the construction and operation of facilities which dam, divert, or otherwise alter the flow of surface waters to minimize damage from flooding, soil erosion, or excessive drainage. (s. 62-40.310(3)(b), F.A.C.)

Encourage the management of floodplains and other flood hazard areas to prevent or reduce flood damage, consistent with establishment and maintenance of desirable hydrologic characteristics and associated natural systems. (s. 62-40.310(3)(c), F.A.C.)

Encourage the development and implementation of a strict floodplain management program by state, regional, and local governments designed to preserve floodplain functions and associated ecosystems. (s. 62-40.310(1)(d), F.A.C.)

Avoid the expenditure of public funds that encourage or subsidize incompatible new

development or significant expansion of existing development in flood prone areas. (s. 62-40.310(3)(e), F.A.C.)

Minimize flood-related emergencies, human disasters, loss of property, and other associated impacts. (s. 62-40.310(3)(f), F.A.C.)

Regional Goal 1.4: Minimize damage from floods.

Indicators:

- a. Reduction in structural damage from flooding, and number of permits issued in flood zones.

Policies:

- 1.4.1 Implement non-structural surface water management methods. s. 187.201(8)(b)4, F.S.
- 1.4.2 Protect and restore the natural water storage and conveyance functions of flood prone areas. s. 187.201(8)(b)8, F.S.
- 1.4.3 Protect flood-prone areas and related natural systems and discourage channelization or other alterations of natural surface water regimes. s. 187.201(8)(b)4, F.S.

Strategies:

- 1.4a Preserve hydrologically significant wetlands and other natural floodplain features.
- 1.4b The Local Government Comprehensive Plan Intergovernmental Coordination Element should include provisions to coordinate comprehensive planning and implementation of land development regulations within floodplains to achieve consistency among local governments in flood protection and protection of water quality, habitat, and floodways. s. 187.201(16)(b)6, F.S.
- 1.4c The water management districts will coordinate planning for acquisition, development rights purchase, or conservation easements for regionally significant floodplains. s. 187.201(8)(b)4, F.S.
- 1.4d The Regional Planning Council will assist local government in the development of land use designations and other land development regulations that minimize the potential for flood damage in flood prone areas. s. 187.201(8)(b)8, F.S.

- 1.4e The Regional Planning Council and appropriate State agencies shall assist local governments in redevelopment projects to meet new development standards for flood protection. s. 187.201(8)(b)8, F.S.
- 1.4f The Regional Planning Council will assist local governments in the development of land use designations and regulations that are compatible with the operation and maintenance of regional and local flood control systems. s. 187.201(8)(b)8, F.S.
- 1.4g New costs for flood protection in flood-prone areas should be borne as a cost of development. s. 187.201(8)(b)8, F.S.

Natural Systems:

Since the adoption of the Comprehensive Regional Policy Plans, Florida has undergone revolutionary changes in the way in which we consider natural systems and endangered species. The 1993 Legislature merged the Department of Environmental Regulation and the Department of Natural Resources creating the Department of Environmental Protection (DEP). The DEP was charged with developing a strategy to protect the functions of entire ecological systems.

The theme DEP articulates for that purpose is stewardship. Stewardship, as an idea, conveys a strong sense of ownership in, and responsibility for, Florida's land, air, water and other resources. Stewardship applies to all the citizens of Florida.

The result of this change is the concept of ecosystem management. It recognizes that all elements of our environment -- natural areas, urban communities, and managed areas such as farms and timber land -- have value to our quality of life. DEP's definition of ecosystem management is *"an integrated, flexible approach to management of Florida's biological and physical environments--conducted through the use of tools such as planning, land acquisition, environmental education, regulation, economic incentives, and pollution prevention--designed to maintain, protect, and improve the state's natural, managed, and human communities"*.

The central focus of the ecosystem management initiative is place-based management. Place-based management focuses on areas or places of sufficient size to address major hydrological (both surface and groundwater) and ecological connections on a regional scale. However, it recognizes that management activities at all levels within the ecosystem, from homes and neighborhoods to regional initiatives, affect the system. Further, it recognizes that urban areas are an important part of ecosystems and must be addressed. Place-based management seeks to coordinate all management efforts within an ecosystem so they are complementary and build upon one another.

Ecosystem Management is proposed as a flexible approach that allows action to be based on current knowledge with the recognition that new knowledge will reshape our understanding and

management of ecosystems. It is important that ecosystem management solutions be integrated, as appropriate, into local government comprehensive plans, strategic regional policy plans and the State Land Development Plan.

Ecosystems do not recognize political or jurisdictional boundaries. They are generally regional and interregional in nature. In recognition of that fact, DEP has developed a preliminary statewide management framework of Ecosystem Management Areas (EMAs) Ecosystem Management Areas are “*broad areas, including the urban components of those areas, often based on drainage basins or watersheds, that are big enough to allow major hydrological and ecological connections to be addressed on a regional scale*”.

Within the Central Florida Region four EMAs have been proposed; the Greater Charlotte Harbor - Peace River E.M.A., the Lake Wales Ridge E.M.A., the Greater Kissimmee and Okeechobee Basin of the South Florida E.M.A., and the Alafia Basin of the Greater Tampa Bay E.M.A. This structure recognizes the interregional environmental linkages previously discussed. The Peace River Basin is a critical component of the Charlotte Harbor National Estuary Program. The Kissimmee River is a critical component of the Everglades restoration program. The Lake Wales Ridge is a globally unique endangered habitat.

Given the clear direction set by the State and the major inter-regional environmental issues within central Florida, the Ecosystem Management Area structure is a reasonable method of organization for the identification and assessment of natural resources within the region.

The Central Florida Region has one of the smallest percentages (5.6%) of conservation lands of any region in Florida (statewide average is 19.6%). Highlands, Polk, Okeechobee, DeSoto, and Hardee counties all have a much smaller percentage of conservation lands than the statewide average for individual counties. The recent purchase of the 45,000 acre Latt Maxcy property has substantially increased the percentage of conservation lands in Okeechobee County. In sharp contrast to these figures lies the fact that this region contains some of the rarest and most biologically rich lands remaining in Florida. The region contains Strategic Habitat Conservation Areas identified by the FGFWFC for southern bald eagle, Florida scrub jay, Florida sandhill crane, Audubon’s crested caracara, Florida grasshopper sparrow, red-cockaded woodpecker, wood storks and other rare wading birds, and endemic scrub communities. Many of the important remaining natural areas are threatened by expanding citrus operations, phosphate mining, and residential development. The Strategic Habitat Conservation Areas are considered to be biodiversity hotspots, indicating existing habitat which may be shared by assemblages of listed species. These areas are often include private property, and the presence of the habitat reflects the stewardship of the property owner.

Proper management of the Green Swamp is one of the most significant issues within the central Florida region. The Green Swamp consists of approximately 870 square miles of rivers, swamps, uplands and forests located in Lake, Sumter, Pasco, and Polk counties.

Portions of the Green Swamp, 322,690 acres, were designated an Area of Critical State Concern (ACSC) by the State in 1974. The ACSC designation was intended to afford protection to the area until adequate local regulations could be developed. To fully protect the area's natural resources, existing local regulations should be strengthened.

The Green Swamp Task Force was assembled by the Polk County Commission in cooperation with the Nature Conservancy. The Task Force included representatives of agencies and property owners with direct interest in the resources of the Swamp. Their report, completed in 1992, outlines measures necessary to protect the natural functions of the Green Swamp. Recommended policies included low residential densities, prohibition of development within the 100 year flood plain, stringent open space requirements, and a prohibition of sludge and septage disposal.

In 1994 legislation was enacted to provide \$30 million over three years to purchase development rights from property owners in the ecologically sensitive parts of the Swamp. The law creates a 10 member Green Swamp Land Authority, which includes Polk County, the SWFWMD and the St. Johns River Water Management District (SJRWMD), to identify how to best balance ecological concerns with private property rights.

The SJRWMD has identified 80% of that District's acreage within the Green Swamp for acquisition within the SOR/P2000. Project lands currently owned or scheduled to be acquired in Polk County under the SWFWMD's SOR/P2000 Programs include those associated with the Green Swamp Riverine Corridor, Withlacoochee Riverine Corridor AA, and the Withlacoochee/Hillsborough Riverine Corridor AD. The Alston Tract has been evaluated and approved for acquisition.

The SWFWMD has also purchased or scheduled for purchase the Upper Lake Marion Creek Watershed. Much of the flood plain of the Peace River from Bartow to Charlotte Harbor is under evaluation, or has been evaluated and approved for purchase.

The SFWMD has designated approximately 13,500 acres of the Lake Marion Creek drainage basin for acquisition through the SOR program. This acquisition adjoins the 3,800 acres of the Upper Lake Marion Creek watershed proposed for acquisition by the SWFWMD and includes the 1,324 acre Horse Creek Scrub proposed for acquisition through the CARL program.

The SWFWMD has also proposed acquisition of 6,142 acres along Catfish Creek for acquisition through the SOR program. This project, combined with the Catfish Creek CARL Project and the SFWMD's Kissimmee Chain of Lakes SOR Project, will create a natural corridor extending from Lake Hatchineha to Lake Pierce.

The Kissimmee River Restoration will restore approximately 32,000 acres of the original 43,000 acre Kissimmee River system. The project area encompasses approximately 77,000 acres in

Polk, Highlands, Osceola, and Okeechobee Counties. To date, approximately 19,000 acres have been acquired.

Gap Analysis:

The most significant national effort to supplement heritage-style inventories by proactive, ecosystem-level approaches is the Gap Analysis project of the U.S. Fish and Wildlife Service. Gap analysis projects are being conducted state by state, carried out through the Cooperative Research Units and cooperating state and federal agencies and universities. In Florida, Gap Analysis has been completed by the Florida Game and Fresh Water Fish Commission and published as Closing the Gaps in Florida's Wildlife Habitat Conservation System: Recommendations to meet minimum conservation goals for declining wildlife species and rare plant and animal communities. 1994, Tallahassee, Florida. The following material is summarized from this report and should be interpreted within the context of the entire document. This data is currently considered the best available on a regional basis. More current data may become available in the future.

Gap Analysis is basically an assessment of representation of vegetation types and species, using satellite imagery, ancillary data on vegetation, wildlife-habitat association models, and GIS mapping. Gaps in the representation of species, ecosystems, and hot spots of species richness are selected as priorities for protection. Thus, Gap Analysis is a coarse-filter approach. The analysis should be verified by on-site investigation.

Peace River - Greater Charlotte Harbor Ecosystem Management Area:

Component Basins: Peace River, Myakka River, Lemon Bay and Charlotte Harbor, excluding Pine Island Sound/Matlacha Pass south of an east-west line from Boca Grande Inlet.

Drainage Area: about 3010 square miles

SWIM Water bodies: Banana Lake, Charlotte/Placida Harbor, Winter Haven Chain of Lakes

Conservation Lands: Cape Haze Aquatic Preserve, Cecil Webb Wildlife Management Area, Carlton Reserve (Sarasota Co.), Charlotte Harbor State Reserve, Don Pedro Island State Recreation Area, Gasparilla Sound/Charlotte Harbor Aquatic Preserve, Green Swamp Wildlife Management Area, Highlands Hammock State Park (SOR), Lemon Bay Aquatic Preserve, Mound Key, Myakka River State Park, Paynes Creek State Historical Site, Port Charlotte Beach Recreation Area, Teneroc State Reserve, Upper Myakka River Watershed (WMD), GDC/Peace River in DeSoto County (SOR).

CARL Projects:

Green Swamp (69,600 Ac) - Priority Project 18, Lake and Polk Counties. 2,773 acres acquired, 66,827 remaining. SOR has purchased 199,365 acres with 195,320 acres to be acquired in Lake, Sumter, Pasco, and Polk Counties. Located in an area of Critical State Concern, the Green Swamp project is an extremely complex mosaic of highly disturbed upland and wetland parcels intermixed with higher quality wetland forests. Two non-contiguous Phase I areas have been identified based on relative intactness of their natural communities. Although an accurate figure is not possible to calculate, it is estimated that 90% of the native upland vegetation within the project has been cleared and/or highly disturbed. While most of the remaining areas in natural vegetation may be considered as wetlands, the project does contain some widely scattered upland parcels with relatively intact communities. At least 4 FNAI Special Animals occur on or near the project. The primary importance of the project is its significance as a strategic hydrological resource; it encompasses portions of the headwaters of several major rivers in the state and has the highest ground water altitude in the Peninsula. The Green Swamp area is therefore considered by many to be critical to the Floridan Aquifer in terms of total, active recharge (i.e., it maintains the ground water pressure level in central and south Florida).

Strategic Habitat Conservation Areas:

- Area 8:** Large complex of cypress swamp, hardwood swamp, pineland, rangeland, and dry prairie north of Lake Lowery and lying between State Road 33 and U.S. 27. Portions of the area make up a Strategic Habitat Conservation Area for Florida sandhill crane, short-tailed hawk, wood stork, and other wading birds. Other species recorded for the area include Florida black bear, American swallow-tailed kite, southern bald eagle, little blue heron (rookery), great egret (rookery), white ibis (rookery), limpkin, Bachman's sparrow, and gopher tortoise.
- Area 9:** Large tracts of dry prairie, scrubby flatwoods, rangeland, and sandhill land cover along the western edge of DeSoto County, north and south of State Road 72. Portions of the area proposed as a Strategic Habitat Conservation Area for Audubon's crested caracara, Florida sandhill crane, and Florida grasshopper sparrow. Other rare species recorded for the area include fox squirrel, Florida burrowing owl, Bachman's sparrow, and eastern indigo snake.
- Area 10:** Peace River and tributaries (Horse and Charlie creeks) extending from Arcadia south to the Charlotte County line. Portions of the area constitute a Strategic Habitat Conservation Area for nearby wading bird colonies. Rare species recorded in the area include southern bald eagle, swallow-tailed kite, great egret (rookery), tricolored heron (rookery), snowy egret (rookery), limpkin, and anhinga.
- Area 11:** Large tracts of dry prairie land cover and rangeland in southeast DeSoto and southwest Highlands counties (Tippen Bay, Joe Slough, Cow Slough; generally south of State Road 70). Portions of the area proposed as a Strategic Habitat Conservation

Area for Audubon's crested caracara and Florida sandhill crane. Other species recorded in the area include fox squirrel, southeastern American kestrel, Florida burrowing owl, wild turkey, great egret (rookery), and eastern indigo snake.

General Description:

This EMA integrates the basins of the Peace and Myakka rivers with Charlotte Harbor and Lemon Bay. Lemon Bay was added to the Charlotte Harbor system because of their ecological similarity and hydrological connections. The headwaters of this EMA go all the way to the Green Swamp in north central Polk County, east to the Lake Wales Ridge in Polk and Highlands County, and west to the flat marshy areas of Hardee and Manatee Counties. This EMA is characterized by hammock and swamp (cypress and hardwood) in the north, and marsh, prairie (dry & wet), pine flatwood, and estuary to the south. Numerous lakes and large areas of poorly drained swamps in the headwaters of the Peace River act as important recharge areas for the Floridan Aquifer.

Land use in the upper Peace River basin is predominately agriculture, citrus processing, and phosphate mining. Citrus groves are prevalent in the middle reaches of the river. In the lower portion of the river basin land use is primarily agriculture and rangeland. The Peace River corridor itself has little development and is a popular canoe trail from Ft. Meade to Arcadia. Major urban areas in the upper basin include Lakeland, Winter Haven and Bartow. Pollution sources in this basin include discharges from sewage treatment plants, phosphate mines, fertilizer chemical plants, citrus processing plants, and surface runoff from urban, agricultural, rangeland and reclaimed mined areas. The upper Myakka River basin is used mostly for pasture and some citrus groves. South of the Myakka State Park, the basin is relatively undeveloped, contains many habitats and is home to many endangered species. The Myakka river is a very popular recreation area and much of the river is designated as a State Wild and Scenic River. Urban development is heavily concentrated in Port Charlotte and Punta Gorda. The barrier islands are moderately developed, primarily for vacation homes and tourism.

Management Considerations:

Development of a comprehensive Ecosystem Management Initiative is strongly recommended. Given the number of basins, complexity of issues, and geographic extent of the system it will be necessary to assemble working groups for each component basin, and have the management team for the overall EMA serve as a coordinating forum. With some refinement, existing management efforts could serve as the framework to build upon. In the Myakka basin, considerable effort has been put into developing management initiatives associated with the Wild and Scenic River designation. Charlotte Harbor is a SWIM water body receiving priority attention from the SWFWMD, and has recently been designated as a NEP Water body. Lemon Bay (as well as Cape Haze and Gasparilla Sound-Charlotte Harbor) is a designated aquatic preserve receiving priority management attention from the DEP Bureau of Coastal and Aquatic Managed Areas.

The Peace River is receiving considerable management attention from DEP, SWFWMD, and Florida Game and Fish, and a decision regarding future ecosystem management initiatives for that basin is imminent. All of these initiatives should be brought together into an integrated management approach for the entire EMA. A lead agency will have to be identified.

Lake Wales Ridge Ecosystem Management Area

Component Basins: Portions of Fisheating Creek, Kissimmee River, Peace River, and Withlacoochee River basins.

Drainage Area: About 1,000 square miles

SWIM Water bodies: Winter Haven Chain of Lakes

Outstanding Florida Waters: Crooked Lake

Conservation Lands: Arbuckle Wildlife Management Area, Archbold Biological Station, Catfish Creek State Preserve (CARL), Highlands Hammock State Park (SOR), Horse Creek Scrub(CARL), Placid Lakes Tract (CARL)Lake Arbuckle State Forest, Saddle Blanket Lakes Preserve (CARL), Tiger Creek Preserve

CARL Projects:

Lake Wales Ridge Ecosystem (19,753 Ac) Priority Project #2. 20 parcels in Lake, Osceola, Highlands and Polk counties. Central Florida Ridge Scrub is considered to be among the oldest upland ecosystems in Florida. Estimates of losses of this ecosystem to development and conversion to agricultural uses are approximately 90%. This project consists of several separate sites along the Lake Wales Ridge which are intended to be part of a system of managed areas that conserve the character, biodiversity, and biological function of the ancient scrubs of the Ridge. Sites contain the best remaining examples of unprotected ancient scrub as well as lakefront, swamps, black water streams, pine flatwoods, seepage slopes, hammocks, and sandhills. Ancient scrub supports a large number of Florida endemics particularly plants with many rapidly nearing extinction.

The extremely high vulnerability of the upland scrub sites on the Lake Wales Ridge is evident in the small fraction of the original system that remains intact. Well over 80% of the native scrub along the Lake Wales Ridge has already been destroyed to accommodate development and citrus groves, and there is no regulatory structure in place to protect what remains of this imperiled upland system. Much of what does remain is in parcels so small that their long-term viability as part of a functioning ecosystem is unlikely. Because of growth pressures and threats from conversion to citrus groves, the overall endangerment is extremely high. The larger sites are more likely to be converted to citrus groves and all are susceptible to fragmentation by development. Most of the sites are near populated areas, are adjacent to developed areas, are

already subdivided with some infrastructure in place. Unless they are protected through acquisition for conservation purposes, expansion of existing developed and populated areas into these scrub fragments will continue until none remains.

Catfish Creek (6,424 Ac) - Priority Project 10, Polk County. 3,966 acres have been acquired, 2,458 remain. The Catfish Creek project is diverse with many high quality natural communities. Several of these natural community types are considered imperiled in the state. They include sandhill, scrub, scrubby flatwoods, mesic flatwoods, xeric hammock, bottomland hardwood forest, basin swamp, sandhill upland lake, wet flatwoods, black water stream, seepage slopes, and floodplain swamp. The tract harbors at least 12 plant species state listed as endangered or threatened, and is considered a very important site for these mostly scrub endemic species. The project is also known to support numerous animal species considered to be rare or endangered such as bald eagle, wood stork, gopher tortoise, and scrub jay.

Horse Creek (2,365 Ac) - Bargain Shared #3, Polk County. SOR 10,943 acres to be acquired. This project includes scrub, xeric hammock, sandhills, floodplain swamp, a black water stream, and a sandhill upland lake. The tract is an important recharge area for the Floridan Aquifer. The tract supports populations of no fewer than 14 FNAI Special Element plant species, 12 of which are listed as endangered or threatened. Most of these species are inadequately represented on protected lands, and face extinction unless wild populations can be protected. Situated near the northern end of the Lake Wales ridge, this tract supports populations of scrub endemic plants at the extremes of their respective ranges, and is therefore important to preserving within-species genetic variation. An occurrence of a woody mint at this site represents either the northernmost population of *Dicerandra cornutissima*, a disjunct population of *D. Frutescens* (both critically-imperiled endangered species), a hybrid population, or an even rarer undescribed species.

Strategic Habitat Conservation Areas:

- Area 1.** Strategic Habitat Conservation Areas for scrub communities in Polk County. Occurrences of rare species are listed by more specific geographic areas (generally progressing north to south).
- East Horse Creek Scrub:** Florida scrub jay, Lewton's polygala, and Florida willow.
 - Snell Creek Scrub:** gopher tortoise, Carter's warea, and Florida scrub jay.
 - Lake Marion Scrub:** Florida scrub jay and southern bald eagle.
 - Deer Lake Scrub:** southern bald eagle.
 - Lake Pierce/Big Gum Lake Scrub:** southern bald eagle, Florida scrub jay, gopher tortoise, scrub buckwheat, cutthroat grass, and paper-like nail-wort.
 - North Lake Wales Scrub:** Florida bonamia.
 - Lake Weohyakapka Scrub:** southern bald eagle, cutthroat grass, scrub plum, scrub bay, Curtiss' milkweed, Florida gay-feather, and Florida bonamia.
 - Tiger Creek Scrub:**(see also Areas 2 and 3 below) short-tailed hawk, Florida

scrub jay, gopher tortoise, Florida scrub lizard, scrub plum, Florida bonamia, scrub holly, and Britton's bear-grass.

Sunray Deli Estates: Florida scrub jay, Florida scrub lizard, gopher tortoise, peninsular tiger beetle, Small's jointweed, nodding pinweed, Florida bonamia, scrub buckwheat, and scrub plum.

Livingston Creek Scrub: Florida scrub jay, southern bald eagle, and sand skink.

Lake Livingston Scrub: Florida mouse.

Area 2. Corridor of sandhill, scrubby flatwoods, and scrub extending from Avon Park Air Force Range to Tiger Creek Preserve. Strategic Habitat Conservation Area for Florida scrub jay, southern bald eagle, and Audubon's crested caracara: largest tract of sandhill land cover remaining in the region. Rare species recorded for the area include southern bald eagle (4 nest records), short-tailed hawk, southeastern kestrel, Audubon's crested caracara, Florida scrub jay, gopher tortoise, Florida scrub lizard, Florida sand skink, and scrub plum.

Area 3. Corridor of sandhill, scrubby flatwoods, hardwood swamp, and scrub extending from Tiger Creek Preserve to Lake Kissimmee State Park. Portions of the area make up a Strategic Habitat Conservation Area for Florida scrub jay, southern bald eagle, and wood stork. Other rare species recorded in the area include Florida mouse, gopher tortoise, sand skink, gopher frog, Curtiss' milkweed, Florida bonamia, cutthroat grass, scrub holly, hairy jointweed, and scrub bay.

Area 4. Strategic Habitat Conservation Areas for scrub communities in Highlands County. Rare species are listed by more specific geographic areas (generally progressing north to south).

Avon Park Airport: Florida scrub jay, Ashe's savory, and cutthroat grass.

Lake Glenda Scrub: Florida scrub jay, Highlands scrub hypericum, Small's jointweed, and scrub hypericum.

Bonnet Lake Scrub: Florida scrub jay, Highlands scrub hypericum, Ashe's savory, and cutthroat grass.

Lake Jackson Scrub: Florida scrub jay, Florida scrub lizard, Small's jointweed, paper-like nail-wort, Highlands scrub hypericum.

Sebring Air Terminal Scrub: Florida scrub lizard, indigo snake, gopher tortoise, Garrett's scrub balm, cutthroat grass, and pygmy fringe-tree.

Lake Wolf Scrub: Florida scrub jay, Florida scrub lizard.

Josephine Creek/Persimmon Lake: gopher tortoise, Florida scrub lizard, blue-tailed mole skink, Highlands tiger beetle, and pigeon-wing.

Virginia Avenue Scrub: Florida scrub jay.

East of Lake Carrie: Florida scrub jay, gopher tortoise, Florida sand skink,

Florida scrub lizard, Highlands scrub hypericum, hairy jointweed, and Small's jointweed.

Lake Crews/Lake June in Winter: southern bald eagle, gopher tortoise, Florida sand skink, Curtiss' milkweed, scrub holly, and hairy jointweed.

Holmes Avenue Scrub: Florida scrub jay, Florida mouse, gopher tortoise, blue-tailed mole skink, Florida sand skink, Florida scrub lizard, and hairy jointweed.

Southwest of Lake Placid: Florida mouse, Florida scrub jay, gopher tortoise, Florida scrub lizard, nodding pinweed, pigeon-wing, Edison's ascyrum, and scrub plum.

East of Bear Hollow: Florida mouse, Florida scrub jay, Florida scrub lizard, blue-tailed mole skink, Edison's ascyrum, and scrub mint.

Gould Road: gopher tortoise, Florida scrub lizard, scrub holly, paper-like nailwort, Highlands scrub hypericum, wedge-leaved button-snakeroot, and Ashe's savory.

Northeast of Venus: Florida scrub jay, gopher tortoise, pine pinweed, hairy jointweed, Highlands scrub hypericum, Britton's bear-grass, perforate reindeer lichen, gopher tortoise, Florida sand skink.

General Description:

The Lake Wales Ridge EMA, located primarily in Polk and Highlands Counties, includes remnant ecosystems that are highly unique at the global level. The most famous natural community characterizing the ridge is Florida's ancient interior scrub. The deep sands and variable topography also couch numerous sandhill upland lakes, marsh lakes, and sinkhole lakes interspersed between areas of pine flatwoods. Remnants of biodiversity are distributed throughout the ridge, with significant scrub communities existing in numerous distinct fragments. Approximately 40 species of plants and vertebrates survive within these remnants, of which 17 species are federally listed, and 13 additional species are proposed for federal listing. These species and fragmented natural areas are all that remain of an ancient flora and fauna once widespread in North America.

The Lake Wales Ridge is the primary divide between the Kissimmee River and Peace River basins. It also provides headwater drainage for the Withlacoochee River to the north and Fisheating Creek to the south. Rapid seepage of precipitation into the ridge provides important recharge for the Floridan Aquifer. Agriculture, mining, and urban development are widespread throughout the region.

Management Considerations:

Current management efforts rely almost exclusively on land acquisition, with about 31,000 acres already purchased and an additional 42,000 acres proposed for acquisition. Many of these

parcels will be managed by the USFWS under the umbrella of the proposed Lake Wales Ridge NWR. Expanding management efforts to include cooperative agreements with private landowners (e.g., less than fee acquisitions, long-term development agreements) will be essential to provide connectivity between purchased parcels and otherwise maintain ecological integrity within the region. As management efforts expand there will be a greater need for close coordination between the various agencies, private landowners, agricultural interests, and other interested parties. Coordination will be problematic due to the large number of jurisdictions involved, which includes three DEP District Offices (Central, south, and southwest) and two WMDs (South and Southwest). Achieving close coordination and ensuring that the full range of management options be pursued in an integrated fashion demand that a Comprehensive Ecosystem Management Initiative be developed for this EMS. A lead agency will have to be identified.

South Florida Ecosystem Management Area

The South Florida EMA encompasses roughly 1/3 of the state and includes the Kissimmee River, Lake Okeechobee, and the Everglades. Lands included within this EMA generally correspond with the boundaries of the South Florida Water Management District. For descriptive purposes, and for consideration as a possible way to organize management efforts, of the following three sub-regions, the Greater Kissimmee/Okeechobee, is presented:

1. Greater Kissimmee/Okeechobee
2. Loxahatchee/Hungryland Slough & Allapattah Flats
3. Greater Everglades

Greater Kissimmee and Okeechobee:

Component Basins: Kissimmee River, Fisheating Creek, Taylor Creek and Lake Okeechobee

Drainage Area: 4954 square miles

SWIM Waterbodies: Lake Okeechobee/Kissimmee River

Key Water bodies: Upper Kissimmee Chain of Lakes (Tohopekaliga, East Tohopekaliga, Kissimmee, Alligator, Jackson, Rosalie, Cypress, Hatchineha, Pierce, Marian and Fish) Lake Istokpoga, Lake Weohyakapka, Lake Butler.

SOR Lands:

Catfish Creek (6,142 Ac) - this Project is adjacent to Lake Hatchineha. Because it is adjacent to the Catfish Creek CARL Project, this SOR project provides linkage and continuity between Lake Hatchineha and Lake Pierce. The site not only has good natural resource characteristics but also

provides high potential for groundwater recharge. Because of its proximity to the Kissimmee Chain of Lakes and Upper Lakes Basin Watershed, the Catfish Creek SOR Project is an important green-way link and component of the Kissimmee Restoration.

Upper Lake Marion Creek Watershed (Polk County), Group A 1,851 acres to be acquired.

Upper Lakes Basin Watershed Area (43,500 Ac) - This is a multi-county, multi-district project located by Lake Marion and is a critical link between the Kissimmee Chain of Lakes to the south and Reedy Creek-Shingle Creek to the north. The acquisition and management of this area will help implement the SWIM Plan objectives.

Kissimmee Chain of Lakes and Kissimmee River Area (81,385 Ac) - This is an important component of the Kissimmee River Restoration Project. SOR Priority Project for SFWMD for 1994-1999, 30,385 acres acquired, 51,000 acres to be acquired (Polk, Osceola, Highlands and Okeechobee Counties). The SOR Project is designed to acquire properties adjacent to the old river bed which will be reverted back to its original oxbow configuration. Additionally, the Kissimmee Chain of Lakes is being evaluated and properties acquired to ensure greater holding capacities for storm waters which would otherwise flood adjacent and downstream properties. This is a multi-county project involving lands in Polk and Okeechobee counties.

Paradise Run (4,265 Ac) - 1,406 acres acquired and 2,859 acres to be acquired. This is an extension of the Kissimmee River Project since the project completes the river acquisition requirements along the west side of Canal 38. The Project extends from Structure 65E to the north and Lake Okeechobee to the south.

Johnson Ranch (1,642 Acres to be acquired) - This area is located in Highlands county and is an important tributary to the Fisheating Creek floodplain. Johnson Ranch has uplands and wetland areas which provide habitat sites for endangered species.

Conservation Lands: Lake Arbuckle State Forest and WMA and State Park, Lake Kissimmee State Park, Avon Park Air Force Bombing Range, Kicco WMA (WMD), Three Lakes WMA, Prairie Lakes WMA. Disney Wilderness Preserve.

CARL Projects:

Highlands Hammock State Park Addition (6,151 Ac) Priority Project #24, Highlands County, 1,094 acres acquired, 5,057 remaining. This project is comprised of generally good quality scrub, scrubby flatwoods, xeric hammock, mesic flatwoods, baygall, and basin swamp natural communities. The project also includes some relatively minor areas where the natural vegetation has been disturbed. The basin swamp is of particular importance because of hydrological connections with Highlands Hammock State Park. The diversity of natural communities supports healthy populations of wildlife, including several threatened species. The long-term

viability of populations of these animals would be significantly enhanced by this addition.

Strategic Habitat Conservation Areas:

- Area 5.** Extensive area of pine flatwoods, prairie, and scrub north of Avon Park Air Force Range and west of Kicco Wildlife Management Area (bounded by State Roads 60 and 630 and the Kissimmee River). Strategic Habitat Conservation Area for red-cockaded woodpecker. Other rare species recorded in the area include Audubon's crested caracara, Florida scrub jay, Florida scrub lizard, cutthroat grass, and pigeon-wing.
- Area 6:** Mixture of flatwoods and scrub east of Fisheating Creek near Old Venus, southern Highlands County. Species recorded in the area include red-cockaded woodpecker, Florida scrub jay, indigo snake, and gopher tortoise.
- Area 7:** Western edge of Lake Kissimmee. Portions of the area proposed as a Strategic Habitat Conservation Area for snail kite, wood stork, and southern bald eagle (see also Area 10 in East Central Florida Region). Other species recorded in the area include Audubon's crested caracara, sandhill crane, limpkin, Florida scrub lizard, eastern indigo snake, and blue-tailed mole skink.
- Area 12:** Large tract of dry prairie, freshwater marsh, and rangeland in north Okeechobee County (including Sevenmile Slough, Dead Pine Island Marsh, and Duck Slough; northwest of Old Eagle Island Road). Portions of the area proposed as a Strategic Habitat Conservation Area for Florida grasshopper sparrow, snail kite, Florida sandhill crane, and Audubon's crested caracara. Other species reported in the area include fox squirrel, Florida burrowing owl, southeastern American kestrel, great egret (rookery), peregrine falcon, wild turkey, eastern indigo snake, and gopher tortoise.
- Area 13:** Forested wetlands, dry prairie, upland hardwood forests, and rangeland around Jim Green and Fort Drum creeks (east of U.S. 441, north and south of State Road 68). Portions of the area make up Strategic Habitat Conservation Areas for Audubon's crested caracara and Florida sandhill crane. Other rare species recorded from the area include fox squirrel, American swallow-tailed kite, southeastern kestrel, wild turkey, anhinga, eastern indigo snake, great egret (rookery), gopher tortoise, and mole kingsnake.
- Area 10** (ECFRPC). Lakes Kissimmee, Marian, Tohopekaliga, East Lake Tohopekaliga, Reedy Creek, Cobb Marsh, Lake Russell, and nearby upland areas. Portions of the area make up a Strategic Habitat Conservation Area for wood stork, mottled duck, snail kite, and southern bald eagle. Other rare

species are listed by individual lakes.

Lake Kissimmee/Lake Hatchineha: great egret (rookery), snail kite, southern bald eagle, Audubon's crested caracara, mottled duck, and limpkin.

Cypress Lake/Reedy Creek: Florida mouse, wood stork (rookery), southern bald eagle (10 nests), eastern indigo snake, limpkin, Audubon's crested caracara, Florida burrowing owl, gopher tortoise, gopher frog, Florida sand skink, Florida scrub lizard (portions of area recently secured as part of Reedy Creek/Lake Marion Creek Mitigation Site).

Lake Marian: Florida black bear, fox squirrel, snail kite, Audubon's crested caracara, Florida sandhill crane, Florida burrowing owl, and southern bald eagle (15 nests).

Other Resource Issues:

- a) Highlands Ridge Area: This area in Polk and Highlands counties is highly susceptible to groundwater contamination. In addition, declining lake levels within the Ridge Area is an issue of increasing concern.
- b) Recharge - Water Supply Plans: The SFWMD has mapped recharge areas for the upper Floridan aquifer in the Kissimmee Basin. The District's Technical Publication 95-02 identifies areas of recharge and discharge potential for Highlands, Okeechobee and Polk counties within the SFWMD boundaries.

General Description

Areas throughout the Kissimmee River and Fisheating Creek's corridors have been identified by the GFC as Strategic Habitat Conservation Areas. Listed below are descriptions of the component basins within this system.

Kissimmee River Basin - 3,054 square miles

The Kissimmee River has its origin in the southern outskirts of the highly urbanized Orlando area. Shingle, Boggy, and Reedy Creeks are the principal streams making up the headwaters. Shingle Creek flows sluggishly through urban and swampy land and eventually empties into Lake Tohopekaliga. Reedy Creek flows from the Disney World complex through swamps into a slough between Cypress Lake and Lake Hatchineha. From here, the river flows southward into Lake Kissimmee. After leaving Lake Kissimmee, the river used to meander 99 river miles through an extensive floodplain to Lake Okeechobee. Between 1965 and 1971 the Army Corps of Engineers converted the river into a 56 mile long canal, C-38. The original conversion was for flood control, navigation, and to reclaim land for farming and grazing. Unfortunately, a significant price was paid in aesthetics, biological diversity, and downstream water quality. This

stretch of the river corridor is sparsely populated, and the land is used mostly for grazing. The channel flows mostly through unimproved rangeland. However, as it nears Lake Okeechobee, cattle become more concentrated and dairies more numerous. Nutrient and BOD rich runoff from all along the channel flows quickly through the river to Lake Okeechobee and exacerbates eutrophication problems there. Perhaps more significant than the water quality problems in the river is the habitat modification and consequent loss of biological diversity and functional wetlands. Recently, efforts have been made to restore parts of the river to its natural, meandering course by strategically placing weirs in the channel. In those sections, the river has returned to its original floodplain, effectively re-creating the buffering wetlands. Land purchases, design plans and monitoring are being continued toward the restoration goal of 32,000 acres.

The Arbuckle Creek drainage area which forms the western portion of the Kissimmee River basin begins near Reedy Lake in Polk County. This lake drains via Reedy Creek and Livingston Creek to Lake Arbuckle and from Lake Arbuckle to Lake Istokpoga, picking up Carter Creek along the way. The Istokpoga Canal connects Lake Istokpoga to the Kissimmee River 35 miles above Lake Okeechobee. There are other flood control/drainage canal networks that run between Lakes Istokpoga and Okeechobee. Land use in this drainage includes orchards, rangeland and wetlands.

Fisheating Creek Basin - 918 square miles

The Fisheating Creek basin forms part of the northwest drainage basin of Lake Okeechobee. The creek itself is a meandering blackwater stream that flows through rangeland in Highlands and Glades Counties, eventually emptying into Gator Slough, which then flows into Lake Okeechobee. It is mostly lined by cypress swamps. The creek has excellent wildlife values, and several remote segments are used for recreational canoeing and swimming. In drier years, many of Lake Okeechobee's wading birds seek refuge in the swamp and sloughs surrounding the creek.

The basin drains primarily improved rangeland with some agriculture. Other waterways in the basin include several major canals connected to a network of smaller canals designed to drain land for more intensive grazing and some agricultural areas. The canals, however, are impaired from rangeland and agricultural runoff. Habitat and flow alteration (due to ditching and draining) and nutrient enrichment have led to low biotic indices and declining fisheries and weed growth. This basin is one of the many sources of nutrient loading to Lake Okeechobee. The basin is very sparsely populated and has no major urban areas.

Taylor Creek Basin - 282 square miles

The Taylor Creek basin forms a portion of the northeast drainage basin of Lake Okeechobee. The basin is relatively small, with Taylor Creek the largest stream. Although sparsely populated, the basin is highly developed with agriculture lands and range land. There are also many dairies in

the basin, often located directly adjacent to the streams and creeks. All of the reaches in this basin have severe pollution problems, with frequent violations of the dissolved oxygen standard.

The majority of the problems are due to dairy farm runoff which contains high concentrations of BOD and nutrients. Many of the creeks in the basin actually run through dairy operations. As part of the Lake Okeechobee SWIM plan some dairies have been removed from the Taylor Creek basin.

Lake Okeechobee covers 700 square miles, depending on lake level, making it the largest lake in Florida and second largest lake completely within the borders of the United States. Land use in the surrounding basins is predominantly dairy farming, improved pasture, and rangeland. The natural drainage from the lake, basically a spillage in to the extensive wetland system south of the lake, has been diked and dredged into six major exiting canals: the westward flowing Caloosahatchee and the eastward St. Lucie, West Palm Beach, Hillsboro, North New River, and Miami Canals. These modifications and numerous other drainage canals allowed the claiming of 1200 square miles of land for agricultural usage, known as the Everglades Agricultural Area (EAA). It is planted mostly in sugarcane, but also has significant amounts of row crop and sod farming.

Lake Okeechobee is part of the larger system known as the Kissimmee, Okeechobee, Everglades drainage that is unique in the world. Historically, the sluggish, meandering river system emptied into a high, shallow lake that slowly released water to a 50 mile wide, 125 mile long "River of Grass", then to a mangrove swamp, and finally to the Florida Bay estuary.

The hydrology of the Kissimmee Basin and the Everglades/Southeast Florida Basins has been greatly modified for flood control and to produce farmland. Lake Okeechobee still serves as a reservoir for the system, but both inflow to and outflow from the lake is, to a great extent, managed by man through a system of canals, pumps and control structures. All inflows and outflows to the lake (except Fisheating Creek) are controlled. The price of managing water quantity so heavily has been a marked lowering of water quality. Major sources of pollution to the lake include runoff from ranch and dairy operations in the northern drainage and from historic back-pumping of runoff from row cropland sugar cane in the southern drainage. As part of the SWIM plan, some dairies have been removed from the lake's drainage basin.

Management Considerations:

The overall management recommendation for the South Florida EMA is to support and refine as necessary on-going management activities of the SFWMD, South Florida Ecosystem Restoration Federal Initiative, the Governor's commission for a Sustainable South Florida, and Florida Bay Working Group. Refinement of these initiatives will require that each be modified in terms of structure and/or process to result in a single unified management effort for South Florida. Unification may be facilitated by creation of the Everglades Partnership, a proposed consortium of public and private institutions and individuals dedicated to working cooperatively to restore

and maintain the Everglades and South Florida ecosystem.

Mapping of Natural Resources of Regional Significance:

The SRPP contains several maps that identify what are considered to be “natural resources of regional significance”. Section 27E-5.002(4), Florida Administrative Code, defines these as follows:

a natural resource or system of interrelated natural resources, that due to its function, size, rarity or endangerment retains or provides benefit of regional significance to the natural or human environment, regardless of ownership.

The Rule goes on to require that natural resources identified as regionally significant in the Plan must be mapped.

These maps provide an excellent regional planning tool and identify regional opportunities for better land use planning. These maps are to be used for regional planning purposes only. These maps are to be used only in conjunction with the SRPP. They are derived from the best information available for regional planning purposes. They are depicted at a scale appropriate to display regional information. They are not intended to be reproduced and used at a property line scale. Site specific data should be utilized at that scale.

During the 1996 Legislative Session, the Florida Legislature amended Chapter 186, Florida Statutes as follows:

186.809 Utilization of geographic information by governmental entities.—When state agencies, water management districts, regional planning councils, local governments, and other governmental entities use maps, including geographic information maps and other graphic information materials, as the source of data for planning or any other purposes, they must take into account that the accuracy and reliability of such maps and data may be limited by various factors, including the scale of the maps, the timeliness and accuracy of the underlying information, the availability of more accurate site-specific information, and the presence or absence of ground truthing or peer review of the underlying information contained in such maps and other graphic information. This section does not apply to maps adopted pursuant to part II of chapter 163.

It is the intent and policy of the Central Florida Regional Planning Council that maps contained within this Strategic Regional Policy Plan are for planning purposes only and are only to be used in conjunction with this document. Any use of maps or graphic data provided herein must be consistent with s. 186.809, F.S.

State Natural Systems Goals:

Conserve forests, wetlands, fish, marine life, and wildlife to maintain their environmental, economic, aesthetic, and recreational values (. 187.201(10)(b)1., F.S.).

Reserve from use that water necessary to support essential non-withdrawal demands, including navigation, recreation, and the protection of fish and wildlife (s. 187.201(8)(b)14.F.S.).

[Florida Reorganization Act of 1993] It is the policy of the Legislature: ... To protect the functions of entire ecological systems through enhanced coordination of public land acquisition, regulatory, and planning programs (s. 94-356, 2(c), Laws of Florida).

The Legislature hereby declares the policy of the state to be management and preservation of its renewable marine fishery resources, based upon the best available information, emphasizing protection and enhancement of the marine and estuarine environment in a manner as to provide for optimum sustained benefits and use to all the people of this state for present and future generations (. 370.025(1), F.S.).

Legal Basis For Management:

In addition to the provisions cited as goals, the legal basis for managing Florida's natural systems involves a broad array of statutory and rule provisions, including the following:

Florida shall protect and acquire unique natural habitats and ecological systems, such as wetlands, tropical hardwood hammocks, and virgin longleaf pine forests, and restore degraded systems to a functional condition. (s. 187.210(10)(a), F.S.)

[The Department of Environmental Protection shall] Adopt by rule a state water policy, which shall provide goals, objectives, and guidance for the development and review of programs, rules, and plans relating to water resources. This state water policy shall be consistent with the state comprehensive plan and may include such department rules as are specifically identified in the policy. (s. 403.061(33) and s. 373.026(10), F.S.)

To provide for the management of water and related land resources. (s. 373.016(2)(a), F.S.)

To preserve natural resources, fish, and wildlife. (s. 373.061(2)(f), F.S.)

[Everglades Forever Act] It is the intent of the Legislature to facilitate the surface water improvement and management process, to assist the district and the Department of Environmental Protection in the performance of their duties and responsibilities, and to provide funding mechanisms which will contribute to the implementation of the strategies

incorporated in the Everglades Surface Water Improvement and Management Plan...(s. 373.4952, F.S.)

Within each section, or the water management district as a whole, the department or the governing board shall establish...:

(1) Minimum flows for all watercourses in the area. The minimum flow for a given watercourse shall be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. (s. 373.042(1), F.S.)

The minimum flow and minimum water level shall be calculated by the department and governing board using the best information available. When appropriate, minimum flows and levels may be calculated to reflect seasonal variations. (s. 373.042, F.S.)

Utilize, preserve, restore, and enhance natural water management systems and discourage the channelization or other alteration of natural rivers, streams and lakes. (s. 62-40.310(4)(c), F.A.C.)

Protect the water storage and water quality enhancement functions of wetlands, floodplains, and aquifer recharge areas through acquisition, enforcement of laws, and the application of land and water management practices which provide for compatible uses. (s. 62-40.310(5)(a), F.A.C.)

Emphasize the prevention of pollution and other water resource problems. (s. 62-40.310(5)(b), F.A.C.)

Regional Goal 1.5: Preserve, protect and restore natural Florida ecosystems in order to support their natural hydrologic and ecological functions.

Indicator: Acres of protected ecosystems, and changes in viable wetland acres as a result of development activities.

Policies:

1.5.1 Protect the ecological functions of wetland systems to ensure their long-term environmental, economic, and aesthetic values. s. 187.201(10)(b)7, F.S.

Strategies:

1.5a Advocate a comprehensive resource protection perspective reflecting the

interconnectedness of quality and quantity of surface water, ground water, aquatic and related land resources and the cumulative effects of activities which impact them within applicable plans, programs and development actions. s. 94-356, 2(c), Laws of Florida

1.5b The Regional Planning Council will help increase public awareness by serving as a planning resource to environmental education programs that may be established for this purpose.

1.5c The Regional Planning Council will assist local governments in developing and using land use designations and other land development regulations that maintain and protect habitat functions. s. 187.201(10)(b)10, F.S.

1.5.2 Protect Greenways, wildlife corridors, and significant habitat systems through acquisition or other means such as conservation easements and management agreements. s. 187.201(10)(b)10, F.S.

Strategy:

1.5d The Regional Planning Council will assist local governments in identifying compatible land use designations adjacent to conservation lands. s. 187.201(10)(b)1, F.S.

1.5.3 Locate infrastructure routes such as new roadway corridors or roadway expansions, transmission lines and pipelines to minimize impacts to environmentally sensitive areas. s. 187.201(10)(b)1, F.S.

Strategy:

1.5e Strongly emphasize avoidance and minimization of environmental impacts as preferable to mitigation. s. 187.201(10)(b)1, F.S.

Regional Goal 1.6: Protect or conserve Natural Resources of Regional Significance (NRRS).

Indicators:

- a. Acreage of regionally-significant natural resources protected from degradation.
- b. Resource permitting rules which incorporate the protection of native habitat and listed species, and address the issue of cumulative impacts.

- c. Change in the status of state and federally listed species.

Policies:

- 1.6.1 Develop strategies for the protection of Natural Resources of Regional Significance. s. 187.201(10)(a), F.S.

Strategies:

- 1.6a The Regional Planning Council will assist local governments and State and regional agencies in the development of strategies for the protection of Natural Resources of Regional Significance..
- 1.6b Facilitate the maintenance and improvement of native plant communities and viable wildlife habitats determined to be Natural Resources of Regional Significance, specifically, those native habitats and plant communities that tend to be least in abundance and most productive or unique. s. 187.201(10)(b)10, F.S.
- 1.6c Mining activities may be permitted in regionally significant natural areas only when it has been demonstrated/documentated that the areas can be successfully restored, consistent with the requirements of permitting agencies, and when no permanent adverse environmental impact will result. Reclamation standards, consistent with the protection of the public interest and the conservation of natural resources, should ensure that the mining company will utilize existing ability and technology to perform restoration activities that can fully restore both the form and function of the conservation areas impacted. Reclamation should begin as soon as feasible without interfering with the permitted mining process. s. 187.201(10)(b)1, F.S.
- 1.6d The Regional Planning Council will assist local governments and State and regional agencies in protecting natural resources and ecosystem values from surface and groundwater withdrawals that significantly impact the natural seasonal flows, water levels and hydrology.
- 1.6e Establish or maintain a minimum horizontal buffer necessary to preserve the natural value and function of Natural Resources of Regional significance, pursuant to local government land development regulations and State and regional agency rules.
- 1.6f The Florida Game and Freshwater Fish Commission and other appropriate state

and federal agencies shall provide and maintain adequate long-term monitoring of native plant communities and listed species' populations to provide a sound data base and to identify trends upon which future regulatory and acquisition decisions can be based

- 1.6.2 When they cannot be avoided, impacts Natural Resources of Regional Significance shall be to the minimum extent possible. Mitigation may be approved on a project by project basis as a means of compensating for the impact of development upon natural resources. Secondary impacts shall be considered in determining the acreage to be mitigated.
- 1.6.3 Mitigation by habitat re-creation, when undertaken, shall employ native plant material that reclaims natural value and function. Monitoring, maintenance and replanting shall be required for a sufficient time to ensure success. s. 187.201(10)(b)7, F.S.
- 1.6.4 Mitigation for allowable impacts to regionally significant wetland areas should first be performed within the same riverine drainage basin. s. 187.201(10)(b)7, F.S.
- 1.6.5 Mitigation by restoring disturbed habitat of a similar nature, including the removal of exotic plant species, may be acceptable. s. 187.201(10)(b)7, F.S.
- 1.6.6 Protect, preserve and restore the natural functions of riverine systems. Prohibit new development in riverine floodways as identified by FEMA. s. 187.201(10)(b)9, F.S.

Strategies:

- 1.6g Discourage channelization through regionally significant natural systems such as estuarine, riverine and special habitats; solely to create new lands for development; or to create new navigation access. s. 187.201(10)(b)9, F.S.
- 1.6h Allow hardening of unaltered shorelines or other structural lining of natural waterways or shorelines, only when required by watershed and/or storm water management plans, and after all State permits have been received. s. 187.201(10)(b)9, F.S.
- 1.6.7 Encourage public/private partnerships in the acquisition or conservation of Natural Resource of Regional Significance areas. s. 187.201(10)(b)13, F.S.
- 1.6.8 Develop and implement habitat management and funding guidelines that encourage the use of public and private mitigation funds for the protection or acquisition of NRSS areas.
- 1.6.9 Provide public awareness of and public access to publicly owned Natural Resources of Regional Significance.

- 1.6i Materials should be available at NRRS areas which explain the site and state reasons for its importance. s. 187.201(10)(b)2, F.S.
- 1.6j NRRS areas in public ownership should have adequate public access points for uses not in conflict with the purpose of the area. s. 187.201(10)(b)2, F.S.
- 1.6k NRRS areas in public ownership should provide appropriate activities which are consistent with environmental enhancement and preservation. s. 187.201(10)(b)2, F.S.
- 1.6l Lands purchased for preservation or designated as environmentally sensitive should be protected from inappropriate activities. s. 187.201(10)(b)3, F.S.
- 1.6m Encourage the development of a variety of recreational opportunities, including the appropriate utilization of unique natural features and scenic areas. s. 187.201(10)(b)2, F.S.
- 1.6n The Regional Council will assist local governments and State and regional agencies in the creation of parks and recreational facilities, equitably and geographically distributed for projected numbers of people in the region. s. 187.201(10)(b)12, F.S.

Regional Goal 1.7: Protect and maintain the natural resources of public and private lands which are managed for conservation purposes.

Indicators:

- a. Buffer zones established to protect regionally significant conservation lands.
- b. Acres designated for conservation of regionally significant natural resources.

Policies:

- 1.7.1 Protect regionally significant parks, green ways, preserves and conservation lands from incompatible land uses. s. 187.201(10)(b)2, F.S.

Strategies:

- 1.7a State and regional agencies will facilitate cooperation among governments with shared resources, including development of common methods for: ensuring adequate sites for water-dependent uses; preventing surface and groundwater pollution; controlling surface water runoff; protecting plant and animal resources; providing adequate management of protected areas; reducing exposure to natural hazards; optimizing acquisition and restoration efforts; and ensuring appropriate

public access. s. 187.201(10)(b)1, F.S.

- 1.7b Support the restoration of natural features in the Region's parks and open space system, as depicted on the Natural Systems and Planning and Management Areas Map. s. 187.201(10)(b)2, F.S.
- 1.7.c Support land acquisition programs, less than fee development rights purchase, conservation easements, and other programs that protect natural resources, provide habitats for plant and animal species considered to be endangered, threatened or species of special concern, and provide for appropriate recreational opportunities. s. 187.201(10)(b)2, F.S.

Regional Goal 1.8: Incorporate the protection of Natural Resources of Regional Significance into planning for future growth within the region.

Indicators:

- a. Adopted riverine management plans.
- b. Established regional wildlife corridors and core areas.

Policies:

- 1.8.1 Use principals of ecosystem management for the protection of regionally significant natural resources. s. 187.201(10)(a), F.S.

Strategies:

- 1.8a Encourage the establishment and maintenance of regional wildlife corridors, Strategic Habitat Conservation Areas, and the Florida Green ways Plan, in coordination with the Florida Game and Fresh Water Fish commission, Florida Department of Environmental Protection, Water Management Districts and the U.S. Fish and Wildlife Service and local governments. Maintenance programs will first be funded from Federal and State sources. s. 187.201(10)(a), F.S.
- 1.8b Endorse programs which provide financial and technical support to projects related to fish and wildlife species and habitat research and restoration in the Central Florida Region.
- 1.8c The Regional Planning Council, State agencies and local governments will promote the protection, conservation and restoration of those regional environmental resources listed in Appendix A. The Regional Planning Council will aid in the identification and designation of additional significant natural resources based on input from and local governments and State and regional

agencies. s. 187.201(10)(b)1, F.S.

- 1.8d To ensure continued identification of environmentally sensitive lands, the Regional Planning Council and appropriate State agencies shall maintain current copies of regional and local plans which identify environmentally sensitive lands. Such plans include the WMD's Five Year Save Our Rivers Plans, the WMD's aquifer recharge reports, the SFWMD's Kissimmee River Restoration Plan, the Florida Game and Freshwater Fish Commission's Environmentally Sensitive Lands mapping efforts, and local government's land acquisition plans. This information will be made available to local governments. s. 187.201(10)(a), F.S.
- 1.8e The FDEP will conduct periodic workshops for regional agencies and local government to explain the principals of ecosystem management.
- 1.8.2 Development in the 100-year flood plain will meet FEMA requirements. s. 187.201(10)(b)9, F.S.

Strategies:

- 1.8f The Regional Planning Council and water management districts will assist local governments in the development and implementation of floodplain management strategies to prevent erosion, retard runoff and protect natural functions and values. s. 187.201(10)(b)9, F.S.
- 1.8g The Regional Planning Council, FDEP and water management districts will assist local governments in the development and coordination of riverine management plans. s. 187.201(10)(b)9, F.S.
- 1.8.3 Plan the regional park and recreation system and the acquisition of regional open space and facilities for future recreational use in a manner consistent with the protection of environmental and natural resources, energy efficiency, water conservation, and the orderly extension and expansion of compatible public facilities and services. s. 187.201(10)(b)12, F.S.

The Regional Park System is defined as “a system of parks, recreation areas and open space consisting of National, State, regional, county and selected municipal lands and facilities designed for the use and enjoyment of persons from more than one jurisdiction.

- 1.8.4 The Region shall actively encourage the State to return revenues collected within the region from the various resource related licenses and fines for expenditure within the region. s. 187.201(10)(b)2, F.S.

Regional Goal 1.9: Prevent the destruction of endangered species and protect their habitats. S.187(10)(b)3. F.S.

Indicators:

- a. Number of protected plant and animal species given an upgraded status from “threatened” or “endangered”.
- b. Amount of upland and wetland habitat preserved upon which listed species are specifically dependent.
- c. Amount of native upland acreage preserved/protected.
- d. Number of management plans implemented.

Policies:

- 1.9.1 Identify native ecosystems and develop planning standards to preserve and protect them and the threatened and endangered species and species of special concern dependent upon them. s. 187.201(10)(a), F.S.

Strategies:

- 1.9a The Florida Game and Fresh Water Fish Commission and the Florida Natural Areas Inventory will document the location of native ecosystems and dependent threatened and endangered species and species of special concern and provide that information to the Regional Planning Council and local government.
- 1.9b. The Regional Planning Council will maintain a Geographic Information System which maps designated native habitat and related resources. This information will be available for use by local government.
- 1.9c. The Regional Planning Council will assist local government in developing planning standards to preserve and protect native habitat and related threatened and endangered species and species of special concern.
- 1.9d Planning standards shall be based on formally adopted federal and State guidelines for species protection and associated recovery plans, and shall be consistent with formally adopted habitat management guidelines. s. 187.201(10)(b)4, F.S.
- 1.9e Where areas of intact native upland habitat exist in sufficient size to support plant and animal species considered to be endangered, threatened or species of special concern, the planning of a Development of Regional Impact should integrate such areas into the overall plan and avoid development that will jeopardize the

continued existence of endangered species. When upland preserve areas are designated, they will be designed, where feasible, to interconnect with other preserve areas, including wetland preserves. Such actions may result in a recommendation to grant mitigation credits. A management plan for such areas will be developed and carried out. s. 187.201(10)(b)10, F.S.

- 1.9f The RPC will support measures which set out to control and eliminate invasive exotic plant species from native upland areas. s. 187.201(10)(a), F.S.

Phosphate Mining:

The mining of phosphate rock has been carried out within central Florida for over 100 years. The industry has grown from small operations which disturbed a few acres of land to its present day size in which the total acreage mined averages 6000 acres per year, with the production of about 33 million metric tons of rock. The phosphate industry owns 466,440 acres in central Florida, over half of which is in active mining areas. By 1990, a total of 218, 229 acres had been mined; 149,130 before July 1, 1975.

Two main waste products are generated during the beneficiation and processing of phosphate rock: sand tailings and phosphatic clays. Tailings are commonly used to backfill mine cuts, then the overburden stockpiled nearby is spread over the tailings to produce a stable land form with a variety of potential uses. The phosphatic clays are pumped as a 3 to 5% solids slurry to large, diked areas where the clay solids slowly settle and the supernatant water is removed through spillways and reused in the mine operations. The waste clay settling ponds occupy from 20 to 40% of the land area mined, so that a significant portion of mined land will not be available for load-supporting, construction uses. Until recently, clay ponds required 10 to 15 years to consolidate to a 15-20% solids level and to crust over enough to support cattle. However, various techniques have been developed to shorten this time requirement to 3 to 5 years. In 1990, 19 operating mines had 57,146 acres of active and inactive clay ponds with a projection of 20,000 additional acres needed for future operations. While the dominant disposal practices for these byproducts are backfilling with the sands and settling ponds for the clays, it should be noted that there is significant use of sand/clay mix for disposal of these materials into mine cuts.

Throughout most of the years of phosphate mining in central Florida there was no requirement that mined lands be reclaimed. The State of Florida mandated that all land mined after July 1, 1975 must be reclaimed, and further, established a severance tax program to assist in the reclamation of pre-1975 mined lands. By 1990, 41% (28,248 acres) of post-1975 mined land had been reclaimed, and 58% (86,624 acres) of pre-1975 lands had been reclaimed and released.

The latest reports from FDEP show that 54% of the land mined since July 1, 1975 has been reclaimed or is in the process of being reclaimed, exceeding the rate of reclamation required by law. Most of the land remaining unreclaimed is still used for mining activities.

Of the pre-1975 lands, 86,624 acres was the total declared eligible for non-mandatory

reclamation funding. Of that total acreage, 52% are in some stage of reclamation, and 41,088 are currently eligible for funding.

Eleven of the 19 phosphate mines operating in 1990 will have mined out their reserves by the year 2000. It is probable that four to six companies will be mining in central Florida past the year 2010. Phosphate rock production will peak at about 40 million metric tons, then gradually decline to around 20 million tons by the year 2010. Companies are now planning the utilization or disposition of their land areas which are being reclaimed and released by permitting agencies.

Chemical Fertilizer Plants:

Over the last 40 years the techniques of mining phosphate rock have not changed substantially in kind, only in magnitude. However, the chemical processing of the phosphate rock has undergone a transition from small normal superphosphate plant operations to large phosphoric acid-based plants producing finished products such as di-ammonium phosphate, triple superphosphate and mono-ammonium phosphate. There are currently 11 fertilizer plants and one animal food supplement plant in central Florida producing over 12 million tons of finished products annually.

The technology switch to wet process phosphoric acid based products brought with it an unwelcome by-product, phosphogypsum. Approximately five tons of phosphogypsum (calcium sulfate di-hydrate) are produced per ton of recovered phosphoric acid anhydride. Phosphogypsum requires sizable disposal/storage areas. The 11 chemical plants have four inactive storage stacks in addition to the active stacks at each site. In 1990 there were 4,872 acres in gypsum storage, 25% of the total plant acreage. It is estimated that there are over 600 million tons of gypsum stored in Florida with about 30 million tons added each year.

A source of groundwater contamination in Polk County has been unlined phosphogypsum stacks. Some of these stacks have had sinkholes develop beneath them and open fissures into the ground water system. Others have leached contaminants. Thirteen of the fifteen gypsum stacks are older, unlined, facilities. Localized, on-site impacts to the surficial aquifer have been monitored by the operators and reported to various governmental entities. Threats to groundwater that may exist during the active life of a gypsum stack are minimized when the stack goes through formal closure procedures. In one instance where impacts beneath the surficial aquifer were detected, the affected ground water was contained by the plant production well "zone of capture" until mitigation was completed. No off-site impacts were detected. Although newer stacks are lined and have monitoring systems, the older stacks remain a potential source for additional ground water contamination, a situation that will exist until the stacks have completed closure activities.

Integrated Habitat Plan:

In 1992 the Bureau of Mine Reclamation published a document entitled : A Regional Conceptual Reclamation Plan for the Southern Phosphate District of Florida. This document contains an analysis of the environmental and socio-economic factors existing within a nine county region of

west-central Florida, and provides the framework for a region-wide landscape planning effort. The purpose of this effort was to plan for the maintenance and protection of the environmental resources within the phosphate mining district. The document sets out the concept of an Integrated Habitat Network/Coordinated Development Area (IHN/CDA) which has been widely reviewed and discussed by various governmental entities, land owners, and phosphate mining interests. Although the document has been endorsed by the FDEP, it has not been endorsed as to its specifics by the phosphate industry. The Florida Phosphate Council and its member companies have expressed support for the concept and will continue to work with the Bureau of Mine Reclamation to include the concept in reclamation planning. The IHN/CDA is an example of the ecosystem management and greenways approach.

The Integrated Habitat Network/Coordinated Development Area concept provides an unique opportunity for the CFRPC, FDEP, local government and the phosphate mining companies to demonstrate that with sensible regulation and good stewardship, a goal of effective environmental protection in concert with a viable mining industry can be realized. Through streamlining of existing regulatory processes this effort will plan, construct, and manage for the protection of regional water resources, a balance of intensive and non-intensive land uses, as well as plant and animal communities. It is the policy of the FDEP that the tenets of the IHN/CDA concept be considered in the decision-making process for all regulatory, planning, and management functions relating to mining and mitigation of mining activities in the phosphate mining district.

Several phosphate companies are already participating in IHN/CDA efforts. Other entities are using the IHN/CDA document as a reference in their planning efforts, including the Florida Greenways Coordination Council, the Office of Greenways and Trails, the Office of Ecosystem Management, the Southwest Florida Water Management District, the Army Corps of Engineers, the Florida Game and Fresh Water Fish Commission, the Florida Department of Transportation, the Central Florida Regional Planning Council, an several local governments.

State Mining Goal:

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. (State Comprehensive Plan, s. 187.201(14)(a), F.S.)

Regional Goal 1.10: Mining practices shall not degrade regionally significant natural resources.

Indicator:

- a. Mining and reclamation plans which meet the intent of the policies of this Goal.

- b. Old lands reclamation projects which restore pre-mining hydrology and resources.

Policies:

- 1.10.1 No mining activities shall be allowed within a buffer zones. However, certain mining support activities will be allowed within buffer zones provided the natural hydrological and ecological regimes of any preservation areas for which the affected buffer zones were established are maintained.
- 1.10.2 Species considered endangered, threatened or species of special concern shall be protected.
- 1.10.3 Design mining practices to protect regionally significant natural resources from the adverse effects of resource extraction.
- 1.10.4 Reclamation plans shall reflect premining watershed patterns and provide for restoration thereof.
- 1.10.5 Vegetation native to the central Florida region should be used for mining reclamation and mitigation.
- 1.10.6 Prior to any land clearing for mining activities, a habitat management plan for listed species should be implemented and remain in use throughout the mining and reclamation period.

Regional Goal 1.11: All disturbed lands, including nonmandatory, shall be reclaimed or put to productive use, within a time frame established by statute, except those lands which have been successfully reclaimed by nature.

Indicator:

- a. Acres of land reclaimed and established in permanent post-mining land uses.
- b. Acres of land reclaimed and established as wildlife habitat.
- c. Acres of nonmandatory lands reclaimed.

Policies:

- 1.11.1 The post-mining reclamation shall be undertaken and managed to support projected land uses, which have been determined in accordance with applicable local, state, or federal regulations.
- 1.11.2 Post-mining land uses shall be established within a binding time frame.

- 1.11.3 Agencies shall develop incentives for reclamation of nonmandatory lands.
- 1.11.4 Innovative and interim land uses shall be considered at any stage of a review.
- 1.11.5 Wildlife habitat and forestry shall be included among the viable end land uses for incorporation in reclamation plans.
- 1.11.6 DRI Development Orders and Mine Reclamation Plans should support the concept of the IHN/CDA.
- 1.11.7 Provide information and guidance to state agencies and local governments concerning the IHN/CDA concept.
- 1.11.8 Where consistent with mining and reclamation practices and regulatory requirements, enhancements to regional habitat plans, fish and wildlife objectives, water supply and control, and other activities shall be encouraged.

Regional Goal: 1.12 Full scale reclamation practices and plans shall reflect only proven best available technology. Experimentation to further reclamation technology shall be encouraged.

Indicator:

- a. Reclamation plans approved and implemented consistent with these policies.

Policies:

- 1.12.1 The timing of reclamation shall be set as reasonably as possible within mining operations constraints, but expeditious restoration of the environment shall always be the primary interest and concern.
- 1.12.2 Measures shall be employed to ensure the development of economically feasible technology that promotes faster, more reliable, and better consolidation and reclamation of waste clays.
- 1.12.3 All mined/disturbed areas must be returned to a reasonably compatible condition with surrounding areas.
- 1.12.4 Reclamation must be compatible with natural topography.
- 1.12.5 Soils must be returned to proper load-bearing capacities, and stability, as appropriate for

the planned end land use.

Regional Goal: 1.13 Advance the management and final productivity of decommissioned waste clay ponds.

Indicator:

- a. Clay ponds managed and decommissioned consistent with these policies.

Policies:

- 1.13.1 Approval of any proposed mining activities shall be predicated upon the use of the most efficient management of clay storage areas, such as the stage-filling method.
- 1.13.2 Any reclamation practice which has or would have the effect of rendering a decommissioned waste clay pond to be economically nonproductive shall be discouraged, unless an economically nonproductive use provides other benefits to the Region or local government. The use and definition of the term "economically nonproductive" shall be the exclusive prerogative of the appropriate affected local government.

Regional Goal: 1.14 Ensure the distribution and use of severance tax funds benefits the jurisdictions impacted by phosphate mining.

Indicator:

- a. Severance tax funds distributed within impacted jurisdictions.

Policies:

- 1.14.1 Work with local governments and the local legislative delegation to alter the annual distribution and handling of severance tax funds to return a larger percentage of those funds to the county within which severance occurred.
- 1.14.2 Identify potential uses of severance tax funds.
- 1.14.3 Assist local governments and the local legislative delegation in identifying opportunities to return a larger percentage of severance tax funds to the county within which severance occurred.

Regional Goal 1.15: Natural Resources of Regional Significance shall be protected from encroachment by mining activities.

Indicator:

- a. Acres of NRRS impacted or protected from mining activities.

Policies:

- 1.15.1 Avoid mining within the 25-year floodplain of any regionally significant watercourse. In mining plans, discourage mining within the 25-year floodplain of major surface watercourses. Encourage upland buffers adjacent to undisturbed 25-year floodplains for the purpose of establishing and maintaining wildlife corridors, greenways, buffering the floodplain and promoting healthy wetland systems' values and functions. Protect these areas, whenever possible, from adverse adjacent mining activity impacts, erosion, and vegetation loss.
- 1.15.2 Areas determined to be preservation or conservation within an adopted DRI development order shall not be disturbed by mining or mining support operations, except where utility and/or equipment crossings are warranted and will be, or have been subject to regulatory review.
- 1.15.3 Natural Resources of Regional significance should first be considered for preservation; however, if disturbance is necessary, the mining plan shall identify the minimum disturbance and the tradeoffs or mitigation required by the disturbance.

Regional Goal 1.16: Inhabitants of the region shall be protected from any proven adverse effects on their health caused by mining, as shown by epidemiological evidence and toxicological interpretations.

Indicator:

- a. Mine plans approved and executed in a manner consistent with these policies.

Policies:

- 1.16.1 Radiation exhalation rates for mined lands shall be in accord with appropriate federal, state and local standards.
- 1.16.2 The radiation concentration of any water that originates on or passes through a mining site and is discharged from that site, shall meet all applicable standards of federal, state

and local governing bodies and agencies.

- 1.16.3 Promote landscape reclamation, including, but not limited to establishing functional and diverse ecological communities, achieving a balance of human uses and natural lands, engineering post-reclamation hydrology compatible with regional hydrology, and establishing post-reclamation land use compatible with the reclamation technique, as part of any mining plan.
- 1.16.4 Coordinate regional information on phosphate mining activities and reclamation with future land use planning through clearinghouse or data center activities.
- 1.16.5 Encourage development and implementation of the integrated habitat plan.
- 1.16.6 Encourage the production of phased reclamation schedules.
- 1.16.7 Development permits shall include a maintenance and monitoring plan to prohibit mining in areas which are geologically or hydrologically unsuited for the extraction of minerals.

Air Quality:

There are thousands of man-made and natural substances found in the air, and many of these can cause health problems for humans. For over twenty years efforts have been made to control the release of harmful substances into the air. In the Clean Air Act of 1970, Congress pinpointed six pollutants which were the most widespread and posed the most immediate danger to human health. These pollutants - ozone, particulate, nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead - are known as criteria air pollutants. Congress and the U.S. EPA set outdoor health standards for the criteria pollutants, and federal law requires every community across the nation to meet these health standards. However, many communities were slow to enact regulations to clean up their air. The Clean Air Act Amendments of 1990 addressed this problem, and required non-attainment areas (those that do not meet federal health standards) to take strong measures to clean up their air. Areas that failed to do so by the deadlines in the amendments faced sanctions from the federal government including the potential loss of highway funds.

The United States Environmental Protection Agency (EPA), and the Clean Air Act established the maximum ambient pollution levels for the six major air pollutants. These levels are known as the Primary and Secondary Ambient Air Quality Standards (NAAQS). The primary standards were established to protect the health of the general public. The secondary standards were established to protect the welfare of the general public by protecting vegetation, materials, and aesthetics. Measurements of individual criteria pollutants are compared to the primary and secondary standards in order to determine compliance or exceedance. An exceedance occurs when the observed ambient air quality measurement is greater than the NAAQS. Areas can be designated as either attainment or non-attainment areas based on ambient air quality

measurement compared to the NAAQS. Areas which experience a pattern of exceedances are designated as non-attainment areas. Areas which do not violate the NAAQS are classified as attainment areas.

The Central Florida Region's air quality is currently considered to be attainment or unclassifiable for all criteria air pollutant currently regulated. Central Florida does not have the breezes associated with coastal areas which facilitate the dispersal of pollutants; rather it is more of an air stagnation area with the potential for pollution problems to increase. The region itself is bordered by three recent non-attainment areas (NAAs) for ozone: Hillsborough, Orange, and Palm Beach Counties. However, as of February 1996, these areas reached attainment. Although most of the region has no predicted air quality problems for the immediate future, due to its location between the two past NAAs, Polk County is considered to have a potential for future air quality problems.

Polk County is a locus for heavy industry, having power generating plants, and numerous chemical processing and manufacturing industries. It is also considered to be a target for residential, commercial, and further industrial growth. An increase in air quality degradation could lead to a possible non-attainment classification in the future. The result would be more stringent state and federal requirements which would affect both industry and the general populace of Polk County.

The number of facilities and sources of air pollution in Polk County is increasing. In February of 1992, The FDEP permitting records indicated Polk County had approximately 757 FDEP permitted air emission sources and 156 facilities. In October of 1994, FDEP permitting records showed 862 permitted air sources and 190 facilities, an increase of 13.8% and 21.8%, respectively. Even though most industries are within their permitted emissions limits, local controversies and conflicts over pollutant emissions do arise between such an industry and its surrounding neighbors. Residents have complained of odors and dust. Fluoride and ammonia emissions from phosphate chemical plants are another example.

The region also experiences a sporadic addition to its constant air pollution emissions. The use of oil burners in citrus groves to prevent freeze damage to the crop and vegetation, although rather uncommon and highly seasonal, can produce temporary, localized, but intense air pollution events. The replacement of this method of freeze prevention with microjet systems is alleviating the emissions problem.

There are two problems that will increase pollutant emissions and both are related to the growth expected in Polk County. New growth causes increases in traffic, and decreases in Levels of Service on existing transportation networks. This has been designated by FDEP as the single biggest future source of air pollution in Florida, even though new cars are equipped with better emissions control devices. The major pollutants identified with transportation impacts on ambient air quality are carbon monoxide, nitrogen oxides, and hydrocarbons. NO_x contributes to

acidic precipitation, and NOx and hydrocarbons combine in the atmosphere to form ozone.

Carbon monoxide ambient air concentrations can be predicted and computer modeled within certain parameters, for traffic impacts, thus pointing the way to transportation design improvements that could be made to prevent or mitigate a potential problem. Other types of automobile emissions control are possible. One would be the use of and enforcement of a spot check program for catalytic converter tampering, of which, Florida has a very high rate. Another would be a form of passive control: the use of revegetation schemes where feasible.

The major emitters of sulfur and nitrogen oxides are power generator plants for electric utilities and fertilizer manufacturers. Many of the phosphate chemical plants now have electric cogeneration operations that use heat recovery systems. This system does not consume fossil fuels, and has helped to reduce the emissions from electric utility plants.

The other problem concerns the trend of mixed use developments towards the inclusion of the so-called "light" industries. The general perception of industrial air polluters is that of a heavy process-type, smokestack industry, many of which are located in this region. However, certain "light" industries can release small amounts of highly toxic and/or hazardous air pollutants that can create serious health problems. Many times these industries are located within major development projects that abut previously established residential areas, culminating in serious land use conflicts.

Another future air quality issue is the disposal of hazardous wastes by on-site incineration. This procedure can lead to the possible release of toxic air pollutants, under the guise of hazardous waste cleanup, as incineration is effective only for certain types of wastes. Combustion of other types simply transfers hazardous substances into the atmosphere.

Recently located and future power plant facilities in the region include:

Florida Power Corporation: 3,200 megawatts at build out (470 megawatt at first phase), located in Fort Meade, utilizing Natural Gas for fuel with a first phase completion date of November 1998.

Tampa Electric Company: 1,100 megawatts at build out (250 megawatt at first phase), located at SR 37 at CR 640, utilizing coal and coal fuel for fuel with a first phase completion date of Fall 1996.

Destec Energy, Inc.: 212 megawatts, located at SR 630 west of Fort Meade, utilizing Natural Gas for fuel, completed in 1995.

CSW/Ark Energy, Inc.: 123 megawatts, located south of Bartow on SR 555, utilizing Natural Gas for fuel, completed in August 1994.

Mission Energy, Inc.: 150 megawatts, located off Recker Highway in Auburndale, utilizing Natural Gas for fuel, completed.

Panda Energy, Inc.: 75 megawatts, located off McCue Road in Lakeland, utilizing Natural Gas for fuel, completion date 1997.

Ark Energy, Inc.: 102 megawatts, located on US 17- south of Bartow, utilizing Natural Gas for fuel, completed in June 1995.

Ridge Generating Station, Inc.: 40 megawatts, CR 542, just east of K-ville Road, utilizing tires and wood waste from the county's Northeast Landfill, Completed.

Although the FDEP has identified new growth, which causes increases in traffic, and decreases in Levels of Service on existing transportation networks, as the biggest single source of air pollution in Florida, the abundance of power generating plants is a great concern in the region. Sulfur and nitrogen oxides are the two major pollutants generated from power plants. The combined impact of sulfur and nitrogen oxides from these two sources demands that existing monitoring be improved to prevent any further degradation of the ambient air quality continues.

The main agency responsible for the control of stationary or mobile source air emissions is FDEP, which also has the main permitting responsibility. However, the pollution potential from some members of the phosphate industry is great enough that a small number of these sources also operate under federal permits from the U.S. EPA..

Ambient air monitoring is conducted by FDEP, on a sampling network that is outdated and under equipped. Polk County has a local monitoring system, however, as of this writing, its future is in doubt.

Regional Goal 1.17: Improve the present condition of ambient air quality and prevent its future degradation.

Indicators:

- a. Ambient air pollutant concentrations, obtained from air monitoring data.
- b. Emissions inventories of criteria pollutants.
- c. Strategies identified in local government comprehensive plans.
- d. Individuals using mass transit or other alternatives to the single-occupant vehicle.

Policies:

1.17.1 Developments of Regional Impact shall identify and mitigate transportation-related

adverse impacts on air quality created by them.

Strategies:

- 1.17a A developer proposing a Development of Regional Impact shall provide computer models of traffic impacts to air quality acceptable to the Regional Planning Council, when requested.
 - 1.17b Development approvals shall include a road improvement program and commitment for construction of listed roadway improvements that would assure project-related impacts are fully mitigated and that an acceptable level of service is maintained by construction of identified improvements concurrent with project phasing.
- 1.17.2 Minimization of air pollution emissions should be taken into consideration in project reviews for large scale developments, as defined by local government.

Strategies:

- 1.17c The Regional Planning Council will assist local governments in developing local regulations that provide for revegetation of new development and redevelopment sites.
 - 1.17d Best management practices that minimize unconfined emissions generated by construction activities shall be used in conjunction with clearing and contouring work.
 - 1.17e Discourage open burning of land clearing debris in those urban areas that have an established resource recovery facility, or where on-site mulching is available.
 - 1.17f Promote the-use and development of alternate and/or renewable energy sources to alleviate increased demand, and hence increased pollution from utilities and transportation.
 - 1.17g Promote state, regional, and local plans and programs for public transit systems, as an alternative mode for maintaining air quality standards when feasible.
- 1.17.3 The disposal of hazardous waste by incineration within this Region shall be prohibited, unless it can be proven that a public health hazard will not result.

Strategies:

1.17h Review new development which releases toxic/hazardous substances into the air to ensure that adequate buffers to residential, institutional, or recreational land uses are provided. Toxic/hazardous substances are defined as “substances regulated under Section 112R(7) of the Clean Air Act.

1.17.4 Improve and expand the ambient air monitoring network within this Region.

Strategies:

1.17i Develop procedures and strategies to assess control measures and to ensure maintenance of National Ambient Air Quality Standards.

1.17j Local governments and State and regional agencies will cooperate in the enforcement of air quality standards.

1.17k Encourage the FDEP in cooperation with the appropriate counties to direct the FDEP to provide and operate air quality monitors in attainment areas to determine baseline ambient air conditions and trends for criteria pollutant.

1.17l The use of low-volume irrigation, flood irrigation, or other non-polluting systems on citrus groves should replace the use of oil burners as soon as feasible.

1.17.5 Land use and transportation planning shall incorporate strategies to improve air quality in the Central Florida region and associated air shed.

Strategies:

1.17m Promote transportation system enhancements, including multi-modal planning, mass transit, car pooling and non-motorized access alternatives that reduce air pollution, energy consumption, and the use of single occupant vehicles.

1.17n Encourage feasibility studies and the use of alternative technology high-occupancy- vehicles (HOV).

1.17o Encourage feasibility studies for HOV to connect with the State of Florida’s Hi-Speed Rail system, where applicable.

1.17p Support those roadway improvements which provide long term air quality benefits.

1.17q Promote Congestion Management Strategies, Traffic Control Measures and other

programs which serve to reduce single-occupant vehicle trips and reduce vehicle miles traveled.

- 1.17r Encourage the retrofitting of energy generators to reduce such facilities emissions.
- 1.17s Promote Agricultural Best Management Practices to minimize the airborne releases of nutrients and chemicals.
- 1.17t Encourage the development of innovative and cost-effective pollution prevention and control technologies.

Regional Goal 1.18: Reduce emissions of nitrogen and other pollutants to improve surface water and sediment quality in the Central Florida region.

Indicators:

- a. Amount of nitrogen oxides produced by electric generators, and other stationary and mobile sources, affecting the Central Florida Region.
- b. Rate of nitrogen loading to major water bodies within the Central Florida Region.

Policies:

- 1.18.1 Use Agricultural Best Management Practices to minimize the airborne releases of nutrients and chemicals.
- 1.18.2 Use Best Available Control Technology to minimize the amount of nitrogen oxides produced by electric generators, and other stationary and mobile sources, affecting the Central Florida region.

Strategies:

- 1.18a Encourage the consideration of water quality impacts in the permitting of stationary sources.
- 1.18b Encourage the retrofitting of energy generators to reduce such facilities emissions.
- 1.18c Encourage the development of innovative and cost-effective pollution prevention and control technologies.
- 1.18.3 Developments of Regional Impact shall identify and mitigate transportation-related adverse impacts on water quality created by them.

THE NATURAL RESOURCES MAPS

The source used for the base on all the maps is the Central Florida Regional Planning Council. The base data consisting of roads, political boundaries, water features, and railroads was digitized from the United States Geological Survey 7.5 Minute Topographical Series. All data is projected in Universal Transverse Mercator Zone 17, in meters, on North American Datum 1927. Data that was received in other formats was translated. The software used to build and produce all of the maps is PC Arc/Info.

Map of Natural Systems and Planning and Management Areas (Plate 1-1):

Source #1 - Florida Natural Areas Inventory (FNAI):

There are two sources for the Map of Natural Systems and Planning and Management Areas. The first is from the Florida Natural Areas Inventory (FNAI). The FNAI data base represents a compilation of information extracted from published and unpublished literature, museums and herbaria, field surveys, personal communication, and other sources. This information was provided by The Nature Conservancy and the Florida Department of Environmental Protection has not modified in any way by the CFRPC. The follow summaries the description by FNAI:

Areas of Conservation Interest (ACI) Category A:

Site in ACI Category A were initially identified on the basis of FNAI-documented occurrences of rare, imperiled, or outstanding examples and populations of animals, plants, or natural communities, then supplemented by aerial photographic interpretation of landscape vegetation surrounding the particular occurrence. Each site contains one or more occurrences of FNAI-tracked species or natural communities. The occurrence information upon which the sites are based comes from a variety of sources that include field surveys by FNAI staff, published and unpublished materials, herbaria and museum collections, and contacts with knowledgeable persons. These sites provide a means for describing areas of land that support habitat for rare, threatened or endangered species, or which contain exemplary natural communities. They are distinct from Managed Areas in that they are not under some formal, unified (and often legal) level of protection or stewardship. These sites represent a significant portion of the habitat for

rare, threatened or endangered species and natural communities and as such, FNAI recommends that they be given priority status in acquisition and protection plans.

Areas of Conservation Interest (ACI) Categories B and C:

Sites in ACI Category B and C were identified principally from aerial photographic interpretation of natural communities by FNAI scientists and from input received during the Regional Ecological Workshops held in each Regional Planning Council area during 1993 and 1994. Florida Department of Transportation black and white aerial photographs (1:2083) were used. The ACIs presented on these maps are preliminary. **Category B** sites are considered to have higher priority than **Category C** sites, based on the quality, size, and rarity of their natural communities.

High Quality Natural Communities:

Natural community occurrences ranked **Categories A and B** represent the highest quality occurrences of the communities tracked by FNAI. A high-quality example of a natural community is generally one that is not significantly impacted by recent human activities, including notable disturbance to the herbaceous groundcover components, and that possesses a species composition characteristic of that natural community type (i.e., contains the more common species and perhaps some of the rarer species), while not having substantial number of exotic species. Conservation of these areas is necessary for the preservation of the biodiversity represented by each community type.

Rare/Endangered Species:

Natural Communities with these ranks represent the rarest communities in the state based on the following criteria:

S1 = Critically imperiled statewide because of extreme rarity - 5 or fewer occurrences or very few remaining acres - or because of some factor making it especially vulnerable to extirpation or extinction.

S2 = Imperiled statewide because of rarity - 6 to 20 occurrences or few remaining acres - or because of other factors making it vulnerable to extirpation or extinction.

S3 = Either very rare and local throughout the state - 21 to 100 occurrences or found locally in a restricted range.

Wildlife Aggregation Areas and Manatee Habitat:

The Florida Natural Areas Inventory track wading bird rookeries, manatee aggregation areas, and migratory bird concentration areas. This data layer represents the location of these areas based on information provided to FNAI, principally by the Florida Game and Freshwater Fish Commission and the Department of Environmental Protection. These areas merit protection because they provide habitat for concentration of protected species or provide important foraging or nesting habitat for species.

Managed Areas:

The Florida Natural Areas Inventory identifies Managed Areas for the purpose of identifying and characterizing natural areas of land under distinct protective or potentially protective management. A Managed Area is usually under some formal or legal level of protection and may be managed in accordance with some unified set of stewardship plans.

CARL Projects:

CARL projects are those project identified in the 1995 Conservation And Recreation Lands annual report. These lands are proposed for acquisition because of outstanding natural resources, opportunity for natural resource-based recreation, or historical and archaeological resources. After purchase, these land are reclassified as Managed Areas.

Save Our Rivers Project:

Save Our Rivers project boundaries are compiled form the Water Management Districts.

Source #2 - Florida Greenways, Version 1, Conservation Lands Database:

The second source of the Natural Systems and Planning and Management Area map is from the Florida Greenways. Version 1 of the Conservation Lands Database was developed by the University of Florida (UF) Department of Landscape Architecture and the Geoplan Center, Department of Urban and Regional Planning, Gainesville, Florida. This work was performed during 1994 in partial fulfillment of a contract between UF and 1000 Friends of Florida, which was aimed at supporting the Florida Greenways Commission's mapping and identification objectives. The only change made to this data was to join adjacent polygons with identical codes to make the map easier to read. The following codes are used on the map:

Map of Groundwater Resources (Plate 1-2):

The well field and water conservation areas on the Ground Water Resources map were provided by the water management districts; Southwest, South and St. Johns. The Charlotte Harbor

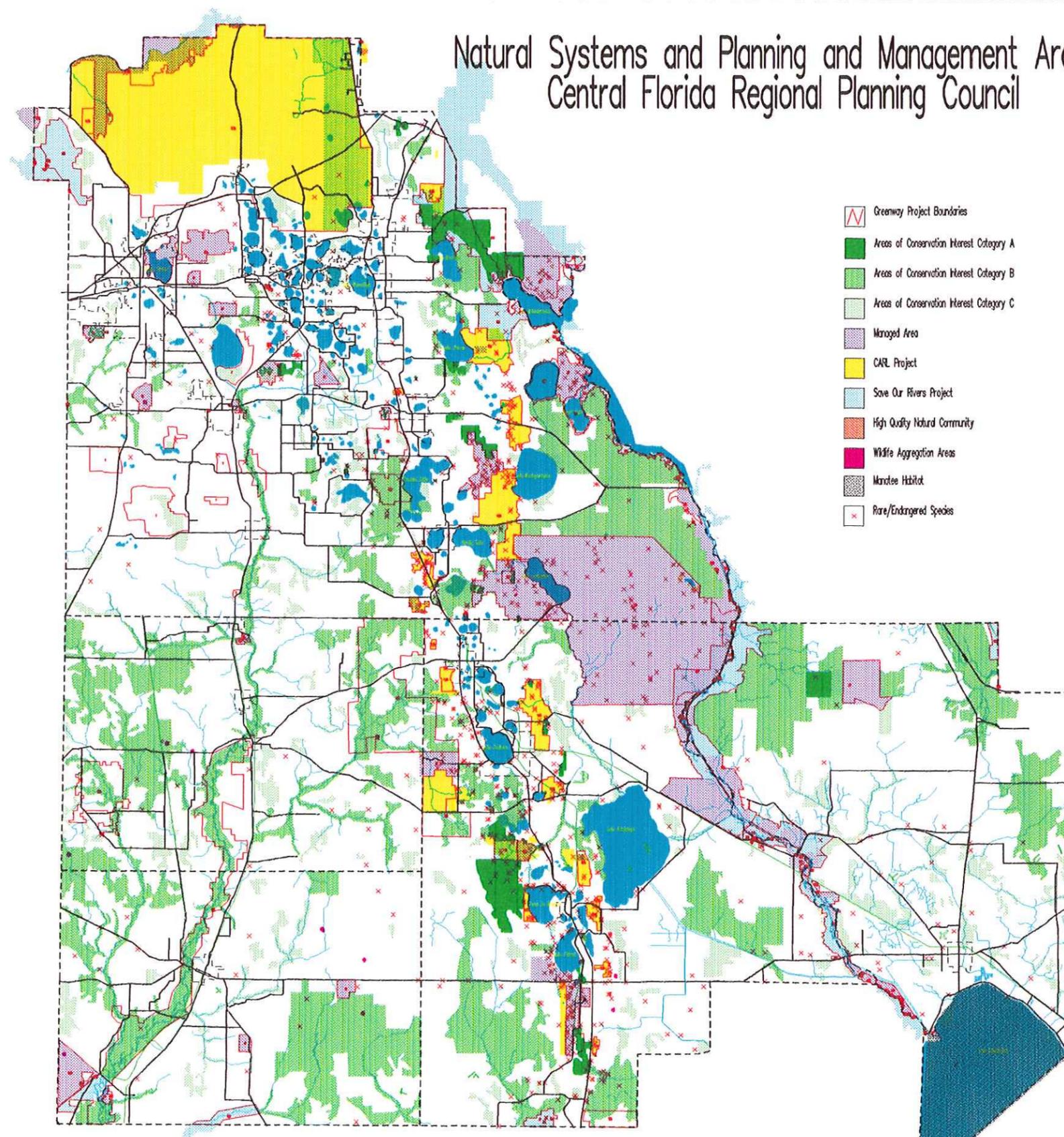
National Estuary Program boundary was provided by the Southwest Regional Planning Council. The discharge and recharge data was taken from a report entitled "Areal Variation in Recharge to and Discharge from the Floridan Aquifer System in Florida" by Walter R. Aucott from the U.S. Geological Survey Water-Resources Investigations Report 88-4057 in 1988.

| Code | Description |
|-------------|-----------------------------------|
| AP | State-Owned Aquatic Preserves |
| CARL | CARL Project |
| EZ | Conservation Easement |
| GW | Greenway |
| HS | Historic Site |
| IR | Indian Reservation |
| LP | Local Park |
| MIL | Military Reservation |
| NF | National Forest |
| NM | National Monument |
| NR | National Reserve |
| NS | National Seashore |
| NWR | National Wildlife Refuge |
| OOP | Other Public Land (Airport, etc.) |
| OUT | Outparcel |
| PP | Private Preserve/Park |
| SF | State Forest |
| SG | State Garden |
| SGS | State Geologic Site |
| SOR | Save Our Rivers Project |
| SP | State Park |
| SPR | State Preserve |
| SR | State Reserve |
| SRA | State Recreation Area |
| WEA | Wildlife and Environmental Area |
| WMA | Wildlife Management Area |
| WMD | Water Management District Land |
| ? | Type Unknown |

Map of Surface Water Resources (Plates 1-3 thru 1-5):

The Surface Water Resources base data is provided by the Council. The species specific data is an aggregation of data provided by the Florida Game & Freshwater Commission from 1994 satellite images. This satellite imagery was modified in format, but not in content. For ease in reading and identifying information presented, the Surface Water Resources are displayed on three maps, one each for Polk County (Plate 1-3), Hardee and DeSoto Counties (Plate 1-4), and Highlands and Okeechobee Counties (Plate 1-5).

Natural Systems and Planning and Management Areas Central Florida Regional Planning Council



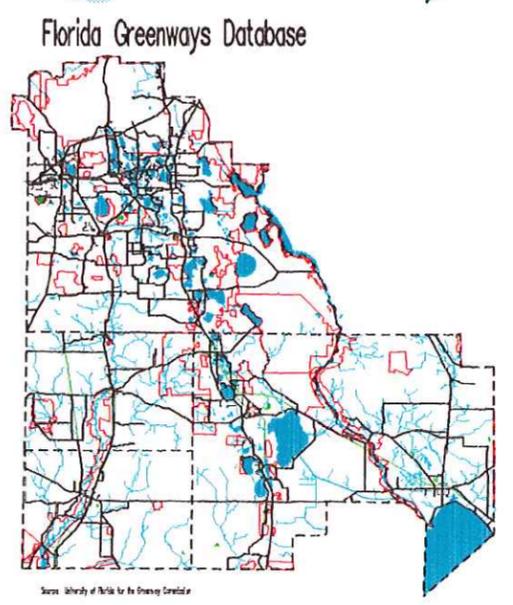
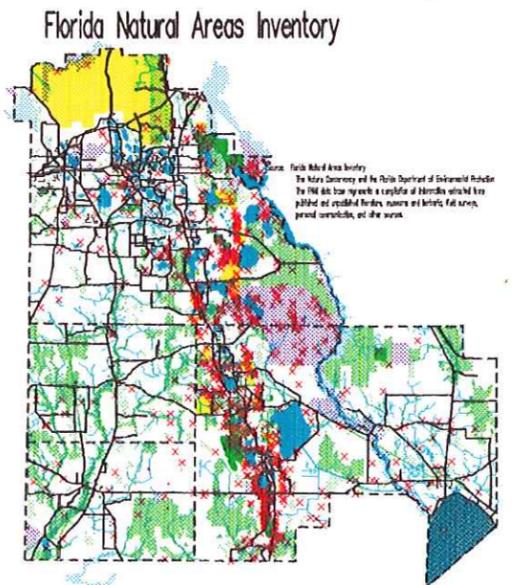
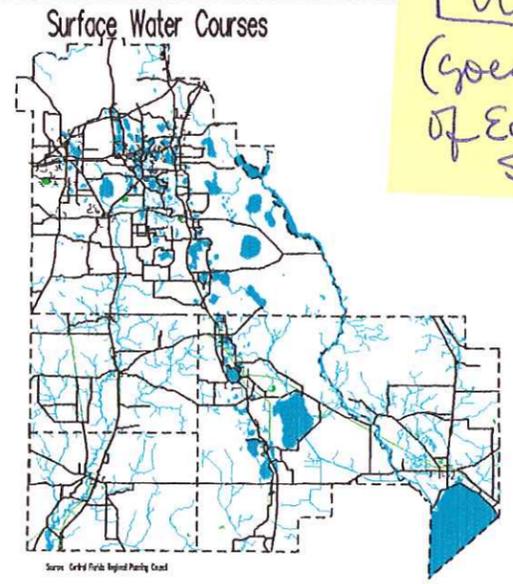
- Greenway Project Boundaries
- Areas of Conservation Interest Category A
- Areas of Conservation Interest Category B
- Areas of Conservation Interest Category C
- Managed Area
- CARL Project
- Save Our Rivers Project
- High Quality Natural Community
- Wildlife Aggregation Areas
- Manatee Habitat
- Rare/Endangered Species

February 14, 1997
Scale in Miles
0 100 200 400 600

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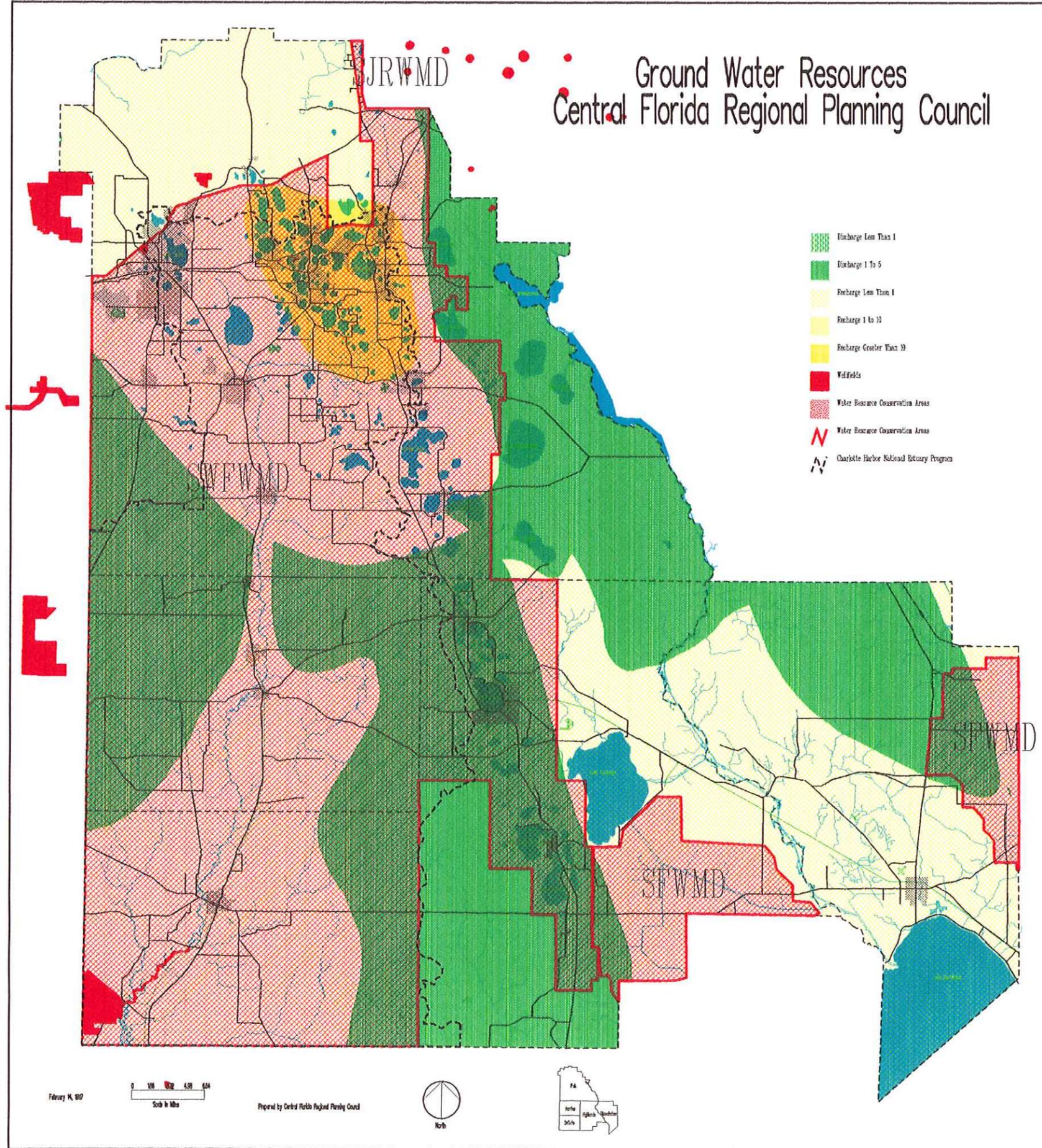


*First Map
(goes in front
of Economic Dev.
Section)*

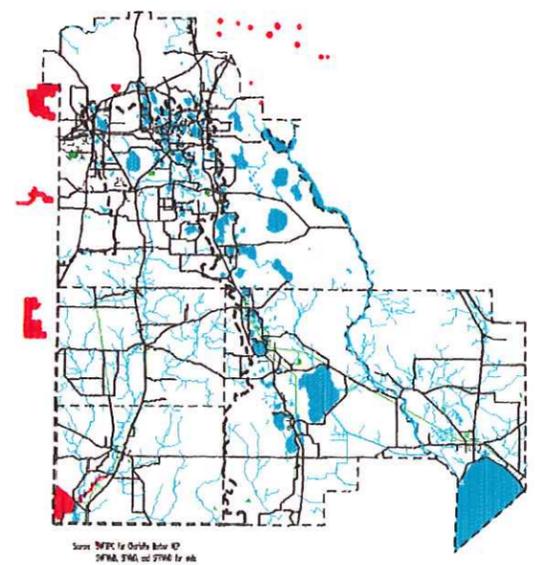
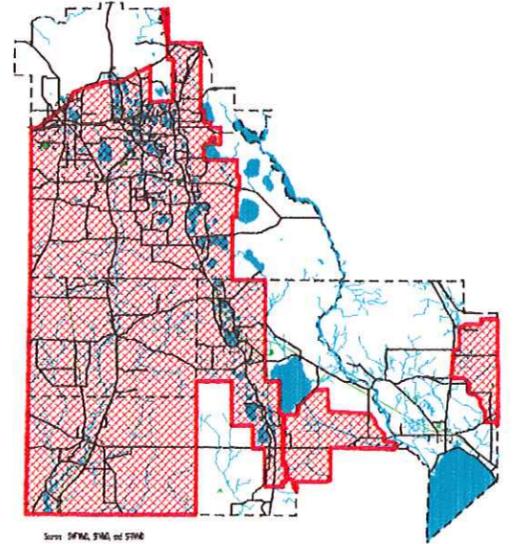
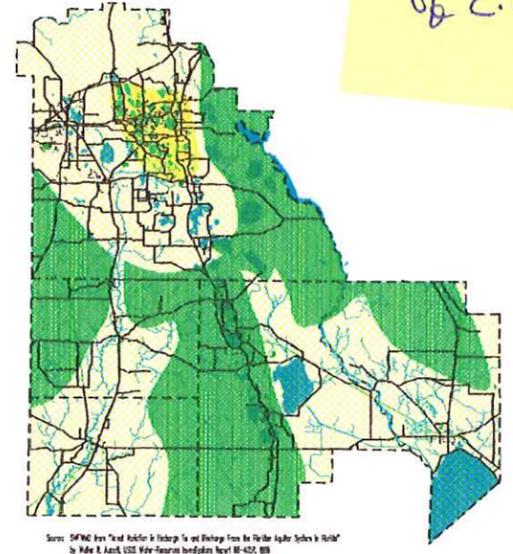


Second Map
(goes in front
of E.T. Section)

Ground Water Resources Central Florida Regional Planning Council



- Discharge Less Than 1
- Discharge 1 To 5
- Recharge Less Than 1
- Recharge 1 to 10
- Recharge Greater Than 10
- Wetlands
- Water Resource Conservation Areas
- Water Resource Conservation Areas
- Charlotte Harbor National Estuary Program



February 14, 89

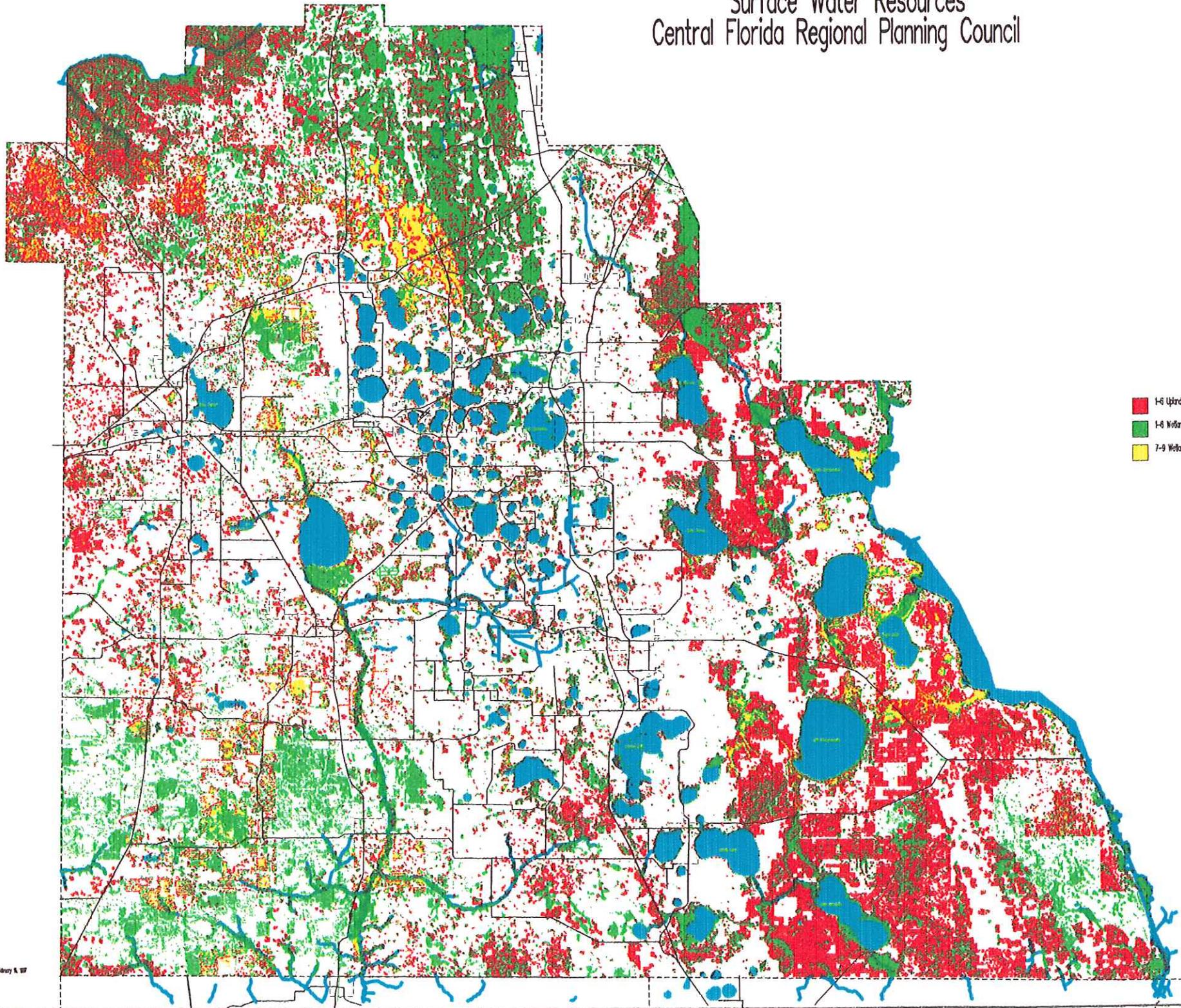


Prepared by Central Florida Regional Planning Council



Surface Water Resources
Central Florida Regional Planning Council

3RP Map
(goes in front of
E.D. Section)



- 1-6 Upland Species
- 1-6 Wetland Species
- 7-9 Wetland Species

February 8, 1977

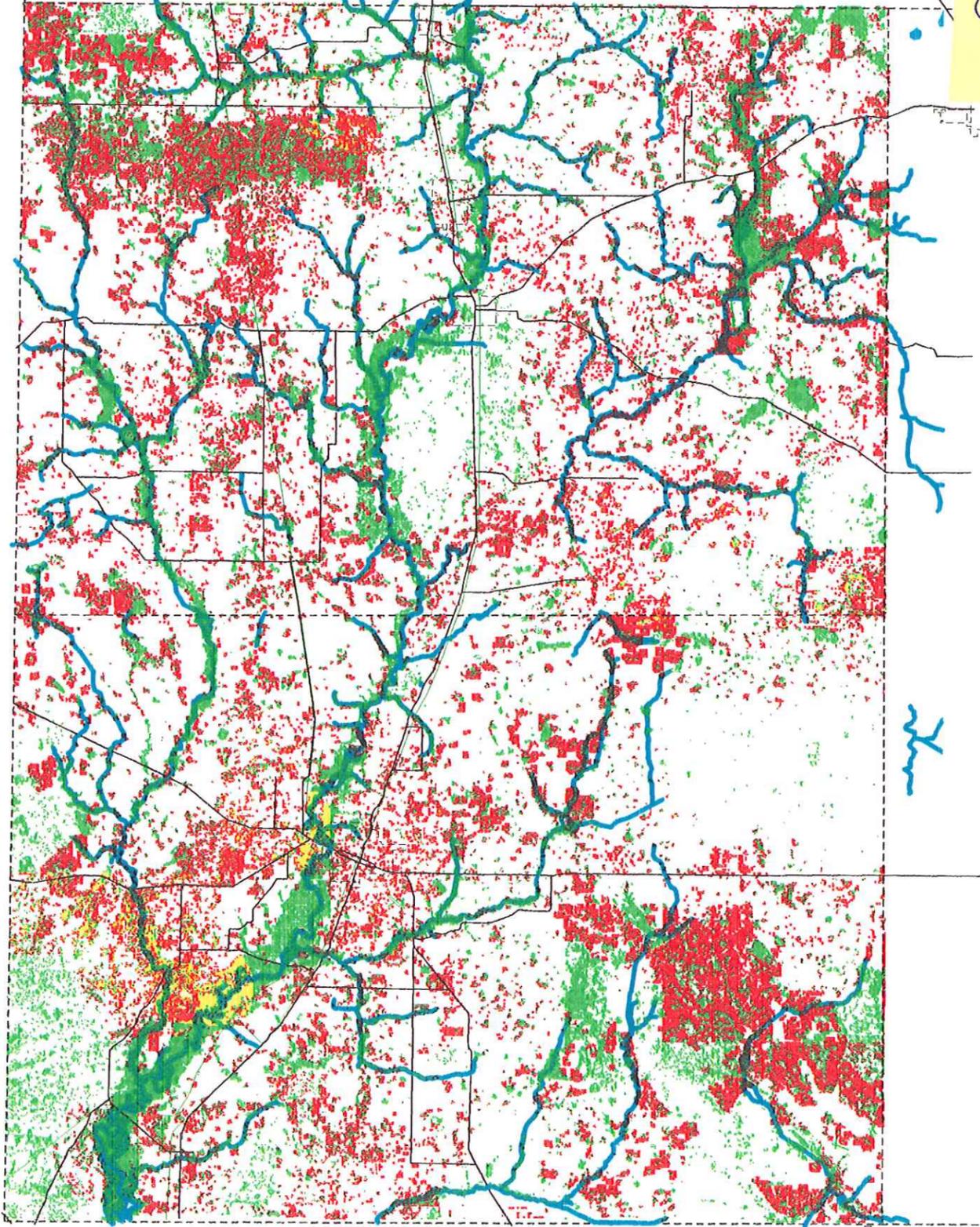


Scale 1:50,000

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Not to be confused with any other policy document

Surface Water Resources Central Florida Regional Planning Council

Fourth
Footle Map
(goes in front
of E.D. Section)



February 14, 1977

Scale 1:500,000

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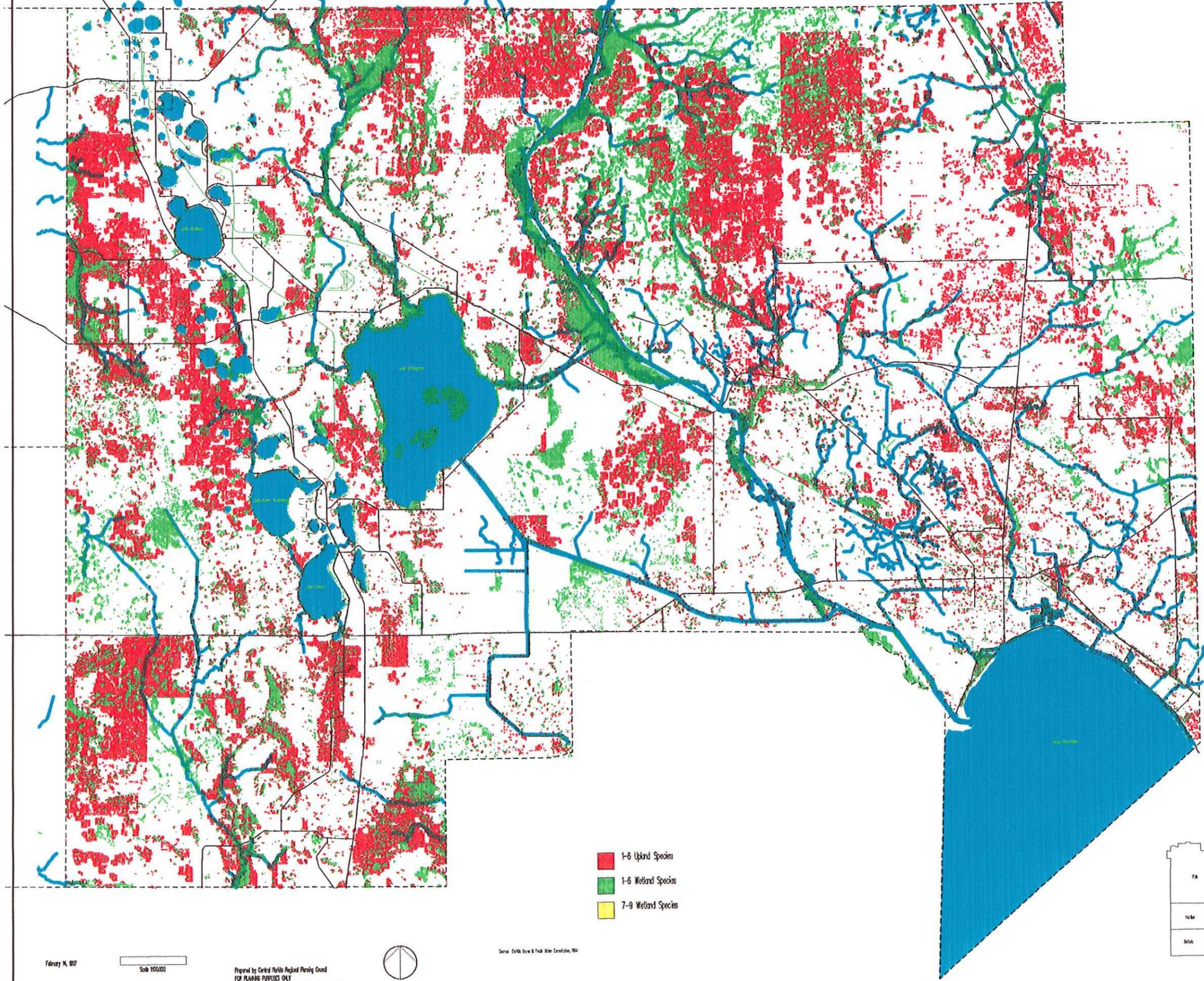
Source: Florida Game & Fresh Water Commission, USGS

- 1-6 Upland Species
- 1-6 Wetland Species
- 7-9 Wetland Species



Surface Water Resources Central Florida Regional Planning Council

5th map
(goes in front
of E.D. Section)



February 1987

Scale 1:60,000

Prepared by Central Florida Regional Planning Council
FOR PLANNING PURPOSES ONLY
Must be used in conjunction with the SEPP policy document



Source: Florida Game & Fish Wild. Conservation, USFWS



2. ECONOMIC DEVELOPMENT

"It was the best of times. It was the worst of times."

- - - Charles Dickens

Overview:

Unemployment in Central Florida is the lowest it has been in fifteen years, excluding 1988 and 1989, but during that time, per capita income in the Region slipped from 88% of Florida's per capita income in 1980 to less than 81% today. In the five counties of the Region, nearly 50,000 new jobs were created in the last ten years, but three of every five new jobs are ones that pay the lowest wages.

Polk County produces more oranges annually than California, but in the last five years, the market value of prime citrus land has fallen from near \$20,000 per acre to barely \$10,000 an acre for the same groves. In Highlands County residents enjoy the highest per capita income of any county in the Region; however, more than half of the total personal income in Highlands County is generated by "non-labor activities", and its per capita income is less than 83% of that of the State of Florida. Okeechobee County led the Region in job creation percentage from 1972 to 1992, but the County has the lowest per capita income in the Region.

For every indication that the economy of Central Florida is improving, there appears to be a downside for the economies of the five counties in the region. The nature of recent trends are analyzed in this section, so we can search for strengths upon which to build a vigorous economic future.

A Regional Perspective:

The Central Florida Region is perhaps the State's most diverse. It is a Region comprised of three sparsely populated rural counties -- DeSoto, Hardee, and Okeechobee -- Highlands, a small, moderately populated rural county, and Polk, one of the State's largest land area counties. Polk, with the two largest cities in the Region, Lakeland and Winter Haven, has a population almost three times the rest of the Region, and is one of Florida's twenty metropolitan areas.

The Central Florida Regional Planning Council is largely rural in nature. The total population according to the 1995 BEBR estimate is 602,803. The total land area is 5,177 square miles, a territory approximately equal to the land and inland water area of the State of Connecticut. Connecticut's estimated population in April 1995 was 3.3 million. Since 1990, the Region has been the slowest growing region in the State without a major metropolitan area. Lying at the core of Peninsular Florida, the Region is surrounded by nearly 80% of the State's population.

The exception to the rural pattern in Central Florida is the Lakeland/Winter Haven Urban Area in north central Polk County, which is home to approximately forty percent (40%) of the Region's population. Polk County is an inland, urban county, the largest county in dry land area in the state with 1,875 square miles a population of 443,153. There are seventeen municipalities in the County, ranging in population from Lakeland with 74,626, to Highland Park with 157 persons. The unincorporated areas of the county are growing 3.6 times as fast as the population of all the municipalities. Even though Polk County is urbanizing, citrus, cattle and phosphate mining are still important.

Hardee and DeSoto Counties are inland, rural counties. Hardee County is 637 square miles in area, with a population of 22,885, which includes the three municipalities of Bowling Green, Wauchula and Zolfo Springs. The county is a leading producer of citrus, farm crops, beef and phosphate. DeSoto County is 637 square miles in area, with a population of 26,640. Its only municipality is the City of Arcadia with a population of 6,617. DeSoto County, like Hardee, produces citrus, farm crops, beef and, in the future, phosphate.

Highlands County is an inland, rural county with its major urban area, the Avon Park/Sebring Urban Area, lying in the central section of the county along the U.S. 27 corridor. The county is 1,029 square miles in area, with a population of 77,270 and includes the three municipalities of Avon Park, Lake Placid and Sebring. The populated area of Highlands County does not qualify as an urban area for purposes of U.S. Census statistics, but it has a large enough population base to support a regional mall and regional cultural activities. Highlands County also produces citrus, farm crops and beef, but has not phosphate reserves.

Okeechobee County is also rural and inland with an area of 774 square miles and a population of 32,855. The only municipality is the City of Okeechobee with a population of 5,069. Okeechobee County is unique among inland counties, in that it is bounded on two sides by water, the Kissimmee River and Lake Okeechobee. The county is a leading producer of beef and dairy products, as well as citrus and farm crops.

Growth and Development:

South Florida has been redefined by the Regional Planning Council as an area encompassing at least twenty-eight counties from roughly along and south of Interstate 4 to the Florida Keys. It is bounded by a line running along the northern limits of Pasco, Polk, Lake, Seminole, and Volusia Counties, and is home to nearly 10.5 million people, only a little less than three quarters of the population of Florida. Six hundred thousand live in the Central Florida Region. This equates to a ratio of more than seventeen to one when South Florida's population is compared to ours, and economic activity is a function of people and their investments. Table 2-1: Population Estimates & Projections for South Florida appears on the next page and displays estimates and projections through the year 2000.

Economic Setting:

Although there are major qualitative differences among the counties, economic activity in the Region is, for the most part, driven by activity in Polk County. Approximately 75% of total personal income in the Region is accounted for by Polk County alone. Highlands County in a distant second place with 13% of the Region's economic base, and the remaining three counties (DeSoto, Hardee and Okeechobee) divide approximately equal shares of the residual 12%.

Looking back over the past twenty years, there are a number of factors that have combined to influence the current economic position of the Region. First, due to its strategic location between Orlando and Tampa, two of the State's fastest growing metropolitan areas, Polk County, in particular, has benefited enormously by being included in the "labor shed" of both. The proximity to expanding labor markets has made parts of the County bedroom communities to the metros, and created more job opportunities for residents of the Region living close to them. The advantages of such a location are referred to in economic development terms as "adjacency". Adjacency not only benefits Polk County, but to a much lesser degree, DeSoto profits from its proximity to Sarasota and Fort Myers, and Okeechobee enjoys its relationship with the Treasure Coast.

Second, the Region has experienced a large influx of retirees, both elderly and "early", many of whom have brought with them relatively stable sources of disposable income. Their arrival has strengthened the Region's ad valorem tax base somewhat, but because increases in retirement income are almost always tied to the cost of living, their presence does little more than prop up per capita income. Most do not earn a regular wage; many have a strong preference for mobile home living; and, as a group, they increase the demand for expansion in the retail and services sectors of the job market.

Third, the Region has been losing high paying jobs in manufacturing and mining, while more and more people are employed in the lower paying service industries. Thus, growth in wage and salary earnings per capita has declined. Comparing 1992 per capita wage and salary earnings to those of 1970, shows that while national levels rose by 334% over the period, South Florida levels increased by nearly 350%, and the Region improved, but by a more moderate rate of 293%. According to long-term forecasts by the *Bureau of Economic and Business Research (BEBR)* at the University of Florida, future rates of annual personal income growth during the upcoming ten years are expected to run 6.6% Statewide and 5.8% in the Region. Thus, per capita income in Florida is expected to rise from \$22,393 in 1995 to \$35,663 in the year 2005. Over the same period, expectations for the Region are for an increase from \$17,297 to \$25,983. If this prediction is accurate, *per capita income in the Region will fall another five percentage points behind that of Florida.*

| |
|--|
| Table 2-1: Population Estimates and Projections for South Florida |
|--|

| County | | 1990 Population | 1996 Population Estimate | Percent Change 1990-1996 | 2000 Population Projection | Percent Change 1996-2000 | Percent Change 1990-2000 |
|---------------|-------------------|--------------------|--------------------------------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|
| 1 | Volusia | 370,712 | 407,199 | 9.84% | 450,802 | 10.71% | 21.60% |
| 2 | Lake | 152,104 | 182,309 | 19.86% | 200,005 | 9.71% | 31.49% |
| 3 | Seminole | 287,529 | 329,031 | 14.43% | 372,903 | 13.33% | 29.69% |
| 4 | Orange | 677,491 | 777,556 | 14.77% | 842,660 | 8.37% | 24.38% |
| 5 | Osceola | 107,728 | 139,724 | 29.70% | 166,901 | 19.45% | 54.93% |
| 6 | Brevard | 398,978 | 450,164 | 12.83% | 500,091 | 11.09% | 25.34% |
| 7 | Indian River | 90,208 | 102,211 | 13.31% | 111,598 | 9.18% | 23.71% |
| 8 | St. Lucie | 150,171 | 175,458 | 16.84% | 198,299 | 13.02% | 32.05% |
| 9 | Martin | 100,900 | 114,464 | 13.44% | 128,198 | 12.00% | 27.05% |
| 10 | Palm Beach | 863,518 | 981,793 | 13.70% | 1,074,399 | 9.43% | 24.42% |
| 11 | Broward | 1,255,488 | 1,392,252 | 10.89% | 1,471,100 | 5.66% | 17.17% |
| 12 | Dade | 1,937,094 | 2,043,316 | 5.48% | 2,140,799 | 4.77% | 10.52% |
| 13 | Monroe | 78,024 | 83,789 | 7.39% | 89,200 | 6.46% | 14.32% |
| 14 | Collier | 152,099 | 193,036 | 26.91% | 223,995 | 16.04% | 47.27% |
| 15 | Hendry | 25,773 | 30,157 | 17.01% | 32,801 | 8.77% | 27.27% |
| 16 | Glades | 7,591 | 9,413 | 24.00% | 10,268 | 9.08% | 35.27% |
| 17 | Charlotte | 110,975 | 129,468 | 16.66% | 152,095 | 17.48% | 37.05% |
| 18 | Lee | 335,113 | 383,706 | 14.50% | 428,601 | 11.70% | 27.90% |
| 19 | Sarasota | 277,776 | 305,848 | 10.11% | 329,998 | 7.90% | 18.80% |
| 20 | Manatee | 211,707 | 236,778 | 11.84% | 258,798 | 9.30% | 22.24% |
| 21 | Hillsborough | 834,054 | 910,855 | 9.21% | 963,700 | 5.80% | 15.54% |
| 22 | Pinellas | 851,659 | 881,383 | 3.49% | 914,800 | 3.79% | 7.41% |
| 23 | Pasco | 281,131 | 309,936 | 10.25% | 338,298 | 9.15% | 20.33% |
| 24 | DeSoto | 23,865 | 26,716 | 11.95% | 30,598 | 14.53% | 28.21% |
| 25 | Hardee | 19,499 | 22,519 | 15.49% | 23,604 | 4.82% | 21.05% |
| 26 | Highlands | 68,432 | 77,996 | 13.98% | 88,200* | 12.06% | 27.72% |
| 27 | Polk | 405,382 | 452,707 | 11.67% | 483,201 | 6.74% | 19.20% |
| 28 | Okeechobee | 29,627 | 33,643 | 13.56% | 38,146 | 13.38% | 28.75% |
| | Central Florida | 546,805 | 613,581 | 12.21% | 662,949 | 8.05% | 21.24% |
| | So. Florida | 10,104,628 | 11,183,427 | 10.68% | 12,063,258 | 7.87% | 19.38% |
| | Florida | 12,937,926 | 14,411,563 | 11.39% | 15,527,384 | 7.74% | 20.01% |
| | South Florida | 78% | 78% | | 78% | | |
| | RATIO | 17.5 | 17.2 | | 17.2 | | |

1. Florida Estimates of Population, April 1, 1996. BEBR, University of Florida, February 1997.

2. Florida Population: Census Summary 1990. BEBR, University of Florida, April 1991.

3. Population Projections. BEBR, University of Florida.

* Highlands County official 2000 population projections.

Concern #1: What can be done to keep pace in Central Florida with the rate of increase of per capita income in Florida?

Fourth, the Region has experienced an influx of farm workers searching for permanent residency, since the mid- 1970s. Farm worker families have less income than the average worker, so their arrival tends to flatten or stagnate income growth rates.

With the events of the last twenty years, have not only come changes in the composition of Region's economic base, but also in the ways income is generated. The most pronounced of these changes has been a decreased reliance on the agricultural and phosphate sectors of the economy, and a strengthening reliance on "non-labor" related sources of income, which includes retirement, investment and rental income.

Taking an average of the annual rates of growth in *total personal income* over this period, shows that while the U.S. grew at an average rate of 8.6% annually, South Florida grew at an average rate of 11.4%, and the Region grew at an average rate of 10.5%. On the face of it, it looks like impressive growth for the Region, but because of the high rates of in-migration of elderly retirees and farm worker families into Central Florida, growth in *per capita income* paints a dramatically different picture of the progress actually made. Between 1969 and 1992, it is clear that while U.S. *per capita income* rose at an average rate of 7.5%, and Florida's improved at an average rate of 7.7%, per capita income in the Region grew at an average rate of 7.4%. During a period of more than two decades, a small difference in growth rates can become greatly magnified. Regional *per capita incomes* were as high as 89% of the State in 1978, but by 1992 the proportion fell to only 81.5%. Nominal per capita income, nominal is not adjusted for inflation, stood at \$20,105 nationally in 1992, at \$19,711 in Florida, and \$16,102 in the Region.

Concern #2: Is there anything the public agencies can do to develop policy that would stop the decline in per capita income in the Region?

The Changing Composition of the Regional Economy:

A look at the changing character of the Region's economy over the last two decades against the economic history of the United States, provides an illuminating picture of just what kind of progress has taken place in the Region, and how little things have changed in its rural counties. Employment and income in the retail, services, government, and financial, insurance and real estate (FIRE) sectors of the regional economy are all increasing their shares of non-farm earnings. The shares of the economy claimed by agriculture, mining, manufacturing, construction, communications and every other sector are shrinking. This section concentrates on the decline of the agriculture sector and the rising importance of income derived from "non-labor" activities.

Agriculture remains one of Central Florida's base industries, despite the fact that as a percentage of total economic activity its role is less significant than in the past. A base industry is one that provides the means to import income and wealth into the Region from the outside. Today, it is often referred to as a "value-added" industry. Personal income data from the U.S. Department of

Commerce shows that in the Central Florida Region as a whole, farm related income made up approximately 4.5% of total personal income in 1992. Although this is less than half the 1972 figure of 11.5%, it remains more than four times higher than that of both Florida and the U.S. As a point of comparison, the last time that farm related income constituted 4.5% of total personal income in the United State was in the middle 1950's.

The reasons for the Region's dependence, yet decreasing reliance, on agricultural related economic activities stems from any number of ingredients. The most obvious reason is that much of the land is best suited for growing citrus and pasturing livestock, especially since urban pressures are far less intense in Central Florida than in the coastal areas of the Peninsula. The decline is economic rather than physical.

Individually, the counties of the Region are highly dependent on farm income. As compared to the aggregate 1992 Regional level of 4.5%, farm income accounts for 12% of total income in DeSoto, 18% in Hardee, 7.5% in Highlands, 13% in Okeechobee, and even 2.5% in Polk County. All of Polk's rural sister counties remain in the top ten counties most dependent on farm related income in Florida. You have to look back prior to the 1930's to find a time when agriculture comprised more than a 10% share of U.S. personal income.

That agriculture is a shrinking piece of the action is best illustrated by the fact that there has been very little growth in the actual dollar value of income generated by agricultural production in the Region. Another reason typifies the risk in practicing agriculture. Freezes occurred during the 1980's and destroyed three citrus crops and a significant number of the Region's citrus trees. To complicate the situation further, the adoption of certain environmental policies shifted economic windfalls and wipeouts to farmers in the Region as well, like the "clean up of Lake Okeechobee", which resulted in the loss of almost half of the dairy industry in Okeechobee County, even though some of the farms later relocated to Hardee and DeSoto Counties. The result has been a stagnation of the Region's agricultural income growth over the past twelve years. ***Personal income data, in fact, shows that total 1992 farm income was approximately equal to the total 1980 farm income in the Region.***

Concern #3: If, as it appears, per capita income for workers in agriculture is extremely low, is farm related income subject to the National trend toward a widening gap between rich and poor? And if so, what can be done to raise farm worker wages?

The shrinking percentage of farm income as a portion of personal income is explained in two other ways. First, it is the natural result of relatively strong rates of national expansion in non-farm labor and proprietor earnings, and second, the declining importance of agriculture in the Region's economy is a function of the powerful rise in non-labor income sources during the

1980's. Non-labor income is derived from interest on investments, rent, and "transfer payments", which include pensions, annuities and social security, not from holding a job that pays a regular wage. The influx of elderly retirees into the Central Florida Region over the past twenty years has dramatically increased the role of transfer payments and property income as sources of personal income. Retirees are not the only ones to blame, however, because income producing investments in real estate are also included in this category of income.

This trend has been most pronounced in DeSoto, Highlands and Okeechobee Counties where transfer payments now make up more than 25% of total personal income. Highlands County has also experienced strong growth in the property income (Dividends, Interest and Rent), which has risen to 28% of total personal income. In fact, *in Highlands County only 47% of all personal income is generated by labor related activities*. The same phenomenon has taken place in Polk County as well, but to a lesser extent. During the past twenty years the proportion of property income as a percentage of total personal income rose from 13.8% in 1972 to 18.3% in 1992. Over the same period, transfer payments climbed from 12.8% to 20.3%, for a combined total of 39.1%.

The Region continues to be increasingly reliant on transfer payments, while the State and South Florida are more dependent on property income. The combined result is approximately the same. The Region derives 41.2% of its income from the transfer payments and property income combined, while in all of Florida they make up 41.5% of total personal income. Although the magnitude of increase is predicted to be lower in the next ten years due to a slowing of retiree in-migration, forecasts by the University of Florida (BEBR) indicate that the percentage of income derived from non-labor sources in the Region will increase by an additional three percent by the year 2005.

Employment:

Growth in the retail and service sectors is primarily a response to the market demand for goods and services required by the Region's people and businesses. In other words, as the population grows, the economy grows, and these sectors grow fastest. The leading retail sectors in the Region include; grocery stores, department stores, and eating and drinking places, which are all among the top ten individual employment categories as a percentage of total Regional employment. But also, in the top ten ranking by SIC are public school teachers, contract farm labor, medical services, and temporary help. To gain insight into the employment growth, second quarter 1984 data was aggregated and compared by division to the second quarter of 1994. This data is compiled by the *Florida Department of Labor and Employment Security* from federal unemployment insurance program records. Although the Regional employment totals across all data sources do not exactly coincide, they are the only available post-1992 sources of county employment by sector. On a sector basis, the fastest growing industries in the Region have been Private Agriculture (40.0%), Government (47.5%), Direct Services (50.8%), and Transportation, Communications and Public Utilities (42.3%).

Although job creation is always a preferred position to the alternative, the problem with the past ten years of growth is that almost 60% of the new jobs created in the Region came from the three lowest wage earning industries (Agriculture, Retail, Services). All else remaining the same, when you extend this trend, it quickly becomes evident that the net result is a pronounced reduction in the Region's average effective real wages. *This trend will lead to a situation in which you have more people employed, accompanying lower unemployment, but low total real wage and salary earnings.*

Unfortunately, during the past ten years, the Region has also experienced reductions in employment in the goods producing sectors, which further compounds the wage issue. Durable Manufacturing and Mining employment fell by 10.1% and 29.3% respectively between 1984 and 1994. Construction jobs were 0.6% off their 1984 levels, but non-durable manufacturing jobs have lost 7.6%. In all, there was a loss of 3,647 jobs across these higher paying industries in the past decade. This defines the classic dilemma for economic development in Florida. Supplying more jobs for a low skilled work force means jobs pay lower wages and do not add "value" to the economy.

Concern #4: Can the value of retail, services and agricultural employment be increased in the Region, or would that simply cut into the disposable income of retirees and the individual employed in those sectors?

Based on BEBR's 1994 long-term forecast, during the next ten years (1995-2005) the fastest growing employment sectors of the Regional economy will be services and retail trade, which will each expand by approximately 28%. Contrary to past trends, however, there are expectations for solid gains in both construction (20%) and manufacturing (6.5%). On the other hand, employment in the Region's mining industry is expected to fall by an additional 6% over the next ten years. These rates of employment growth and decline closely follow the rates predicted for Florida, but there is a notable divergence in anticipated employment growth in the FIRE (finance, insurance and real estate) sector. Statewide, there will be a 30% increase in jobs in this sector from 1995 and 2005, but the Region is predicted to grow at a significantly slower rate of 19% over the same period. The reason for this prediction is probably obvious when you acknowledge the growing success of Tampa and Orlando, and other major metro areas, in attracting financial and insurance back-office operations. Another way to interpret the forecast is to admit that growing metro areas are powerful magnets for corporate concentration, and to accept the fact that the Region lies in the "hinterlands" where only those locations, both residential and commercial - industrial, with almost direct access to I-4 will benefit from new industry and job creation.

Wages and Salaries:

The five highest paying industries in the Region during the second quarter of 1994 were; security

and commodity brokers, non-metallic mining, chemicals manufacturing, utilities and communications, engineering and management services. At the bottom of the list were harvesting, motion pictures, eating and drinking places, and berry farming. The top five industries for wage growth in the past ten years were; employment agencies, non-metallic mineral processing, surety insurance, non-metallic mining, and agricultural chemical manufacturing. Wage rates across the board look encouraging, because in many cases they have risen by more than fifty percent in ten years, but again they are "nominal", so an adjustment for inflation is necessary before we can say how well off we are. To do this, we start by computing an estimate of the weighted average wage rate for comparable periods in 1984 and 1994. This approach allows us to capture the net effects of the changing composition of employment in the Region. In nominal terms, average wage rates were \$14,752 for the second quarter of 1984, and \$21,191 for the same quarter of 1994. To account for the inflationary effects on wage levels over the ten year period, the Consumer Price Index for each period was applied to produce real average wages in terms of 1982 dollars. *The results show that the increase in the Region's real average wage was 0.6% from 1984 to 1994, which amounts to a rise in real wages from \$14,253 to \$14,347.*

Concern #5: What forms of diversification in the economy of the Region will lead to growth in real wages?

Labor Force and Unemployment:

The dominant source of labor in the Central Florida Region is harbored in Polk County. While the resident population base in Polk provides most of the Region's total work force, the percentage has been falling over the past fourteen years. According to Local Area Unemployment Statistics provided by the Florida Department of Labor and Employment Security, in 1980, the County's labor force represented 79% of the Region's total labor market. Since that time, relatively strong labor force growth in Highlands and Okeechobee Counties, along with a recessionary period that lasted longer in Polk County, have whittled the advantage down to its 1994 level of 76%.

Average annual rates of labor force growth in the Region over the 1981 to 1994 period ran from a low of 2.0% in Hardee to a high of 4.7% in Okeechobee County, with the Region as a whole running at annual rates of approximately 2.6%. As a point of comparison, the rate for Florida over the same period averaged 3.4%. Although Okeechobee and Polk Counties had 1994 growth rates that were moderately above the State, the remaining counties have been either flat or declining (as a percentage) during each of the past three years.

DeSoto County has experienced consecutive declines in its labor force every year since 1991 due to falling labor force participation among its working age population, even though its working age population is growing. In 1994, DeSoto labor force participation rates stood some 7.0% below their 1991 level of 67%. There is nothing to indicate that this trend will turn around, so

predictions are that participation rates will likely drift back to their "normal" level of around 55%. On the other hand, it is difficult to explain why labor force participation rates have been running exceptionally high in Okeechobee County in the past five years. During 1994, the county's participation rate peaked at 78%, some 13% above its long term average of 65%.

It was demonstrated earlier that due to the large agricultural presence in the regional economy, the Central Florida Region has historically had notably higher rates of unemployment by comparison to most other regions of the State. During the early to mid-1980's, when both the agricultural and mining industries were in a slump, Regional unemployment rates consistently ran above 10%. Following this period, unemployment rates for the Region have remained two to three percentage points above Florida's. There is recent evidence that this trend may be subsiding, due to the changing composition of employment away from agricultural and mining related activities. Polk County, at least, has made significant strides in reducing joblessness and appears to be on track to converging with statewide unemployment levels.

By a wide margin, the most chronic and severe unemployment problems exist in Hardee County. During the past fourteen years, there have only been three years in which unemployment levels have dipped below 10%. In fact, during the most recent three years of available data, unemployment has remained above 14.0%. After a number of years in the late 1980s and early 1990s of below statewide levels of unemployment, beginning in 1992, DeSoto County has also experienced a dramatic rise in joblessness. Unemployment rates of 9.9% in 1993 were more than double the rates experienced only five years earlier. It is interesting to note that this rapid rise in unemployment occurred at a time when the County's labor force was, in fact, in decline.

As mentioned earlier, much of the Central Florida Region is situated in the labor sheds of larger metropolitan areas. Of particular importance, is the proximity of Polk County to the Orlando and Tampa Bay labor markets. Information on commuting patterns in 1990 indicates that in 1989 approximately 16,600 workers, or slightly greater than 7.8% of the Region's labor force, worked outside the Region. The most significant counties for attracting Regional workers were Hillsborough (30.8%), Orange (31.9%), Osceola (18.7%), and Charlotte (6.2%). With respect to the types of jobs held by these individuals, the most frequent occupations were in sales (11.7%), supervisors (10.7%), cleaning (10.4%), construction (10.1%), transportation (8.7%), and executive and administrative (6.7%) employment.

In addition to exporting labor to other markets, the Region also imports approximately 5.0% of its total employment base. The workers who come into the Region are a different breed than those we export. On a net in-flow basis, the largest divergence occurs in white-collar occupations, such as, executive and administrative, lawyers and justice, health technicians, mathematicians and computer operators, managers, and engineers and architects. The Region supplies Hillsborough, Orange and Osceola Counties with an additional source of primarily lower skilled workers, and draws skilled workers who fill a portion of the Region's higher paying jobs. *The net result is an indication of a transfer of wealth out of the Region.* Unfortunately,

this data does not provide insight into the central question.

Concern #6: Does the Region have an adequate supply of labor to meet the demand for highly skilled and professional jobs?

There are a number of possible answers. One is that the jobs come with firms expanding into the Region who employ a staff that does not wish to move here. When the power companies were making plans for new generating stations in Hardee and Polk Counties, they predicted that the skilled positions at the plants would come from the Tampa area. Another explanation is that as regional firms modernize and refit for the future, the people with the experience are found with larger national and international firms, and they are usually found in the metropolitan areas. Once recruited, the result is the same, because in many cases, professional and technical people value the broader choices in education, entertainment and cultural activities that Tampa and Orlando offer. Or simply, the explanation may be that we do not train these people here, so the supply must to come from somewhere else.

Another aspect of the "wealth drain" is the growing trend for the location of district and regional operations and franchises in the Region. One clear indication of this trend is the location of distribution and warehousing in northern Polk County near I-4, some of which is locally owned, but much of which is controlled by national corporations. The decline of the mining, agriculture and manufacturing sectors of the economy means that greater dependence for creation of value added industries is shifted to privately owned companies, such as, Publix, medical facilities and the aggregate of hundreds of small businesses to retain the profits of business activity. District and regional operations and franchises provide employment to people in the Region, but the profits (the wealth) goes to places like Atlanta, Chicago, Los Angeles, and overseas to Tokyo and London.

Education and Economic Growth:

There is little doubt that the Region's work force is at a distinct disadvantage compared to its surrounding labor markets. Educational attainment data from the 1990 Census shows that 34.1% of the Region's population over age 25 have some college education or hold at least one degree, as compared to 47.8% for all of Peninsular Florida. ***Recently, it was reported that although more young people are graduating from high school in Central Florida, fewer people in the Region have bachelor degrees.*** The differences become progressively more divergent for higher levels of educational attainment. Only 4.1% of the people in the Region have graduate or professional degrees, compared to 11.2% in South Florida. Other Florida Department of Education data shows that SAT scores for students in the Central Florida are lower than both Peninsular and Florida averages.

Although there are efforts being made in the community to remedy these problems, it is paramount for the future growth of quality employment that these measures be brought closer in

line to those of the surrounding labor markets. Based on demographic forecasts by the Florida Consensus Estimating Conference (1994), annual growth in the Region's working age population will continue at its current rate of approximately 2.0% through the year 2000 before trending down to 1.25% by the year 2010. This same general trend is expected to take place around the State during the next fifteen years. Assuming that labor force participation rates remain steady, which may take a leap of faith in some counties, from a supply side perspective, lower rates of labor force growth will be a constraining factor on future economic growth for both Florida and Region.

A First Summary:

The analyses in this study have dealt with total personal income, per capita income, labor and employment, changes in the sectors of the regional economy, wages and earnings, job creation, wealth and education. So, how can we distill it down to what we need to know? One way is to say that from the study we now know that, total personal income is greater than it was twenty-five years ago; that per capita income is almost five times what it was in 1969 and has increased by \$4,500 in the last ten years; and that more people are working now than in 1970, or any year since. We can also feel confident that there are more jobs, higher wages on average, and that some sectors of the economy are growing faster than others. The problem is that some sectors are retracting, and wealth and educational attainment are stagnate.

As much as the income and jobs numbers have increased, the study proves that the Region has barely kept pace with inflation, and has indeed lost ground when compared to most of our South Florida neighbors, the State as a whole, and the U.S. High rates of population growth mask the fact that more aggregate dollars in our regional economy does not mean more wealth. More people simply means that the money must be divided among more of us. Our per capita income has drifted to 81% of the State's from 89% in 1978, and the real average hourly wage in the Region has only risen a nickel an hour in ten years!

Most of the study to this point has compared the Region to Florida, the United States, and in a few cases to South Florida. This is the way it is normally done, but all of these "places" are very urban, so of course, a region as rural as Central Florida will not have incomes, wages, wealth or the education the urban places have. It might make more sense to compare us to a group of rural counties in North Florida, but unless they are Big Bend counties with the paper industry, they will not stand a chance against us with our citrus, phosphate and proximity to Tampa and Orlando. We would look great.

We have also compared ourselves to our past, which may be the most valid measure of our progress. That was the basis of the section on agriculture, but there are other comparisons about agriculture that are less rigorous, but far more telling. For instance, according to Lee Tillman, a planning council executive director and member of the Board of the National Association of Development Officials (NADO), only 16% of farm households nationwide derive their income

from farming. **Service industries employ 29% of rural Americans, and manufacturing industries employ 21%.**

We know in our own Region that services employ over 26% and manufacturing 13.5%, less in both cases than the national averages cited the previous paragraph. If Polk is excluded from the regional averages, the numbers change dramatically. In DeSoto, Hardee, Highlands and Okeechobee Counties together, services employ 32.5% and manufacturing only 7.7%, significantly higher and lower numbers. What does it mean? It means that the four counties are more isolated from manufacturing investment and jobs than the average rural county in the United States. It also means that they are more dependent on services employment, which is low wage employment. Polk County employs 30.6% in services and 17.3% of its work force in manufacturing. Using these measures and setting aside the County's 2.5% agricultural employment, Polk looks a lot like an average **rural** county in America.

Polk County's advantage is its location, its adjacency to Orange and Hillsborough Counties, but even that has not made the County fully urban. Overall, these comparisons simply reinforce how suburban its largest county is, and how rural all of the Central Florida Region is. It is our history. Everything points to it being our future, but the perhaps the future of rural Florida is different than the past. Perhaps there are other markets and other activities that can be undertaken that will create new definition of what rural regions and communities do to grow and attract investment and entrepreneurs to build their economies around their natural environment and their rural quality of life. Perhaps the setting is a product in itself that is sought by more than ten million South Florida neighbors who have yet to discover the benefits of a few days away from the beach and the attractions. Tapping the market ten million people create with innovations of our own appears to be the key to future growth and increased wealth in Central Florida.

State Comprehensive Plan Goal for the Economy: Florida shall promote an economic climate which provides economic stability, maximizes job opportunities, and increases the per capita income of its residents.

Regional Goal 2.1: Unite local economic development endeavors to increase the wealth of the Central Florida Region.

Indicators:

- a. Increase real average wages to \$7.50 per hour.

Policies:

2.1.1: Attract, expand and retain quality employment for residents of the Region, expand and

enhance the Region's economic base, and promote foreign investment.

Strategies:

- 2.1a The Regional Planning Council will establish a clearinghouse to rapidly disseminate information to local governments, economic development organizations, agencies, chambers of commerce and individuals in the Region.
- 2.1b Regional Planning Council conduct research, provide information and otherwise assist economic development and chamber professionals to reach a better understanding of the value and needs of entrepreneurs in the Region; in order to, direct investment in ideas and technologies that will hold and increase wealth in the Region. s.187.201(22)(b)2,6&12.F.S.
- 2.1.2 Promote business and agri-business development and expansion through partnerships among State, regional and local economic development organizations.

Strategies:

- 2.1c The Regional Planning Council and local economic development organizations will conduct quarterly workshops to the exchange ideas and the coordination of economic and industrial development efforts among the chambers of commerce and the industrial and economic development agencies of the Region. s.187.201(22)(b)6.F.S.
- 2.1d The Regional Planning Council shall act as liaison and promote an organization of chambers of commerce and economic development professionals to act as a unified voice for the Region's economic development interests and to provide assistance in economic development efforts; especially in cases where projects of benefit to the Region are threatened by Federal, State and regional permitting agency action.
- 2.1e The Regional Planning Council, local economic development organizations, and interested groups will conduct research on the Internet and in periodicals for businesses that are decentralized and are looking for micro business partners.
- 2.1.3: The Regional Planning Council will promote the efforts of county and city agencies, chambers of commerce and similar organizations in their local economic development efforts.

Strategies:

- 2.1f The Regional Planning Council work with local economic development agencies

to promote the creation of new businesses.

- 2.1g Local economic development agencies identify and utilize incentives to attract businesses to the Region.
- 2.1h The Regional Planning Council, with Enterprise Florida, the Governor's Office of Trade, Tourism and Economic Development and local economic development agencies promote international trade in the Region.
- 2.1i In support of one stop permitting and expedited permit review, the Regional Planning Council shall communicate with representatives of permitting agencies and business, to resolve problems and promote understanding between the parties.
- 2.1j The Regional Planning Council shall conduct two workshops annually to present a review of permitting and economic development activities in the Region to representatives of the permitting agencies and economic development interests.

Development Programs:

The Central Florida Regional Planning Council has also been an Economic Development District (EDD) since 1976 when four counties qualified as "distressed" under the criteria established by the U.S. Department of Commerce, Economic Development Administration. Polk County qualified for this dubious distinction in 1980. Although all of the counties are distressed in some way, the advantage of the designation as an EDD has made possible the award of grants and low interest loans throughout the Region for infrastructure improvements to support the location of industrial development. The ongoing budget disagreement in Washington, which began in the fall of 1995, have placed the EDA and its programs in jeopardy. Funding is certain to be cut, but the depth is unknown. The Planning and Technical Assistance Grant, which funds one staff position at the Regional Planning Council, has been automatically extended for December 31, 1995 to March 31, 1996 and then to June 30, 1996.

The major purpose of the economic development activities under the EDA Program are; (a) to prepare an *Overall Economic Development Program* plan, which describes the economic conditions in the Region, sets priorities for funding, and qualifies projects in the Region for Federal grants and loans that result in permanent job creation; (b) to provide technical assistance to local governments in the preparation and filing of applications for funding; and 8 to track progress in business operations around the Region. The EDD prepares a bimonthly newsletter and coordinates activities with chambers of commerce and economic and industrial development boards and agencies. In the past two years, financial assistance and staff support has been provided to the Florida Heartland Rural Economic Development Initiative (FHREDI) in marketing the rural counties of the Region and supporting organizational endeavors.

The counties and cities of the Central Florida Region are represented by at least seventeen chambers of commerce and nine economic, industrial and downtown development organizations. They are a powerful force in attracting and developing businesses in their areas. One common characteristic of the lions share of businesses that have come into the Region in the last decade is that they represent regional or district offices; distribution, wholesaling, and warehousing operations; and corporately held franchises and branches of larger U.S. regional and national, and international firms. Perhaps this pattern is unavoidable, given our location outside the metropolitan areas of South Florida. These business provide jobs for residents of Central Florida, but as was pointed out earlier, the wealth of the parent companies is invested elsewhere.

There are many examples of local businesses that have thrived and reinvested heavily in their communities and the Region. What is important is that development organizations concentrate more now than in the past on developing new businesses that retain wealth in the Region, which admittedly is a far more difficult assignment than getting a branch bank, a Hardees or a Wal-Mart Distribution Center. The pay off in the long run, however, is far greater.

Concern #7: Can public and private economic development interests create a diversification strategy that will inspire entrepreneurial opportunity, reduce risk, and improve the chances of the success for small and large businesses and investors in the Region?

Economic development organizations and chambers of commerce are essential players in the process of growth and prosperity. The counties and cities of the Region must continue to sustain their efforts and to provide increasing investments in their activities. Only Polk and Okeechobee Counties levy the tourist development tax, known as a "bed tax". Whenever possible, local governments, and especially counties, should enact lawful user fees and tourist development taxes to expand their local efforts to build and diversify the regional economy.

Regional Goal 2.2: Sustain county and municipal economic development.

Indicators:

- a. Establishment of a regional revolving loan fund.

Policies:

- 2.2.1 Develop local and regional infrastructure throughout the Region to support economic development activities.

Strategies:

- 2.2a The Regional Planning Council will serve as a catalyst and facilitator to provide Federal and State financial and technical assistance to local economic

development organizations and local governments.

2.2b The Regional Planning Council will actively seek and assist local governments and economic development organizations in obtaining business development and expansion capital from federal and state program established for that purpose.

2.2c The Council will also work to develop more sources of funding for infrastructure development within the Region.

2.2d The Regional Planning Council will assist local governments and economic development organizations in applying for funding for rural economic development activities throughout the Region.

2.2.2 Establish a revolving loan program.

Strategies:

2.2e The Regional Planning Council will coordinate the establishment of a shared pool of capital from regional banks for the purpose of funding expansion and development of businesses that provide new, permanent jobs for residents of the Region.

2.2.3: Entrepreneurs and small businesses receive timely financial and educational services for business start up, expansion and diversification from experienced advisors and trainers. Skills and competence training is readily available through the Workforce Development System of the Jobs and Education Partnership of Enterprise Florida.

Tourism:

Tourism fills a major economic role in all of Florida. Year round residents initially came to the State on business, on vacation, or for the season, then decided to make Florida home. According to a recent survey, the beaches remain the top attraction for both domestic and international visitors, and the attractions spread across Central Florida are second. The Central Florida Region is not known for theme parks and large attractions and has only the new Fantasy of Flight, located on I-4 just east of Polk City, in addition to the Region's original attraction Cypress Gardens, which was transferred from corporate to private ownership in 1995. The second attraction in the Region was Circus World, which became Boardwalk and Baseball, but it was dismantled by Anheuser-Busch in 1992. Bok Tower and its botanical gardens are a noted attraction, as are the annual racing events at Sebring and the four Major League Spring Training sites, but they are certainly not attraction in the true Florida mold. Another finding of the survey was the desire by many visitors who stay up to a week in the Orlando and Tampa areas to explore "the real Florida". This rising interest in other forms of tourism is encouraging for the Region,

which historically has drawn tourists to recreational pursuits in its natural resources. On a regional basis, tourism is considered the “third industry” behind citrus and phosphate mining, although wages and salaries and business income do not exactly confirm this perception.

Tourists and winter visitors are drawn to certain natural resource attractions in the Region, like Winter Haven's Chain of Lakes, the Peace River, the Kissimmee River and Lake Okeechobee, plus the Region’s three State Parks at Lake Kissimmee and the Van Fleet Trail in Polk County and Highlands Hammock in Highlands and Hardee. The Van Fleet Trail opened in 1992 and registered about 9,000 visitors a year for its first two years of operation. At the other two parks attendance declined between 1991 and 1994 by sixteen and forty-two percent! Statewide, during the same time period, attendance at State Parks has fallen off less than three percent.

Lake Okeechobee is a particularly popular place for fishing and boating and lures thousands of winter residents. The Kissimmee River has also been popular with fishermen and winter campers. In 1987, the Kissimmee River Resource Planning and Management Committee completed a strategy for tourism and economic development for the Kissimmee-Okeechobee region that focused on Highlands, Okeechobee, and Glades Counties. One element of the strategy was aimed at preparing communities for development. Another proposed that the three counties coordinate the establishment of a regional organization to promote tourism and economic development. Out of the committee’s recommendations has come today's Greater Lake Okeechobee Tourism Alliance (GLOTA), which includes two coastal counties outside the Region and the South Florida Water Management District as active participants.

Tourism generates jobs. Overall, Florida saw an increase in employment in tourist related industries of almost 122 percent between 1980 and 1993, the latest reporting year. In 1993, 929,018 Floridians were holding jobs in the tourism industries, but jobs of this kind were far fewer in the Central Florida Region than in neighboring regions of South Florida. In fact, only two percent of the jobs in amusement and recreation and 2.8 percent of the jobs in eating and drinking places were in the Region. By comparison, four percent of the people reside in the Central Florida Region. Some of the obvious reasons for the deficit are; the small number of employment intensive attractions, the total absence of beaches, and the lack of a major airport in the Region. Others reasons, which may be less apparent, include; the passive nature of scattered sites in small towns, and perhaps most of all, the Region’s assets, whatever they may be, are unknown even to the 10,000,000 people who reside within an hour and a half of South Florida’s interior.

Concern #8: How can the Region increase the number of visitor days potentially available in the South Florida market area.

The Florida Department of Commerce conducted a 1984 survey of visitors arriving by air and auto, which included a survey of visitors arriving in Polk County by auto. It revealed several interesting things. Florida is a preferred meeting site, because business can be combined with

pleasure, as a result, business and meeting visitors often return as leisure visitors, and vacationers come back on business. The State had approximately 90% repeat visitors who arrived by air or auto, and over 80% of Polk County's visitors who arrived by auto had been to the county before, and were returning on vacation or to visit friends or relatives. One reason is that business travelers who arrive by air stay near Tampa and Orlando's International airports, which are only an hour away from literally all of Polk County. And, if pleasure is part of the trip, the metropolitan areas offer more and better known options.

There is a need for a thorough inventory of recreation and tourism assets in the Region, and the development of a strategy to develop and promote them. An essential element of the strategy is to conduct market research to answer crucial questions about trends in local and regional tourist markets, such as demand, absorption levels, the demographics of current and potential visitors, and seasonality, and to investigate the effectiveness of current advertising and marketing strategies. Other regions of the State have completed similar studies and have begun to build destinations within their small towns and rural areas that are attracting large numbers of first time visitors to Florida.

Regional Goal 2.3: Establish the Central Florida Region as a major destination for tourists.

Indicators:

- a. Completion of Tourism Development Strategy.
- b. Annually increasing numbers of visitor days in the Region.

Policies:

2.3.1: Develop a strategy to increase tourism.

Strategies:

- 2.3a A Tourist Development Committee made up of representatives of the industry from all parts of the Region, including the Florida Heartland Rural Economic Development Initiative (FHREDI) and its Greater Lake Okeechobee Tourism Alliance (GLOTA) will be established to guide and direct the development of the strategy.
- 2.3b The Regional Planning Council and local economic development organizations, tourism organizations and chambers of commerce will develop an inventory of tourism assets in the Region.
- 2.3c The Regional Planning Council and local economic development, tourism

organizations and chambers of commerce will complete a Tourism Development Strategy that spells out actions to be taken to promote Central Florida as a destination for ecotourism, weekend getaways, resort and second home development, and other associated endeavors.

2.3.2 Market and promote the attractions, recreation and leisure time resources of the Region.

Strategies:

2.3d The Regional Planning Council and local economic development, tourism organizations, and chambers of commerce will develop and undertake a coordinated and concerted marketing program to target Floridians and others.

2.3e Promote open space and natural ecosystems as a means of developing a sustainable tourist trade.

Public Investment for Economic Development:

Modern infrastructure and commercial and industrial sites ready for development are often praised as the two essential ingredients for successful economic development. Perhaps, but a great deal of activity and negotiations precede the decision to build, and it is not just trade shows, target industry plans and industry recruiting. Both the private and public sectors plan, design and finance subdivisions, roads, water and sewer systems. Success in managing the growth of counties, municipalities and the combined communities they create is more than one site with all the improvements in place. Infrastructure is too expensive to make it available to far flung locations, and too expensive to duplicate through needless competition.

In the rural counties of the Region, urban services are available from the municipalities and in areas near the highest concentrations of development. Large scale developments may have private systems, and there is no central utility, except perhaps in the agreement between Okeechobee City and the County to provide potable water. In Polk County, the situation is different. The County is a utilities provider in unincorporated areas outside municipal Utility Services Areas. Conflicts arise as development expands to the edges of the Utility Services Areas, and available capacity to serve development is often not the factor that determines whether the county of a city will capture the new customers.

Regional Goal 2.4: Plan, develop, reinforce and link infrastructure systems to serve business and industrial location and expansion.

Indicators:

a. Number of cooperative, interlocal agreements for linking and transfer of capacities to

meet development proposals.

- b. Number of business and industrial locations and expansions that require only hook up and impact fees payments, rather than construction of utilities to meet their requirements.

Policies:

- 2.4.1: Link existing municipal and county water distribution systems where it will insure the full and efficient supply of potable water for all urban demands, but especially the requirements of business activities that create new, quality jobs in the Region.
- 2.4.2: Link existing municipal and county sewer collection systems where it will insure the full and efficient treatment all urban effluent, but especially the requirements of business activities that create new, quality jobs in the Region.
- 2.4.3: Plan, budget and invest in local roadway links that facilitate intermodal access.

Strategies:

- 2.4a The Regional Planning Council, FDOT and the Polk Transportation Planning Organization will assist local governments in planning links to the intermodal system.
- 2.4b The Regional Planning Council, FDOT and the Polk Transportation Planning Organization will encourage and support the efforts of local governments to expand local and regional airports to increase economic development activities.
- 2.4c The Regional Planning Council will encourage and support the efforts of local governments to expand and create an appropriate supply of regional and local industrial and business parks to support future development.

3. REGIONAL TRANSPORTATION

“Let me sit by the road and be a friend to man.”

- - - -Unknown

This Region’s people rely almost exclusively on their private vehicles to travel the Region, putting the emphasis of regional transportation on the highway and road systems. The highway system provides the key connection between other transportation systems in the Region, such as rail and air. If travel on a commercial air carrier is desired, passengers must leave the Region, probably via the highway system, to reach an airport which provides this service. The passengers and much of the goods moved by rail must use the highway network to reach their final destinations.

Highway System: The CFRPC is located within FDOT District One. The District One Planning Department has in the past provided a planning level of detailed, level-of-service (LOS) spreadsheet documenting conditions on the State Highway System. The LOS spreadsheets are intended to provide a “reasonable” estimate of overall level of service for a section of highway (including delays encountered by traffic passing through a series of intersections). They do not, however, provide information on traffic conditions at individual intersections. More detailed “traffic operations” techniques need to be used to analyze intersection-specific conditions.

Previously provided 1994 spreadsheets are now out of date and FDOT has requested that the CFRPC no longer use them. FDOT will provide updated LOS spreadsheets for Hardee, Highlands, DeSoto and Okeechobee Counties that reflect *current* level-of-service utilizing the FDOT LOS Manual generalized tables. The Department and CFRPC staff have agreed upon a cooperative effort, utilizing the expertise and input of the applicable local government to determine *future* LOS trends and projections. Polk County already is provided current LOS; and long range 2020 year forecasts (by modeling future traffic, based upon future land use assumptions), by their Transportation Planning Organization staff. FDOT District One current and annual LOS spreadsheets for DeSoto, Hardee, Highlands, and Okeechobee Counties and needs on regionally significant highways will be determined for this information.

All Federal Department of Transportation (FDOT) Intrastate Highway System roads, Interstate Highway System roads, State Highways, and U.S. Highways are regionally significant. Many other roadways are 'regional' in nature, because they form vital links between other major roadways, even though they may not, in and of themselves, serve more than one county. In addition, all hurricane evacuation routes are classified as regional facilities regardless of their normal classification.

Table 1 below lists regionally significant roadways in the region, identifies problems or concerns with that roadway and designates if it is an evacuation route. Regionally significant connecting links may be identified on a case by case basis through a DRI Transportation Assessment.

Table 3-1: Regionally Significant Central Florida Highways

| Highway | From | To | Evac. Route | Problems/Concerns |
|------------------|--|----------------------------------|-------------|---|
| US 17 | Charlotte County line | Polk County line (becomes 17-92) | Yes | 2 lanes in parts of Bartow and Winter Haven. LOS D&F in Winter Haven |
| County Line Road | SR 60 | I-4 | | |
| US 27 | Glades County line | Lake County line | Yes | |
| US 98 | SR 70 (Okeechobee) | US 27 (Highlands) | Yes | |
| US 98 | US 27 | Pasco County line | Yes | 2 lane in area of Ft. Meade and Dade City |
| US 98/441 | Martin County line | SR 70 (Okeechobee) | | 4 lanes in Okeechobee City |
| US 441 | SR 70 | Osceola County line | Yes | 4 lanes in Okeechobee City |
| US 92 | Hillsborough County line | US 17 (Polk) | Yes | 6 lanes in Lakeland, LOS D & F in Lakeland area |
| I-4 * | Hillsborough County line | Osceola County line | Yes | |
| I-75 * | Small section running through corner of SW DeSoto County | | | Not a designated evacuation route for the region as there are no access points in this region. Is a significant evacuation route for residents of S.W. Florida. |
| SR 31 | Charlotte County line | SR 70 (DeSoto) | Yes | |
| SR 60 | Hillsborough County line | Osceola County line8 | Yes | 2 lanes in Bartow, LOS D in Bartow |
| SR 62 | Manatee County line | US 17 (Hardee) | Yes | |
| SR 64 | Manatee County line | US 27 (Highlands) | Yes | |
| SR 66 | Zolfo Springs | US 27 & 98 (Highlands) | | 2 lanes |
| SR 70 | Manatee County line | Highlands County line | Yes | 4 lanes in Arcadia |
| SR 70 | Highlands County line | St. Lucie County line | | 4 lanes and LOS F in Okeechobee |
| SR 710 | SR 70 | Martin County line | | 2 lanes, outside Cities and subject of flooding. |
| SR 72 | Sarasota County line | SR 70 | | |
| SR 78 | US 441 at Lake Okeechobee | County Line | | |
| | | | | |

| Highway | From | To | Evac. Route | Problems/Concerns |
|----------------------|--|-------|-------------|---|
| Kings Highway | Charlotte County line | SR 70 | | |
| Florida's Turnpike * | Small section running through corner of NE Okeechobee County | | | Not a designated evacuation route for the region as there are no access points in this region. Is a significant evacuation route for residents of S.E. Florida. |

* FIHS facility

Mass Transit Systems: The existing local mass transit service within the Region is limited to one regularly scheduled bus system which serves the City of Lakeland. The existing development pattern in the Region is widely spaced, resulting in relatively long, low-occupancy vehicle trips. This is an inefficient use of the highway system. If development continues with this pattern of highway use, it can lead to unnecessary congestion. Without any mass transit system in place at the present time, such as bus service or light rail, congestion already exists in all major commercial areas.

Large segments of the population, such as the elderly who have given up driving, teens, and the poor, are cut off from the services and amenities of the Region without mass transit service. The owners of older commercial centers and the promoters of sporting events, competing for the same group of customers that have flocked to the new malls, have failed to unite behind a mass transit system of any kind. Such a system could be specific to shopping areas and sports complexes and could radically increase their customer base.

In addition, little has been done to promote and encourage mass transit systems that would transport this Region's citizens to the courts and county and State offices located in the county seats. This lack of any system encourages discrimination of a specific nature; that is, discrimination of those citizens without a private vehicle.

Emergency Preparedness: The condition of the major roads in this Region is of great importance during any kind of an emergency, not only to this Region's citizens, but to those in the surrounding coastal areas. Evacuation routes that start elsewhere and end here must be clearly marked. But most importantly, funds must be set aside to improve these routes so that they can carry the amount of vehicles that will use them during a crises.

A 49 mile segment of the I-4 corridor, from Hillsborough County through Polk County to the Osceola County line is one of the oldest segments of interstate highway system in the State, being built in the late 1950's and early 1960's. This is the primary evacuation route to Central Florida from the both the East and West coast of Florida and the principle evacuation route for Hillsborough and Pinellas Counties. A segment of I-4, near the Hillsborough and Polk County line flooded during the Fall of 1988 during a very heavy rain. As a result, I-4 was closed at SR

579 for eastbound traffic for several days. In response to this problem, FDOT commissioned a study to improve the I-4 corridor.

The **I-4 Multi modal Interstate Master Plan Study for Polk County (I-4 Master Plan)** is to provide documented information necessary to maintain and improve interstate travel integrity on I-4 from the Hillsborough/Polk County line to the Polk/Osceola County line. The primary goal of the I-4 Master Plan was to assess the feasibility of a Multi modal corridor. Rail transit as well as high occupancy vehicle (**HOV**) demands were assessed. The improvements suggested by the I-4 Master Plan would satisfy the 2020 horizon year traffic needs. This study will evaluate and upgrade the system to six and eight lanes in Polk County by the year 2020. However, in the meantime, if flooding were to occur again during a "wet" hurricane, or other period of heavy rain, rapid movement of the evacuating population through Polk County would not be possible.

Other roadways/evacuation routes in the Central Florida Region have segments where flooding is possible. FDOT's Five Year Work Plan for District One (November, 1994), contains plans to upgrade many of these roadways through Polk County; however, flooding in the other counties will continue to be a serious issue. Alternate evacuation routes are designated for some of the primary evacuation routes, although many of the routes would not have any other roads available in case of flooding. Emergency management and law enforcement officials determine alternate routes in these circumstances.

High Speed Rail: The Florida High Speed Rail Transportation Commission has designated the Tampa Bay Area and Dade County as termini and as areas of the State to be served, with lines running through this Region. This Region will be involved and directly affected by this regional form of transportation. The CFRPC will lobby the Commission to locate stations in this Region and to construct lines that can easily be added on to with north-south connecting lines. The impending construction of the high speed lines may fuel the fire for the planning of light rail service and bus service that will link the people throughout the Region.

Trails: Bike trails have not been constructed in the Region, although surrounding regions have them. Currently the City of Lake Wales is considering designating the right-of-way for trails adjacent to residential subdivisions in the US 27-Eagle Ridge Mall area. Numerous subdivisions line US 27 and teens would benefit from access to the mall area by bike trails. There is also a planned Okeechobee County segment of the Lake Okeechobee Scenic Trail, a five-county, multi-use trail system. The CFRPC supports the construction of bike trails in a master plan system to link all five counties to each other and to the surrounding counties.

Aviation: The Partnership of Florida Airports and Communities, Florida Department of

Transportation, and the Federal Aviation Administration are the lead agencies studying the aviation issues in the State of Florida. This group of agencies completed a study titled "The Florida Aviation System Plan, Statewide Summary 1992-2010." This study was done for Florida's 103 publicly-owned airports. The Plan was written to: ensure that Florida's airports work together effectively as a state-wide transportation system; provide linkages to the global air transportation system; and, effectively interface with regional surface transportation systems.

The Florida Aviation System Plan has three goals. First, it must forecast the dollar needs and timing of airport enhancements necessary to ensure a viable system of airports to serve Florida. Second, it must provide justification for budgeting and appropriation of funds for planned airport enhancements. Third, it must guide the investment of public funds in Florida's publicly-owned airports.

At the writing of this report, the Central Florida Region is the only Aviation Planning Region in the State of Florida not served by commercial air service. However, due to the Region's projected population and economic growth, overall aviation activity is expected to increase dramatically.

This Plan projected the following impacts and needs of Central Florida Region:

-  Commercial passenger service, which was expected to begin in 1995, has not. FDOT's Plan projects that by the year 2010, over 37,000 passengers will be flying out of the Region's airports.
-  Aircraft operations are projected to increase by 25 percent from 1995 to 2010, growing from 500,000 in 1990 to nearly 672,000 by 2010.
-  The number of aircraft based at the Region's airports is expected to increase from 1990 levels of about 670 to nearly 950 by 2010.
-  The annual air cargo tonnage shipped from the region by 2010 is estimated to be approximately 195 tons per year.

The following table outlines the development needs of the Region's airports over the next ten years.

Table 3-2: Ten-year Airport Development Needs - Central Florida Region

| TYPE OF PROJECT | COST | % OF COST |
|--------------------------|-----------------------|------------------|
| Land Acquisition | \$13.2 million | 19% |
| Facility Preservation | \$1.4 million | 2% |
| Security/Access/Rescue | \$12.5 million | 18% |
| Terminals/Aprons/Hangars | \$3.5 million | 5% |
| Runways/Taxiways | \$38.7 million | 56% |
| TOTAL | \$69.3 MILLION | 100% |

Regional Goal 3.1: As a priority, protect, maintain and improve existing transportation infrastructure with available transportation funds.

Indicators:

- a. Lane miles of regional highways resurfaced, widened to standard width, and reconstructed with shoulder and emergency lane improvements.
- b. Number of access management and on-system improvements to maintain or improve capacity.
- c. Percent of transportation funds spent to maintain transportation facilities versus funds spent to construct new facilities.
- d. Lane miles of emergency evacuation routes improved with positive drainage.

Policies:

- 3.1.1 The full development of transportation facilities shall be within existing rights-of-way, wherever possible.
- 3.1.2 Make operational, safety improvements utilizing transportation system management (TSM), access management and other improvements to all significant regional transportation facilities.
- 3.1.3 Plan, support, and give priority to the repair and replacement of bridges, especially those that restrict the flow of traffic on hurricane evacuation routes.
- 3.1.4 Plan, support, and give priority to construction of road drainage projects for regionally significant highways that are designated hurricane evacuation routes and are susceptible

to flooding.

Strategies:

3.1.a As funding permits, undertake maintenance of all significant regional transportation facilities.

3.1.b As funding permits, undertake bridge widening and replacement projects, road drainage projects and safety improvement projects.

3.1.6 Protect the operational integrity of airports.

Strategies:

3.1.c Protect the operational integrity of airports from incompatible land uses by developing planning standards.

3.1d Regional Planning Council assist local governments in the development of regulations that provide for the control of tall structures, including media broadcast towers, which protects airports and the airways system in a manner consistent with airport master plans and the DOT model of the State's navigable airspace system.

3.1.7 Utilize best available data in the planning for improvements to existing transportation facilities.

Regional Goal 3.2: Coordinate future transportation improvements to aid in the management of growth, and facilitate integration of highway, air, mass transit and other transportation modes.

Indicators:

- a. Designation and acquisition of miles of high speed rail right-of-way.
- b. Number of new areas served by public transit systems.
- c. Increasing number of landings and takeoffs at airports in the Region.

Policies:

3.2.1 Support the Polk Transportation Planning Organization (TPO) in planning for extensions of service areas of the existing public transit systems in Polk County.

3.2.2 Extend any applicable rail lines within the Region that will lead to reduced levels of truck

traffic.

- 3.2.3 Improve public access to airports and airway systems to enable operations to remain viable before expansion or development of new facilities.
- 3.2.4 Support construction of the High Speed Rail system that will lead to a more balanced transportation system, minimize environmental impacts, and provide accessibility to the greatest number of people.
- 3.2.5 Regional and State right-of-way High Speed Rail corridors will be protected and enhanced.
- 3.2.6 Planning and implementation of High Speed Rail corridor siting, ancillary facilities and station development and location shall minimize environmental impacts, and provide accessibility to the greatest number of people.
- 3.2.7 Promote the planning, development and implementation of ridesharing, High Occupancy Vehicle, and other alternative transportation facilities and services by using FDOT's maximum lane standards.
- 3.2.8 Ensure that the regional transportation system provides timely and efficient access to services, jobs, markets and attractions.

Strategies

- 3.2.a Promote the Florida Cracker Trail designation.
- 3.2.b Promote the development of the Florida National Scenic Trail.
- 3.2.9 Utilize best available data in the planning for future transportation facilities.

Strategies

- 3.2.c Regional Planning Council shall assist communities in the development and implementation of plans to increase the number of bicycle paths and pedestrian walkways.
- 3.2.d Coordinate and promote transportation improvements including connections to the State Highway System, and the integration of transportation systems and intermodal transfer facilities with local governments, MPO's and FDOT.

- 3.2.e Address social and historical issues, existing and future land use patterns, displacement and relocation, timing, and other considerations directly in the planning of future transportation facilities in the intermodal system.

Transportation Disadvantaged Services

Definition of Disadvantaged Persons: *"Those persons who, because of physical or mental disability, income status, age, or children who are disabled or high-risk or at-risk as defined in Chapter 411.202, F.S. or people who for other reasons are unable to transport themselves or to purchase transportation and are, therefore, dependent on others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities."*

The State of Florida has addressed the transportation needs for its elderly, economically disadvantaged, and disabled citizens by enacting legislation, Chapter 427, Florida Statutes. This legislation mandates that all recipients of federal, state, and local transportation funds must coordinate their funds in order to provide eligible citizens transportation to life-sustaining activities. In each of Florida's 67 counties, a specialized transportation system exists and provides door-to-door transportation service to those who meet eligibility criteria.

The Transportation Disadvantaged program is administered in the region utilizing State Transportation Disadvantaged Trust Funds, local and other funds and Federal Transit Administration (FTA) funds. The Central Florida Regional Planning Council administers the Transportation Disadvantaged Planning program for Hardee, Highlands and Okeechobee Counties. Polk and DeSoto Counties also have similar Transportation Disadvantaged programs.-

A Needs vs. Demand for Service study is conducted annually in order to determine current and future demand for services. Service is tailored to the availability of the resources (financial and others). The system is continually monitored for compliance with State and Federal regulations. The 1996 Needs vs. Demand Study for Highlands, Hardee and Okeechobee identified the total Transportation Disadvantaged population eligible to receive service. The study revealed that 50% of the potential client requests for service are being met. However, 90% of the actual demand (requests for service) is currently being met at this time.

It is important that the CFRPC and program administrators for Polk and DeSoto lobby to keep these programs alive. Population pyramids have been studied for each county and the population will continue to age over the next decade. The citizens of the Region will continue to need this program.

Regional Goal 3.3: Provide access to transportation services to the transportation disadvantaged which will meet their needs.

Indicators

- a. Percentage of service demand met.

Policies

- 3.3.1 Promote the provision of transportation disadvantaged services in all counties to all eligible clients.
- 3.3.2 Transportation Disadvantaged services shall be provided by the most cost effective, efficient manner.

Strategies:

- 3.3.a Identify and acquire needed resources.
- 3.3.3 Coordinate transportation disadvantaged services with the mass transit systems in all counties that have mass transit systems.

Regional Goal 3.4: Reduce average vehicle trip lengths on the transportation system, thereby lowering energy consumption per vehicle and reducing segment volumes.

Indicators

- a. Commuter air service established
- b. Average vehicle trip length
- c. Increased car/van pooling
- d. Miles of HOV lanes added

Policies

- 3.4.1 Establish regularly scheduled commercial air carrier (commuter) service at one or more of the airports and airways systems within the Region to reduce the distance traveled on the highway network.
- 3.4.2 Promote development in close proximity to existing compatible land uses so that average trip lengths will be reduced.

Strategies

- 3.4.a Amend local government comprehensive plans to provide for development of airports to their ultimate capacity, consistent with appropriate planning, environmental considerations and compatible land use.
- 3.4.b Amend local government comprehensive plans to allow mixed-use developments that will provide both trip origins and destinations, i.e., residential land use with adjacent shopping facilities.

Regional Goal 3.5: Development shall only occur in a manner consistent with Florida Statutes requiring the concurrent provision of adequate transportation facilities.

Indicators

- a. Facilities provided concurrent with need.
- b. Adopted impact fee programs

Policies

- 3.5.1 Developments of Regional Impact shall provide for the concurrent provision of adequate transportation facilities needed to accommodate the impacts of the proposed development.
- 3.5.2 A State and regionally significant roadway segment shall be determined to be significantly impacted by a proposed development if, at a minimum, the traffic projected to be generated at the end of any stage or phase of the proposed development, cumulatively with previous stages or phases, will utilize five percent or more of the adopted peak hour level of service maximum service volume of the roadway and the roadway is projected to be operating below the adopted level of service standard at buildout of that stage or phase. If a transportation facility significant impact threshold of less than five percent is specifically adopted in an in-compliance local government comprehensive plan, then this lower significant impact threshold shall be utilized by the CFRPC as its significant impact threshold for those state and regional roadways within that local government's jurisdiction.
- 3.5.3 For State and regional roadways that are part of the Florida Intrastate Highway System, the CFRPC will evaluate transportation issues in accordance with the Florida Department of Transportation level of service standards, and action and master plans for the Florida Intrastate Highway System consistent with Subsection 163.3180(10), F.S. For all other

state and regional roadways, the CFRPC will evaluate transportation issues in accordance with the adopted transportation level of service standards of the applicable local government comprehensive plan.

- 3.5.4 Regionally significant transportation facilities are listed in Appendix A. Regionally significant highways are shown on the Map of Regionally Significant Central Florida Highways.
- 3.5.5. Development along the state, regional and local transportation corridors will observe the planned future right-of-way lines when determining set-back requirements for construction, and shall be consistent with applicable FDOT regulations and the Florida Transportation Plan.
- 3.5.6 Transportation projects shall be promoted in state, regional and local capital improvement plans that are protected by local government right-of-way protection, and shall be consistent with applicable FDOT regulations and the Florida Transportation Plan.
- 3.5.7 Interchanges shall be established along limited access routes only when they are consistent with the SRPP, the Florida State Comprehensive Plan and the Florida Transportation Plan, in accordance with applicable FDOT standards.
- 3.5.8 Right-of-way for state, regional and local government transportation facilities shall be protected, and shall be consistent with applicable FDOT regulations and the Florida Transportation Plan.

Strategies

- 3.5.a Develop and administer land development regulations and concurrency management programs to provide for the concurrent provision of needed transportation improvements.
- 3.5.b Coordinate the review, timing and sequence of driveway access permits and land development decisions between state agencies and local governments, to ensure compliance with F.S. 335.18, the State Highway System Management Access Act.
- 3.5.c Regional Planning Council assist local governments in the development and implementation of ordinances and techniques, including impact fees, that mitigate impacts to state, regional and local government public facilities.
- 3.5.d Regional Planning Council, Polk Transportation Planning Organization and FDOT assist local governments in implementing access management techniques which protect the through capacity on components of the Florida Intrastate

Highway System, to ensure compliance with F.S. 335.18, the State Highway System Management Access Act.

Regional Goal 3.6: Level-of-service methodologies shall be consistent.

Indicators

- a. Number of roadways with updated LOS determinations

Policies

- 3.6.1 Current LOS shall be available for all roadways in the region.
- 3.6.2 A process to determine future LOS shall be available for all roadways in the region.

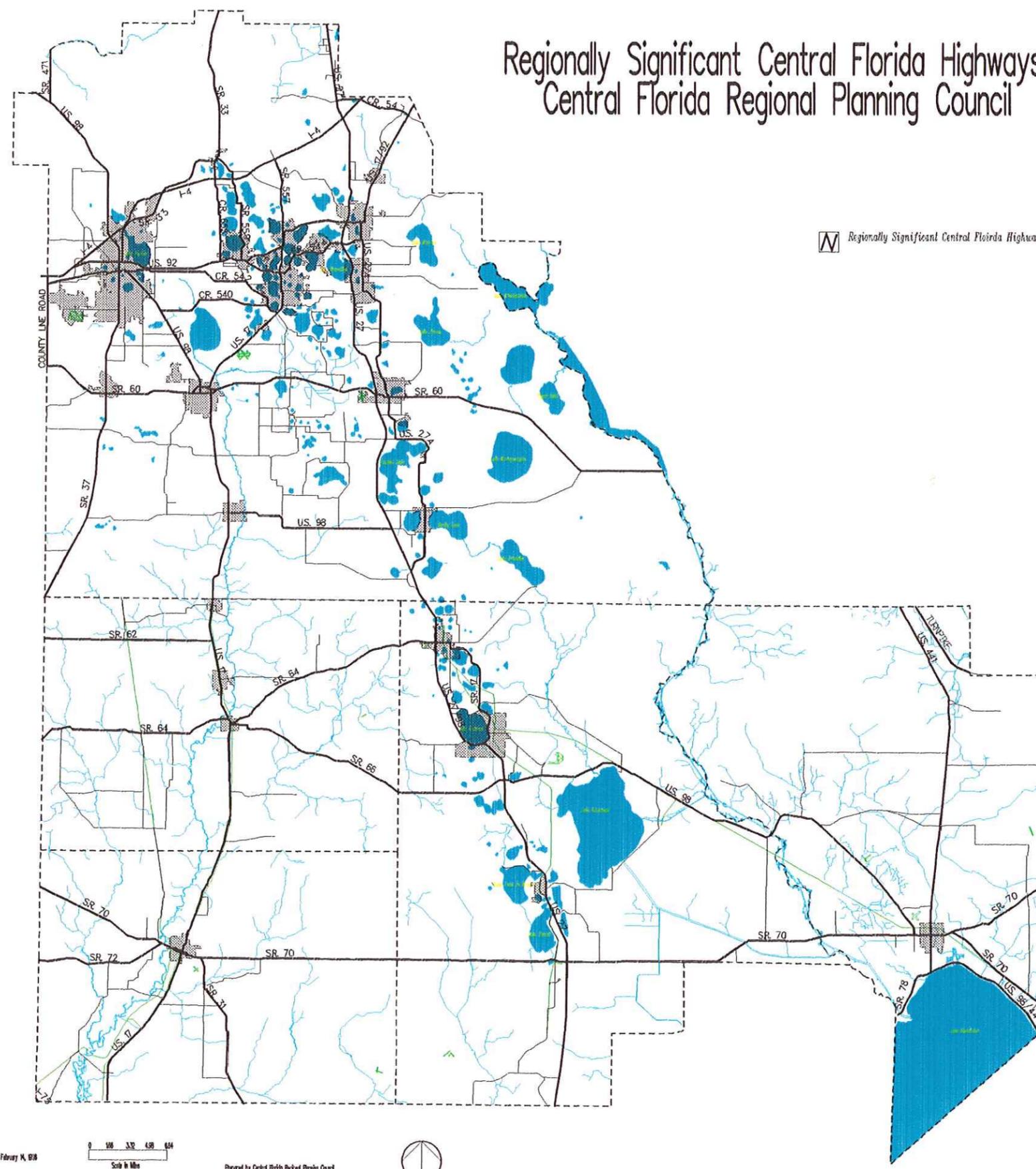
Strategies-

- 3.6.a FDOT will provide existing LOS for all SHS roadways in the Region, except for Polk County, to ensure consistency from jurisdiction to jurisdiction.
- 3.6.b Polk Transportation Planning Organization will provide existing LOS for all roadways in Polk County.
- 3.6.c Regional Planning Council assist local governments in determining LOS, using FDOT approved methodologies, to ensure consistency with the FDOT LOS manual on roadway segments designated in local comprehensive plans, that are not included on the State Highway System.
- 3.6.d The FDOT, Regional Planning Council and local governments shall cooperatively develop future LOS trends and projections at least annually for roadways on the State Highway System in Hardee, Highlands, Okeechobee and DeSoto Counties.
- 3.6.e Polk Transportation Planning Organization will provide future LOS trends and projections for all roadways in Polk County.

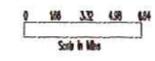
Regionally Significant Central Florida Highways Central Florida Regional Planning Council

 Regionally Significant Central Florida Highways

*Single Map
(see in front
of Affordable
Housing Section)*



February 14, 1988



Prepared by Central Florida Regional Planning Council



4. AFFORDABLE HOUSING

“Your house is your larger body.”

- - -Kahlil Gibran, **The Prophet**

In the 1980's the availability and affordability of housing emerged as issues and sparked ongoing debate in communities across the United States. Central Florida may have entered the discussions somewhat later, but could not escape the dissension created by differing views. The opinions and the conditions that limit access to affordable shelter have changed little in the last decade and remain relevant to the establishment of new policies. The major concerns for Central Florida remain: (a) the value of manufactured housing, specifically what we refer to as mobile homes, versus conventional houses, especially in regard to appreciation of the investment, life cycle costs, and vulnerability to severe wind storms; (b) the lack of local land development regulations that truly encourage the development and creation of affordable housing; (c) the severe shortage of multi-family housing stock; and (d) the absence of a constituency for local housing rehabilitation programs that would maintain the existing housing stock and increase the supply of affordable housing.

Both private and public sectors of the community have been frustrated by an inability to increase the affordable housing supply. On the public sector side, municipal and county employees in community development departments, planning departments and housing authorities are tasked with “producing” affordable housing. They are thwarted by lack of, or lukewarm political support, and staff reductions, because many consider their departments and services nonessential when it comes to cutting budgets and “right sizing” local government.

In the private sector, the increasing cost of land and building materials continue to cut the profit margin on each home built, so builders are discouraged from building low-end priced units. Lower cost housing, manufactured and conventional, is most often built for retirees or other market groups that have money. Lower cost housing communities, such as apartment complexes, carry subtle restrictions, like no children or pets, that turn away those in need. In addition, it is as true today as in the mid-1980s that developers are not inspired to build apartments with modest rents. Incentives, such as the SAIL program, which required the set aside of some percentage of affordable units, failed to get many apartment developments built and in some cases, left the owner with the less expensive units rented and the rest vacant. Of course, owners may have tried to recoup the loss of rental income on the affordable units by raising rents on the other units, which only worked to their disadvantage.

Wages and Affordability:

Since 1980, two major trends have emerged, one involving wages, and the other involving farm worker housing. First, wages have not kept pace with inflation in Central Florida, largely because the majority of new jobs are being created in service, retail and agriculture, the three lowest paying sectors in the economy. In fact, the average real wage improved by *less than one percent* between 1984 and 1994, while the Consumer Price Index increased by more than forty points, and the median value of owner occupied house in Florida rose almost 71% between 1980 and 1990. Thus, home buyers and renters at the bottom of the economic scale are falling farther and farther behind. Renters who can handle a rent payment are faced with the “first, last and deposit” qualification requirement, which for a modest three bedroom, two bath apartment or house can amount to as much as \$1,500. Buyers in the same financial position might be able to afford a monthly mortgage payment, but cannot deal with the challenge of twenty percent down and closing costs, let alone the cost of maintaining the property.

Yet, according to the National Association of Home Builders (NAHB), the Lakeland-Winter Haven metropolitan area is one of the most affordable areas in the United States. In the first quarter of 1995, it ranked tenth in the nation among areas where a high percentage (81.5% in the local case) of the homes sold were within reach of the median-income household at the prevailing mortgage interest rate. “*Within reach*” means the sales price was about twice the local median income of \$33,100, and the purchaser was able to secure financing at the prevailing mortgage rate.

Concern #1: There is a significant lack of information upon which to base an evaluation of the success or failure of affordable housing efforts and to answer crucial questions. Has the gap, for example, between the rich and the poor rendered median income an inadequate means of measuring affordability in housing? And, are those earning less than the median income, earning so much less that they cannot afford to purchase or rent safe, decent housing available in the market? Or, is there even a supply of housing in their price range?

The NAHB study recognizes that affordability involves more than the sales or purchase price of a home. Other important factors include the cost of construction materials, location, income and financing. The price of housing and the cost of financing are affected by national, as well as local conditions. Construction materials are produced in a national market which, like interest rates, is sensitive to national and global economic conditions. Income is related to the capacity of the economy and the job market to expand and produce increased buying power, and it is highly localized.

Lakeland-Winter Haven metro area, with a 1995 median income of \$33,100, is statistically more affluent than the rest of the Region. In 1990 for example, Polk County had a median household income of \$25,216, which was almost \$8,000 less than the metro area and \$2,000 below the State’s median of \$27,483. Polk County’s estimated median income for 1995 would only rise to

\$29,200 with inflation taken into account, and remains well below the metro area median. The lack of definition, consistency and comparability in statistics related to housing and income has created a situation where no one really knows whether or not the public policies designed to rehabilitate or produce affordable housing, or assist the buyers and renters, are actually working.

Concern #2: Is it possible to define the factors that determine the cost of housing and to describe the dynamics of housing markets, developer interest, housing finance costs, and buyer and renter income to produce a new understanding of affordability in housing; and if so, can it be applied to public policy formulation?

Migrant and Permanent Residency Farm Worker Housing:

Decent housing for migrant farm workers is almost nonexistent. The deplorable living conditions of farm workers were documented at least ten years ago, and were even the subject of a segment on the television program “60 Minutes”. Some efforts to supply new or refurbished housing have been made, but a large influx of farm worker families seeking permanent residency has changed the situation for the worse. Nowhere in the Region is any county or community keeping up with the demand.

In DeSoto and Hardee Counties, the first symptoms of the coming crisis were detected in the 1990 U.S. Census results. In DeSoto County forty-five of every one hundred new, permanent residents who came there during the 1980s, were minorities; Hardee County, whose population grew by only 120 persons during the entire decade, increased its minority population by more than 2,000 persons. Today, three of every ten residents of Hardee, and one of every four in DeSoto County are either Non-white and Non-Hispanic or of Hispanic origin. The huge influx of Hispanic residents, in particular, is due to the planting, tending and harvesting needs of the citrus and truck farming industries.

Hardee and DeSoto Counties offer the farm worker population a convenient, centralized location to surrounding agricultural areas, so the housing problems are concentrated there. In the small cities of Arcadia and Wauchula, and the smaller towns of Bowling Green and Zolfo Springs, the problem extends into traditional, single family neighborhoods, with the rental and overcrowding of three- and four-bedroom homes. As many as eighteen young, Hispanic men crowd into houses rented “by the week” during the harvesting season. Conditions deteriorate and complaints are called in to the various city departments. Because these homes are in so much better condition than the scattered shacks and the collections of old trailers available for rent out in the county, the local authorities have been unable to stop the conversion of traditional homes into rental units. The State inspects and licenses these homes and, by allowing the homes to be rented to migrants, acts in opposition to the local government and its attempts to maintain the character of the family-oriented neighborhoods. The solution to the problem is in the availability of affordable housing units, both for rent and for purchase.

Concern #3: Is it possible to create the encouragement and incentives to get migrant farm worker housing built by cooperatives of citrus growers, ranchers, farmers, local governments and nonprofits? Is it possible to design and build durable, easily maintained barracks or dormitory structures, at a reasonable price and with supporting recreation and other services, that would accommodate the migrant farm worker?

Discrimination Isolates Low Income Neighborhoods:

There is always a laundry list of lingering issues associated with the housing of low and moderate income groups that complicates questions of affordability and freedom of choice. Fair Housing and Community Development programs aside, historical housing patterns throughout the Region display the scars of past discriminations. Concentrated areas of substandard and deteriorated neighborhood conditions; entirely absent or incomplete infrastructure; ineffective local code enforcement; a general lack of organized, ongoing housing rehabilitation assistance and incentives; and leapfrog annexation patterns isolate low income and minority communities and settlements, and contribute directly to severely deteriorated housing in every county. CFRPC staff, participating in housing inspections in low income areas in most of the region's counties in the early 1980's, documented these conditions and little has changed.

Concern #4: Are local governments making efforts to extend modern infrastructure to low income areas and mandating the code enforcement that is necessary to prevent the decay and demolition of affordable housing units?

The “Real” Price of a Mobile Home

Mobile homes are generally less expensive than conventional housing and often require as little down payment as a car, but they present unique problems in the Region. Ineffective local policies governing the placement of mobile homes, which are reinforced by the State’s misplaced assumption that permissive regulations and minimum infrastructure makes them affordable housing, only adds to the depreciation of the housing stock in Central Florida counties. In addition, the spread of mobile homes dramatically increases the risk of storm damage to a growing portion of the population. Mobile homes are unsafe in a hurricane, so local emergency management plans throughout the region call for the evacuation of *all* mobile home residents when a hurricane threatens. Where mobile homes and conventional homes are located in neighborhoods together, mobile home roofs and walls, which become flying debris during a high wind situation, damage adjacent conventional housing that would otherwise be undamaged. This significantly increases the percentage of the population at risk of injury during a major storm event; and, when the numbers are finally tallied, pushes the total cost of storm damage unnecessarily high.

Polk County experienced a proliferation in the sale and permitting of mobile homes during the 1970's and 1980's. In 1985, more mobile homes were sold in Polk County than any other county

in the State. Since 1990, the rest of the counties in the Region have experienced explosive growth in mobile home sales. Based on the estimated numbers of central Florida mobile home residents alone to be evacuated, the Region has a deficit of nearly 67,000 shelter spaces. Further exacerbating the situation is the fact that mobile home parks tend to be located on lakeshores and in wetland areas, which adds damage by flooding to the toll taken on units during any wet weather event, including a wet summer.

Concern #5: Will mobile home construction standards be required by the State of Florida that will improve their ability to withstand hurricane force winds? Will local governments establish stringent regulations for the location of mobile homes and mobile home parks on uplands, and demand the construction of on site shelters?

This Region As Provider of Affordable Units for Surrounding Regions:

One aspect of affordable housing that is becoming a concern is the extent to which development outside the region is impacting the availability of affordable housing in this region. A prime example is occurring in the Northeast portion of Polk County. Large scale, mixed use developments have been approved in Lake, Orange, and Osceola Counties which may not have appropriately addressed affordable housing issues. *Out-migrators*, persons who **work** outside the region but **live** inside the region, look to Polk County for affordable housing. Homes that are considered “affordable” to persons who work outside the area, because of lower purchase prices compared to those in other counties, are bought up as soon as they are built. The same scenario occurs in Martin and St. Lucie County with people, and in particular farmworkers, utilizing Okeechobee County for their affordable housing needs. In that case, though, farm workers are looking for affordable rentals rather than home ownership options.

This cycle reduces the incentive even further for builders to produce lower priced homes that would be affordable to low income wage earners who want to both live and work within this region. It is ridiculous to assume that builders will choose to make a smaller profit on low-end priced homes when a much larger profit can be made on producing affordable homes for out-migrators. The evidence points to failure without *requiring* affordable homes to be produced or without providing *incentives* to produce more units. One way of requiring affordable units to be produced may lie in the DRI process. Neighboring jurisdictions should provide for their “fair share” of affordable housing based on the development activity they authorize in their respective jurisdictions.

Concern #6: Is the staff of the CFRPC effective in monitoring DRI Development Orders in neighboring regions that have to potential to induce affordable housing demand within jurisdictions of the CFRPC?

Conclusion:

Conventionally constructed affordable housing units are not being developed in this Region. Demand for such units remains high. Governmental programs that have been implemented since the last regional policy plan was written have not been effective. The attractiveness of this Region to industries that pay low wages has created a market for affordable units for employees who do not earn enough to purchase or rent expensive housing. The continued viability of the agricultural base of this Region and the inability of the Region to provide more farm worker housing has created another need, and market, for affordable units. The only segment of the housing market that has answered the call for affordable units is the mobile/manufactured housing industry. Mobile homes, both in planned communities and sold as individual units, have the largest market share in the affordable category, regardless of their performance in high winds. However, *mobile home communities*, which are generally safer than individually sited units due to tougher development standards, are not being developed to meet the demand for affordable units among the two groups who *need* them the most: the farm workers and the low income wage earners.

When the report card for counties in this region comes in, it appears, by their utilization of State programs, that strides are being made towards the State goal to increase the home ownership capacity of very low and low income persons. Polk County is currently utilizing funds through the CDBG HOME program and the State's SHIP program. Okeechobee County also uses both the CDBG and SHIP programs. Additionally, the Polk County Board of County Commissioners has adopted an Affordable Housing Incentives Plan. This Plan develops specific initiatives to encourage and facilitate affordable housing. But in reality, affordable units are not being produced, older affordable units are being lost to deterioration, migrant farm workers are without any housing options at all and mobile homes have become the only affordable housing in this region due to the lack of new, conventional, low-priced units.

Regional Goal 4.1: Increase the supply of affordable housing within the Central Florida Region

Indicators:

- a. Committee established
- b. Data center established
- c. Adoption of Regional
- d. Affordable Housing Strategy
- e. An increase in affordable housing stock.

Policies:

- 4.1.1 Develop a Regional Affordable Housing Strategy for the improved provision of affordable housing.

Strategies:

- 4.1a Establish a committee of experts in affordable housing, planners, housing industry representatives, and housing finance representatives to define the factors that require measurement, and design the means of gathering and keeping such information up to date.
 - 4.1b Define the factors that determine the cost of housing and describe the dynamics of housing markets, developer interest, housing finance costs, and buyer and renter income to produce a new understanding of affordability in housing.
 - 4.1c Develop standards of fact that will establish a basis for making public policy to motivate the private housing market to build and rehabilitate housing units for those in need of affordable units.
- 4.1.2 Establish an affordable housing data center at the regional planning council.

Strategies:

- 4.1d Publish periodic information for distribution by mail and by electronic means.
 - 4.1e Expand the understanding of affordable housing by conducting independent research and analysis and publishing the findings, and educating elected officials, housing providers, housing financing institutions and residents of the Region about the links between the supply of affordable housing, income and job creation in the regional economy.
 - 4.1f Conduct annual public workshops for builders, developers, real estate representatives, bankers, elected officials, experts in affordable housing, planners, chambers of commerce, and economic development officials to evaluate the information being collected and maintained, and to evaluate the success of the data center.
 - 4.1g Identify barriers to the construction of multi-family units by coordinating workshops between county and municipal officials for an exchange of ideas. Specifically focus on the benefits of a diverse price range of housing stock for attracting new jobs to the Region.
- 4.1.3 Reduce the cost of housing construction by eliminating unnecessary regulatory practices which add to the cost of housing. S.187.201(5)(b)4, F.S.

Strategies:

- 4.1h Assist local governments in the identification of affordable housing opportunities and provide technical assistance in obtaining grants for such projects.

- 4.1I The Central Florida Regional Planning Council will assist local governments in identifying regulatory impediments to the provision of affordable housing.
- 4.1j The Regional Planning Council and local governments will promote good and alternate design and development techniques for the construction of affordable housing.
- 4.1.k The Regional Planning Council shall sponsor an annual workshop to provide information to local government housing providers regarding the latest design innovations for reducing costs in residential developments.
- 4.1l The Regional Planning Council will provide information and suggest land development regulations to local governments for existing affordable units that may be under-utilized, such as garage apartments, granny flats, and vacant 2nd-story and 3rd-story spaces above commercial uses that could be made into residential units.

Regional Goal 4.2 Rehabilitate existing sub-standard affordable housing and maintain and improve the existing affordable housing stock.

Indicators:

- a. Enactment of provisions for code enforcement in local government land development regulations.
- b. Enactment of provisions for historic preservation in local government land development regulations.

Policies:

- 4.2.1 Eliminate public policies which result in housing discrimination, and develop policies which encourage housing opportunities. S.187.201(5)(b)1, F.S.

Strategies:

- 4.2a Provide technical information and conduct workshops with local officials to address the benefits of code enforcement in their communities as it relates to the maintenance of the housing stock and the availability of more affordable units.
- 4.2b Encourage local governments to offer incentives through density increases for subdivisions that include affordable units.

- 4.2c Encourage local governments to include regulations for the establishment of code enforcement boards.
- 4.2d Help local governments write historic preservation regulations and establish historic commissions to oversee the protection and preservation of historic housing.

Regional Goal 4.3 Increase the quality and quantity of housing for farm workers.

Indicator:

- a. Increased units for housing farm workers.

Policies:

- 4.3.1 Identify farm worker housing needs and provide incentives for construction of safe, affordable housing in rural areas near work sites.

Strategies:

- 4.3a Sponsor annual workshops for an exchange of ideas on the best ways to welcome permanent farm workers into a communities and aid in their assimilation into a community.
- 4.3b Promote the development of new farm worker housing in the Region by addressing the members of the agricultural community at their conferences and meetings.

5. EMERGENCY PREPAREDNESS

“Mitigation is the cornerstone of Emergency Management.”

James Lee Witt, FEMA Director

The State of Florida’s Comprehensive Plan, Chapter 187, (7) Public Safety, (a) Goal, states: *Florida shall protect the public by . . . protecting lives and property from natural and manmade disasters.* Among the more than twenty policies associated with this section are two which address emergency preparedness in particular. Policy #24 requires . . . *local governments, in cooperation with regional and state agencies, to prepare advance plans for the safe evacuation of coastal residents;* while policy #25 requires . . . *local governments, in cooperation with regional and state agencies, to adopt plans and policies to protect public and private property and human lives from the effects of natural disasters.*

Florida’s requirement for government to address these specific, as well as other, emergency preparedness issues is the impetus for the following strategic policy plan goals and objectives for the Central Florida Region.

History:

Since the Second World War, emergency management has focused primarily on preparedness. The reasoning was that the primary duty was to be prepared in case of an enemy attack, but being prepared is only a part of *comprehensive* emergency management. Communities have to deal with emergencies before they strike, even though most concentrate on the enormous responsibility to aid recovery after a disaster. As a result, current thinking defines four phases of comprehensive emergency management -- Preparedness, Response, Recovery, and Mitigation. The four phases are often visualized in a circular relationship to each other. Each phase results from the previous one and establishes the requirements of the next one. Activities in one phase may overlap those in the previous phase.

Preparedness moves swiftly into response when disaster strikes. Response yields to recovery at different times, depending on the extent and kind of damage. Similarly, recovery should trigger mitigation, motivating attempts to prevent or reduce the potential of the next disaster.

Preparedness is planning how to respond in case an emergency or disaster occurs and working to increase resources available to respond effectively. Response activities occur during and immediately following a disaster. They are designed to provide emergency assistance to victims of the event and reduce the likelihood of secondary damage. Recovery continues until all

systems return to normal, or near normal. Short-term recovery returns vital life support systems to minimum operating standards. Long-term recovery from a disaster may go on for years until the entire disaster area is completely redeveloped, either as it was or for entirely new purposes that are hopefully less disaster prone. Mitigation refers to activities that actually eliminate or reduce the effects of a disaster.

Central Florida is no less vulnerable than our coastal neighbors with regards to natural and technological hazards and man-made threats. With the exception of storm surge from hurricanes, which the Region is fortunately spared, Central Florida suffers from the same hazards as any other region in the state. Excessive rainfall coupled with damaging wind and lightning from severe thunderstorms, tornadoes and hurricanes, is the most predominant natural hazard to the Region. Drought and severe winter weather, though not as common, can seriously affect the abundant agricultural economy. Wildfires and dam failures also can negatively impact natural resources and rural development. In addition to these natural hazards, technological hazards, such as hazardous materials spills and nuclear contamination can cause immeasurable environmental damage and result in a mass casualty event where many people are affected.

Civil disorder and terrorism are two examples of man-made hazards. Of the two, terrorism is the more serious, because it often occurs without warning. Mass immigration, another form of man-made disaster, is a constant possibility for the Central Florida Region. Not only from foreign shores, as was evident during the Mariel boat-lift situation, but from vast coastal evacuations during hurricane events. Designated a "host region" for evacuees places Central Florida in a serious and hazardous situation with regards to adequate shelter for its own population.

Emergency management and preparedness contribute to a livable, sustainable and competitive Region. Regional emergency management nurtures a livable community by virtue of its purpose to protect public safety and health. It contributes to a sustainable community by preventing the waste of human and material resources that occurs through inadequate hazard mitigation and is reflected in the cost of recovery and redevelopment from disasters. Furthermore, emergency preparedness for the Region fosters a competitive community in which investments are more secure from calamity.

Emergency management is an important instrument rarely used in preparation, but always criticized when not perfectly provided for response. Unfortunately, emergency management considerations are not addressed in the design of the Region's transportation infrastructure, public facilities siting and structural design, physical development patterns, regional economic development, and health care service provision.

Concern #1: Are local and regional planning authorities considering emergency management when reviewing Developments of Regional Impact (DRI)?

From the planning review perspective, emergency management concepts can be the rationale for increasing the supply of shelters, as well as public and private facilities that can also serve as

shelters, and requiring that the cost become a part of the normal costs of development. It can also serve as a foundation for the improvement of inadequate building codes and zoning regulations to mitigate the effects of future storms; and as the basis for a stable economic and emotional environment by increasing a shared sense of security in the region.

Preparedness:

The population of the Central Florida Region is approximately 570,000, with the majority of roughly 430,000 people residing in Polk County. As identified in the 1995 Central Florida Regional Hurricane Evacuation Study Update (CFRHESU), over half the population of the Region is vulnerable to natural hazards, such as flooding and wind damage that accompany severe thunderstorms, tornadoes and hurricanes. In the event of a worst case coastal evacuation, the Region could expect another half million people to either seek shelter or pass through the region. This situation would exacerbate an already serious deficit in public shelter for local residents, not to mention coastal or Southern Florida county evacuees. Data from the CFRHESU illustrates this significant deficit: DeSoto has a deficit of 9,233 shelter spaces, Hardee - 7,026 spaces, Okeechobee - 16,595 spaces, Polk - 39,471 spaces. The exception is Highlands county with 5,554 excess shelter spaces. With the Central Florida Region being designated as host to coastal and Southern Florida county evacuees, alleviating the existing 66,771 space shelter deficit is a primary concern.

Table 5-1: Existing Shelter vs Potential Need

| County | At-Risk* | Public | Motel (rms/pers) | Deficit | Percent Deficit |
|---------------|----------|--------|------------------|----------|-----------------|
| DeSoto | 14,218 | 4,425 | 140/560 | (9,233) | 35% |
| Hardee | 11,452 | 4,142 | 71/284 | (7,026) | 39% |
| Highlands | 31,650 | 31,096 | 1,527/6,108 | 5,554 | (117%) |
| Okeechobee | 23,354 | 5,595 | 291/1,164 | (16,595) | 30% |
| Polk | 72,224 | 13,614 | 4,778/19,112 | (39,471) | 45% |
| Totals | 152,898 | 58,872 | 6,807/27,228 | (66,771) | 56% |

- Denotes total at-risk population, including Mobile Homes, sub-standard conventional homes, and flood prone areas.

As can be seen in the preceding table, the five inland counties of Central Florida have a total shelter capacity of approximately 59,000 spaces. This includes primary American Red Cross, county operated shelters, and alternate shelters (churches, lodges, other public buildings). Space available in hotels and motels is estimated at approximately 16,337 beds. Space is calculated at twenty square feet per person for Red Cross shelter. Hotel and motel occupancy rates have been calculated at 60% for the hurricane months of June through November, according to a recent survey. Based on figures supplied from the recent hurricane evacuation update, it is expected

that as many as 153,000 people would seek shelter in Central Florida in a worst case scenario. When compared to the availability of all types of shelter, this results in a deficit of nearly 67,000 spaces in the Region.

County emergency management agencies are aware of the disparity between evacuees and shelter space, so all of them have embraced the “shelter-in-place” concept. This concept has been implemented in coastal counties to alleviate the severe drain on their shelter situation, and only means that people living in adequate housing, which includes conventional homes in areas with no known flood-hazard, “batten down” and stay where they are. The theory is that shelters will be available for those who really need them and evacuation traffic and congestion will be reduced.

Concern #2: There is inadequate public shelter availability in the event of mass coastal evacuation into the Region.

The disposition of pets during an evacuation may seem minor to some, but it is a sensitive issue and warrants attention, because some people will put themselves in grave danger because of a dog or a cat. It is estimated that there are nearly a quarter of a million dogs, cats, and various other domestic pets in the Central Florida Region and hundreds of thousands more in coastal areas. During any evacuation, pets will be transported out of the hazard area or, as we found out in the aftermath of Andrew, they will be left to fend for themselves until their owners are permitted to return to their homes, which may be from a few days to weeks or never. Since local Red Cross shelters do not accept animals, the question is not whether owners will take them with them, it is where do the pets go if someone has no means or place to go and must be sheltered?

Concern #3: Will domestic animals be abandoned in homes during major evacuation events, or will owners refuse to evacuate because pets will not be transported with them?

Once again citing the 1995 CFRHESU, in the event of mass coastal evacuations, inter-regional evacuation routes will have to carry 187,000 vehicles entering and/or transiting the region. In times of evacuation, direction of traffic is adjusted to facilitate movement of evacuees to the safest location inland, utilizing both lanes (or three of four lane roadways), in one direction. One lane is usually reserved for use by emergency vehicles. This increases the LOS and expedites traffic movement.

Obviously, capacities of the roadway system will be strained with the influx of coastal evacuees. While most of the system is adequate to handle the traffic that is carried under "normal" conditions, an increase in volume would tax the carrying capacity of these roadways. While "one-waying" certain evacuation routes may help to alleviate some of the burden, the number of potential vehicles from coastal counties, along with evacuating intra-county residents, would create a traffic situation that would not be conducive to rapid movement through the counties.

The following table, taken from the 1995 CFRHESU (Table 11), illustrates projected evacuees entering the Central Florida Region. It must be noted here that the numbers given in the tables do not take into account population growth. Detailed projections for transportation impacts can be found in the Regional Transportation element.

Table 5-2: Projected Evacuees Entering Central Florida

| County | Category I | Category II | Category III | Category IV | Category V |
|------------------------------|------------|-------------|--------------|-------------|------------|
| Tampa Bay Region | | | | | |
| Pinellas | 25,749 | 36,018 | 43,812 | 49,122 | 51,993 |
| Hillsborough | 14,193 | 20,637 | 26,559 | 29,601 | 30,915 |
| Manatee | 9,108 | 9,911 | 11,726 | 13,783 | 15,004 |
| Sub Total | 49,050 | 66,566 | 82,097 | 92,506 | 97,912 |
| Southwest Region | | | | | |
| Charlotte | 20,942 | 25,366 | 31,039 | 32,002 | 32,012 |
| Sarasota | 30,124 | 34,744 | 43,828 | 51,098 | 78,232 |
| Lee | 76,592 | 99,048 | 103,549 | 104,030 | 108,730 |
| Collier | 31,972 | 37,768 | 49,723 | 51,967 | 52,722 |
| Sub Total | 159,630 | 196,926 | 228,139 | 239,097 | 271,696 |
| West Coast Total | 208,680 | 263,482 | 310,236 | 331,603 | 369,608 |
| Treasure Coast Region | | | | | |
| Martin | 19,038 | 19,038 | 31,548 | 36,124 | 36,124 |
| St. Lucie | 32,034 | 32,034 | 41,140 | 41,140 | 41,140 |
| Palm Beach | 70,072 | 70,072 | 107,184 | 119,196 | 119,196 |
| Indian River | 16,150 | 16,150 | 25,080 | 25,080 | 25,080 |
| East Coast Total | 137,294 | 137,294 | 204,952 | 221,540 | 221,540 |

Additionally, from the coastal counties, evacuation routes are plainly marked with the blue and white hurricane evacuation route sign. However, with the exception of Okeechobee County, once routes cross into the inland counties, the signs are nonexistent. How are evacuees expected to know where to go once they reach an inland county, and should there not be signs showing the continuation of evacuation routes?

Concern #4: Why are designated coastal evacuation routes not marked in the Central Florida Region?

The regional transportation system is an important part of hurricane preparedness planning. In

the aftermath of Hurricane Andrew, the public became aware that roadways will be severely congested, as anyone who traveled I-95 or the Florida Turnpike would attest. Although the travel situation seemed unacceptable for an emergency situation, weather conditions were clear and did not further complicate the evacuation. As a result of Andrew, it is more likely that future Category 3, 4 or 5 hurricanes will produce much higher early evacuation rates than in the past. But time passes, and memory fades. Floridians, especially South Floridians, are so accustomed to traveling north and south that they must be trained to travel inland by east-west routes, then north up the peninsula. The transportation system must be analyzed for new timing and volumes of traffic during evacuation, and plans made to direct traffic to alternate routes that were under utilized.

In addition to the vast numbers of anticipated evacuees during a major storm event, which will tax the Region's routing procedures, is the issue of evacuation route conditions. A 49 mile segment of the I-4 corridor, from Hillsborough County through Polk County to the Osceola County line is one of the oldest segments of interstate highway system in the State, being built in the late 1950's and early 1960's. This is the primary evacuation route to Central Florida from the West Coast and the principle evacuation route for Hillsborough and Pinellas Counties. A segment of I-4, near the Hillsborough and Polk County line flooded during the Fall of 1988 during a very heavy rain. As a result, I-4 was closed at SR 579 for eastbound traffic for several days. In response to this problem, FDOT commissioned a study to improve the I-4 corridor.

The **I-4 Multimodal Interstate Master Plan Study for Polk County (I-4 Master Plan)** is to provide documented information necessary to maintain and improve interstate travel integrity on I-4 from the Hillsborough/Polk County line to the Polk/Osceola County line. The primary goal of the I-4 Master Plan was to assess the feasibility of a multimodal corridor. Rail transit as well as high occupancy vehicle (**HOV**) demands were assessed. The improvements suggested by the I-4 Master Plan would satisfy the 2020 horizon year traffic needs. This study will evaluate and upgrade the system to six and eight lanes in Polk County by the year 2020. However, in the meantime, if flooding were to occur again during a "wet" hurricane, or other period of heavy rain, rapid movement of the evacuating population through Polk County would not be possible.

Other roadways/evacuation routes in the Central Florida Region have segments where flooding is possible. FDOT's Five Year Work Plan for District One (November, 1994), contains plans to upgrade many of these roadways through Polk County; however, flooding in the other counties will continue to be a serious issue. Alternate evacuation routes are designated for some of the primary evacuation routes, although many of the routes would not have any other roads available in case of flooding. Emergency management and law enforcement officials determine alternate routes in these circumstances. The following table shows primary evacuation routes in the region and the possibility of flooding.

Table 5-3: Central Florida Evacuation Routes

| Highway | Possibility of Flooding | Alternate Routes |
|----------------|---------------------------------------|-------------------------|
| US 17 | In DeSoto County | CR 630 to CR 555 |
| US 27 | In Polk County | SR 60 to US 17 |
| US 27 | Near Glades County line | None |
| US 98 | In Okeechobee County | US 441 |
| US 98 | In Polk County | SR 60 to US 27 |
| US 441 | Minimal | |
| US 92 | Minimal | I-4, SR 542 |
| I-4 | Near Plant City exit | SR 582, US 92 |
| SR 31 | In DeSoto County | None |
| SR 60 | Minimal | SR 630, 640 |
| SR 62 | Minimal | SR 64 |
| SR 64 | Minimal | SR 62 |
| SR 70 | East Okeechobee Near Martin County | SR 68 |

Concern # 5: Existing regional evacuation routes are inadequate (capacity and condition) for the numbers of anticipated evacuees.

Many resources are available for regional authorities to use regarding preparedness, the State Comprehensive Emergency Management Plan (SCEMP), Local Emergency Planning Committee Hazardous Materials Emergency Plan, Central Florida Regional Hurricane Evacuation Plan Update, 1995, and applicable county Peacetime Emergency Plans. The Peacetime Emergency Plans are currently being revised for incorporation of the State’s “all hazards” approach, which will be contained in future local Comprehensive Emergency Management Plans (CEMP).

Concern #6: Are local emergency response authorities aware of available regional resource materials for preparedness planning?

Regional Goal 5.1: Protect public and private property and human lives from the effects of natural and man-made disasters.

Indicators:

- a. Incidence of human injury and death as a result of Category 3 or higher hurricanes is reduced 50% by the year 2000.
- b. Amount of private and public property damage as a result of Category 3 or higher hurricanes is reduced by 20% by the year 2000.

Policies:

- 5.1.1: Organizational policies include county emergency management's input during planning/development review.
- 5.1.2: County emergency managers are members of the DRI development review team.
- 5.1.3: A comprehensive list of existing shelter space in the Region, including alternative shelter locations (i.e. businesses, private residences, etc.) is available and updated at regular intervals.

Strategies:

- 5.1a The Local Emergency Planning Committee shall organize cognizant county, state, and federal agencies (County Emergency Management, Sheriff's Office, and American Red Cross) to conduct public shelter awareness workshops annually to discuss "in-place" sheltering concept.
- 5.1b Cognizant county agencies, responsible for emergency shelter issues, shall contact local fraternal organizations about hosting evacuees belonging to their group to alleviate shelter deficit (Adopt-a-Family program) .
- 5.1c On an annual basis, cognizant authorities shall provide updated copies and/or inventories of resource materials to emergency response organizations within the Region.

Regional Goal 5.2: Maximize Regional Evacuation Capability and Emergency Shelter Capacity.

Indicators:

- a. Shelter direction signs are erected at key locations along evacuation routes in counties that require them.

- b. Increase shelter spaces in every county by 10% to keep pace with growth.

Policies:

- 5.2.1: A system of evaluating key evacuation traffic control points and hurricane evacuation route/shelter direction signs locations is updated at regular intervals.
- 5.2.2 A region-wide inventory of primary/alternate evacuation routes is available and updated at regular intervals.
- 5.2.3 Adequate shelter standards for the evacuation and management of domestic pets are incorporated into County Emergency Management Plans.

Strategies:

- 5.2.a FDOT shall assess existing regional evacuation routes that are flood-prone and need to be elevated to allow for smooth traffic flow during an emergency evacuation.
- 5.2.b Inadequate evacuation routes are identified. County emergency managers are supplied with updated information on primary and alternate evacuation routes.
- 5.2.c Comprehensive emergency shelter plans contain standards for the management of domestic pets during an evacuation.
- 5.2.d By the year 2000, improvements to routes susceptible to freshwater flooding are underway.
- 5.2.e All emergency response organizations are supplied with copies of regional resource materials including, at a minimum, shelter and disaster plans, and are trained in their content, value and use. An annual inventory is being conducted.

Response:

Response puts preparedness plans into action with the objective of saving lives and preventing property damage in a disaster or emergency situation. In Central Florida response actions are coordinated through the county offices of emergency management, with each county responsible for its own response effort. In many cases, counties have signed Mutual Aid Agreements with the State and adjacent counties to insure extra support, if required, and additional assets for carrying out their response.

Prior to responding to a disaster or emergency, authorities must ensure that certain issues are addressed. Of paramount importance is the proper training of response personnel. State and Federal government regulations require that personnel assigned the task of responding to emergencies involving hazardous conditions be trained to recognize these situations and to properly execute solutions to mitigate the hazard. OSHA and the EPA promulgated regulations (29 CFR 1910.120 and 40 CFR 311) to ensure that emergency responders are trained to react to incidents involving hazardous materials and wastes. This training, combined with an annual refresher, ensures competencies in five levels of response; first responder awareness level, first responder operations level, hazardous materials technician, hazardous materials specialist, and on-scene incident commander. According to a region wide hazardous materials training survey, emergency responders are not adequately trained nor have many emergency response agencies established policies for hazardous materials training programs, even though it is specifically dictated by OSHA.

As of January 1995, the Florida Department of Labor and Employment Security adopted the 1993 OSHA labor standards for all public sector employees. Volunteer emergency responders must now also be trained to respond to hazardous materials incidents. Previously, public-sector emergency responders (career and volunteers) were excluded from State regulation under Rule 38I-20. In order to provide guidance for emergency responders, the SERC Training Task Force published guidelines for public-sector hazardous materials training. The guidance includes training for emergency medical services, law enforcement, fire fighters, public works, utilities, transportation, public health and other public-sector employees, as well as guidelines for hazardous materials technicians, incident commanders, and instructor qualifications.

Concern #7: Why are local emergency responders not receiving proper hazardous materials training as required by OSHA and EPA?

In 1975, the President signed into law the Hazardous Materials Transportation Act (HMTA). Its purpose was to consolidate the numerous, fragmented regulations covering hazardous materials transportation. Training of public sector emergency responders was one of the primary issues addressed by HMTA. Under a grant from DOT, training is available to all public sector employees who may, in the course of their jobs, come into contact with hazardous materials. This training is available, free of charge, to local governments and is coordinated through the Local Emergency Planning Committee. However, available training is not reaching the intended audience. More emphasis needs to be placed on local governments and their role in training local emergency responders. If local government is informed as to the importance of, and the requirement for, the available training, then a more efficient method of reaching students could be achieved.

Concern #8: Why is HMTA sponsored hazardous materials response training not being efficiently administered or monitored for compliance by local

governments?

There are five basic stages of response to an emergency or disaster. The stages are: notification and warning, immediate public safety, property security, public welfare, and restoration. The length of each stage depends upon the emergency situation. For example, the notification and warning stage for a hurricane may be several days, whereas the notification stage for an explosion may be a matter of minutes, perhaps only seconds. Each stage depends on efforts in earlier stages. The extent to which evacuation assures immediate public safety greatly influences later tasks in providing public welfare.

During ***Notification/warning***, the first stage, two specific groups must be notified, the general public, and the departments, individuals, or agencies who must respond to the emergency. In most emergency situations, the general public can be informed through radio and television; however, those in the immediate danger area should be informed by a more direct means such as loudspeakers or sirens.

Departments, individuals, or agencies that must be alerted should be informed according to the emergency preparedness plan. The alert can be done by two-way radio, telephone, messenger, or local television and radio bulletins. The people who are expected to respond must be given enough information so that they know what to do.

Immediate Public Safety deals primarily with providing emergency medical services, search and rescue, and evacuation from the disaster area. The public safety stage is people-oriented. The primary concern is for safety of the people and treatment of those who may be injured.

Concern #9: Have special needs populations been identified and adequate means of transportation identified and programmed or scheduled?

Concern #10: Is shelter and proper care available for the special needs populations once they have been evacuated?

Property Security is the stage that deals primarily with the protection of property in the community. The actions in this stage are carried out by local police and fire departments, who see that property is secure against looting or vandalism do not occur, and fires are not allowed to spread to surrounding property.

Public Welfare consists of two operations; caring for the people after the emergency and assessing damage. This stage is where close association with service agencies, such as the Red Cross and Salvation Army, is necessary. During the public welfare stage concerns about mass care for injured, shelter for homeless, and food and clothing for those in need must be considered.

Restoration involves actions that repair the necessities of life. This means restoring utility service, and the removal of debris from the disaster scene. During this stage, the first outside assistance provided by a county, state, or federal government is used.

These five stages are all part of the response effort. The degree to which each stage must be implemented depends on the type of emergency. Each of the five stages are not distinct, they do not occur independently of each other. They are interrelated and may occur simultaneously, depending upon the situation.

Regional Goal 5.3: Hazardous Materials will present the minimum feasible risk to the citizens of the region.

Indicators:

- a. Ninety (90) percent of all local emergency responders have received proper annual hazardous materials training.

Policies:

- 5.3.1 The appropriate level of hazardous materials training for potential responders to a hazardous materials incident shall be conducted annually.

Strategies:

- 5.3a Municipal and County governments, in cooperation with the Regional Planning Council, shall determine the existing level of training and awareness of all agencies and personnel within their jurisdictions.
- 5.3b Local Emergency Planning Committee will continuously make SERC approved training materials available to all employees who, in the normal course of their job, have the potential to come into contact with hazardous materials.
- 5.3.2 Regulations contained in the Emergency Planning and Community Right-to-Know Act of 1986/SARA Title III shall be adhered to by public and private industry within the region.

Strategies:

- 5.3c The LEPC conducts community outreach and awareness seminars annually with regard to hazardous materials.

- 5.3d The LEPC actively supports local Industry Community Advisory Panels (ICAP) by attending scheduled meetings and offering assistance as required.
 - 5.3e The LEPC keeps the Public informed about issues regarding hazardous materials by use of printed materials, workshops and seminars.
- 5.3.3 The inventory of facilities in the Region with hazardous materials shall be complete and current.

Strategies:

- 5.3f Counties, in cooperation with the Local Emergency Planning Committee, will continue to collect information and maintain a database of facilities in the Region that contain hazardous materials, at or above threshold planning quantities.
- 5.3g Industries conduct community forums to discuss procedures to protect the Public from accidental releases of hazardous materials.

Regional Goal 5.4: The emergency requirements of the Special Needs Population have been met.

Indicator:

- a. At least 50% of the Special Needs Population have been identified by cognizant, sponsoring agencies.

Policies:

- 5.4.1 The evacuation and transportation requirements of the Special Needs Population are identified, and contingency plans adopted.
- 5.4.2 The emergency evacuation requirements of the Special Needs population in the region remain a priority.

Strategies:

- 5.4a Counties, with the cooperation of the Regional Planning Council and other cognizant agencies, will identify special needs population.

- 5.4b Counties, with the assistance of cognizant authorities, will determine minimum level of transportation and medical assistance individuals require during evacuation.
- 5.4.c Special Needs assistance information is incorporated into local, county and regional evacuation plans and made available to cognizant authorities, Transportation Disadvantaged carriers, and local ambulance services

Recovery and Mitigation:

Pre-disaster planning provides more time, less constraints, better solutions, more public involvement, and a more efficient recovery which, in turn, minimizes additional loss of life, property loss, and “downtime”, and maximizes assistance. Recovery planning must be coordinated with economic development plans, comprehensive plans, capital improvement plans, and environmental plans, in order to use the opportunity of recovery for accomplishing the goals of existing plans, making improvements, and correcting mistakes. Counties will need to form recovery and reconstruction task forces to address recovery issues before a disaster is imminent.

Recovery is often divided into short-term and long-term recovery efforts. Short-term recovery grows out of the response effort. During the response phase, emergency repairs to buildings are made as protective measures against further damage or injury. However, there is no clear cut distinction as to when or where response ends and short-term recovery begins. When requesting federal or state assistance to address disaster damage, assistance is requested during the response phase; when the assistance arrives, that part of the recovery phase begins.

Concern #11: Do all counties have pre-disaster plans to aid in post-disaster recovery and future mitigation?

There are more people and investments at risk to natural hazards than ever before. Sustainability is emerging as a key principle for economic growth. The immediate focus of post-disaster redevelopment tends to be on restoring the community that was, and little emphasis is given to the preexisting development and policies that may have resulted in vulnerability to the disaster. Disasters have taught us that an integral relationship exists between the way we plan our communities—the form, configuration and use—and the capacity of those communities to resist the forces from extreme natural events. Almost all loss of life, property damage and socioeconomic disruption from natural hazards occur as a result of the built environment, or rather as a result of the failure of the various systems and components of the built environment; transportation and utility infrastructure, development patterns, open space networks, health, safety and other community facilities. Mitigation is the foundation and essential first step toward effective hazard management, and community design is the foundation and first essential first

step toward mitigation.

Mitigation efforts are those that try to eliminate or reduce the impact of hazards that exist within a community and are a threat to life and property. The principal tool available for mitigation is local law or ordinance. Typically, laws are among the most common ways to mitigate emergencies, especially, zoning ordinances, building codes and enforcement, public health ordinances, fire regulations, hazardous materials ordinances, traffic codes and others. Central Florida is at risk from the damaging effects of natural, technological and manmade disasters. To minimize these effects, strong mitigation measures must be in place and enforced.

Concern #12: Is hazard mitigation an important concern of planning and development authorities in the Region?

Regional Goal 5.5: Mitigation techniques reduce exposure and vulnerability of development, so recovery from natural disasters is timely and cost effective.

Indicators:

- a. Value of property lost due to natural disasters decreases.
- b. Recovery periods from natural disasters are shorter.

Policies:

5.5.1 Post-disaster reconstruction and redevelopment plans are complete and up-to-date.

Strategies:

- 5.5a Counties have Recovery and Reconstruction Task Forces to address recovery issues and planning considerations.
 - 5.5b Local governments have enacted ordinances prohibiting *same-standard* post-hurricane rebuilding in vulnerable (high-risk) areas.
- 5.5.2 Development of Regional Impact review requires the incorporation of mitigation techniques into development planning.

Mobile homes are generally less expensive than conventional housing and often require as little down payment as a car, but they present unique problems in the Region. Ineffective local

policies governing the placement of mobile homes, which are reinforced by the State's misplaced assumption that permissive regulations and minimum infrastructure makes them affordable housing, only adds to the depreciation of the housing stock in Central Florida counties. In addition, the spread of mobile homes dramatically increases the risk of storm damage to a growing portion of the population. Mobile homes are unsafe in a hurricane, so local emergency management plans throughout the region call for the evacuation of *all* mobile home residents when a hurricane threatens. Where mobile homes and conventional homes are located in neighborhoods together, mobile home roofs and walls, which become flying debris during a high wind situation, damage adjacent conventional housing that would otherwise be undamaged. This significantly increases the percentage of the population at risk of injury during a major storm event; and, when the numbers are finally tallied, pushes the total cost of storm damage unnecessarily high.

Potentially thousands of coastal evacuees are expected to seek public shelter inland under various hurricane scenarios, and added together, the public shelter deficit for the region reaches into the thousands. Since the mid-1980s, it has been consistently recommended that DRIs with mobile home components be required to provide adequate shelter for those residents. This has not been the case, however, for sub-DRI mobile home projects.

Florida Administrative Code, Rule 9J-2.0256, *Hurricane Preparedness Policy Rule*, and Florida Administrative Code, Rule 9J-2.0257, *Special Hurricane Preparedness Districts for Developments of Regional Impact*, apply to all proposed mobile home and park trailer developments, all proposed residential developments located in the hurricane vulnerability zone, and all proposed recreational vehicle and hotel/motel developments located in high hazard hurricane evacuation areas. They include thresholds deemed to create a substantial impact on regional hurricane preparedness and techniques to mitigate anticipated impacts on public shelter availability and evacuations.

Structural elements in residential and commercial buildings experience damage or complete failure due to natural disasters as the result of high wind loads. Andrew served to highlight this problem. The recurring and uniform nature of damage to residential structures indicate that design wind force levels are inadequate, and that performance type code requirements do not effectively ensure safe structural response. There are a number of different building codes in the State, each with different requirements and criteria for wind design. Many structures have failed during wind disasters as the result of inadequate window, roof, and door protection. Once there is window failure, many buildings sustain heavy damage, or in some cases, total destruction due to either wind pressure, or wind borne debris. This is especially true of mobile homes.

The National Association of Home Builders (NAHB) prepared an *Assessment of Damage to Single-Family Homes Caused by Hurricanes Andrew and Iniki* for the U.S. Department of Housing and Urban Development. NAHB Research Center's analysis revealed three characteristics of a typical home that have the greatest influence on the overall resistance to

hurricane damage: opening protection (windows and doors), roof coverings and roof sheathing attachment. Improvements in these characteristics will have the greatest impact on limiting damage under hurricane conditions.

Among the NAHB recommendations were improvements in building code requirements related to hurricane resistance and multi-disciplined efforts to assure compliance with existing wind resistant building code measures. The NAHB further states that “affordable housing should be maintained through rational amendments to building codes.”

Those families left homeless after a storm would surely agree that a small percentage more added to the cost to have their homes still standing and habitable would have been money well spent. Various studies have concluded wind resistant construction techniques, such as lateral bracing on truss systems, hurricane straps, stronger gabled roof ends and nailed, rather than stapled roof sheathing, add considerably less than cost estimates cited by builders and developers.

Regional Goal 5.6: Minimize future risk to life in new and existing mobile home and recreational vehicle parks from the effects of natural disasters.

Indicators:

- a. By the year 2000, new non-DRI mobile home and RV park communities are built with emergency shelter facilities.
- b. Twenty percent (20%) of existing communities without shelter space have retrofit or constructed new shelters for their populations.
- c. Post-Andrew building codes are adopted by all local governments in the Region.

Policies:

5.6.1 Conventional homes are constructed to Post-Andrew building codes.

Strategies

5.6a National Association of Home Builders recommendations for Post-Andrew codes and affordable retrofitting of existing homes have been adopted.

5.6.2 Mobile home communities and RV Parks have emergency shelters for all residents that are built and equipped to State standards.

Strategies

5.6b Local Land Development Regulations conform with Florida Administrative Code

9J-2 in regard to design standards for emergency shelter in MH/RV communities.

- 5.6c Local governments enact land development regulations requiring the provision of emergency shelter in all future Mobile Home communities and RV Parks.
- 5.6d Existing communities are encouraged to remodel and construct emergency shelters for the safety of their residents.
- 5.6e County Emergency Management track new MH/RV community shelter construction where it alleviates the need for additional public shelter space.

6. COORDINATION OUTLINE

The Regional Policy Plan establishes goals and polices from which specific strategies emerge to form an overall approach to achieving desirable outcomes in the region and it local governments. The extent to which strategies are adopted and actively used by individual counties and municipalities remains the discretion of local leadership. Implementation may require changes in local development regulations and amendments or refinements to comprehensive plans, depending on the specific conditions and needs of each local government. Most often, such changes will be minor, because after twelve years of Growth Management in Florida, many of the ideas included in the Regional Policy Plan are already addressed in local planning documents. The most effective changes will emphasize a proactive approach to planning and regulation.

Local governments should determine particular areas of emphasis according to their own "visions of the future", but should always address planning problems in a comprehensive way. For example, if the rapid growth is a principal issue, there will be concerns for the preservation of the countryside, agriculture and natural systems. Then, polices that guide urban form and infrastructure will only deal with part of the concerns. Other polices linked to the development policies will need to address the sustainability of growth decisions, and the ways in which other elements of the community are to develop or be conserved. When plans shift from a regulatory mode to a proactive policy planning approach, their successful implementation moves the community toward it vision.

The Central Florida Regional Planning Council will assist local government in their efforts to implement the plan in two ways, through the provision technical assistance and the review of Developments of Regional Impact and local comprehensive plans.

A. Implementation Through Technical Assistance

The Council receives a large number of requests for technical assistance from a variety of sectors, both private and public. Requests cover all areas in which the Council is involved (e.g. census, planning, transportation programs, land development processes assistance, emergency preparedness, hazardous materials, and many others). Staff responses to these requests cover a range of effort from telephone responses to public presentations, attendance at seminars and workshops and direct involvement in local decision making, when invited.

B. Implementation Through the Review of Development Proposals and Comprehensive Plans

Review of Comprehensive Plans

The review of local government comprehensive plan amendments continues to be one of the Council's primary responsibilities. With the adoption of the recommendations of the ELMS III Committee by the 1993 Legislature, Council's review function has been redefined, and now takes place within the guidelines established by the following criteria:

- o Review of amendments for consistency with the SRPP;
- o Review of amendments for extra-jurisdictional impacts inconsistent with the comprehensive plan of affected local government; and
- o Review and recommend, pursuant to Section 163.3184(6)(a), F.S., the necessity of review by the DCA.

Development of Regional Impact Review:

The Development of Regional Impact (DRI) review process was created by the state legislature in 1973 to provide State, regional and local agencies the opportunity to evaluate the impacts of large-scale development projects. Council's involvement has included a determination of the facilities and services, such as major roads, sewer and drainage systems, which will be needed to accommodate these projects. The potential impacts of each project on adjacent governmental jurisdictions and on regionally-significant natural resources are also reviewed by the Council. After coordination with affected governmental agencies to ensure that those agencies' concerns are identified, recommendations are provided by Council to the local jurisdiction for the project.

The public sector's greatest influence in proposed projects occurs at the site planning level. Most of the time, site plan review is done by the local government. In the largest projects, the DRI, some review occurs at the regional level. In the past, regional plans have not emphasized the physical plan in the review of DRIs. The strongest regulatory policies tended to address the environment and traffic, both important areas, but insufficient to guarantee planning of the highest quality.

The SRPP policies shift the focus from regulation towards strategy. Such a change in emphasis will have a positive effect. Future DRI review should be more effective and valuable for all the parties involved. The greater flexibility of the Plan will encourage more creative solutions from the development and more constructive reviews from Council.

Natural Resources of Regional Significance:

The goals, policies and strategies related to Natural Resources of Regional Significance are implemented through formal and informal review of proposed projects, and through the provision of technical assistance to public and private sectors. Impacts to natural resources are analyzed on a regular basis during review of the following types of projects and plans:

- o Intergovernmental Coordination and Review Projects

- o Local Government Comprehensive Plan Amendments
- o DRI Applications
- o Ten-Year Development Site Plans
- o Transmission Line Siting Applications
- o Power Plan Siting Certification Applications

Regional Transportation:

Historically, the Council has been active in the area of transportation. Transportation impacts are regularly assessed through the DRI and local comprehensive plan and plan amendment review processes. The Council will also have continuing opportunities to positively shape regional transportation planning, programs and projects through its participation in the Intergovernmental Coordination and Review (ICR) process and through its dispute resolution processes. Council staff has also been active in participating in the review and development of transportation rules at the State level, serving on the PTPO technical advisory committees, and participating on other transportation committees, planning task forces and aviation system planning.

An important emphasis of the SRPP is on improving the integration of transportation planning and land use to reduce automobile dependency and achieving regional benefits related to air quality, affordable housing, infrastructure cost containment, public safety, and infill development. Goals, policies and strategies are contained in the Plan to emphasize the improvement of opportunities for developing public transportation corridors and systems in the Region. The SRPP clearly points the Council in the direction of supporting alternate forms of mass transit, such as high speed rail, local mass transit systems, and a system of bike trails.

Affordable Housing:

The Comprehensive Regional Policy Plan, which guided the activities of the Council from 1987 until the present, indicated that a high quality of life was dependent on affordable, safe and clean housing close to employment opportunities and necessary services. Prior government involvement in the provision of housing had been limited to the indigent and low-income, but the cost of housing and interest rates had combined to create difficulty even for moderate-income families. There was a severe shortage of rental housing. Those most affected by the shortage of affordable housing were the elderly on fixed-incomes, agricultural and migrant workers and those with insufficient education or technical skills. The shortage of rentals still exists.

In 1987, identification and definition of the affordable housing problem was complicated by the lack of a decent data base. The root causes, however, appear to have been; (a) the deterioration or elimination of existing affordable housing, because of the lack of local code enforcement and participation by local governments in grant programs for rehabilitation of housing, and (b) the immigration of people with insufficient income and income growth to afford decent shelter. From a growth management perspective, residents have been forced to devote too much income

on the cost of transportation and local governments have not recognized and assessed the full costs of growth.

Also in 1987, goals were established to assure that; (a) adequate and affordable housing be available, and (b) that home purchase opportunities for first time buyers would be increased. Policies to implement these goals were general in nature; including statements that said that provisions to meet needs, that substandard housing was to be restored and rehabilitated where feasible, and that special efforts should be made to assist those with insufficient income to gain decent housing. Many of the issues identified in the 1987 Plan remain of concern in 1996. Most of the causes are the same. Impacts on affordable housing, or lack thereof, are still reviewed through the DRI and local comprehensive plan amendment process. The Council's approach to coordination will be to carry out the following:

- (a) Work with the local economic development groups to reinforce the linkage between attracting jobs, a healthy economy and affordable housing.
- (b) Hold semi-annual workshops with housing providers to assess the progress being made in providing actual units.
- (c) Work with local governments to create a regulatory framework for land development regulations that is conducive to the production of affordable housing, and strengthens code enforcement procedures.
- (d) Encourage the location of affordable housing in proximity to employment in the review of DRIs, local government plan amendments, and in other activities.
- (e) Work with local governments and non-profit organizations when appropriate, to help them address the special housing needs of agricultural workers.

The Outline of Coordination:

There will be literally hundreds of specific activities that will take place to accomplish the outcomes envisioned by the goals of the SRPP. To make clear which agencies, departments of government, levels of government and the private sector that will be involved in the assistance, cooperation and coordination of activities and events, the remaining pages of this section contain tables that list each goal, policy and strategy in the SRPP and indicate the who the "players" are. The purpose of the tables is to provide a ready reference when events, programs and actions are contemplated, planned or scheduled. The tables are arranged in sequence with the five major topics of SRPP, beginning with Natural Resources.

NATURAL RESOURCES

SRPP COORDINATION OUTLINE

| Page 1 | Goal 1.1 Assure an adequate supply of water to meet all competing uses, including human and natural needs, deemed reasonable and beneficial. | | | | | | | | |
|-----------------------------|---|--------------|--------------|-------------------|--------------|--------------|--------------|--------------|--------------|
| Agency | Policies | | | Strategies | | | | | |
| | 1.1.1 | 1.1.2 | 1.1.3 | 1.1.a | 1.1.b | 1.1.c | 1.1.d | 1.1.e | 1.1.f |
| CFRPC | X | X | X | X | X | | X | | X |
| SWFWMD | X | X | X | | | | X | | |
| SFWMD | X | X | X | | | | X | | |
| SJRWMD | X | X | X | | | | X | | |
| DCA | X | X | | | | | | | |
| D of Ag | | X | | | | X | | | |
| OTTED | | | | | | | | | |
| FDOT | | | | | | | | | |
| FDEP | X | X | X | | | | | | |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | | | | |
| USFWS | | | | | | | | | |
| COE | | | | | | | | | |
| FTDC | | | | | | | | | |
| Special Districts | | X | X | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | X | X | X | X | X | | X | |
| City of Arcadia | X | X | X | X | X | X | | X | |
| Hardee County | X | X | X | X | X | X | | X | |
| Cities in Hardee | X | X | X | X | X | X | | X | |
| Highlands County | | | | | | | | | |
| Highlands County | X | X | X | X | X | X | | X | |
| Cities in Highlands | | | | | | | | | |
| Cities in Highlands | X | X | X | X | X | X | | X | |
| Okeechobee County | | | | | | | | | |
| Okeechobee County | X | X | X | X | X | X | | X | |
| City of Okeechobee | | | | | | | | | |
| City of Okeechobee | X | X | X | X | X | X | | X | |
| Polk County | X | X | X | X | X | X | | X | |
| Cities in Polk | X | X | X | X | X | X | | X | |
| Private Industry | X | X | X | X | X | X | | X | |
| Other Private Sector | | | | | | | | | |
| Other Private Sector | X | X | | | | | | | |

| Page 1.a | Goal 1.1 Assure an adequate supply of water to meet all competing uses, including human and natural needs, deemed reasonable and beneficial. | | | | | | | | | | |
|-----------------------------|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Agency | Strategies | | | | | | | | | | |
| | 1.1.g | 1.1.h | 1.1.i | 1.1.j | 1.1.k | 1.1.l | 1.1.m | 1.1.n | 1.1.o | 1.1.p | 1.1.q |
| CFRPC | X | X | | | X | X | X | X | X | | |
| SWFWMD | X | | X | | X | X | X | X | | | X |
| SFWMD | X | | X | | X | X | X | X | | | X |
| SJRWMD | X | | X | | X | X | X | X | | | X |
| DCA | | | | | | | | | | | |
| D of Ag | | | | | | | | | | | |
| OTTED | | | | | | | | | | | |
| FDOT | | | | | | | | | | | |
| FDEP | | | | | | X | X | | | | |
| Enterprise FL | | | | | | | | | | | |
| FGFWFC | | | | | | | | | | | |
| USFWS | | | | | | | | | | | |
| COE | | | | | | | | | | | |
| FTDC | | | | | | | | | | | |
| Special Districts | | | | X | | | | | | | |
| PTPO | | | | | | | | | | | |
| DeSoto County | X | X | X | X | | X | X | X | X | | X |
| City of Arcadia | | X | X | X | | X | X | X | X | | X |
| Hardee County | X | X | X | X | | X | X | X | X | | X |
| Cities in Hardee | | X | X | X | | X | X | X | X | | X |
| Highlands County | X | X | X | X | | X | X | X | X | | X |
| Cities in Highlands | | X | X | X | | X | X | X | X | | X |
| Okeechobee County | X | X | X | X | | X | X | X | X | | X |
| City of Okeechobee | | X | X | X | | X | X | X | X | | X |
| Polk County | X | X | X | X | | X | X | X | X | | X |
| Cities in Polk | | X | X | X | | X | X | X | X | | X |
| Private Industry | | | | | | X | X | X | | X | |
| Other Private Sector | | | | | | | | | | | |

| Page 1.b | Goal 1.1 Assure an adequate supply of water to meet all competing uses, including human and natural needs, deemed reasonable and beneficial. | | | | | | | | | | | |
|----------------------|--|-------|-------|------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Agency | Policies | | | Strategies | | | | | | | | |
| | 1.1.4 | 1.1.5 | 1.1.6 | 1.1.r | 1.1.s | 1.1.t | 1.1.u | 1.1.v | 1.1.w | 1.1.x | 1.1.y | 1.1.z |
| CFRPC | | | X | X | X | X | X | X | X | X | X | |
| SWFWMD | | X | X | | X | | X | | X | X | X | X |
| SFWMD | | X | X | | X | | X | | X | X | X | X |
| SJRWMD | | X | X | | X | | X | | X | X | X | X |
| DCA | | | | | | | | | | | | |
| D of Ag | | | | | | | | | | | | |
| OTTED | | | | | | | | | | | | |
| FDOT | | | | | | | | | | | | |
| FDEP | | | | | | | | | | | | |
| Enterprise FL | | | | | | | | | | | | |
| FGFWFC | | | | | | | | | | | | |
| USFWS | | | | | | | | | | | | |
| COE | | | | | | | | | | | | |
| FTDC | | | | | | | | | | | | |
| Special Districts | | | | | | | | | | | | |
| PTPO | | | | | | | | | | | | |
| DeSoto County | X | | X | X | X | X | X | | X | X | X | X |
| City of Arcadia | X | | X | X | X | X | X | | X | | X | X |
| Hardee County | X | | X | X | X | X | X | | X | X | X | X |
| Cities in Hardee | X | | X | X | X | X | X | | X | | X | X |
| Highlands County | | | | | | | | | | | | |
| Cities in Highlands | X | | X | X | X | X | X | | X | X | X | X |
| Okeechobee County | X | | X | X | X | X | X | | X | X | X | X |
| City of Okeechobee | X | | X | X | X | X | X | | X | | X | X |
| Polk County | X | | X | X | X | X | X | | X | X | X | X |
| Cities in Polk | X | | X | X | X | X | X | | X | | X | X |
| Private Industry | | | | | | | | | | | | |
| Other Private Sector | X | | X | | | | | | | | | |

| Page 2 | Goal 1.2 Protect the quality of surface water in the region, and improve and restore the qualities of waters not presently meeting water quality standards. | | | | | | | | |
|-----------------------------|--|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|--------------|
| Agency | Policies | | | | Strategies | | | | |
| | 1.2.1 | 1.2.2 | 1.2.3 | 1.2.4 | 1.2.a | 1.2.b | 1.2.c | 1.2.d | 1.2.e |
| CFRPC | | X | X | | X | | X | | X |
| SWFWMD | X | | X | X | | X | X | | |
| SFWMD | X | | X | X | | X | X | | |
| SJRWMD | X | | X | X | | X | X | | |
| DCA | | | | | | | X | | |
| D of Ag | | | | | | | X | | |
| OTTED | | | | | | | | | |
| FDOT | X | X | X | X | | | X | | |
| FDEP | | | | X | | X | X | | X |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | | X | | |
| USFWS | | | | | | | | | |
| COE | | | | | | | X | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X | | X |
| City of Arcadia | X | X | X | X | X | X | X | | X |
| Hardee County | X | X | X | X | X | X | X | | X |
| Cities in Hardee | X | X | X | X | X | X | X | | X |
| Highlands County | | | | | | | | | |
| | X | X | X | X | X | X | X | | X |
| Cities in Highlands | | | | | | | | | |
| | X | X | X | X | X | X | X | | X |
| Okeechobee County | | | | | | | | | |
| | X | X | X | X | X | X | X | | X |
| City of Okeechobee | | | | | | | | | |
| | X | X | X | X | X | X | X | | X |
| Polk County | | | | | | | | | |
| | X | X | X | X | X | X | X | | X |
| Cities in Polk | | | | | | | | | |
| | | | | X | | | | X | X |
| Private Industry | | | | | | | | | |
| Other Private Sector | | | | | | | | | |

| Page 2.a | Goal 1.2 Protect the quality of surface water in the region, and improve and restore the qualities of waters not presently meeting water quality standards. | | | | | | | | |
|----------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Agency | Strategies | | | | | | | | |
| | 1.2.f | 1.2.g | 1.2.h | 1.2.i | 1.2.j | 1.2.k | 1.2.l | 1.2.m | 1.2.n |
| CFRPC | X | X | X | X | X | X | X | X | X |
| SWFWMD | X | X | X | | X | X | X | | |
| SFWMD | X | X | X | | X | X | X | | |
| SJRWMD | X | X | X | | X | X | X | | |
| DCA | | | | | | | | | |
| D of Ag | | | | | | | | | X |
| OTTED | | | | | | | | | |
| FDOT | | | | | | X | | | |
| FDEP | | X | X | | X | | | X | X |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | | | | |
| USFWS | | | | | | | | | |
| COE | | | | | | | | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | X | | | | |
| DeSoto County | X | X | X | | X | X | | | |
| City of Arcadia | X | X | X | | X | X | | | |
| Hardee County | X | X | X | | X | X | | | |
| Cities in Hardee | X | X | X | | X | X | | | |
| Highlands County | X | X | X | | X | X | | | |
| Cities in Highlands | X | X | X | | X | X | | | |
| Okeechobee County | X | X | X | | X | X | | | |
| City of Okeechobee | X | X | X | | X | X | | | |
| Polk County | X | X | X | | X | X | | | |
| Cities in Polk | X | X | X | | X | X | | | |
| Private Industry | | | | | | X | | X | |
| Other Private Sector | | | | | | | | | |

| Page 3 | Goal 1.3 Protect the quality of groundwater in the Region. | | | | | | | | | | | |
|----------------------|--|-------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Agency | Policies | | Strategies | | | | | | | | | |
| | 1.3.1 | 1.3.2 | 1.3.a | 1.3.b | 1.3.c | 1.3.d | 1.3.e | 1.3.f | 1.3.g | 1.3.h | 1.3.i | 1.3.j |
| CFRPC | X | X | | X | X | X | X | | | X | X | X |
| SWFWMD | X | X | | | | | | | X | X | | |
| SFWMD | X | X | | | | | | | X | X | | |
| SJRWMD | X | X | | | | | | | X | X | | |
| DCA | | | | | X | | | X | | | | |
| D of Ag | | | | | | | | X | | | | |
| OTTED | | | | | | | | | | | | |
| FDOT | | | | | | | | | | | | |
| FDEP | X | | X | | | X | | | | | X | X |
| Enterprise FL | | | | | | | | | | | | |
| FGFWFC | | | | | | | | | | | | |
| USFWS | | | | | | | | | | | | |
| COE | | | | | | | | | | | | |
| FTDC | | | | | | | | | | | | |
| Special Districts | | | | | | | | | | | | |
| PTPO | | | | | | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X | | | | | X |
| City of Arcadia | X | X | X | X | | X | X | | | | | X |
| Hardee County | X | X | X | X | X | X | X | | | | | X |
| Cities in Hardee | X | X | X | X | | X | X | | | | | X |
| Highlands County | X | X | X | X | X | X | X | | | | | X |
| Cities in Highlands | X | X | X | X | | X | X | | | | | X |
| Okeechobee County | X | X | X | X | X | X | X | | | | | X |
| City of Okeechobee | X | X | X | X | | X | X | | | | | X |
| Polk County | X | X | X | X | X | X | X | | | | | X |
| Cities in Polk | X | X | X | X | | X | X | | | | | X |
| Private Industry | X | | | | | | | | | | X | |
| Other Private Sector | | | | | | | | | | | | |

| Page 4 | Goal 1.4 Minimize damage from floods. | | | | | | | | | |
|----------------------|---------------------------------------|-------|-------|------------|-------|-------|-------|-------|------|-------|
| Agency | Policies | | | Strategies | | | | | | |
| | 1.4.1 | 1.4.2 | 1.4.3 | 1.4.a | 1.4.b | 1.4.c | 1.4.d | 1.4.e | 1.4f | 1.4.g |
| CFRPC | X | X | X | X | X | | X | X | X | |
| SWFWMD | X | X | X | X | | X | | X | | X |
| SFWMD | X | X | X | X | | X | | X | | X |
| SJRWMD | X | X | X | X | | X | | X | | X |
| DCA | X | X | X | X | X | | | | | |
| D of Ag | | | | | | | | | | |
| OTTED | | | | | | | | | | |
| FDOT | X | X | X | X | | | | | | |
| FDEP | X | X | X | X | | | | | | |
| Enterprise FL | | | | | | | | | | |
| FGFWFC | | | | X | | | | | | |
| USFWS | | | | X | | | | | | |
| COE | X | X | X | X | | | | | | |
| FTDC | | | | | | | | | | |
| Special Districts | X | X | X | X | | | | X | | |
| PTPO | | | | | | | | | | |
| DeSoto County | X | X | X | X | X | | X | X | | X |
| City of Arcadia | X | X | X | X | X | | X | X | | X |
| Hardee County | X | X | X | X | X | | X | X | | X |
| Cities in Hardee | X | X | X | X | X | | X | X | | X |
| Highlands County | | | | | | | | | | |
| | X | X | X | X | X | | X | X | | X |
| Cities in Highlands | | | | | | | | | | |
| | X | X | X | X | X | | X | X | | X |
| Okeechobee County | | | | | | | | | | |
| | X | X | X | X | X | | X | X | | X |
| City of Okeechobee | | | | | | | | | | |
| | X | X | X | X | X | | X | X | | X |
| Polk County | | | | | | | | | | |
| | X | X | X | X | X | | X | X | | X |
| Cities in Polk | | | | | | | | | | |
| | X | X | X | X | X | | | | | X |
| Private Industry | | | | | | | | | | |
| | X | X | X | X | X | | | | | X |
| Other Private Sector | | | | | | | | | | |

| Page 5 | Goal 1.5 Preserve, protect and restore natural Florida ecosystems in order to support their natural hydrologic and ecological functions. | | | | | | | |
|-----------------------------|---|--------------|--------------|-------------------|-------------|-------------|-------------|-------------|
| Agency | Policies | | | Strategies | | | | |
| | 1.5.1 | 1.5.2 | 1.5.3 | 1.5a | 1.5b | 1.5c | 1.5d | 1.5e |
| CFRPC | X | X | X | X | X | X | X | X |
| SWFWMD | X | X | | X | | | | X |
| SFWMD | X | X | | X | | | | X |
| SJRWMD | X | X | | X | | | | X |
| DCA | X | | | X | | | | X |
| D of Ag | | | | | | | | |
| OTTED | | | | | | | | |
| FDOT | | | X | | | | | |
| FDEP | X | X | | X | | | | X |
| Enterprise FL | | | | | | | | |
| FGFWFC | | X | | X | | | | |
| USFWS | | X | | X | | | | |
| COE | X | | | X | | | | X |
| FTDC | | | | | | | | |
| Special Districts | X | | | | | | | X |
| PTPO | | | | | | | | |
| DeSoto County | X | X | X | X | | X | X | X |
| City of Arcadia | X | X | X | X | | X | X | X |
| Hardee County | X | X | X | X | | X | X | X |
| Cities in Hardee | X | X | X | X | | X | X | X |
| Highlands County | | | | | | | | |
| | X | X | X | X | | X | X | X |
| Cities in Highlands | | | | | | | | |
| | X | X | X | X | | X | X | X |
| Okeechobee County | | | | | | | | |
| | X | X | X | X | | X | X | X |
| City of Okeechobee | | | | | | | | |
| | X | X | X | X | | X | X | X |
| Polk County | X | X | X | X | | X | X | X |
| Cities in Polk | X | X | X | X | | X | X | X |
| Private Industry | | | X | | | | | |
| Other Private Sector | | | | | | | | |

| Page 6 | Goal 1.6 Protect or conserve Natural Resources of Regional Significance (NRRS) | | | | | | | | |
|----------------------|--|-------|-------|------------|------|------|------|------|------|
| Agency | Policies | | | Strategies | | | | | |
| | 1.6.1 | 1.6.2 | 1.6.3 | 1.6a | 1.6b | 1.6c | 1.6d | 1.6e | 1.6f |
| CFRPC | X | X | X | X | X | X | X | X | |
| SWFWMD | X | X | X | X | X | X | X | X | |
| SFWMD | X | X | X | X | X | X | X | X | |
| SJRWMD | X | X | X | X | X | X | X | X | |
| DCA | | X | X | X | | | | | |
| D of Ag | | | | | | | | | |
| OTTED | | | | | | | | | |
| FDOT | | X | X | | | | | | |
| FDEP | X | X | X | X | X | X | X | X | |
| Enterprise FL | | | | | | | | | |
| FGFWFC | X | X | X | X | | X | | | X |
| USFWS | X | X | X | X | | X | | | X |
| COE | | | X | X | | X | | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X | X | |
| City of Arcadia | X | X | X | X | | | X | X | |
| Hardee County | X | X | X | X | X | X | X | X | |
| Cities in Hardee | X | X | X | | | | X | X | |
| Highlands County | | | | | | | | | |
| Cities in Highlands | X | X | X | X | X | X | X | X | |
| Okeechobee County | X | X | X | X | X | X | X | X | |
| City of Okeechobee | X | X | X | | | | X | X | |
| Polk County | X | X | X | X | X | X | X | X | |
| Cities in Polk | X | X | X | | | | X | X | |
| Private Industry | | X | X | | | X | X | | |
| Other Private Sector | | | | | | | | | |

| Page 6a | Goal 1.6 Protect or conserve Natural Resources of Regional Significance (NRRS) | | | | | | | | |
|-----------------------------|---|--------------|--------------|-------------------|-------------|-------------|-------------|-------------|-------------|
| Agency | Policies | | | Strategies | | | | | |
| | 1.6.4 | 1.6.5 | 1.6.6 | 1.6g | 1.6h | 1.6i | 1.6j | 1.6k | 1.6l |
| CFRPC | X | X | X | X | X | X | X | X | X |
| SWFWMD | X | X | X | X | X | X | X | X | X |
| SFWMD | X | X | X | X | X | X | X | X | X |
| SJRWMD | X | X | X | X | X | X | X | X | X |
| DCA | X | X | X | X | | | | | X |
| D of Ag | | | | | | | | | |
| OTTED | | | | | | | | | |
| FDOT | X | X | X | | | | | | |
| FDEP | X | X | X | X | X | X | X | X | X |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | X | X | X | X |
| USFWS | | | | | | X | X | X | X |
| COE | X | X | X | X | | | | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X | X | X | X |
| Highlands County | | | | | | | | | |
| Cities in Highlands | X | X | X | X | X | X | X | X | X |
| Okeechobee County | | | | | | | | | |
| City of Okeechobee | X | X | X | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X | X | X | X |
| Private Industry | | | | | | | | | |
| Other Private Sector | | | | | | | | | |

| Page 6b | Goal 1.6 Protect or conserve Natural Resources of Regional Significance (NRRS) | | | | |
|-----------------------------|---|--------------|--------------|-------------------|-------------|
| Agency | Policies | | | Strategies | |
| | 1.6.7 | 1.6.8 | 1.6.9 | 1.6m | 1.6n |
| CFRPC | X | X | X | X | X |
| SWFWMD | X | X | X | X | X |
| SFWMD | X | X | X | X | X |
| SJRWMD | X | X | X | X | X |
| DCA | | | | | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | | | | | |
| FDEP | X | X | X | X | X |
| Enterprise FL | | | | | |
| FGFWFC | | X | X | X | X |
| USFWS | | X | X | X | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | | | | | |
| DeSoto County | X | | X | X | X |
| City of Arcadia | X | | X | X | X |
| Hardee County | X | | X | X | X |
| Cities in Hardee | X | | X | X | X |
| Highlands County | X | | X | X | X |
| Cities in Highlands | X | | X | X | X |
| Okeechobee County | X | | X | X | X |
| City of Okeechobee | X | | X | X | X |
| Polk County | X | | X | X | X |
| Cities in Polk | X | | X | X | X |
| Private Industry | X | | | | |
| Other Private Sector | | | | | |

| Page7 | Goal 1.7 | Protect and maintain the natural resources of public and private lands which are managed for conservation purposes | | |
|-----------------------------|-----------------|--|-------------|-------------|
| Agency | Policies | Strategies | | |
| | 1.7.1 | 1.7a | 1.7b | 1.7c |
| CFRPC | X | X | X | X |
| SWFWMD | | X | X | X |
| SFWMD | | X | X | X |
| SJRWMD | | X | X | X |
| DCA | | | | |
| D of Ag | | | | |
| OTTED | | | | |
| FDOT | | | | |
| FDEP | | X | X | X |
| Enterprise FL | | | | |
| FGFWFC | | X | X | X |
| USFWS | | X | X | X |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | | | | |
| DeSoto County | X | X | X | X |
| City of Arcadia | X | X | X | X |
| Hardee County | | X | X | X |
| Cities in Hardee | X | X | X | X |
| Highlands County | | | | X |
| Cities in Highlands | X | X | X | X |
| Okeechobee County | | | | X |
| City of Okeechobee | X | X | X | X |
| Polk County | X | X | X | X |
| Cities in Polk | X | X | X | X |
| Private Industry | X | | | |
| Other Private Sector | | | | |

| Page8 | Goal 1.8 Incorporate the protection of Natural Resources of Regional Significance into planning for future growth within the region. | | | | | |
|-----------------------------|---|-------------------|-------------|-------------|-------------|-------------|
| Agency | Policies | Strategies | | | | |
| | 1.8.1 | 1.8a | 1.8b | 1.8c | 1.8d | 1.8e |
| CFRPC | X | X | X | X | X | |
| SWFWMD | X | X | X | X | X | |
| SFWMD | X | X | X | X | X | |
| SJRWMD | X | X | X | X | X | |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | X | | | X | | |
| FDEP | X | X | X | X | X | X |
| Enterprise FL | | | | | | |
| FGFWFC | X | X | X | X | X | |
| USFWS | X | X | X | X | | |
| COE | | | | | | |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | | | | | | |
| DeSoto County | X | X | | X | | |
| City of Arcadia | X | X | | X | | |
| Hardee County | X | X | | X | | |
| Cities in Hardee | X | X | | X | | |
| Highlands County | | | | | | |
| Cities in Highlands | X | X | | X | | |
| Okeechobee County | | | | | | |
| City of Okeechobee | X | X | | X | | |
| Polk County | X | X | | X | | |
| Cities in Polk | X | X | | X | | |
| Private Industry | | | | | | |
| Other Private Sector | | | | | | |

| Page8a | Goal 1.8 Incorporate the protection of Natural Resources of Regional Significance into planning for future growth within the region. | | | | |
|-----------------------------|---|--------------|--------------|-------------------|-------------|
| Agency | Policies | | | Strategies | |
| | 1.8.2 | 1.8.3 | 1.8.4 | 1.8e | 1.8f |
| CFRPC | X | X | X | X | X |
| SWFWMD | X | | | X | X |
| SFWMD | X | | | X | X |
| SJRWMD | X | | | X | X |
| DCA | | | | | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | X | | | | |
| FDEP | | | | | X |
| Enterprise FL | | | | | |
| FGFWFC | | | | | |
| USFWS | | | | | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | | | | | |
| DeSoto County | X | X | | X | X |
| City of Arcadia | X | X | | X | X |
| Hardee County | X | X | | X | X |
| Cities in Hardee | X | X | | X | X |
| Highlands County | X | X | | X | X |
| Cities in Highlands | X | X | | X | X |
| Okeechobee County | X | X | | X | X |
| City of Okeechobee | X | X | | X | X |
| Polk County | X | X | | X | X |
| Cities in Polk | X | X | | X | X |
| Private Industry | | | | | |
| Other Private Sector | | | | | |

| Page9 | Goal 1.9 | Prevent the destruction of endangered species and protect their habitats. | | | | | |
|-----------------------------|-----------------|--|-------------|-------------|-------------|-------------|-------------|
| Agency | Policies | Strategies | | | | | |
| | 1.9.1 | 1.9a | 1.9b | 1.9c | 1.9d | 1.9e | 1.9f |
| CFRPC | X | | X | X | X | X | X |
| SWFWMD | | | | | | | |
| SFWMD | | | | | | | |
| SJRWMD | | | | | | | |
| DCA | | | | | | X | |
| D of Ag | | | | | | | |
| OTTED | | | | | | | |
| FDOT | | | | | | | |
| FNAI | | X | | | | | |
| FDEP | X | | | | X | | |
| Enterprise FL | | | | | | | |
| FGFWFC | X | X | | | X | | |
| USFWS | X | | | | X | | |
| COE | | | | | | | |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | | | | | | | |
| DeSoto County | X | | | X | | X | |
| City of Arcadia | X | | | X | | X | |
| Hardee County | X | | | X | | X | |
| Cities in Hardee | X | | | X | | X | |
| Highlands County | | | | | | | |
| Cities in Highlands | X | | | X | | X | |
| Okeechobee County | | | | | | | |
| City of Okeechobee | X | | | X | | X | |
| Polk County | X | | | X | | X | |
| Cities in Polk | X | | | X | | X | |
| Private Industry | | | | | | | |
| Other Private Sector | | | | | | | |

| Page10 | Goal 1.10 Mining practices shall not degrade regionally significant natural resources. | | | | | |
|-----------------------------|---|---------------|---------------|---------------|---------------|---------------|
| Agency | Policies | | | | | |
| | 1.10.1 | 1.10.2 | 1.10.3 | 1.10.4 | 1.10.5 | 1.10.6 |
| CFRPC | X | X | X | X | X | X |
| SWFWMD | X | | | X | | |
| SFWMD | X | | | X | | |
| SJRWMD | X | | | X | | |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | | | | | | |
| FNAI | | | | | | |
| FDEP | X | X | X | X | X | X |
| Enterprise FL | | | | | | |
| FGFWFC | | X | | | | X |
| USFWS | | | | | | |
| COE | | | | | | |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | | | | | | |
| DeSoto County | X | X | | | | |
| City of Arcadia | | | | | | |
| Hardee County | X | X | | | | |
| Cities in Hardee | | | | | | |
| Highlands County | X | X | | | | |
| Cities in Highlands | | | | | | |
| Okeechobee County | X | X | | | | |
| City of Okeechobee | | | | | | |
| Polk County | X | X | | | | |
| Cities in Polk | | | | | | |
| Private Industry | X | | X | X | X | X |
| Other Private Sector | | | | | | |

| | | | | | | | | |
|-----------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Page11 | Goal 1.11 All disturbed lands, including non-mandatory, shall be reclaimed or put to productive use, within a time frame established by statute, except those lands which have been successfully reclaimed by nature. | | | | | | | |
| Agency | Policies | | | | | | | |
| | 1.11.1 | 1.11.2 | 1.11.3 | 1.11.4 | 1.11.5 | 1.11.6 | 1.11.7 | 1.11.8 |
| CFRPC | X | X | | X | X | X | X | X |
| SWFWMD | | | | X | | | | X |
| SFWMD | | | | X | | | | X |
| SJRWMD | | | | X | | | | X |
| DCA | | | | | | X | | X |
| D of Ag | | | | | | | | |
| OTTED | | | | | | | | |
| FDOT | | | | | | | | |
| FNAI | | | | | | | | |
| FDEP | X | X | X | X | X | X | X | X |
| Enterprise FL | | | | | | | | |
| FGFWFC | | | X | | | X | X | X |
| USFWS | | | | | | | | X |
| COE | | | | | | | | |
| FTDC | | | | | | | | |
| Special Districts | | | | | | | | |
| PTPO | | | | | | | | |
| DeSoto County | X | | | X | | X | | |
| City of Arcadia | | | | | | | | |
| Hardee County | X | | | X | | X | | |
| Cities in Hardee | | | | | | | | |
| Highlands County | X | | | X | | X | | |
| Cities in Highlands | | | | | | | | |
| Okeechobee County | X | | | X | | X | | |
| City of Okeechobee | | | | | | | | |
| Polk County | X | | | X | | X | | |
| Cities in Polk | | | | | | | | |
| Private Industry | X | X | | X | X | X | | X |
| Other Private Sector | | | | | | | | |

| | | | | | |
|-----------------------------|------------------|--|---------------|---------------|---------------|
| Page12 | Goal 1.12 | Full scale reclamation practices and plans shall reflect only proven best available technology. Experimentation to further reclamation technology shall be encouraged. | | | |
| Agency | Policies | | | | |
| | 1.12.1 | 1.12.2 | 1.12.3 | 1.12.4 | 1.12.5 |
| CFRPC | X | | | | |
| SWFWMD | | | | | |
| SFWMD | | | | | |
| SJRWMD | | | | | |
| DCA | | | | | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | | | | | |
| FNAI | | | | | |
| FDEP | X | | | X | |
| Enterprise FL | | | | | |
| FGFWFC | | | | | |
| USFWS | | | | | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | | | | | |
| DeSoto County | | | | | |
| City of Arcadia | X | | | | |
| Hardee County | | | | | |
| Cities in Hardee | | | | | |
| Highlands County | | | | | |
| Cities in Highlands | | | | | |
| Okeechobee County | | | | | |
| City of Okeechobee | | | | | |
| Polk County | | | | | |
| Cities in Polk | | | | | |
| Private Industry | X | X | X | X | X |
| Other Private Sector | | | | | |

| | | |
|-----------------------------|--|---------------|
| Page13 | Goal 1.13 Advance the management and final productivity of decommissioned waste clay ponds. | |
| Agency | Policies | |
| | 1.13.1 | 1.13.2 |
| CFRPC | X | X |
| SWFWMD | | |
| SFWMD | | |
| SJRWMD | | |
| DCA | | |
| D of Ag | | |
| OTTED | | |
| FDOT | | |
| FDEP | X | X |
| Enterprise FL | | |
| FGFWFC | | |
| USFWS | | |
| COE | | |
| FTDC | | |
| Special Districts | | |
| PTPO | | |
| DeSoto County | | |
| City of Arcadia | | |
| Hardee County | | |
| Cities in Hardee | | |
| Highlands County | | |
| Cities in Highlands | | |
| Okeechobee County | | |
| City of Okeechobee | | |
| Polk County | | |
| Cities in Polk | | |
| Private Industry | X | X |
| Other Private Sector | | |

| | | | | |
|-----------------------------|------------------|---|---------------|---------------|
| Page14 | Goal 1.14 | Ensure the distribution and use of severance tax funds benefits the jurisdictions impacted by phosphate mining. | | |
| Agency | Policies | | | |
| | | 1.14.1 | 1.14.2 | 1.14.3 |
| CFRPC | | X | | X |
| SWFWMD | | | | |
| SFWMD | | | | |
| SJRWMD | | | | |
| DCA | | | | |
| D of Ag | | | | |
| OTTED | | | | |
| FDOT | | | | |
| FDEP | | X | | |
| Enterprise FL | | | | |
| FGFWFC | | | | |
| USFWS | | | | |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | | | | |
| DeSoto County | | | X | |
| City of Arcadia | | | | |
| Hardee County | | | X | |
| Cities in Hardee | | | | |
| Highlands County | | | | |
| Cities in Highlands | | | | |
| Okeechobee County | | | | |
| City of Okeechobee | | | | |
| Polk County | | | X | |
| Cities in Polk | | | | |
| Private Industry | | | | |
| Other Private Sector | | | | |

| Page15 | Goal 1.15 | | |
|-----------------------------|---|---------------|---------------|
| | Natural Resources of Regional significance shall be protected from encroachment by mining activities. | | |
| Agency | Policies | | |
| | 1.15.1 | 1.15.2 | 1.15.3 |
| CFRPC | X | X | X |
| SWFWMD | | | |
| SFWMD | | | |
| SJRWMD | | | |
| DCA | | | |
| D of Ag | | | |
| OTTED | | | |
| FDOT | | | |
| FDEP | X | | X |
| Enterprise FL | | | |
| FGFWFC | | | |
| USFWS | | | |
| COE | | | |
| FTDC | | | |
| Special Districts | | | |
| PTPO | | | |
| DeSoto County | X | X | |
| City of Arcadia | | | |
| Hardee County | X | X | |
| Cities in Hardee | | | |
| Highlands County | X | X | |
| Cities in Highlands | | | |
| Okeechobee County | X | X | |
| City of Okeechobee | | | |
| Polk County | X | X | |
| Cities in Polk | | | |
| Private Industry | X | | X |
| Other Private Sector | | | |

| | | | | | | | |
|-----------------------------|---|-------------------|---------------|---------------|---------------|---------------|---------------|
| Page 16 | Goal 1.16 Inhabitants of the region shall be protected from any proven adverse effects on their health caused by mining, as shown by epidemiological evidence and toxicological interpretations. | | | | | | |
| Agency | Policies | Strategies | | | | | |
| | 1.16.1 | 1.16.2 | 1.16.3 | 1.16.4 | 1.16.5 | 1.16.6 | 1.16.7 |
| CFRPC | X | X | X | X | X | X | X |
| SWFWMD | | | | | | | |
| SFWMD | | | | | | | |
| SJRWMD | | | | | | | |
| DCA | | | | | | | |
| D of Ag | | | | | | | |
| OTTED | | | | | | | |
| FDOT | | | | | | | |
| FNAI | | | | | | | |
| FDEP | X | X | X | | X | X | X |
| Enterprise FL | | | | | | | |
| FGFWFC | | | | | X | | |
| USFWS | | | | | X | | |
| COE | | | | | | | |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | | | | | | | |
| DeSoto County | | | | | | | X |
| City of Arcadia | | | | | | | |
| Hardee County | | | | | | | X |
| Cities in Hardee | | | | | | | |
| Highlands County | | | | | | | X |
| Cities in Highlands | | | | | | | |
| Okeechobee County | | | | | | | X |
| City of Okeechobee | | | | | | | |
| Polk County | | | | | | | X |
| Cities in Polk | | | | | | | |
| Private Industry | X | X | X | | X | X | X |
| Other Private Sector | | | | | | | |

| Page 17 | Goal 1.17 Improve the present condition of ambient air quality and prevent its future degradation. | | | | | | | | |
|----------------------|--|--------|------------|-------|-------|-------|-------|-------|-------|
| Agency | Policies | | Strategies | | | | | | |
| | 1.17.1 | 1.17.2 | 1.17a | 1.17b | 1.17c | 1.17d | 1.17e | 1.17f | 1.17g |
| CFRPC | X | | X | X | X | | | X | X |
| SWFWMD | | | | | | | | | |
| SFWMD | | | | | | | | | |
| SJRWMD | | | | | | | | | |
| DCA | X | | | X | | | | X | X |
| D of Ag | | | | | | | | | |
| OTTED | | | | | | | | | |
| FDOT | X | | | X | | | | X | X |
| FDEP | | | | | | | | X | |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | | | | |
| USFWS | | | | | | | | | |
| COE | | | | | | | | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | X | | X | X | | | | |
| City of Arcadia | X | X | | X | X | | | | |
| Hardee County | X | X | | X | X | | | | |
| Cities in Hardee | X | X | | X | X | | | | |
| Highlands County | | | | | | | | | |
| Highlands County | X | X | | X | X | | | | |
| Cities in Highlands | X | X | | X | X | | | | |
| Okeechobee County | | | | | | | | | |
| Okeechobee County | X | X | | X | X | | | | |
| City of Okeechobee | X | X | | X | X | | | | |
| Polk County | X | X | | X | X | | X | | X |
| Cities in Polk | X | X | | X | X | | X | | X |
| Private Industry | X | X | X | X | | X | | | X |
| Other Private Sector | | | | | | | | | |

| Page 17a | Goal 1.17 Improve the present condition of ambient air quality and prevent its future degradation. | | | | | | | | |
|----------------------|--|--------|------------|-------|-------|-------|-------|-------|-------|
| Agency | Policies | | Strategies | | | | | | |
| | 1.17.3 | 1.17.4 | 1.17h | 1.17i | 1.17j | 1.17k | 1.17l | 1.17m | 1.17n |
| CFRPC | X | X | X | X | | X | | X | |
| SWFWMD | | | | | | | | | |
| SFWMD | | | | | | | | | |
| SJRWMD | | | | | | | | | |
| DCA | X | | | | | | | X | |
| D of Ag | | | | | | | X | | |
| OTTED | | | | | | | | | |
| FDOT | | | | | | | X | X | X |
| FDEP | X | X | | X | X | X | | X | |
| Enterprise FL | | | | | | | | | |
| FGFWFC | | | | | | | | | |
| USFWS | | | | | | | | | |
| COE | | | | | | | | | |
| FTDC | | | | | | | | | |
| Special Districts | | | | | | | | | |
| PTPO | | | | | | | | | |
| DeSoto County | X | | | | X | X | | | |
| City of Arcadia | | | | | X | | | | |
| Hardee County | X | | | | X | X | | | |
| Cities in Hardee | | | | | X | | | | |
| Highlands County | X | | | | X | X | | | |
| Cities in Highlands | | | | | X | | | | |
| Okeechobee County | X | | | | X | X | | | |
| City of Okeechobee | | | | | X | | | | |
| Polk County | X | X | | X | X | X | X | X | |
| Cities in Polk | | | | | X | | X | X | |
| Private Industry | | X | | X | | X | | | |
| Other Private Sector | | | | | | | X | | |

| Page17a | Goal 1.17 Improve the present condition of ambient air quality and prevent its future degradation. | | | | | | |
|-----------------------------|---|-------------------|--------------|--------------|--------------|--------------|--------------|
| Agency | Policies | Strategies | | | | | |
| | 1.17.5 | 1.17o | 1.17p | 1.17q | 1.17r | 1.17s | 1.17t |
| CFRPC | X | X | X | X | X | | |
| SWFWMD | | | | | | | |
| SFWMD | | | | | | | |
| SJRWMD | | | | | | | |
| DCA | | | | | | | |
| D of Ag | | | | | | X | |
| OTTED | | | | | | | |
| FDOT | X | X | X | X | | | |
| FNAI | | | | | | | |
| FDEP | X | | | | X | | X |
| Enterprise FL | | | | | | | |
| FGFWFC | | | | | | | |
| USFWS | | | | | | | |
| COE | | | | | | | |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | X | X | X | X | | | |
| DeSoto County | X | | X | X | | | |
| City of Arcadia | X | | X | X | | | |
| Hardee County | X | | X | X | | | |
| Cities in Hardee | X | | X | X | | | |
| Highlands County | X | | X | X | | | |
| Cities in Highlands | X | | X | X | X | | |
| Okeechobee County | X | | X | X | | | |
| City of Okeechobee | X | | X | X | | | |
| Polk County | X | X | X | X | | | |
| Cities in Polk | X | X | X | X | X | | |
| Private Industry | | | | | X | | |
| Other Private Sector | | | | | | | |

| Page18 | Goal 1.18 Preserve, protect and restore natural Florida ecosystems in order to support their natural hydrologic and ecological functions. | | | | | |
|-----------------------------|--|---------------|---------------|-------------------|--------------|--------------|
| Agency | Policies | | | Strategies | | |
| | 1.18.1 | 1.18.2 | 1.18.3 | 1.18a | 1.18b | 1.18c |
| CFRPC | | | X | X | X | X |
| SWFWMD | | | | | | |
| SFWMD | | | | | | |
| SJRWMD | | | | | | |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | | | | | | |
| FDEP | | X | | X | X | X |
| Enterprise FL | | | | | | |
| FGFWFC | | | | | | |
| USFWS | | | | | | |
| COE | | | | | | |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | | | | | | |
| DeSoto County | | | | | | |
| City of Arcadia | | | | | | |
| Hardee County | | | | | | |
| Cities in Hardee | | | | | | |
| Highlands County | | | | | | |
| Cities in Highlands | | | | | | |
| Okeechobee County | | | | | | |
| City of Okeechobee | | | | | | |
| Polk County | | | | | | |
| Cities in Polk | | | | | | |
| Private Industry | | X | | | | |
| Other Private Sector | X | | | | | |

ECONOMIC DEVELOPMENT

SRPP COORDINATION OUTLINE

| Page 1 | Goal 2.1 Unite local economic development endeavors to increase the wealth of the Central Florida Region. | | | | | | |
|-----------------------------|--|--------------|-------------------|--------------|--------------|--------------|--------------|
| Agency | Policies | | Strategies | | | | |
| | 2.1.1 | 2.1.2 | 2.1.a | 2.1.b | 2.1.c | 2.1.d | 2.1.e |
| CFRPC | X | X | X | X | X | X | X |
| SWFWMD | | | | | | X | |
| SFWMD | | | | | | X | |
| SJRWMD | | | | | | X | |
| DCA | | | | | | | |
| D of Ag | | | | | | | |
| OTTED | X | X | | | | | |
| FDOT | | | | | | X | |
| FDEP | | | | | | X | |
| Enterprise FL | X | X | | | | | |
| FGFWFC | | | | | | X | |
| USFWS | | | | | | X | |
| COE | | | | | | X | |
| FTDC | | | | | | X | |
| Special Districts | | | | | | | |
| PTPO | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X | X |
| Highlands County | X | X | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X | X |
| Private Industry | X | | | | | | X |
| Other Private Sector | X | | | | | | X |

| Page 1 | Goal 2.1 (Cont.) | Unite local economic development endeavors to increase the wealth of the Central Florida Region. | | | | |
|----------------------|---------------------|--|-------|-------|-------|-------|
| Agency | Policies | Strategies | | | | |
| | 2.1.3 | 2.1.f | 2.1.g | 2.1.h | 2.1.i | 2.1.j |
| CFRPC | X | X | | X | X | X |
| SWFWMD | | | | | X | X |
| SFWMD | | | | | X | X |
| SJRWMD | | | | | X | X |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | X | X | X |
| FDOT | | | | | X | X |
| FDEP | | | | | X | X |
| Enterprise FL | | | | X | | X |
| FGFWFC | | | | | X | X |
| USFWS | | | | | X | X |
| COE | | | | | X | X |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | | | | | | |
| DeSoto County | X | X | X | X | | X |
| City of Arcadia | X | X | X | X | | X |
| Hardee County | X | X | X | X | | X |
| Cities in Hardee | X | X | X | X | | X |
| Highlands County | X | X | X | X | | X |
| Cities in Highlands | X | X | X | X | | X |
| Okeechobee County | X | X | X | X | | X |
| City of Okeechobee | X | X | X | X | | X |
| Polk County | X | X | X | X | | X |
| Cities in Polk | X | X | X | X | | X |
| Private Industry | | | | | | |
| Other Private Sector | | | | | | |

| Page 2 | Goal 2.2 Sustain county and municipal economic development. | | | | | | | |
|----------------------|---|-------|-------|------------|-------|-------|-------|-------|
| Agency | Policies | | | Strategies | | | | |
| | 2.2.1 | 2.2.2 | 2.2.3 | 2.2.a | 2.2.b | 2.2.c | 2.2.d | 2.2.e |
| CFRPC | X | X | | X | X | X | X | X |
| SWFWMD | | | | | | | | |
| SFWMD | | | | | | | | |
| SJRWMD | | | | | | | | |
| DCA | | | | | | | | |
| D of Ag | | | | | | | | |
| OTTED | | | | X | X | X | | |
| FDOT | X | | | | | | | |
| FDEP | | | | | | | | |
| Enterprise FL | | | | X | X | X | | |
| FGFWFC | | | | | | | | |
| USFWS | | | | | | | | |
| COE | | | | | | | | |
| FTDC | | | | | | | | |
| Special Districts | | | | | | | | |
| PTPO | X | | X | X | X | | X | |
| DeSoto County | X | | X | X | X | | X | |
| City of Arcadia | X | | X | X | X | | X | |
| Hardee County | X | | X | X | X | | X | |
| Cities in Hardee | X | | X | X | X | | X | |
| Highlands County | X | | X | X | X | | X | |
| Cities in Highlands | X | | X | X | X | | X | |
| Okeechobee County | X | | X | X | X | | X | |
| City of Okeechobee | X | | X | X | X | | X | |
| Polk County | X | | X | X | X | | X | |
| Cities in Polk | X | | X | X | X | | X | |
| Private Industry | | | X | | | | | |
| Other Private Sector | | | X | | | | | X |

| Page 3 | Goal 2.3 Establish the Central Florida Region as a major destination for tourists. | | | | | | |
|----------------------|--|-------|------------|-------|-------|-------|-------|
| Agency | Policies | | Strategies | | | | |
| | 2.3.1 | 2.3.2 | 2.3.a | 2.3.b | 2.3.c | 2.3.d | 2.3.e |
| CFRPC | X | X | X | X | X | X | X |
| SWFWMD | | | | | | | X |
| SFWMD | | | | | | | X |
| SJRWMD | | | | | | | X |
| DCA | | | | | | | |
| D of Ag | | | | | | | |
| OTTED | | | | | | | X |
| FDOT | | | | | | | |
| FDEP | | | | | | | X |
| Enterprise FL | | | X | | | | |
| FGFWFC | | | | | | | X |
| USFWS | | | | | | | X |
| COE | | | | | | | X |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X | X |
| Highlands County | X | X | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X | X |
| Private Industry | | | | | | | |
| Other Private Sector | X | X | X | X | X | X | X |

| Page 4 | Goal 2.4 Plan, develop, reinforce and link infrastructure systems to serve business and industrial location and expansion. | | | | | |
|----------------------|--|-------|-------|------------|-------|-------|
| Agency | Policies | | | Strategies | | |
| | 2.4.1 | 2.4.2 | 2.4.3 | 2.4a | 2.4.b | 2.4.c |
| CFRPC | X | X | X | X | X | X |
| SWFWMD | X | X | | | | |
| SFWMD | X | X | | | | |
| SJRWMD | X | X | | | | |
| DCA | X | X | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | | | X | X | X | |
| FDEP | | | | | | |
| Enterprise FL | | | | | | |
| FGFWFC | | | | | | |
| USFWS | | | | | | |
| COE | | | | | | |
| FTDC | | | | | | |
| Special Districts | X | X | X | | | |
| PTPO | | | X | X | X | |
| DeSoto County | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X |
| Highlands County | X | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X |
| Private Industry | X | X | X | | | |
| Other Private Sector | X | X | X | | | |

REGIONAL TRANSPORTATION

SRPP COORDINATION OUTLINE

| Page 1 | Goal 3.1: As a priority, protect, maintain and improve existing transportation infrastructure with available transportation funds. | | | | | | | | | | |
|-----------------------------|---|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
| Agency | Policies | | | | | | | Strategies | | | |
| | 3.1.1 | 3.1.2 | 3.1.3 | 3.1.4 | 3.1.5 | 3.1.6 | 3.1.7 | 3.1.a | 3.1.b | 3.1.c | 3.1.d |
| CFRPC | | | | | | X | X | | | X | X |
| SWFWMD | | | | | | | X | | | | |
| SFWMD | | | | | | | X | | | | |
| SJRWMD | | | | | | | X | | | | |
| DCA | | | | | | | X | | | X | X |
| D of Ag | | | | | | | X | | | | |
| OTTED | | | | | | | X | | | | |
| FDOT | X | X | X | X | X | X | X | X | X | X | X |
| FDEP | | | | | | | X | | | | |
| Enterprise FL | | | | | | | X | | | | |
| FGFWFC | | | | | | | X | | | | |
| USFWS | | | | | | | X | | | | |
| COE | | | | | | | X | | | | |
| FTDC | | | | | | | X | | | | |
| Special Districts | | | | | | | X | | | | |
| PTPO | X | X | X | X | X | X | X | X | X | X | X |
| DeSoto County | X | X | X | X | X | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X | X | X | X | X | X |
| Highlands County | X | X | X | X | X | X | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X | X | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X | X | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X | X | X | X | X | X |
| Private Industry | | | | | | | X | | | | |
| Other Private Sector | | | | | | | X | | | | |

| | | | | | | | | | |
|-----------------------------|------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Page 2 | Goal 3.2: | Coordinate future transportation improvements to aid in the management of growth, and facilitate integration of highway, air, mass transit and other transportation modes. | | | | | | | |
| Agency | Policies | | | | | | | | |
| | 3.2.1 | 3.2.2 | 3.2.3 | 3.2.4 | 3.2.5 | 3.2.6 | 3.2.7 | 3.2.8 | 3.2.9 |
| CFRPC | X | | | X | X | X | X | X | X |
| SWFWMD | | | | | | | X | | X |
| SFWMD | | | | | | | X | | X |
| SJRWMD | | | | | | | X | | X |
| DCA | | | | | X | | X | X | X |
| D of Ag | | | | | | | X | | X |
| OTTED | | | | | | | X | | X |
| FDOT | X | X | X | X | X | X | X | X | X |
| FDEP | | | | | | | X | | X |
| Enterprise FL | | | | | | | X | | X |
| FGFWFC | | | | | | | X | | X |
| USFWS | | | | | | | X | | X |
| COE | | | | | | | X | | X |
| FTDC | | | | | | | X | | X |
| Special Districts | | | | | | | X | | X |
| PTPO | X | X | X | X | X | X | X | X | X |
| DeSoto County | | X | X | X | X | X | X | X | X |
| City of Arcadia | | X | X | X | X | X | X | X | X |
| Hardee County | | X | X | X | X | X | X | X | X |
| Cities in Hardee | | X | X | X | X | X | X | X | X |
| Highlands County | | X | X | X | X | X | X | X | X |
| Cities in Highlands | | X | X | X | X | X | X | X | X |
| Okeechobee County | | X | X | X | X | X | X | X | X |
| City of Okeechobee | | X | X | X | | X | X | X | X |
| Polk County | X | X | X | X | | X | X | X | X |
| Cities in Polk | | X | X | X | | X | X | X | X |
| Private Industry | | X | X | X | | X | X | X | X |
| Other Private Sector | | X | X | X | | X | X | X | X |

| | | | | | |
|-----------------------------|--|--------------|--------------|--------------|--------------|
| Page 2a | Coordinate future transportation improvements to aid in the management of growth, and facilitate integration of highway, air, mass transit and other transportation modes. | | | | |
| Agency | Strategies | | | | |
| | 3.2.a | 3.2.b | 3.2.c | 3.2.d | 3.2.e |
| CFRPC | X | X | X | X | X |
| SWFWMD | X | X | X | X | |
| SFWMD | | | X | X | |
| SJRWMD | | | | | |
| DCA | X | X | X | X | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | X | X | X | X | X |
| FDEP | | | | | |
| Enterprise FL | | | | | |
| FGFWFC | | | | | |
| USFWS | | | | | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | X | X | | | X |
| DeSoto County | X | X | | | X |
| City of Arcadia | X | X | | | X |
| Hardee County | X | X | | | X |
| Cities in Hardee | X | X | | | X |
| Highlands County | X | X | | | X |
| Cities in Highlands | X | X | | | X |
| Okeechobee County | X | X | X | X | X |
| City of Okeechobee | X | X | | | X |
| Polk County | X | X | | | X |
| Cities in Polk | X | X | | | X |
| Private Industry | X | X | | | X |
| Other Private Sector | X | X | | | X |

| Page 3 | Goal 3.3: | | | Provide access to transportation services to the transportation disadvantaged which will meet their needs. |
|-----------------------------|------------------|--------------|--------------|--|
| Agency | Policies | | | Strategy 3.3.a |
| | 3.3.1 | 3.3.2 | 3.3.3 | |
| CFRPC | X | X | X | X |
| SWFWMD | | | | |
| SFWMD | | | | |
| SJRWMD | | | | |
| DCA | | | | |
| D of Ag | | | | |
| OTTED | | | | |
| FDOT | | | | |
| FDEP | | | | |
| Enterprise FL | | | | |
| FGFWFC | | | | |
| USFWS | | | | |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | X | X | X | X |
| DeSoto County | X | X | | X |
| City of Arcadia | | | | |
| Hardee County | X | X | | X |
| Cities in Hardee | | | | |
| Highlands County | X | X | | X |
| Cities in Highlands | X | X | | |
| Okeechobee County | X | X | | X |
| City of Okeechobee | | | | |
| Polk County | X | X | X | X |
| Cities in Polk | | | | |
| Private Industry | | | | |
| Other Private Sector | X | X | | X |

| Page 4 | Goal 3.4: Reduce average vehicle trip lengths on the transportation system, thereby lowering energy consumption per vehicle and reducing segment volumes. | | | |
|-----------------------------|--|--------------|-------------------|--------------|
| Agency | Policies | | Strategies | |
| | 3.4.1 | 3.4.2 | 3.4a | 3.4.b |
| CFRPC | X | X | X | X |
| SWFWMD | | X | | |
| SFWMD | | | | |
| SJRWMD | | | | |
| DCA | | X | X | X |
| D of Ag | | | | |
| OTTED | X | | | |
| FDOT | X | | | |
| FDEP | | | | |
| Enterprise FL | X | | | |
| FGFWFC | | | | |
| USFWS | | | | |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | X | | | |
| DeSoto County | X | X | X | X |
| City of Arcadia | | X | X | X |
| Hardee County | X | X | X | X |
| Cities in Hardee | | X | X | X |
| Highlands County | X | X | X | X |
| Cities in Highlands | | X | X | X |
| Okeechobee County | X | X | X | X |
| City of Okeechobee | | X | X | X |
| Polk County | X | X | X | X |
| Cities in Polk | | X | X | X |
| Private Industry | X | | | |
| Other Private Sector | X | | | |

| | | | | | | | | |
|-----------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Page 5 | Goal 3.5: Development shall only occur in a manner consistent with Florida Statutes requiring the concurrent provision of adequate transportation facilities. | | | | | | | |
| Agency | Policies | | | | | | | |
| | 3.5.1 | 3.5.2 | 3.5.3 | 3.5.4 | 3.5.5 | 3.5.6 | 3.5.7 | 3.5.8 |
| CFRPC | X | X | X | X | X | X | X | X |
| SWFWMD | X | | | | | | | |
| SFWMD | X | | | | | | | |
| SJRWMD | X | | | | | | | |
| DCA | X | X | X | | | X | X | |
| D of Ag | X | | | | | | | |
| OTTED | X | | | | | | | |
| FDOT | X | | X | X | X | X | X | X |
| FDEP | X | | | | | | | |
| Enterprise FL | X | | | | | | | |
| FGFWFC | X | | | | | | | |
| USFWS | X | | | | | | | |
| COE | X | | | | | | | |
| FTDC | X | | | | | | | |
| Special Districts | X | | | | | | | |
| PTPO | X | X | X | | X | X | X | X |
| DeSoto County | X | X | X | | X | X | X | X |
| City of Arcadia | X | X | X | | X | X | X | X |
| Hardee County | X | X | X | | X | X | X | X |
| Cities in Hardee | X | X | X | | X | X | X | X |
| Highlands County | X | X | X | | X | X | X | X |
| Cities in Highlands | X | X | X | | X | X | X | X |
| Okeechobee County | X | X | X | | X | X | X | X |
| City of Okeechobee | X | X | X | | X | X | X | X |
| Polk County | X | X | X | | X | X | X | X |
| Cities in Polk | X | X | X | | X | X | X | X |
| Private Industry | X | X | | | | | | |
| Other Private Sector | X | X | | | | | | |

| | | | | |
|-----------------------------|---|--------------|--------------|--------------|
| Page 5a | Goal 3.5a: Development shall only occur in a manner consistent with Florida Statutes requiring the concurrent provision of adequate transportation facilities. | | | |
| Agency | Strategies | | | |
| | 3.5.a | 3.5.b | 3.5.c | 3.5.d |
| CFRPC | X | X | X | X |
| SWFWMD | | | | |
| SFWMD | | | | |
| SJRWMD | | | | |
| DCA | X | X | X | X |
| D of Ag | | | | |
| OTTED | | | | |
| FDOT | X | X | X | X |
| FDEP | | | | |
| Enterprise FL | | | | |
| FGFWFC | | | | |
| USFWS | | | | |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | X | X | X | X |
| DeSoto County | X | X | X | X |
| City of Arcadia | X | X | X | X |
| Hardee County | X | X | X | X |
| Cities in Hardee | X | X | X | X |
| Highlands County | X | X | X | X |
| Cities in Highlands | X | X | X | X |
| Okeechobee County | X | X | X | X |
| City of Okeechobee | X | X | X | X |
| Polk County | X | X | X | X |
| Cities in Polk | X | X | X | X |
| Private Industry | | | | |
| Other Private Sector | | | | |

| Page 6 | Goal 3.6: | | Level-of-service methodologies shall be consistent. | | | | |
|-----------------------------|------------------|--------------|---|--------------|--------------|--------------|--------------|
| Agency | Policies | | Strategies | | | | |
| | 3.6.1 | 3.6.2 | 3.6.a | 3.6.b | 3.6.c | 3.6.d | 3.6.e |
| CFRPC | X | X | | | X | X | |
| SWFWMD | | | | | | | |
| SFWMD | | | | | | | |
| SJRWMD | | | | | | | |
| DCA | | | | | | | |
| D of Ag | | | | | | | |
| OTTED | | | | | | | |
| FDOT | X | X | X | | X | X | |
| FDEP | | | | | | | |
| Enterprise FL | | | | | | | |
| FGFWFC | | | | | | | |
| USFWS | | | | | | | |
| COE | | | | | | | |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | X | X | | X | X | X | X |
| DeSoto County | | X | | | X | X | |
| City of Arcadia | | X | | | X | X | |
| Hardee County | | X | | | X | X | |
| Cities in Hardee | | X | | | X | X | |
| Highlands County | | X | | | X | X | |
| Cities in Highlands | | X | | | X | X | |
| Okeechobee County | | X | | | X | X | |
| City of Okeechobee | | X | | | X | X | |
| Polk County | | X | | | X | X | |
| Cities in Polk | | X | | | X | X | |
| Private Industry | | | | | | | |
| Other Private Sector | | | | | | | |

AFFORDABLE HOUSING
SRPP COORDINATION OUTLINE

| Page 1 | Goal 4.1 Increase the supply of affordable housing within the Central Florida Region. | | | | | | | | | |
|-----------------------------|--|--------------|--------------|--------------|-------------------|-------------|-------------|-------------|-------------|-------------|
| Agency | Policies | | | | Strategies | | | | | |
| | 4.1.1 | 4.1.2 | 4.1.3 | 4.1.4 | 4.1a | 4.1b | 4.1c | 4.1d | 4.1e | 4.1f |
| CFRPC | X | X | X | X | X | X | X | X | X | X |
| SWFWMD | | | | | | | | | | |
| SFWMD | | | | | | | | | | |
| SJRWMD | | | | | | | | | | |
| DCA | | | | | | | | | | |
| D of Ag | | | | | | | | | | |
| OTTED | | | | | | | | | | |
| FDOT | | | | | | | | | | |
| FDEP | | | | | | | | | | |
| Enterprise FL | | | | | | | | | | |
| FGFWFC | | | | | | | | | | |
| USFWS | | | | | | | | | | |
| COE | | | | | | | | | | |
| FTDC | | | | | | | | | | |
| Special Districts | | | | | | | | | | |
| PTPO | | | | | | | | | | |
| DeSoto County | | | | | X | | X | | X | |
| City of Arcadia | | | | | X | | X | | X | |
| Hardee County | | | | | X | | X | | X | |
| Cities in Hardee | | | | | X | | X | | X | |
| Highlands County | | | | | X | | X | | X | |
| Cities in Highlands | | | | | X | | X | | X | |
| Okeechobee County | | | | | X | | X | | X | |
| City of Okeechobee | | | | | X | | X | | X | |
| Polk County | | | | | X | | X | | X | |
| Cities in Polk | | | | | X | | X | | X | |
| Private Industry | | | | | X | | X | | X | X |
| Other Private Sector | | | | | X | | X | | X | X |

| Page 1.a | Goal 4.1 Increase the supply of affordable housing within the Central Florida Region. | | | | | |
|----------------------|---|------|------|------|------|------|
| | Strategies | | | | | |
| | 4.1g | 4.1h | 4.1i | 4.1j | 4.1k | 4.1l |
| CFRPC | X | X | X | X | X | X |
| SWFWMD | | | | | | |
| SFWMD | | | | | | |
| SJRWMD | | | | | | |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | | | | | | |
| FDEP | | | | | | |
| Enterprise FL | | | | | | |
| FGFWFC | | | | | | |
| USFWS | | | | | | |
| COE | | | | | | |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | | | | | | |
| DeSoto County | X | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X | X |
| Hardee County | X | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X | X |
| Highlands County | X | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X | X |
| Polk County | X | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X | X |
| Private Industry | | | | | X | |
| Other Private Sector | | | | | X | |

| Page 2 | Goal 4.2 Rehabilitate existing substandard affordable housing and maintain and improve the existing affordable housing stock. | | | | |
|----------------------|---|------------|------|------|------|
| Agency | Policy | Strategies | | | |
| | 4.2.1 | 4.2a | 4.2b | 4.2c | 4.2d |
| CFRPC | X | X | X | X | X |
| SWFWMD | | | | | |
| SFWMD | | | | | |
| SJRWMD | | | | | |
| DCA | | | | | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | | | | | |
| FDEP | | | | | |
| Enterprise FL | | | | | |
| FGFWFC | | | | | |
| USFWS | | | | | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | | | | | |
| DeSoto County | X | X | X | X | X |
| City of Arcadia | X | X | X | X | X |
| Hardee County | X | X | X | X | X |
| Cities in Hardee | X | X | X | X | X |
| Highlands County | X | X | X | X | X |
| Cities in Highlands | X | X | X | X | X |
| Okeechobee County | X | X | X | X | X |
| City of Okeechobee | X | X | X | X | X |
| Polk County | X | X | X | X | X |
| Cities in Polk | X | X | X | X | X |
| Private Industry | | | | | |
| Other Private Sector | | | | | |

| Page 3 | Goal 4.3 Increase the quality and quantity of housing for farm workers. | | |
|-----------------------------|--|-------------------|-------------|
| Agency | Policies | Strategies | |
| | 4.3.1 | 4.3a | 4.3b |
| CFRPC | X | X | X |
| SWFWMD | | | |
| SFWMD | | | |
| SJRWMD | | | |
| DCA | | | |
| D of Ag | X | X | X |
| OTTED | | | |
| FDOT | | | |
| FDEP | | | |
| Enterprise FL | | | |
| FGFWFC | | | |
| USFWS | | | |
| COE | | | |
| FTDC | | | |
| Special Districts | | | |
| PTPO | | | |
| DeSoto County | X | X | X |
| City of Arcadia | X | X | X |
| Hardee County | X | X | X |
| Cities in Hardee | X | X | X |
| Highlands County | X | X | X |
| Cities in Highlands | X | X | X |
| Okeechobee County | X | X | X |
| City of Okeechobee | X | X | X |
| Polk County | X | X | X |
| Cities in Polk | X | X | X |
| Private Industry | | | X |
| Other Private Sector | | | X |

EMERGENCY PREPAREDNESS

SRPP COORDINATION OUTLINE

| Page 1 | Goal 5.1 Protect public and private property and human lives from the effects of natural and man-made disasters. | | | | | |
|-----------------------------|---|--------------|--------------|-------------------|--------------|--------------|
| Agency | Policies | | | Strategies | | |
| | 5.1.1 | 5.1.2 | 5.1.3 | 5.1.a | 5.1.b | 5.1.c |
| CFRPC | X | X | X | X | X | X |
| SWFWMD | | | | | | |
| SFWMD | | | | | | |
| SJRWMD | | | | | | |
| DCA | | | | | | |
| D of Ag | | | | | | |
| OTTED | | | | | | |
| FDOT | | X | | | | |
| FDEP | | | | | | |
| Enterprise FL | | | | | | |
| FGFWFC | | | | | | |
| USFWS | | | | | | |
| COE | | X | | | | |
| FTDC | | | | | | |
| Special Districts | | | | | | |
| PTPO | X | X | | | | |
| DeSoto County | X | X | X | X | X | X |
| City of Arcadia | | | | | | |
| Hardee County | X | X | X | X | X | X |
| Cities in Hardee | | | | | | |
| Highlands County | X | X | X | X | X | X |
| Cities in Highlands | | | | | | |
| Okeechobee County | X | X | X | X | X | X |
| City of Okeechobee | | | | | | |
| Polk County | X | X | X | X | X | X |
| Cities in Polk | | | | | | |
| Private Industry | | | | | | |
| Other Private Sector | | | X | X | X | X |

| Page 2 | Goal 5.2 Maximize Regional Evacuation Capability and Emergency Shelter Capacity. | | | | | | | |
|-----------------------------|---|--------------|--------------|-------------------|--------------|--------------|--------------|--------------|
| Agency | Policies | | | Strategies | | | | |
| | 5.2.1 | 5.2.2 | 5.2.3 | 5.2.a | 5.2.b | 5.2.c | 5.2.d | 5.2.e |
| CFRPC | X | X | X | | X | X | | X |
| SWFWMD | | | | | | | | |
| SFWMD | | | | | | | | |
| SJRWMD | | | | | | | | |
| DCA | | | | | | | | |
| D of Ag | | | | | | | | |
| OTTED | | | | | | | | |
| FDOT | X | X | | X | X | | X | |
| Enterprise FL | | | | | | | | |
| FGFWFC | | | | | | | | |
| USFWS | | | | | | | | |
| FDEP | | | | | | | | |
| COE | | | | | | | | |
| FTDC | | | | | | | | |
| Special Districts | | | | | | | | |
| PTPO | X | X | | | | | | |
| DeSoto County | X | X | X | X | X | X | X | X |
| City of Arcadia | | | | | | | | |
| Hardee County | X | X | X | X | X | X | X | X |
| Cities in Hardee | | | | | | | | |
| Highlands County | X | X | X | X | X | X | X | X |
| Cities in Highlands | | | | | | | | |
| Okeechobee County | X | X | X | X | X | X | X | X |
| City of Okeechobee | | | | | | | | |
| Polk County | X | X | X | X | X | X | X | X |
| Cities in Polk | | | | | | | | |
| Private Industry | | | | | | | | |
| Other Private Sector | | | X | | | X | | X |

| Page 3 | Goal 5.3 Hazardous Materials will present the minimum feasible risk to the citizens of the region. | | | | | | | | | |
|----------------------|--|-------|-------|------------|-------|-------|-------|-------|-------|-------|
| Agency | Policies | | | Strategies | | | | | | |
| | 5.3.1 | 5.3.2 | 5.3.3 | 5.3.a | 5.3.b | 5.3.c | 5.3.d | 5.3.e | 5.3.f | 5.3.g |
| CFRPC | X | X | X | X | X | X | X | X | X | X |
| SWFWMD | | | | | | | | | | |
| SFWMD | | | | | | | | | | |
| SJRWMD | | | | | | | | | | |
| DCA | | | | | | | | | | |
| D of Ag | | | | | | | | | | |
| OTTED | | | | | | | | | | |
| FDOT | | | | | | | | | | |
| FDEP | | | | | | | | | | |
| Enterprise FL | | | | | | | | | | |
| FGFWFC | | | | | | | | | | |
| USFWS | | | | | | | | | | |
| COE | | | | | | | | | | |
| FTDC | | | | | | | | | | |
| Special Districts | | | | | | | | | | |
| PTPO | | | | | | | | | | |
| DeSoto County | X | X | X | X | | | | | X | |
| City of Arcadia | X | | | X | | | | | | |
| Hardee County | X | X | X | X | | | | | X | |
| Cities in Hardee | X | | | X | | | | | | |
| Highlands County | X | X | X | X | | | | | X | |
| Cities in Highlands | X | | | X | | | | | | |
| Okeechobee County | X | X | X | X | | | | | X | |
| City of Okeechobee | X | | | X | | | | | | |
| Polk County | X | X | X | X | | | | | X | |
| Cities in Polk | | | | | | | | | | |
| Private Industry | X | | | X | | | X | | X | X |
| Other Private Sector | | | | | | | X | | | |

| Page 4 | Goal 5.4 The emergency requirements of the Special Needs Population have been met. | | | | |
|-----------------------------|---|--------------|-------------------|--------------|--------------|
| Agency | Policies | | Strategies | | |
| | 5.4.1 | 5.4.2 | 5.1.a | 5.1.b | 5.1.c |
| CFRPC | X | X | X | | X |
| SWFWMD | | | | | |
| SFWMD | | | | | |
| SJRWMD | | | | | |
| DCA | | | | | |
| D of Ag | | | | | |
| OTTED | | | | | |
| FDOT | | | | | |
| FDEP | | | | | |
| Enterprise FL | | | | | |
| FGFWFC | | | | | |
| USFWS | | | | | |
| COE | | | | | |
| FTDC | | | | | |
| Special Districts | | | | | |
| PTPO | | | | | |
| DeSoto County | X | X | X | X | X |
| City of Arcadia | | | | | |
| Hardee County | X | X | X | X | X |
| Cities in Hardee | | | | | |
| Highlands County | X | X | X | X | X |
| Cities in Highlands | | | | | |
| Okeechobee County | X | X | X | X | X |
| City of Okeechobee | | | | | |
| Polk County | X | X | X | X | X |
| Cities in Polk | | | | | |
| Private Industry | | | | | |
| Other Private Sector | X | X | X | | X |

| Page 5 | Goal 5.5 Recovery from natural disasters is timely and cost effective, because mitigation techniques have reduced exposure and vulnerability of development. | | | |
|-----------------------------|---|--------------|-------------------|--------------|
| Agency | Policies | | Strategies | |
| | 5.5.1 | 5.5.2 | 5.5.a | 5.5.b |
| CFRPC | | X | X | |
| SWFWMD | | | | |
| SFWMD | | | | |
| SJRWMD | | | | |
| DCA | | | | |
| D of Ag | | | | |
| OTTED | | | | |
| FDOT | | | | |
| FDEP | | | | |
| Enterprise FL | | | | |
| FGFWFC | | | | |
| USFWS | | | | |
| COE | | | | |
| FTDC | | | | |
| Special Districts | | | | |
| PTPO | | | | |
| DeSoto County | X | X | X | X |
| City of Arcadia | | | | X |
| Hardee County | X | X | X | X |
| Cities in Hardee | | | | X |
| Highlands County | X | X | X | X |
| Cities in Highlands | | | | X |
| Okeechobee County | X | X | X | X |
| City of Okeechobee | | | | X |
| Polk County | X | X | X | X |
| Cities in Polk | | | | |
| Private Industry | | | | X |
| Other Private Sector | | | | |

| Page 6 | Goal 5.6 Minimize future risk to life in new and existing mobile home and recreational vehicle parks from the effects of natural disasters. | | | | | | |
|-----------------------------|--|--------------|-------------------|--------------|--------------|--------------|--------------|
| Agency | Policies | | Strategies | | | | |
| | 5.6.1 | 5.6.2 | 5.6.a | 5.6.b | 5.6.c | 5.6.d | 5.6.e |
| CFRPC | X | X | X | X | X | X | X |
| SWFWMD | | | | | | | |
| SFWMD | | | | | | | |
| SJRWMD | | | | | | | |
| DCA | | | | | | | |
| D of Ag | | | | | | | |
| OTTED | | | | | | | |
| FDOT | | | | | | | |
| FDEP | | | | | | | |
| Enterprise FL | | | | | | | |
| FGFWFC | | | | | | | |
| USFWS | | | | | | | |
| COE | | | | | | | |
| FTDC | | | | | | | |
| Special Districts | | | | | | | |
| PTPO | | | | | | | |
| DeSoto County | X | X | X | X | X | X | X |
| City of Arcadia | | | | X | X | X | |
| Hardee County | X | X | X | X | X | X | X |
| Cities in Hardee | | | | X | X | X | |
| Highlands County | X | X | X | X | X | X | X |
| Cities in Highlands | | | | X | X | X | |
| Okeechobee County | X | X | X | X | X | X | X |
| City of Okeechobee | | | | X | X | X | |
| Polk County | X | X | X | X | X | X | X |
| Cities in Polk | | | | | | | |
| Private Industry | | | | X | X | X | |
| Other Private Sector | | | | | | | |

GLOSSARY

Affordable: That monthly rents or monthly mortgage payments including taxes, insurance, and utilities do not exceed 30 percent of that amount which represents the percentage of the median adjusted gross annual income for very low, low, and moderate income persons. [420.000(3), F.S.]

Agriculture: All methods of production and management of livestock, crops, and soil. This includes, but is not limited to, the related activities of tillage, fertilization, pest control, harvesting, and marketing. It also includes the activities of feeding, housing, and maintenance of livestock and handling their by-products.

Air Pollution: The presence of contaminants in concentrations that prevent the normal dispersive ability of the air and that interfere directly with human health, safety or comfort or with the full use and enjoyment of property.

Aquifer: An underground water-bearing strata through which ground water moves freely.

Aquifer Recharge Area: A region where water infiltrates the ground surface and flows to the underlying aquifer.

Attainment Areas: Airsheds which meet National Ambient Air Quality Standards for criteria air pollution.

Best Available Control Technology (BACT): A pollution emission/discharge limitation based on the maximum degree of reduction of each pollutant emitted, which is achievable through application of production processes and available methods, systems and techniques for control of each such pollutant, except where cost prohibitive.

Best Management Practices (BMPs): Conservation practices or systems of practices and management measures that control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxins, and sediment. Agricultural BMPs include, but are not limited to, strip cropping, terracing, contour stripping, grass waterways, animal waste structures, ponds, minimal tillage, grass and naturally vegetated filter strips, and proper nutrient application measures. (FDACS Division of Forestry has guidelines applicable during silvicultural operations.) In addition, BMPs include practices that are technologically and economically practicable and most beneficial in preventing or reducing adverse impacts from mining activities.

Buffer: A naturally vegetated area or vegetated area established or established or managed to protect aquatic, wetland, shoreline, and terrestrial environments from man-made disturbances.

Manufactured objects such as walls or fences, as well as vegetation that block sight angles, are also considered buffers.

Buffering: A landscaped strip of land or manmade barrier established and reserved between two or more parcels of land or between two or more dissimilar or incompatible land uses.

Channel: A watercourse with a definite bed and banks which confine and conduct the normal continuous or intermittent flow of water. Also, the deeper path provider for boats or ships to traverse a water body.

Channelization: The straightening and deepening of channels and/or the cross-section thereof to permit water to move rapidly and/or directly; or provision of path, deeper than the surrounding area, through a water body for boats or ships.

Classes of Waters of the State:

- ② Class I-A: Surface waters that are used as potable source for public water supplies or withdrawn for treatment as such.
- ② Class I-B: Groundwaters that are used as potable and agricultural water supplies and storage.
- ② Class II: Coastal waters which have the capability to support shellfish harvesting.
- ② Class III: All other coastal and inland waters not otherwise specifically classified by the State Department of Environmental and Regulation. The primary requirement for these waters is that they be maintained at a quality sufficient to allow body contact water sports and propagation of fish and wildlife.
- ② Class IV: Agricultural and industrial water supplies.
- ② Class V: Navigation, utility and industrial use.

Clean Air Act: The federal act put forth in 1970 which established national air quality standards. The original legislation was adopted in 1963.

CDBG: a type of State administered program. Community Development Block Grant programs are administered by HUD and are given to entitlement governments for expenditure in targeted very-low and low income geographical areas only. CDBG funds may be used for the provision of affordable housing, but due to program restrictions are usually used for infrastructure improvements and rehabilitation of existing housing stock.

Comprehensive Emergency Management: is a planning concept which addresses the four inter-

related phases of emergency management: preparedness, response, recovery and mitigation.

Conservation Areas: Designated areas protected from development by various means.

Criteria Air Pollution: Those pollutants for which national ambient air standards have been established, including carbon monoxide, lead, nitrogen oxides, ozone, sulfur dioxide, and total suspended particulates (recently designated as PM10).

Desalinization: The conversion, through one of several processes, of salt or brackish water to water sufficiently low in dissolved salt content to tender it acceptable for agriculture, industry, and human use.

Detailed Reclamation Plan: A detailed graphic and written description of a reclamation plan for a segment of a mine that is consistent with the applicable approved conceptual reclamation plan and that specifies how that segment will be reclaimed to comply with applicable rules, regulations and ordinances.

Drainage: Surface water runoff; or the removal of surface water or groundwater from land by drains, grading or other means.

Drainage Facilities: A system of man-made structures designed to collect, convey, hold, divert or discharge stormwater, including stormwater sewers, canals, detention structures, and retention structures.

Drainage System: Pipes, swales, natural features and man-made improvements designed to convey runoff.

Dredge: A machine for evacuating material from the bottom of a body of water; or the act of excavating.

Dredge and Fill: Construction, excavation, or deposition of material in, on, or over jurisdictional wetlands.

Dredging: A method for deepening streams, swamps or coastal waters by removing solids from the bottom.

Ecosystem: A community of plant and animal species that interact together along with their physical and chemical environment.

Effluent: The liquid that comes out of a wastewater treatment plant after completion of the treatment process.

Effluent Reuse: Use of treated effluent for purposes such as, landscape irrigation and industrial

and commercial uses; uses that must be in accordance with Chapter 17-6, FAC.

Emergency: any unusual incident resulting from natural or unnatural causes which endanger the health, safety, or resources of the residents of the region.

EPCRA: Emergency Planning and Community Right-to-Know Act.

Endangered Species: Any species of fish, wildlife, or plant which have been designated as such by the appropriate federal or state agency. Designation occurs when the continued existence of these species as viable components of the state's resources are determined to be in jeopardy.

Estuary: The area near the mouth of a river where sea water and freshwater mix. Estuaries include bays, embayments. Lagoons, sounds and tidal streams.

Extinction: The complete disappearance of a species from Earth, which occurs by destruction of natural habitat, failure to adapt to new conditions, or severe depletion of numbers.

Extremely Hazardous Substances (EHSs): chemicals identified by the EPA on the basis of toxicity, and listed under EPCRA/SARA Title III.

Evacuation Route: routes designated by county emergency management authorities based upon the regional evacuation studies, for the movement of persons to safety, in the event of a natural or technological disaster. Pursuant to Paragraph 9J-2.0255(4)(d), F.A.C. the Department of Community Affairs considers hurricane evacuation routes as regionally significant roadways.

Facility: defined for Section 302 of EPCRA as all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person). For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft.

Flood Plains: Areas inundated during a flood event with a specific probability of occurrence.

Floodway: Area of stream or river that has considerable velocity compared to bank flow area.

Groundwater Recharge Area: Areas that are ideal for different methods, both natural and artificial, of returning large volumes of water back into the groundwater supply. A recharge area is mostly dependent on the permeability of soils, with areas having low permeabilities utilizing artificial techniques.

Habitat: The particular natural community, or communities, that typically supports a population of a particular plant and animal species.

HAP: a type of federally administered program. The Homeownership Program (HAP) assists low-income persons in purchasing a home by providing zero-interest second loans to be used for downpayments and closing costs for financing first mortgage loans under the Single Family Mortgage Revenue Bond Program. The program is administered through the FHFA and DCA.

Hazardous Air Pollutant: A pollutant to which no ambient air quality standard is applicable and that may cause or contribute to an increase in mortality or serious illness.

Hazardous Material: any substance or material in a quantity or form which may be harmful to humans, animals, crops, water systems, or other elements of the environment if accidentally released. Hazardous materials include: explosives, gases (compressed, liquefied, or dissolved), flammable and combustible liquids, flammable solids or substances, oxidizing substances, poisonous and infectious substances, radioactive materials, and corrosives.

Hazardous Waste: Solid waste, or a combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infection characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported disposed of, stored, treated, or otherwise managed.

Hazardous Waste Disposal: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or upon any land or water so that such solid waste or hazardous waste or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including Groundwaters, or otherwise enter the environment.

Heavy Metals: Elements such as copper, lead, cadmium, mercury, and other toxic metals used in industrial processes and often released as both air and water pollutants. They may accumulate to hazardous concentrations in sediments and sludge.

HOME: a type of federally administered program. The Home Investment Partnership (HOME) program was enacted as part of the 1990 Cranston-Gonzalez National Affordable Housing Act to provide states with their first opportunity to administer federally funded home ownership and rental housing programs. HOME requirements are very flexible and may be used for new construction, rehabilitation, land acquisition, site improvements, and tenant-based rental assistance. CDBG entitlement are eligible to receive their own HOME funds, the Florida Housing Finance Agency (FHFA) administering Home funds, with priority given to projects in communities not receiving direct HOME funding.

Hurricane: an extremely low pressure tropical storm rotating counterclockwise around a relatively calm eye. Hurricane-force winds start at 75 miles per hour and have been known to exceed 155 miles per hour. Damage is caused by the wind, storm surge and flooding.

Hurricane Shelter: is a structure designated by local officials as a relatively safe place of

protection during a tropical storm or hurricane.

Hydrocarbons: Air pollutants that are important precursors of smog. These chemical compounds are generally released as unburned or incompletely burned residue when carbon-containing fossil fuels such as coal, oil, and natural gas are burned in car and truck engines or other facilities.

Hydrology: The science which deals with the circulation, distribution, and properties of water.

Incompatible: Situations where uses differ to such as extent in character and intensity that major conflicts arise between them in terms of, but not limited to, traffic generation, noise, and aesthetics.

Infiltration: Entry of ground water into sanitary sewer lines through such sources as defective pipes, pipe joints, connections, or manhole walls.

Inflow: Signifies discharge into the sewer system lines through service connections from such sources as area or foundation drainage, storm waters, street wash waters, or sewers.

Land Use: The purpose for which land or the structure on the land is being used.

Landfill: A well-planned, and properly located operation that is based on engineering methods and techniques that allows the disposal and burial of vast amounts of refuse in stable land.

Landscape Reclamation: A reclamation planning process with the following basic objectives:

- ② Re-establishing a coherent drainage pattern, using existing watersheds as the basic planning units;
- ② Establishing functional and diverse ecological communities;
- ② Establishing connections and links, in particular wildlife corridors; and
- ② Achieving a balance of human uses and natural lands.

Listed Species: An animal or plant species identified as endangered, threatened, or Species of Special Concern in Chapter 39, FAC; Chapter 531.153, F.S.; and/or in the federal Endangered Species Act, 16 U.S.C. Section 1531 et.seq., as amended, or any other applicable state or federal statute or rule.

Local Emergency Planning Committee (LEPC): a committee appointed by the State Emergency Response Commission (SERC), as required by EPCRA, SARA Title III, to formulate a comprehensive emergency plan for its district.

Local Government Comprehensive Plan: A growth management plan prepared, adopted and

amended by a local government and determined to be in compliance by the Florida Department of Community Affairs, pursuant to Chapter 163, Florida Statutes.

LIHTC: a type of federally administered program. The low income rental Housing Tax Credit (LIHTC) program provided developers with a dollar to dollar reduction in federal tax liability in exchange for the production of low income housing. The FHFA is the designated tax credit agency for Florida and SAIL and HOME programs are given priority and are exempt from a scoring a ranking competitive process that all other developers must go through.

Low-income persons: one or more persons or a family, the total annual adjusted gross household income of which does not exceed 80 percent of the median annual adjusted gross income for households within the state, or 80 percent of the median annual adjusted gross income for households within the metropolitan statistical area (MSA) or, if not within an MSA, within the county in which the person or family resides, whichever is greater. [420.0004(9), F.S.]

Manufactured home: a mobile home fabricated on or after June 15, 1976, in an off-site manufacturing facility for installation or assembly at the building site, with each section bearing a seal certifying that it is built in compliance with the federal Manufactured Home Construction and Safety Act. [320.01(2)(b), F.S.]

Marina: A facility for storing, servicing, fueling, berthing and securing pleasure boats and which may include eating and retail facilities for owners, crews and guests.

Median price: published by the National Association of Home Builders. This figure for the Lakeland-Winter Haven area was \$68,000 for the final quarter of 1994. This means that of all the homes for sale in the final quarter of 1994, half were for sale under \$68,000 and half were for sale over that amount. Nationally, for the same quarter, this figure was \$114,000.

Metropolitan Planning Organization (MPO): The organization designated by the Governor as responsible together with the State for transportation planning in an urbanized area according to 23 U.S.C. Section 134. This organization shall be the forum for cooperative decision-making by principal elected officials of general local government.

MGD: Million gallons per day.

Migrant Farmworker: any person who has left his/her permanent residence or abode in search of agricultural employment, and once employment is secured, has established a temporary residence for the period of employment. This definition includes family members of the migrant farmworker, whether working or not.

Mitigate: To offset or reduce negative impacts through measures such as, but not limited to, the following:

- ② Not taking action or parts of a certain action;
- ② Limiting the degree or magnitude of the action;
- ② Repairing, rehabilitating, or restoring the affected resource;
- ② Preserve and maintain operations over time during the life of the action ; and
- ② Replacing or providing substitute resources or environment.

Mobile Home: structure, transportable in one or more sections, which is eight body feet or more in width, and which is built on an integral chassis and designed to be used as a dwelling unit when connected to the required utilities and includes the plumbing, heating, air conditioning and electrical systems contained therein. [320.01(2)(a), F.S.]

Moderate-income persons: one or more persons or a family, the total annual adjusted gross household income of which is less than 120 percent of the median annual adjusted gross income for households within the MSA, or if not within an MSA, within the county in which the person or family resides, whichever is greater. [420.0004(10), F.S.]

Modular home: a structure, fabricated off-site and assembled on the building site, and meeting the requirements of the building code, plumbing code, electrical code, and other such codes as may be applicable for conventional construction.

National Ambient Air Quality Standards (NAAQS): Federal ambient air quality standards, for air pollutants which may reasonable be anticipated to endanger public health or welfare. The presence of such pollutants in the ambient air results from numerous or diverse mobile or stationary sources.

Nonattainment Areas: Geographical areas which the U.S. Environmental Protection Agency has designated as failing to meet National Ambient Air Quality Standards.

Non-Criteria Pollutants: Pollutants for which there are no state or federal standards (fluorine, and acid deposition, for example).

Non-Point Source Pollution: Any source of water pollution that is not discharged into a specific identifiable location, and is usually generated over a relatively wide area such as a city or cropland. It is usually discharged into receiving waters at irregular intervals as a consequence of storm runoff.

Nutrients: Elements or compounds required by plants and animals for growth and reproduction including water-soluble nitrogen and phosphorus compounds (nitrate and phosphate fertilizers) needed by crops for normal growth.

Open Space: Undeveloped lands suitable for passive recreation or conservation uses.

Overriding Public Interest (test): In determining whether a project or activity is in the public interest, the Council may consider and balance the following criteria:

- ② The public benefit to be derived from the project.
- ② The degree to which the current condition and relative value of functions being performed by areas affected by the proposed project or activity are degraded;
- ② The degree to which the project or activity will adversely affect the public health, safety, or welfare or the property of others;
- ② The degree to which the project will adversely affect the conservation of fish and wildlife, including endangered or threatened species, or their habitats;
- ② The degree to which the project or activity will adversely affect or enhance significant historical and archaeological resources; and
- ② If the project will be of a temporary or permanent nature.

In deciding to recommend approval or denial of an application, the Council may consider measures to mitigate adverse effects which may be caused by the project or activity.

Ozone: A bluish, irritating gas or pungent odor, formed naturally in the upper atmosphere, consisting of three oxygen atoms. Lack of it in the atmosphere allows stronger concentrations of ultraviolet radiation to reach the earth. Ozone is also formed at ground level by the interaction of sunlight with exhaust gases from automobiles and industry, and by the action of sunlight on nitrogen oxides and hydrocarbons, where it is a primary component of smog that aggravates breathing problems and damages plants.

Permitting: Authorization to engage in or conduct any construction, operation, modification, or expansion of any installation, structure, equipment, facility, or appurtenances thereto, which will reasonably be expected to be a source of pollution or a hindrance, or affect the health and welfare of the population or environment.

Point Source Pollution: Pollution originating at a specific location, such as a sewage treatment facility, or at stormwater drain outfalls, and occurs more or less continuously.

Potable Water: Water that can be used for human consumption.

Proactive: Planned, positive action to achieve a designated result.

Public Facilities: Systems or facilities relating to transportation, sewer service, solid waste service, drainage service, potable water service, parks and recreation and public health.

Reasonable Available Control Technology (RACT): The lowest emission limit that a particular source is capable of meeting by the application of control technology that has been applied to similar, but not necessarily identical, source categories.

Receiving Waters: Rivers, lakes, oceans, or other water courses that receive treated or untreated waste water, or other discharges.

Reclamation: The reshaping of lands in a manner which meets the reclamation standards of applicable rules, regulations and ordinances. The reasonable rehabilitation of disturbed land for useful purposes. Also, the recycling of wastewater, with treatment, to water useable for a variety of purposes.

Regionally significant natural resources: A natural resource or system of interrelated natural resources, that due to its function, size, rarity or endangerment retains or provides benefit of regional significance to the human or natural environment, regardless of ownership (27E-5.002 (4), FAC.)

Regionally significant transportation facilities - All facilities on the Florida Intrastate Highway System are considered to be significant regional facilities. Roadways considered to be state and regionally significant shall be a paved roadway that crosses local government jurisdictional boundaries, is a component of the state highway system, connects components of the state highway system, provides access to a regional center, or is a hurricane evacuation route.

Reservoir: A pond, lake, tank, tank or basin, natural or man-made, used for the storage, regulation and control of water.

Restoration: The recontouring and revegetation of land in a manner which will return the type, nature, and function of the ecosystem to the condition in existence prior to disturbance.

SAIL: a type of State administered program. The State Apartment Incentive Loan (SAIL) program offers low-interest mortgage loans to for profit and non-profit developers of apartment complexes that set aside a minimum of 20% of their units for households with qualifying low incomes.. The program is administered through the FHFA and DCA and uses a competitive application process to select applicants.

Retrofit: To raise to current standards, such as, to provide a higher level of stormwater treatment to a previously developed area.

Revegetation: Provision of a diverse permanent vegetation capable of self-regeneration and

which will provide the appearance of a natural landscape within a reasonable time.

Runoff: The part of the rainfall that travels to surface streams and water bodies via surface or subsurface routes.

Saltwater Intrusion: The occurrence of the saltwater/freshwater interface moving laterally or vertically to occupy space where freshwater once was.

Sand Pine Scrub: Characterized and dominated by sand pines and a usually well drained soil composition. Depending on soil moisture and characteristics, varying amounts of oak, scrub hickory, paw paw, and rosemary can also be found.

SARA Title III (Superfund Amendments and Reauthorization Act of 1986).

Septic System: An underground system with a septic tank used for the decomposition of domestic wastes. Consists of a water-tight receptacle that receives the discharge of sewage from a building, sewer or part thereof, and is designed and constructed so as to permit settling of solids from this liquid, digestion of the organic matter, and discharge of the liquid portion into a disposal area (drain field).

SHIP: a type of federally administered program. The State Housing Initiatives Partnership (SHIP) program is supported by the William E. Sadowski Affordable Housing Act, signed into law in July 1992. As of July 1995, this legislation provided over \$100 million of affordable housing funds each year, generated by an \$.20 per \$100 documentary tax on deeds. This dedicated source of funding provides a split of 69% to local governments and 31% to the State. SHIP funds can be used to implement local housing programs, supplement state programs within the local jurisdiction, provide local matching funds to obtain federal housing grants or, programs, and fund emergency repairs under the state weatherization program. Both homeownership and rental housing can be included in the SHIP program, however, 65% of each local government's funds must be used for home ownership.

Sinkhole: A depression in the land surface formed either by the collapse of the roof of an underground cavern or channel, or by solution of near-surface limestone or similar rocks.

Species of Special Concern: Any species of animals or plants which have been designated as such by the appropriate state agency. These species appear likely, within the foreseeable future, to become threatened.

Strategy: A plan or action, which when carried out alone or in association with other strategies, implements or furthers the accomplishment of outcomes called for in goals and policies. In the context of the Strategic Regional Policy Plan, strategies that direct the cooperation or assistance of one organization with another shall be a the agreement of both organizations or the request of

the organization to be assisted. Assistance strategies shall be conducted only with the consent and availability of resources of the assisting organization. According to Rule 27E-5.002(9), Florida Administrative Code , “strategic” means proactive, future and results oriented with a focus on important long term priorities, needs and problems of the region.

Stormwater Detention: Any storm drainage technique that retards or detains runoff, such as a detention basin, parking lot storage, rooftop storage, porous pavement, dry well or any combination thereof.

Surface Water: Water on the earth's surface exposed to the atmosphere as rivers, lakes, streams and oceans.

Substandard:

- (a) Any unit lacking complete plumbing or sanitary facilities for the exclusive use of the occupants;
- (b) A unit which is in violation of one or more major sections of an applicable housing code and where such violation poses a serious threat to the health of the occupant; or
- (c) A unit that has been declared unfit for human habitation but that could be rehabilitated for less than 50 percent of the property value. [420.0004(12), F.S.]

Threatened Species: Any species which have been designated as such by the appropriate federal or state agency. Designation occurs when the continued existence of these species as viable components of the state’s resources are determined to be in jeopardy. These species appear likely, within the foreseeable future, to become endangered.

Twenty-five (25) Year Flood Plains: Areas which could be inundated during a 25-year flood event as identified by an agency, such as the Water Management District.

Unique and Irreplaceable Natural Resources: Natural resources, with quantity or quality low enough that, under normal environmental conditions, cannot continue to be viable components of the region if stressed or reduced.

Upland: Non-wetlands; Non-submerged lands.

Vehicle Inspection and Maintenance Program: Comprehensive procedures for testing motor vehicle emissions for volatile organic compounds and Carbon Monoxide.

Very-low income persons: one or more persons or a family, not including students, the total annual adjusted gross household income of which does not exceed 50 percent of the median annual adjusted gross income for households within the state, or 50 percent of the median annual

adjusted gross income for households within the MSA or, if not within an MSA, within the county in which the person or family resides, whichever is greater. [420.0004(14), F.S.]

Viability: The capability of population to deal with the various agents of local extinction; it is the ability of populations to persist through time (Shaffer, 1981).

Wastewater: Water carrying wastes from homes, businesses and industries that is a mixture of water and dissolved or suspended solids, or excess irrigation water that is runoff to adjacent land.

Water Quality Standard: A plan for water quality management containing four major elements: the primary use (recreation, drinking, fish and wildlife propagation, industrial or agricultural) of water; criteria to protect the water for that use; implementation plans (for needed industrial-municipal waste treatment improvements); enforcement plans; and an antidegradation statement to protect existing high quality waters.

Watershed: The area drained by a river.

Water Supply System: The system for the production, treatment, storage and distribution of potable water from the source of supply to the customer.

Wetland: Land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands play irreplaceable ecological roles by purifying water and providing spawning grounds for fish and critical habitat for shellfish, shorebirds, and other species.

Wildlife Refuge: Area specifically set aside for the protection of wildlife. Such areas may be subject to multiple uses, like state parks, which are considered game refuges.

BIBLIOGRAPHY

1. NATURAL RESOURCES:

Central Florida Regional Planning Council. August 1990. *Regional Study of Land Use Planning and Reclamation*. Florida Institute of Phosphate Research, Bartow, Florida.

Coastal Protection Program Workbook, Addendum. *Conservation Through Local Land Acquisition and Management*, by Duane E. DeFreese, Ph.D. Brevard County, Florida.

Economic Development Digest, Vol. 5, No. 2, February 1996. *Heritage Areas Preserve Cultural and Natural Resources*. Washington, D.C.

Florida Department of Environmental Protection. *1995 Agency Strategic Plan; People, Progress, and the Environment*.

Florida Department of Environmental Protection. September 1995. *Ecosystem Management Implementation Strategy; Action Plan with accompanying Appendices*. Tallahassee, Florida.

Florida Department of Environmental Protection. December 1995. *Florida Water Plan, 1995*. Tallahassee, Florida.

Florida Department of Natural Resources, Bureau of Mine Reclamation. July 1992. *A Regional Conceptual Reclamation Plan for The Southern Phosphate District of Florida*. Florida Department of Natural Resources, Tallahassee, Florida.

Florida Department of Transportation. November 1994. *2020 Florida Transportation Plan: Public Hearing Draft*. Tallahassee, Florida.

Florida Game and Fresh Water Fish Commission. 1994. *Closing the Gaps in Florida's Wildlife Habitat Conservation System: Recommendations to meet minimum conservation goals for declining wildlife species and rare plant and animal communities*. Tallahassee, Florida.

Florida Game and Fresh Water Fish Commission. September 1994. *Mapping Wetland habitats of High Priority to Endangered and Threatened Species in Florida; Final Project Report*. Tallahassee, Florida.

Florida Greenways Commission, Report to the Governor. January 1995. *Creating a Statewide*

Greenways System: For People . . . for Wildlife . . . for Florida. Tallahassee, Florida.

Florida Greenways Program of 1000 Friends of Florida & the Conservation Fund, The. February 1995. *The Hillsborough River Greenways Task Force: An Ecosystem Protection Plan For The Upper Hillsborough River: Issue Analysis, Action Plans, and Recommendations.* Hillsborough County, Florida.

Florida Naturalist, The. Volume 65, Number 1, Spring 1992. *Vanishing Scrub Habitat.* Florida Audubon Society, Casselberry, Florida.

Governor's Commission for a Sustainable South Florida, The. October 1995. *Initial Report.* Coral Gables, Florida.

Hector, Thomas Scott. *Conservation Buffer Zones: Protecting Preserves, Biological Diversity, and Ecological Integrity.* July 15, 1992. Technical Paper.

King, Tim and, Cates, Bud. *A Three-part Regional Habitat Mitigation Plan as the Foundation for the Southern Phosphate District of Florida's Integrated Habitat Network.* March 1994.

King, Tim; Moxely, Danon; Cates, Bud. *A Proposed Ecosystem Plan For The Upper Peace River: Alternative Mitigation For Upper Saddle Creek.* September 1994.

Land Use Water Planning Task Force. December 1994. *Recommendations of the Land Use & Water Planning Task Force, Final Report.* Tallahassee, Florida.

Lynne, Gary D. and Saarinen, Phyllis Park. *Water Markets: What Role Can They Play In Florida?* Staff Paper SP 93-9, April 1993. Food and Resource Economics Department, University of Florida, Gainesville, Florida.

Morrison, Gerold, Ph.D., and Turner, Dawn G.. Memorandum, *Apparent need for watershed-based strategy for reclamation of mined phosphate lands in upper Peace River basin.* March 1994. Southwest Florida Water Management District, Brooksville, Florida.

Polk County Department of Development Coordination. July 1992. *The Green Swamp System; A Scientific Analysis.* Green Swamp Task Force, Bartow, Florida.

Saarinen, Phyllis Park, and Lynne, Gary D. *Allocating Water Under Scarcity Conditions in Florida: Experience and Prospects.* MS Thesis. Summer 1993. Food and Resource Economics Department, University of Florida, Gainesville, Florida.

Science, Vol. 269. July 1995. *Conservation I. Filling in Florida's Gaps: Species Protection*

Done Right?

Southwest Florida Water Management District. April 1991. *Water Supply Needs & Sources: Southwest Florida Water Management District 1990 - 2020, (draft)*. Brooksville, Florida.

Southwest Florida Water Management District. January 1993. *Charlotte Harbor Surface Water Improvement and Management (SWIM) Plan*. Tampa, Florida.

Southwest Florida Water Management District. March 1993. *Proceedings of a Workshop on Water Allocation Strategies*. Tampa, Florida.

Southwest Florida Water Management District. January 1995. *Water Management Lands Trust Fund: Save Our Rivers/Preservation 2000, Five Year Plan*. Brooksville, Florida.

Southwest Florida Water Management District. March 1995. *DeSoto County Integrated Plan*. Brooksville, Florida.

Southwest Florida Water Management District. March 1995. *Hardee County Integrated Plan*. Brooksville, Florida.

Southwest Florida Water Management District. March 1995. *Highlands County Integrated Plan*. Brooksville, Florida.

Southwest Florida Water Management District. March 1995. *Polk County Integrated Plan*. Brooksville, Florida.

Southwest Florida Water Management District. March 1995. *District Water Management Plan, Volumes 1 & 2*. Brooksville, Florida.

Southwest Florida Water Management District. November 1995. *District Water Management Plan; Annual Report*. Brooksville, Florida.

South Florida Water Management District. April 1995. *District Water Management Plan, Volumes 1 & 2*. West Palm Beach, Florida.

South Florida Water Management District. January 1994. *Strategic Plan for the 1990s: Partnerships in Water Management: The Vision for the Future*. West Palm Beach, Florida.

South Florida Water Management District. 1995. *1995 Five Year Plan. Land For Water's Sake*.

West Palm Beach, Florida.

State of Florida, Office of the Governor. March 1995. *National Estuary Program Streamlines Nomination Document: Charlotte Harbor Estuarine Ecosystem Complex*. Tallahassee, Florida.

United States Department of the Interior. July 1991. *Proposed Establishment of Lake Wales Ridge National Wildlife Refuge: Preliminary Project Proposal*. Fish and Wildlife Service, Southeast Region, Atlanta, Georgia.

2. Economic Development:

AARP Bulletin, Vol. 37, No.1, January 1996. *Jobs 2000; Mid-life career changes in 21st century will find a mix of good news and bad*. Washington, D.C.

Adams, Alto "Bud", Jr. September, 1992. *Letter from Adams Ranch Inc.*

Bureau of Economic and Business Research. 1990. *The Economy of Florida*. Denslow, Pierce, and Shermeyen, Editors. University of Florida, Gainesville, Florida.

Bureau of Economic and Business Research. 1995. *The Economy of Florida*. Scoggins and Pierce, Editors. University of Florida, Gainesville, Florida.

Bureau of Economic and Business Research. 1985 - 1995. *Florida Statistical Abstract*. Pierce, Floyd, Thompson, Evans, and McLarty, Editors. Gainesville, Florida.

Central Florida Regional Planning Council. March 1995. *Economic Market Factors for DeSoto, Glades, Hardee, Hendry, Highlands and Okeechobee Counties*. Bartow, Florida.

Central Florida Regional Planning Council. June 1995. *Overall Economic Development Plan*. Bartow, Fl.

Clark, Peggy and Kays, Amy J. November 1995. *Enabling Entrepreneurship: Microenterprise Development in the United States. Baseline Year Report of the Self-Employment Learning Project*. The Aspen Institute.

Daly, Herman E. 1991. *Steady-State Economics; Second Edition*. Island Press, Washington, D.C.

Economic Development Digest. January 1996. *Identifying Options for the Future through Strategic Planning*. Washington, D.C.

Economic Development Digest, Vol. 5, No. 2, February 1996. *Innovative Rural Ideas*.

Washington, D.C.

Economic Development Digest, Vol. 5, No. 2, February 1996. *Open Trade Doors Closed Some US Factory Doors*. Washington, D.C.

Economic Development Digest, Vol. 5, No. 2, February 1996. *Creative Solutions Woven by Rural Communities*, by Diane Browning. Washington, D.C.

Florida Department of Commerce; Bureau of Economic Analysis. 1993. *Florida Visitor Study 1993: Executive Summary*. Tallahassee, Florida.

Florida Department of Community Affairs. June 1995. *1995 Florida Land Plan: The State Land Development Plan. Revised Public Workshop Draft*. Tallahassee, Florida.

Florida Department of Labor and Employment Security. January 1996. *1996 Florida Planning Report: Service Delivery Area 18*. Tallahassee, Florida.

Florida Economic Development Council Newsletter, Winter 1996. *Economic Development Under Attack*, by Brian Babson. Tallahassee, Florida.

Florida Planning Newsletter, Vol. VI, No. 12, December 1994. *Balancing South Florida's Competing Needs*, by Bonnie Kranzer, Ph.D., AICP.

Florida Planning Newsletter, Vol. VII, No. 4, April 1995. *Regional Planning Update*, by Michael Morell. Tallahassee, Florida.

Florida Planning Newsletter, Vol. VIII, No. 1, January 1996. *Economic Development for Florida*, Tallahassee, Florida.

Florida State Rural Development Council. October 1995. *Rural Summit Draft Report*. Tallahassee, Florida.

Florida State University. 1995. *Florida Annual Policy Survey 1995*. Survey Research Laboratory; Policy Sciences Center. Tallahassee, Florida.

Florida Trend Magazine. January 1996. *1996 Industry Outlook*, by John F. Berry, Editor. St. Petersburg, Florida.

Florida Trend Magazine. December 1994. *Sprawl*, by Phillip Longman. St. Petersburg, Florida.

Galston, William A. and Baehler, Karen J., 1995. *Rural Development in the United States: Connecting Theory, Practice, and Possibilities*. Island Press, Washington, D.C.

- International Institute for Environment and Development, 1992. *Making Development Sustainable: Redefining Institutions, Policy, and Economics*. Edited by Johan Holmberg. Island Press, Washington, D.C.
- Journal of Experiential Education, The, Vol. 17, No. 1, May 1994. *Ecotourism as experiential environmental education? By Constance L. Russell*. Boulder, Colorado.
- Kerlinger, Paul, Ph.D. *The Economic Impact of Birding Ecotourism On Communities. Surrounding Eight National Wildlife Refuges*. Research Paper. New York, New York.
- Lakeland Ledger Newspaper. Sunday, November 12, 1995. *Spectrum: Blow out the candles and find a new job*. Lakeland, Florida.
- Leigh, Nancey Green, 1994. *Stemming Middle-Class Decline: The Challenges to Economic Development Planning*. Center for Urban Policy Research, New Brunswick, New Jersey.
- Munnich, Lee. W. Jr. July 1995. *Emerging Principles in State and Local Economic Development: A Benchmark Tool*. University of Minnesota, Minneapolis, Minnesota.
- National Association of Development Organizations (NADO). April 1994. *Telecommunications and its Impact of Rural America: White Paper*. Washington, D.C.
- National Association of Development Organizations (NADO) Newsletter, Vol. 17, No. 36. Sept. 1995. *Senate Strikes Two Blows Against EDA But the Fight's Not Over*. Washington, D.C.
- NorEaster, Fall/Winter 1994. *Ecotourism: Balancing Environmental and Economic Interests*. Carole Jaworski and Malla Schwartz, Rhode Island Sea Grant.
- North Central Florida Regional Planning Council. November 1992. *Tourism Development Strategic Plan 1992 - 1995*. Gainesville, Florida.
- Orlando Sentinel Newspaper. December 4, 1995. *Eco-Tourism Shows Florida's Other Side, by Jill Jordan Spitz*. Orlando, Florida.
- Parsons, George. 1993. *Destinations: Opportunities for Economic Development in the American Small Town*. Community/Economic Development Center, Mississippi State University, Mississippi State, Mississippi.
- Public Lands Management, Vol. 1, No. 4. *Developing an Ecotourism Program*. Glatting

Jackson Kercher Anglin Lopez Rinehart, Inc., Orlando, Florida.

Register, The, Vol. 1, No. 2, Spring 1995. *Local Economies: The U.S. Common Market of Local Economic Regions*. By William R. Barnes and Larry C. Ledebur. Institute of Community and Area Development, Athens, Georgia.

Salant, Priscilla and Walker, Anita J. 1995. *Guide to Rural Data; Revised Edition*. Island Press, Washington, D.C.

Sanford C. Bernstein & Co., Inc. November 1995. *Outlook for the State of Florida*. Municipal Research. West Palm Beach, Florida.

Southwick Associates. March 1995. *The Economic Contributions of Bird and Waterfowl Recreation in the United States During 1991*. Arlington, Virginia.

Tampa Tribune Newspaper. November 19, 1995. *Counties Courting Ecotourists*, by Jim Tunstall. Tampa, Florida.

Tourism Policy Council. June 1995. *Tourism: Putting the Pieces Together. Federal Tourism Development Strategy*. Washington, D.C.

Unites States Department of Agriculture. April 1995. *Agriculture Information Bulletin Number 714: U.S. Farm and Farm-Related Employment in 1991*. Washington, D.C.

Unites States Department of Agriculture. June 1995. *Agriculture Information Bulletin Number 712: Structural and Financial Characteristics of U.S. Farms, 1991. 16th Annual Family Farm Report to Congress*. Washington, D.C.

United States Department of Labor, News Release. June 1995. "Wages Suffer Largest Decline in Eight Years", *Statement by Labor Secretary Robert B. Reich*. Washington, D.C.

3. Transportation:

Center for Urban Transportation Research. Sept. 1990. *Florida Five-Year Transportation Disadvantaged Plan 1992-1996. Technical Memo Number One, Introduction and Historical Perspective*. College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. May 1991. *Florida Five-Year Transportation Disadvantaged Plan 1992-1996. Technical Memo Number Two, Performance Evaluation and Attitudinal Survey*. College of Engineering, University of South Florida. Tampa,

Florida.

Center for Urban Transportation Research. May 1993. *Florida Demographics and Journey to Work-A County Data Book*. College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. February 1994. *Demographic and Commuting Trends in Florida*. College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. 1995. *CUTR lines, A Newsletter*. College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. 1995. *1994 Annual Report*. College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. March 1994. *A Review of Mobile Source Air Quality Practices in Florida, by Roger L. Wayson, Ph.D., P.E.* College of Engineering, University of South Florida. Tampa, Florida.

Center for Urban Transportation Research. May 1995. *Florida Transportation Almanac*. College of Engineering, University of South Florida. Tampa, Florida.

Central Florida Regional Planning Council. 1987. *Comprehensive Regional Policy Plan*. Bartow, Florida.

Central Florida Regional Planning Council. Oct. 1993. *OEDP: Overall Economic Development Report*. Bartow, Florida.

Central Florida Regional Planning Council. Aug. 1995. *Central Florida Regional Hurricane Evacuation Plan Update, Draft*. Bartow, Florida.

Central Florida Regional Planning Council. Aug. 1995. *Coordinated Transportation Development Plan, Fiscal Year 1994-95 for Hardee, Highlands, and Okeechobee Counties, Draft*. Bartow, Florida.

FDOT. Feb. 1991. *Rural Transportation Planning and Coordination Organization*. A Memo from Larry Slayback, Southwest Area Office, Ft. Myers, Florida. LGS-M6-91.

FDOT. 1992. *Florida Aviation System Plan: Statewide Summary 1992-2010*. Produced by a partnership of Florida Airports and Commissions, FDOT and FAA. Tallahassee, Florida.

- FDOT. Jan. 1994. *Florida Intercity Rail Passenger Service: Options for the 21st Century (A Component of the Florida Transportation Plan)*. Tallahassee, Florida.
- FDOT. March 1995. *A Model Intermodal Transportation Plan: Implementing Florida's Intermodal Planning Process*. With the Assistance of Wilber Smith Associates, in association with Kimley-Horn and Associates and Leftwich Consulting Engineers. Tallahassee, Florida.
- FDOT. Oct. 1994. *Technical Report No. 4, 1990 Model Validation Review for Polk County Year 2020, Long Range Transportation Plan Update*. Prepared for FDOT District 1, by Gannett Fleming, Inc., and in Association with Powell, Fragala & Assoc., Lakeland, Florida.
- FDOT. Dec. 1994. *Draft, Technical Report No. 1, Review of Polk County MPO Transportation Planning Processes and ISTEA Requirements*. Prepared for FDOT District 1, by Gannett Fleming, Inc., and in Association with Powell, Fragala & Assoc., Lakeland, Florida.
- FDOT, Office of Policy Planning. 1995. *Transportation Policy Forum(Connecting Florida's Transportation Partners), A Newsletter Published Bi-Monthly*. Tallahassee, Florida.
- FDOT, District 1. January, 1995. *Interstate 4, Multimodal Interstate Master Plan, Executive Summary*. Bartow, Florida.
- FDOT. Jan. 19, 1995. *ISTEA Transportation Management and Monitoring Systems: A Question and Answer Paper*.
- FDOT. Feb.1995. *Florida High Speed Transportation System: Request for Proposals*. Tallahassee, Florida.
- FDOT. Jan.1995. *The 2020 Florida Transportation Plan: Connections-Bringing Florida Together: Comments Received*. Tallahassee, Florida.
- FDOT. March 1995. *The 2020 Florida Transportation Plan: Connections-Bringing Florida Together*. Tallahassee, Florida.
- FDOT. March 1995. *The 2020 Florida Transportation Plan Public Outreach Program, November/December 1994, Public Hearing Comments*. Tallahassee, Florida.
- High Speed Rail/Maglev Association. 1995. *Speedlines, A Newsletter*. Speedlines, High Speed Rail/ Maglev Associates, 4900 Leesburg Pike, Suite 305, Alexandria, VA 22302-1103.

Polk County Metropolitan Planning Organization (MPO). Feb. 1995. *Mobility Expo Fact Sheet*. MPO, Polk County Offices, Bartow, Florida.

Polk County Transportation Planning Organization (TPO). Nov. 1995. *2020 Long-Range Transportation Plan*. TPO, Polk County Offices, Bartow, Florida.

South Florida Regional Planning Council. December 1994. *Strategic Regional Policy Plan, Draft*. Miami, Florida.

Southwest Florida Regional Planning Council. December 1994. *Strategic Regional Policy Plan, Draft*. Ft. Myers, Florida.

Surface Transportation Policy Project. October 1994. *ISTEA Planner's Workbook*. Surface Transportation Policy Project, 1400 sixteenth Street, NW, Suite, 300, Washington, DC, 20036. ISBN 0-9643965-0-5.

Tampa Bay Regional Planning Council. July 1995. *Proposed Tampa Bay Strategic Regional Policy Plan*. Tampa, Florida.

US Dept. of Transportation, Federal Transit Administration (FTA). March 1994. *InfoBrief Series: Rural Transit in the Age of ISTEA*, by Chris Zeilinger. Prepared by the Community Transportation Associates of America (CTAA) for the Rural Transit Assistance Program (RTAP). Washington, DC.

US Dept. of Transportation. 1991. *Surface Transportation Act of 1991*. Washington, DC.

US Dept. of Transportation. 1992. *A Summary: Air Quality Programs and Provision of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991*. Washington, DC.

4. Affordable Housing:

1000 Friends of Florida Newsletter, Vol. 8, No.1, Spring 1995. *1000 Friends Advocates for Affordable Housing*, by Jamie Ross, *Affordable Housing Director*. Tallahassee, Florida.

Affordable Housing Study Commission. 1993. *Final Report for 1993*. Executive Office of the Governor, Tallahassee, Florida.

Affordable Housing Study Commission. 1994. *Bringing the Pieces Together, Final Report for 1994*. Executive Office of the Governor, Tallahassee, Florida.

Bureau of Economic and Business Research. *Florida Statistical Abstract 1994 Edition*.

- University of Florida, Gainesville, Florida.
- Central Florida Regional Planning Council. 1987. *Comprehensive Regional Policy Plan*. Bartow, Florida.
- Central Florida Regional Planning Council. Oct. 1993. *OEDP: Overall Economic Development Report*. Bartow, Florida.
- Central Florida Regional Planning Council. Aug. 1995. *Central Florida Regional Hurricane Evacuation Plan Update, Draft*. Bartow, Florida.
- Dangora, John M. *Natural Disaster Loss Reduction: Learning from Experience for a Safer Future: Safe Affordable Housing*, by Insurance Institute for Property Loss Reduction, Boston. John Liner Review, Vol. 8, No. 3, Fall 1994.
- DeSoto County. Dec. 1992. *DeSoto County SHIP Program Statement of Qualifications*. Arcadia, Florida.
- East Central Florida Regional Planning Council. 1993, 1994 and 1995. *Regional Housing Bulletin: A Synopsis of Affordable Housing News for East Central Florida*. Orlando, Florida.
- FEMA. 1992. *Inter-agency Hazard Mitigation Team Report*. FEMA-955-DR-FL (Hurricane Andrew). Tallahassee, Florida.
- FEMA. December 21, 1992. *Building Performance: Hurricane Andrew in Florida*. Tallahassee, Florida.
- Florida Department of Community Affairs. 1993 and 1994. *State of Florida C.H.A.S.* Tallahassee, Florida.
- Florida Department of Community Affairs. 1994. *Guide to Programs*. Tallahassee, Florida.
- Florida Department of Health and Rehabilitative Services Report. February 28, 1994. *Migrant Housing Needs in the Florida Heartland*. Tallahassee, Florida.
- Florida Low Income Housing Coalition, Inc. 1994 and 1995. *Housing News Network; Florida's Journal of Affordable Housing News and Information*. Tallahassee, Florida.
- Florida Times Magazine. December 1994. *Sprawl*, by Phillip Longman.
- Hardee County. March 1993. *Hardee County Local Housing Assistance Plan for the SHIP Program*. Wauchula, Florida.

- ICF Corporation. July 15, 1994. *Leveraging Guidebook, Training for the SHIP Program*. Jacksonville, Florida.
- ICF Corporation. August 9, 1994. *State of Florida: Building Partnerships; A Guidebook Sponsored by FDCA*. Jacksonville, Florida.
- Joint Center for Environmental and Urban Problems. November 1992. *Assessment of the Impact of Reedy Creek Development on Affordable Housing, Final Report*. Florida International University. Miami, Florida.
- Keystone Challenge Fund. 1995. *Program Organizational Overview, 1995*. Lakeland, Florida.
- Lakeland, City of. 1993. *Affordable Housing Incentive Plan*. Community Development Department, Lakeland, Florida.
- Lakeland, City of. Dec. 1993. *City of Lakeland, FL, Comprehensive Housing Affordability Strategy (CHAS)*. Community Development Department, Lakeland, Florida.
- Lakeland Ledger Newspaper. *1995 Guide to Polk County*. Lakeland, Florida.
- Okeechobee County. Jan. 1994. *Okeechobee County Local Housing Assistance Plan for the SHIP Program*. Okeechobee City, Florida.
- Okeechobee County. 1994. *Okeechobee County SHIP Affordable Housing Incentive Plan*. Prepared by Clark, Roumelis and Associates, Inc. Okeechobee City, Florida.
- Parade Magazine. April 10, 1994. *A Different Kind of House, by Robert Gettlin*.
- Pizor, Peter J. 1987. *Affordable Housing and Agricultural Preservation: An Inevitable Tension?* Soil and Water Conservation Society. Tallahassee, Florida.
- Polk County Board of Commissioners. 1993-94. *Polk County Comprehensive Housing Affordability Strategy Fiscal Year 1993-94*. Prepared by the Polk County Community Development Division, November 1993. Bartow, Florida.
- Polk County Opportunity Council, Inc. 1995. *Informer, A Monthly Newsletter*. Bartow, Florida.
- South Florida Regional Planning Council. December 1994. *Strategic Regional Policy Plan, Draft*. Miami, Florida.
- Shimberg Center for Affordable Housing. December 31, 1991. *Single-Room Occupancy (SROs)*

- In Florida*. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. December 31, 1991. *Preserving Housing for the Low Income; Prepayment and Contract Expiration in Florida*. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. August 1992. *Local Affordable Housing Initiatives In Florida*. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. November 1992. *Not in My Backyard, A Bibliography*. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. December 1992. *Inclusionary Housing, A Selected Bibliography*. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. June 1993. *Impact Fee Usage in Florida*. Technical Note Series, No. 93-01. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. June 1993. *A Layman's Guide to Low-Income Housing Tax Credits In Florida*. Research Report Series, No. 92-01. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. June 1993. *The Design of Flexible Homes That Contain Future Expansion Capabilities*. Research Report Series, No. 93-01. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. July 1993. *Inclusionary Housing and Density Bonuses for Affordable Housing in Florida*. Research Report Series, No. 93-03. University of Florida, Gainesville.
- Shimberg Center for Affordable Housing. 1992-1996. *Affordable Housing Issues, A Newsletter*. University of Florida, Gainesville.
- Southwest Florida Regional Planning Council. December 1994. *Strategic Regional Policy Plan, Draft*.
- Tampa Bay Regional Planning Council. May 8, 1995. *Strategic Regional Policy Plan, Draft*. Tampa, Florida.
- Winter Haven, City of. Dec. 1993. *City of Winter Haven Comprehensive Housing Affordability Strategy (CHAS), Fiscal Years 1994-1998*. Planning Department, Winter Haven, Florida.

Winter Haven, City of. March 1994. *SHIP Incentive Plan: Recommendations of the Affordable Housing Advisory Committee*. Planning Department, Winter Haven, Florida.

US Department of Commerce. *Statistical Abstract of the United States 1994 Edition*. Bureau of the Census. Washington, D.C.

5. Emergency Preparedness:

Dangora, John M. *Natural Disaster Loss Reduction: Learning from Experience for a Safer Future: "Code Improvement"*, by Insurance Institute for Property Loss Reduction, Boston. *John Liner Review*, Vol. 8, No. 3, Fall 1994.

Federal Emergency Management Agency. Sept. 1992. *Emergency Preparedness U.S.A.* Course Book HS-2. Emmitsburg, Maryland.

Federal Emergency Management Agency. FEMA-982-DR-FL. *Winter Storm March, 1993. "Interagency Hazard Mitigation Team Report"*, Washington, D.C.

Florida Coastal Management Program. Sept. 1994. *Disaster Preparedness*, Fact Sheet. Tallahassee, Florida.

Florida Department of Community Affairs. 1995. *1994 - 1999 Agency Strategic Plan: "Building Partnerships for a Sustainable Florida"*. Tallahassee, Florida.

Florida Statutes. 1995. *Coastal Management*. Chapter 163.3178.

Florida Statutes. *Comprehensive Emergency Management Plans*. Rule Numbers 9G-6.9G-7. *Florida Administrative Weekly*, Vol. 21, No.5, February 3, 1995.

Florida Statutes. 1995. *Florida Coastal Management Act*. Chapter 380.20.

Florida Statutes. 1995. *Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance*. Chapter 9J-5.

Florida Public Interest Research Group. *Information Sheet*. August 15, 1995.

Koutnik, Frank J. Dec. 1994. *Strategic Planning in Emergency Management: An Effective Way to Focus on the Future*. Commentary for Emergency Management Roundtable.

Parker, Jinx. *Building Codes: The Failure of Public Policy to Institutionalize Good Practice*, *Environmental and Urban Issues*, Vol. XXI, No. 4, Summer 1994.

- Saniter, David J., CEM. *Hazard Mitigation Strategies: A Local Perspective*. Talking Paper. Lee County Emergency Management. 1994.
- Smith, Richard A. & Deyle, Robert E. *Storm Hazard Mitigation Policies for Florida*. "Hazard Mitigation: What Are We Doing?".
- South Florida Regional Planning Council. Dec. 1994. *Strategic Regional Policy Plan, Draft*.
- Southwest Florida Regional Planning Council. Dec. 1994. *Strategic Regional Policy Plan, Draft*. N. Ft. Myers, Florida.
- United States Code. *Coastal Management Act of 1972*. Section 301.
- United States Geological Survey. *National Water Summary 1988 -1989 -Floods and Droughts: Florida*. "Florida Floods and Droughts". USGS Water-Supply Paper 2375.
- Withlacoochee Regional Planning Council. June 1995. *Strategic Regional Policy Plan, Draft*.

APPENDIX A - REGIONAL RESOURCES AND FACILITIES LIST

I. GENERAL DESCRIPTION OF REGIONAL RESOURCES SYSTEMS

Ridge Area: The **Ridge Area** runs north and south the length of the region, through Polk and Highlands Counties. The Ridge has the highest recharge capability for the Floridan Aquifer with its fine sands and limestone base, and therefore, development on the Ridge is closely regulated and monitored. The Ridge is the site of a National Landmark, Bok Tower Gardens, located north of Lake Wales, and the proposed site of a National Wildlife Refuge, protecting globally unique and rare plants.

Green Swamp: The southern portion of the **Green Swamp** is located in northern Polk County. The Green Swamp is the potentiometric high for the Floridan Aquifer and is the headwaters for four rivers in the state. The aquifer comes to the surface in this area, creating a potential for pollution of the potable water supply for much of Florida. Maintenance of the potentiometric head is a critical factor in controlling salt water intrusion into the aquifer. Therefore, this area was designated a Area of Critical State Concern by the legislature. Development and all activities are regulated and monitored by the State.

Peace River: The **Peace River** originates in the Green Swamp and flows southwest 105 miles, entering the Gulf of Mexico at Charlotte Harbor, just south of this Region. The river's drainage basin encompasses over 2,300 square miles. Numerous lakes and wetlands are found in the headwaters of the Peace River. There are four primary tributaries in Hardee County and three in DeSoto County. Seven cities in the Region are located in the Peace River basin. Land use activities in the Peace River basin include agriculture, phosphate mining, and urban development.

Kissimmee River: The **Kissimmee River**, which originates in the southern outskirts of the City of Orlando, borders the southeastern edge of Polk County and separates Highlands County from Okeechobee County until its termination at Lake Okeechobee. The river flows southward through two lakes and 150 miles of lowlands consisting of rangeland, agricultural lands and wetlands to its mouth at Lake Okeechobee. From Lake Kissimmee to Lake Okeechobee, the Kissimmee River was channelized by the Army Corps of Engineers between 1961 and 1971. Although the water quality in the channel does not appear to be poor, nutrient-rich runoff from agricultural and rangeland areas flows quickly through the river to Lake Okeechobee. Recent efforts to restore parts of the river along the northwestern edge of Okeechobee County to its natural, meandering course have shown a good degree of success. Efforts to restore the rest of the lower Kissimmee River are continuing through a \$490 million Army Corps restoration

program. Development in the drainage basin is severely limited, with a gradual phasing out of agricultural uses to slow pollution of the river and downstream. Eventually, the flood plain will be a conservation area with access for recreation activities. Access is now available at several points, one of which is Kissimmee State Park in southeast Polk County.

Hawthorn/Bone Valley Formation: The **Hawthorn/Bone Valley Formation** is the location of significant phosphate ore deposits. It runs north and south between the Peace River on the east side and the borders of Polk, Hardee and DeSoto Counties on the west side. The northern boundary is just north of the city of Mulberry in Polk County. The southern boundary is just south of the city of Arcadia in DeSoto County. Phosphate was first mined in the Region in 1888 and a huge phosphate industry has evolved around the deposits of ore. In 1992, more than 27 million net tons of phosphate and phosphate-related materials passed through the Port of Tampa, adding up to about 65 percent of the port's business. The economic impact of the industry reaches even further than the thousands of people relying on phosphate in Central Florida. The phosphate industry has progressed from small acreage disturbance and production operations to present day operations that have the capability to mine over 6,000 acres per year and produce about 40 million tons of phosphate rock. Florida is the world leader in phosphate rock production capacity. The latest figures show Florida producing approximately 75 percent of the nation's phosphate supply and about one-fourth of world production. There are presently ten companies that operate nineteen phosphate mining operations within the Region. Today, the Florida Phosphate Industry owns or controls about 466,440 total acres. Of this total, 241,149 acres are in active mine areas and 19,034 are in chemical production areas.

Lakes: This Region's lakes are divided into three groups: 1) lakes on the Lake Wales Ridge; 2) lakes in the Peace River Drainage Basin; and, 3) manmade lakes. Those on the Ridge comprise the southernmost portion of the longest, smooth line of genetically associated lakes in the United States. They are solution depressions with steep sloping rims, with the lake depression sometimes considerably below the groundwater table. They are thus (unlike "perched" lakes) hydraulically connected to the groundwater, and fluctuate in harmony with the seasonal variations in rainfall, and corresponding ground water table rise and fall.

In addition, the confining bed of the Floridan Aquifer is "leaky" in the Ridge area, and thus the lakes have at least a partial hydraulic connection to the Floridan Aquifer, such that recharge occurs from the lakes to the aquifer when the aquifer's potentiometric surface is lower than that of the lakes' surface water level. This recharge is accentuated at times of low rainfall and peak pumpage of the aquifer, causing draw down of the lakes. Although water quality in the lakes is generally good, the deep sands of the Ridge favor rapid subsurface transport, with little detention time for vegetative uptake of dissolved solids and nutrients from surrounding land uses.

A system of lakes in the central section of the county feed the Peace River Drainage Basin and create the Peace River. Twenty-one (21) of these lakes are interconnected by a series of canals known as The Chain of Lakes in the City of Winter Haven. Seven lakes make up the Upper

Chain and fourteen lakes make up the Lower Chain. Canals were built to maintain lake levels, provide flood control and promote boat access between lakes. These lakes are in an urbanized area and are crowded with boating activities of all kinds. A well known tourist attraction, Cypress Gardens and Ski Show, is located on the Chain.

The third group of lakes are, generally, manmade lakes, in that they are the remnants of 105 years of phosphate mining in the Region. They are located in Polk County, in the vicinity of the City of Lakeland. These manmade lakes range in water quality from good to poor, with those of good quality having been reclaimed from mining activities in the 1920's and 1930's. Those lakes of good quality are generally located in the northern portion of Polk County, are in highly urbanized areas, and are crowded with boaters and fishermen. Many of the lakes are stocked with fish, the large-mouthed bass being one of the most popular species.

Surface Waters: Class I & Outstanding Florida Waters

This Region has surface waters that have been rated by the State of Florida as outstanding. They are listed by county in the following list. They are talked about extensively in the Natural Resources Section by county of this report.

DeSoto County - Class I Waters

- Horse Creek, from N boundary Sec. 14 (T38S/R23E) southward to Peace River
- Prairie Creek, headwaters to Charlotte County line

Hardee County - Outstanding Florida Waters

- Highlands Hammock State Park
- Payne Creek State Historic Site

Highlands County - Outstanding Florida Waters

- Highlands Hammock State Park
- Placid Lakes

Okeechobee County - Class I Waters

- Lake Okeechobee

Polk County - Outstanding Florida Waters

- Lake Arbuckle State Park
- Lake Kissimmee State Park

- Catfish Creek
 - Saddle Blanket Lakes Scrub
 - Crooked Lake, including Little Crooked Lake and its connecting waterway to Crooked Lake, less any artificial water bodies
- * Class I Waters - Surface waters used as a potable source of public water supplies or withdrawn for public water treatment. No effluent or runoff with potential for degradation will be discharged into Class I waters.
- * Outstanding Florida Waters - 403.061(27) F.S. "which water bodies shall be worthy of special protection because of their natural attributes. Under this designation FDEP cannot issue permits for direct pollutant discharges that would lower the existing water quality, or for indirect discharges that would significantly degrade the water body. Permits for new dredging and filling must be clearly in the public interest.

Save Our Rivers Program:

The Southwest Florida Water Management District (SWFWMD) and the South Florida Water Management District (SFWMD) acquire land that meets the objectives of the Water Management Lands Trust Fund, commonly known as the "Save Our Rivers" program. The following projects are those in our Region. The descriptions for each project are from the SWFWMD and SFWMD 1994 Five Year Plan.

Group A includes projects which have been evaluated and have been approved for acquisition;

Group B includes projects which have been evaluated but await review by various committees, boards, and task forces, and approval by the Governing Board;

Group C includes "study areas" scheduled for evaluation during this or next FY; and

Group D includes "study areas" to be scheduled for evaluation after Group C entries.

Southwest Florida Water Management District (SWFWMD) - Group A

- Alafia River Corridor (Hillsborough and Polk counties), 2,555 acres acquired, 29,051 acres to be acquired.
- Alston Tract (Pasco and Polk counties), 2,764 acres acquired, 9,541 acres to be acquired.
- GDC/Peace River (DeSoto County), 5,932 acres acquired and 2,683 acres to be acquired.
- Green Swamp (Lake, Sumter, Pasco, and Polk counties), 119,365 acres acquired

and 195,320 acres to be acquired.

- Jack Creek (Highlands County), 1,271 acres acquired and 1,997 acres to be acquired.
- Peace River Corridor (DeSoto and Hardee counties), 38,579 acres to be acquired.
- Prairie/Shell Creek (Charlotte and DeSoto counties), 9,287 acres to be acquired.
- Upper Lake Marion Creek Watershed (Polk County), 1,851 acres to be acquired.

SWFWMD - Group B

- Peace Creek System (Polk Co.), 13,416 acres to be acquired.

SWFWMD - Group C

- Charlie Creek (Hardee and Highlands counties), 40,398 acres to be acquired.
- Fox Branch (Polk County), 945 acres to be acquired.
- Highlands Hammock Addition (Highlands County), 10,133 acres to be acquired.
- Horse Creek (Hardee County), 10,943 acres to be acquired.
- Peace River Corridor Addition (Hardee County), 730 acres to be acquired.

South Florida Water Management District (SWFWMD) - Priority Projects SOR 1996

- Catfish Creek (Polk), 5,000 acres.
- Kissimmee Prairie Ecosystem (Okeechobee), 45,000 acres acquired.
- Kissimmee Lower Basin (Polk, Osceola and Okeechobee), 101,433 acres.
- Kissimmee Upper Basin (Polk, Osceola and Okeechobee), 26,000 acres, 21,000 acres acquired.
- Kissimmee River (Polk, Osceola, Highlands, and Okeechobee counties), 30,385 acres acquired and 51,000 acres to be acquired.
- Upper Lakes Basin Watershed (Polk and Osceola counties), partly falls within SWFWMD

SWFWMD - Approved Projects 12/31/94

- Johnson Ranch (Highlands Co.), 1,642 acres to be acquired.
- Paradise Run (Okeechobee and Glades counties), 1,406 acres acquired and 2,859 acres to be acquired.

Regionally Significant Trails:

The Florida Cracker Trail (Hardee, Highlands and Okeechobee Counties): The Trail route runs in, generally, a east-west direction from the Gulf of Mexico to the Atlantic Ocean. It traces the approximate route of Florida cowboys, referred to as "crackers" for the long bull whips that they used when driving cattle. The Crackers drove cattle across the state, which were then loaded on ships and sold for food to Cuba and points south. The Trail follows SR 64 east out of Manatee County and runs through Hardee County. At U.S. 17 the trail continues east-west but becomes SR 66 and crosses into Highlands County. Just east of US 27, it becomes US 98, crosses into Okeechobee County and heads south into Okeechobee City. In the City, you must turn north on US 441 and until you come to CR 68. Then turn east again to follow the trail. The trail crosses into St. Lucie County and continues to the Atlantic Ocean.

Florida Canoe Trails: In this Region, the Peace River is a canoe trail in portions of South Polk County and Hardee County.

Commercial Canoe Trails: A commercial canoe trail can be traveled on Fisheating Creek. The route in the extreme south of Highlands County and meanders downstream across Glades County and into Lake Okeechobee.

Polk County Trails: There are six trails in Polk County managed by the Florida Trails Association and Nature Conservancy, which are listed in a table in section II. Polk County Resources, under "Recreational Trails".

Florida African-American Heritage Trail: This "trail" is a collection of historic buildings and/or sites, which is covered in section VI. Regionally Significant Historic Sites in Polk County.

Wildlife Management Areas:

Table 1: Wildlife Management Areas

| WMA | County | Acreage | Ownership | Type |
|--------------------|---------------------------|----------------|------------------|-------------|
| Green Swamp | Polk, Sumter, Lake | 48,488 | WMD | I |
| IMC-Agrico | Polk | 720 | Private | I |
| Arbuckle | Polk | 13,500 | Trustees | I |
| Kicco | Polk, Osceola | 7,426 | WMD | I |
| Avon Park AFB | Highlands | 103,107 | Federal | II |
| Upper Hillsborough | Hillsborough, Pasco, Polk | 5,178 | WMD | I |

Source: FGFWFC Region I (Lakeland) and Region IV (West Palm Beach) offices; FGFWFC Hunting Regulations

Handbook (1994 edition).

Note: all except one of the WMA's are managed by FGFWFC; the exception is the Avon Park AFB, which is managed by the US Air Force.

II. POLK COUNTY - AREAS OF REGIONAL ENVIRONMENTAL SIGNIFICANCE

Regional Parks:

Saddle Creek Park: (734 acres) This park is located between the cities of Lakeland and Auburndale. The park is located on land that has been reclaimed after phosphate mining. It is the only regional park in the county which has been extensively developed for recreational purposes. Recreational activities here focus mainly on a series of lakes. Fishing and canoeing are available, as well as picnicking. Islands amongst the lakes serve as rookeries for several species of waterfowl. The area has become an important stopover for migrating songbirds, particularly warblers, and has become a popular birding spot that is mentioned in some of the leading bird watching/nature guides for Florida.

Cypress Gardens: Cypress Gardens is a regional family entertainment theme park known for its premier botanical gardens, home to more than 8,000 varieties of plants from 75 countries. The Gardens' horticultural staff of experts give free advice to the local municipalities on planting and maintaining landscaping areas and lecture frequently throughout the Region, also free of charge.

Within the Gardens is a butterfly conservatory where research, breeding and preservation of the species conducted on 50 species of butterfly. Over 1,000 butterflies are at home in the conservatory at all times, with daily hatching of 350 to 500 new butterflies.

IMC-Agrico/Peace River Park: (460 acres) This park has not yet been developed, but land for it has been acquired by Polk County. The park will be located between the cities of Bartow and Fort Meade. This particular tract of land has also been reclaimed after phosphate mining. The eastern boundary of the park will lie on the Peace River, which will become the focus of many passive activities. In addition to fishing and boating areas, plans call for this park to have a boardwalk system along the river's edge which will offer a nature walk. A golf course may also be built within the park.

State Recreation Areas:

Lake Kissimmee State Park: This State Park is located east of Lake Wales in Polk County. It consists of 5,030 acres bordered by Lakes Kissimmee, Tiger and Rosalie. Lake Kissimmee State Park offers passive recreational uses and access to the Kissimmee River. A boat launching area provides access to Lake Kissimmee, which is famous for bass fishing. The park also offers a campground, picnicking with shelters, a system of hiking trails, and an observation tower. The park features a living history site, a reconstructed 1876 cow camp with scrub cows and rangers playing the part of "cow hunters." Kissimmee State Park is one of only a few State parks

that manage herds of Florida scrub cows and horses, descendants of the original herds brought here in the 1800's. Over the last four years, the park has opened after dark for star gazing. A local, amateur astronomy club sets up an array of telescopes and invites the public to "take a look". The club also alerts the park rangers when there will be a "major cosmic occurrence" such as an exploding star, comet passing or eclipse. The park rangers open the park after hours for those special occurrences, too.

Fish Management Areas;

Tenoroc (Polk County)
Lake Juliana (Polk County)
Lake Mattie (Polk County)
Lake Parker (Polk County)
Saddle Creek Park (Polk County)
Lake Crago (Polk County)

State Wildlife Management Areas:

Tenoroc State Reserve: This wildlife management area is located approximately two miles northeast of Lakeland. The reserve is comprised of a 6,000 acre tract of land which was once mined for phosphate. It is managed primarily for sport fishing in 1,000 acres of mined pits and reclaimed lakes: there are nine lakes within the Tenoroc Reserve Fish Management Area that support substantial populations of large-mouth bass and panfish. In cooperation with the Florida Game and Freshwater Fish Commission, the Department of Environmental Protection tests innovative fish management techniques by using different regulations on different lakes. One such regulation requires that an adult may only fish when accompanied by a child under 12 years of age and each fish caught must be released. The reserve also offers hiking and equestrian trails and a picnic shelter. Other facilities include a picnic area with shelters, grills and rest rooms, boat ramps, and a primitive camping area.

IMC-Agrico Wildlife Management Area: This area is comprised of two tracts located near the community of Homeland, to the west of US 17. Together the tracts total 720 acres. The primary recreational activities within the area are fishing and hunting (primarily waterfowl). Boat ramps are available.

Green Swamp: This area is controlled by the Southwest Florida Water Management District (SWFWMD), and comprises between 8,000 to 10,000 acres in Polk County. The Polk County sections of the swamp are located in the northwestern tip of the county, and border other areas of the swamp located in Sumter and Lake Counties. The primary recreational activities within the area are hunting, hiking and bird-watching.

Upper Hillsborough Wildlife Management Area: This area comprises a total of 5,178 acres, and a small portion is located in Polk County on the northwestern border of Polk and Pasco Counties.

At this time, limited hunting under the management of the Florida Freshwater Fish and Game Commission is the only recreational activity allowed.

Lake Arbuckle State Park: This state park is slated to open within five years. Its location, in the southeast section of the county situated east of US 27 adjacent to the Avon Park Bombing Range, currently is a wildlife management area and managed as part of the Lake Arbuckle State Forest. The state park will comprise some 13,500 acres, and will offer passive recreational uses such as camping, hunting, fishing, boating, hiking and picnicking.

Avon Park Wildlife Management Area: Occupies approximately 53,738 acres in both Polk and Highlands Counties and is located in the extreme southeastern corner of Polk County. Entrance by road begins from Polk County and then loops back into Highlands. Generally, it is bordered on the west by Arbuckle Creek and the east by the Kissimmee River. There are no distinguishable southern boundaries. This military installation contains an independently operated 560 acre state prison. Much of the land is available for hunting, with a maximum of 2,000 hunting permits issued per season. The range also contains 5,000 acres of endangered species habitat.

KICCO Wildlife Management Area: This area is operated by the Southwest Florida Water Management District (SWFWMD) and is located on the Kissimmee River south of Highway 60.

National Historic Landmark - Bok Tower Gardens:

Bok Tower Gardens is located in the City of Lake Wales. It was dedicated in 1929 and attracts 200,000 visitors annually. It became a National Historic Landmark April 1993. With this prestigious designation, the Gardens expect to attract twice as many visitors to the area. The nationally recognized historic gardens were designed by Frederick Law Olmsted, Jr, designer of the White House grounds and other parks across the country. The gardens, which are entirely in an outdoor setting, use plants that are typically found in local gardens, as well as exotic plants that are tolerant to this climate. The gardens also incorporate sites of several endangered plant species and serve as an education center for observing and studying plants and wildlife of the area. All fourth graders in the City, in their study of Florida History, visit the gardens and participate in programs there.

National Wildlife Refuge:

The U.S. Fish and Wildlife Service is establishing a new National Wildlife Refuge along the Lake Wales Ridge in Polk and Highlands Counties. The refuge will include about 10,000 acres of rare scrub vegetation on 12 undeveloped tracts scattered throughout the Ridge. All of the tracts are generally linked by U.S. Highway 27 or Alternate 27.

The Lake Wales Ridge is an ancient line of dunes that was part of the old peninsula that existed over a million years ago when the rest of Florida was under the sea. The scrub vegetation on the

Ridge is ancient and far exceeds the age of the old growth forests in the Pacific Northwest, which were under glaciers a mere 10,000 years ago.

The scrub of this central Florida ridge harbor plant and animal assemblages found nowhere else in the world. The Lake Wales Ridge is noted for having the largest number of endangered plants growing in a limited area anywhere in the United States. This refuge represents an unprecedented opportunity to protect not only a number of Federally listed plant and animal species, but also one of the rarest ecosystem types in the Southeast United States.

The refuge is the first in the National Wildlife Refuge System to be established primarily for the protection of Endangered Plants and a unique vegetation community, ancient scrub. The Lake Wales Ridge refuge will be part of a larger system of scrub preserves acquired and managed in cooperation with the State of Florida, The Nature Conservancy, and Archbold Biological Station.

Recreational Trails:

Hiking Trails: Within Polk County there are opportunities for hiking and canoeing on designated trail systems. The following table lists the major hiking trails in the county.

Nature Trails: In addition to these major hiking trail systems, there are short interpretive nature trails at the Street Nature Center near Winter Haven, the Babson Park Nature Center in Babson Park, Bok Tower Gardens near Lake Wales, Saddle Creek Park near Lakeland, and the Tiger Creek Nature Preserve east of Lake Wales.

Canoe Trails: The Peace River south of Fort Meade is designated by the Florida Department of Environmental Protection as a canoe trail. (The river between Bartow and Fort Meade was at one time a designated extension of this canoe trail.) Other streams in Polk County that offer good to excellent canoeing include Catfish Creek east of Lake Pierce, Lake Marion Creek east of Lake Marion, Weohyakapka Creek south of Lake Weohyakapka (Walk-in-Water), Rosalie Creek east of Lake Rosalie, Arbuckle Creek south of Lake Arbuckle and Kissimmee State Park waterways.

Private Conservation Areas Open to the Public:

- Catfish Creek Nature Preserve; East of Lake Pierce, 309 acres; Owner: The Nature Conservancy(proposed expansion to 6,240 acres).
- Saddle Creek Nature Preserve; Off Reynolds Rd., East of Lakeland, 315 acres; Owner: Florida Audubon Society.
- Tiger Creek Nature Preserve; East of Babson Park, 4,200 acres; Owner: The Nature Conservancy.

Table 2: Hiking Trails in Polk County

| Trail/Location | Length | Note |
|---|--------------------------|--|
| Arbuckle Trail Avon Park Bombing Range | 15 miles | Maintained by FTA. FTA membership required to hike some segments. Closed Oct.-May during hunting season. |
| Green Swamp Trail Green Swamp Wildlife Management Area | 10.6 miles | Maintained by FTA. Hiking not recommended Oct.-May during hunting season. |
| Kissimmee River Trail KICCO Wildlife Management Area | 14.3 miles | Maintained by FTA. Part closed Oct.-May during hunting season. Part on private land. |
| Lake Kissimmee State Park Trails | 13.5 miles, two loops | Maintained by FTA. |
| Tenoroc State Reserve Trail | 7 miles | Maintained by FTA. |
| Tiger Creek Nature Preserve Trails | 10 miles | Maintained by Nature Conservancy. |
| Van Fleet Trail | 15 miles | Maintained by DEP. |

Sources: Polk County Planning Division; Florida Trail Association

Nature Centers: In addition, local chapters of the Florida Audubon Society operate two nature centers in Polk County. The Street Nature Center is located on Lameraux Road east of Winter Haven and is operated by the Lake Region Audubon Society. The Babson Park Nature Center, operated by the Ridge Audubon Society is located, adjacent to Webber College in Babson Park a little over a mile from Hillcrest Heights. Each nature center has nature trails and exhibits and is manned by part-time naturalists.

III. HIGHLANDS COUNTY - AREAS OF REGIONAL ENVIRONMENTAL SIGNIFICANCE

Surface Water:

Highlands County surface water resources include lakes, rivers, creeks and canals; however, lakes comprise the majority of surface waters. All surface waters within the County are Class III (recreation, propagation and maintenance of a healthy, well balanced population of fish and wildlife) per Chapter 17-3, Florida Administrative Code.

Lakes:

There are 73 lakes, a total of 50,000 acres of lakes, in Highlands County. Virtually all of the lakes are located in the Lake Istokpoga/Arbuckle Creek basin, which discharges through the C-41A and the Lake Istokpoga Canal to the Kissimmee River. Lakes Tulane, Annie and Buck may be among the oldest lakes in the United States, since sediment core samples recently taken indicate ages from 50,000 years for Lake Tulane to 25,000 years for Lake Buck.

Lake Istokpoga is the largest lake, covering approximately 43 square miles. Other large lakes are Lakes Placid, June-in-Winter, and Jackson with over 3,000 acres each and Lake Josephine with over 1,200 acres. There are twenty-seven (27) lakes with more than 100 acres each in Highlands County. They are: Apthorpe (219), Bonnet (260), Charlotte (104), Clay (367), Damon (282), Dinner (379), Francis (539), Glenda (177), Grassy (517), Grassy Pond (100), Huckleberry (119), Huntley (680), Istokpoga (43 square miles), Jackson (3,412), Josephine (1,236), June-in-Winter (3,504), Lelia (165), Letta (478), Little Lake Jackson (125), Little Red Water Lake (329), Lotela (802), Placid (3,320), Pythias (318), Red Beach (335), Sebring (468), Sirena (153), Wolf (122).

Creeks:

All creeks in Highlands County are in the drainage basin for Lake Okeechobee. Most drain into Lake Istokpoga first. This lake's primary tributaries are Josephine Creek, which drains the Sebring-Lake Placid area, and Arbuckle Creek, which drains primarily pasture land from the north. The creeks have been described elsewhere. They are Jack Creek, Carter Creek, Arbuckle Creek and Josephine Creek.

Fish Management Area:

Red Beach Lake

State Parks:

Highlands Hammock State Park: The state of Florida's first State Park is an outstanding example of subtropical hardwood hammock. Some scrub species are also present in the Park. Located west of Sebring, the Park is at the western-most edge of Highlands County and crosses over into Hardee County. The park encompasses approximately 3,800 acres, of which 3,030 acres are uplands and 770 acres are submerged lands. Approximately 380 of these acres are located in adjacent Hardee County. Facilities include: recreation hall, amphitheater, picnic shelters (all of which are available for rental), campsites (varying from primitive to full hook-ups), a separate camping area for scout troops, and nature trail hiking. Annual number of park visitors as reported by FDEP is 215,000 persons. Highlands Hammock Addition, an area of 10,133 acres, is under study for acquisition by SWFWMD and listed in the 1994 Save Our Rivers Annual Report.

National Natural Landmark:

Archbold Biological Station: The site is located in the south-central section of Highlands County, south of Lake Placid and west of U.S. Highway 27. This biological research facility contains outstanding examples of scrub habitat and Lake Annie, a pristine ancient collapse sinkhole lake, the most southerly of the Lake Wales Ridge lakes. The Station was recently designated as a National Natural Landmark and is a semi-public facility of 4,300 acres. Originally created for biological explorations in various parts of the world, research now focuses on those ecosystems located on the grounds. The facility, including research labs and collections, is open to visitors upon approval of a written application. A one-half mile self-guided nature trail is open to the public.

Just north of the Biological Station is an area referred to as Placid Lakes Tract. Its 3,602 acres are being studied for possible acquisition by C.A.R.L. funds. Public acquisition would protect one of the finest remaining examples of ancient Lake Wales Ridge scrub, including populations of at least 23 State-listed Endangered and Threatened plant and animal species, and protect an area of especially high (10-20 inches per year) recharge to the Floridan Aquifer.

The Placid Lakes Tract includes Lake Wales Ridge scrub and associated habitats that support at least 33 plant and animal species of FNAI Special Element of which 23 are state or federally listed as endangered or threatened. Many of these are faced with extinction unless wild populations can be protected. The Placid Lakes Tract supports excellent populations of some of the most endangered Lake Wales Ridge endemic scrub plants anywhere, including Highlands scrub hypericum, wedge-leafed button snakeroot, Carter's mustard, and scrub blazing star. The crested caracara (nesting), bald eagle (2 nests), southeastern American kestrel, Florida scrub jay (about 50 territories), Florida black bear, sand skink, blue-tailed mole skink, and eastern indigo snake are among the endangered and threatened animal species known from this site. Florida panthers have also been known to pass through the tract. The project provides opportunities for nature appreciation/education, picnicking, and limited swimming.

Wildlife Management Areas:

Avon Park Wildlife Management Area: This site occupies approximately 53,738 acres in the extreme northeastern corner of the County. Entrance by road begins from Polk County and then loops back into Highlands County. Generally, it is bordered on the west by Arbuckle Creek and the east by the Kissimmee River. There are no distinguishable southern boundaries. This military installation contains an independently operated 560 acre state prison. Much of the land is available for hunting, with a maximum of 2,000 hunting permits issued per season. The range also contains 5,000 acres of endangered species habitat.

Bumblebee Island/Big Island: Lake Istokpoga is located east of U.S. Highway 27, just northeast of the town of Lake Placid. It is the largest lake in Highlands County, the fifth largest lake in

Florida, and covers an area of approximately 43 square miles. Its depth varies between three and seven feet. The islands and associated marshes in Lake Istokpoga consist of about 700-800 acres. They include remnants of the pondapple-moonvine vegetation association, which once blanketed the southern edge of Lake Okeechobee. Bumblebee Island, before the introduction of grazing cattle, was the major south Florida rookery for wading birds, and could become so again if cattle were excluded. Big Island also has the potential for rookery use. Several listed species inhabit the islands.

Hendrie Ranch: This site is located in the extreme southeast corner of Highlands County. It is one of the last areas in the County where the transition of native vegetation from the Ridge's scrub to baygall exists. The area includes the scrub with its endemic species, cutthroat seep and baygall. Distinct ancient shoreline scarps also are present at the site.

Red Beach Lake: This site is located east of U.S. Highway 27, between the cities of Sebring and Lake Placid. It is a Florida Game and Freshwater Fish Commission designated fish management area.

Lake Istokpoga: This lake is an important public lake in Florida, based on its regional, state and national attraction for fishing. Lake Istokpoga is located east of U.S. Highway 27, just northeast of the town of Lake Placid. It is the largest lake in Highlands County, the fifth largest lake in Florida, and covers an area of approximately 43 square miles. Its depth varies between 3 and 7 feet and it is a prime example of the dark, shallow lake type found in Highlands County. Its primary tributaries are Josephine Creek, which drains the Sebring-Lake Placid area, and Arbuckle Creek, which drains primarily pasture land from the north.

Kissimmee River: Although channelized, the Kissimmee River and the floodplain are a resource of major significance and wildlife management. The river runs along the eastern border of Highlands County, dividing Highlands from Okeechobee County. The river drains into Lake Okeechobee, which is located only ten miles south of the Highlands County border.

Holmes Avenue Scrub: This site is located just east of the town of Lake Placid. It is a 1,040-acre scrub site which includes 14 special plants and six animals, 19 of which are endemic to Florida with limited distribution. The site includes considerable frontage on Lake Huntley, and has been proposed for purchase under the C.A.R.L. program.

Areas Currently Under Public Ownership or Identified for Acquisition:

Kissimmee River: SWFWMD is acquiring floodplain areas for restoration. To date the 8,457 acre McArthur Tract has been acquired. A portion of the Florida National Scenic Trail will be developed along the tree line, several miles inland.

Highlands Hammock State Park Expansion: 10,133 acres is under study for acquisition by SWFWMD and listed in the 1994 Save Our Rivers Annual Report.

Jack Creek: 1,259 acres along the creek have been acquired by the Save Our Rivers program and 2,009 remaining acres have been approved for acquisition in the next five years as listed in the 1994 Annual Report of the Save Our Rivers program.

Abandoned Railroad Right-of-ways: 42 mile segment called the Sebring-Palmdale segment.

Lake Apthrope Preserve: 292 acre tract has been acquired by the Nature Conservancy.

IV. HARDEE AND DESOTO COUNTIES - AREAS OF REGIONAL ENVIRONMENTAL SIGNIFICANCE

DeSoto County Endangered Species & Habitat:

Mangrove Forest/Manatee Habitat: A mangrove forest area has been identified in southwestern DeSoto County along the lower Peace River, and the endangered Florida Manatee has been seen there. As a result, this portion of the river has been designated "Critical Habitat" of the manatee and is protected by the Endangered Species Preservation Act.

Hardee County Regional Parks:

Highlands Hammock State Park: This site is located on the eastern edge of Hardee County and the western edge of Highlands County. The state of Florida's first State Park, Highlands Hammock State Park is an outstanding example of subtropical hardwood hammock. Some scrub species are also present in the Park. The park encompasses approximately 3,800 acres(with approximate 380 acres in Hardee County), of which 3,030 acres are uplands and 770 acres are submerged lands. Highlands Hammock Addition, an area of 10,133 acres, is under study for acquisition by SWFWMD and listed in the 1994 Save Our Rivers Annual Report.

Payne Creek State Park: With 340 acres, this state-owned park is located on the Peace River, south and east of the City of Bowling Green. The park has 50 picnic tables, 12 shelters, two museum/interpretive buildings, one historical/archaeological site/structure and 1.5 miles interpretive/nature trails.

V. OKEECHOBEE COUNTY - AREAS OF REGIONAL ENVIRONMENTAL SIGNIFICANCE

Surface Water Resources:

There are two primary sources of surface water in Okeechobee County; the Kissimmee River and Lake Okeechobee. The Kissimmee River has several tributaries that enter the river within Okeechobee County. There also are two major streams which flow through Okeechobee County: Taylor Creek and Nubbin Slough. A large percentage of the County is made up of wetlands, sloughs, and canals.

The Kissimmee River , as previously described.

Lake Okeechobee

The only major lake in Okeechobee County is Lake Okeechobee, which forms the County's southern boundary. Lake Okeechobee encompasses 727 square miles. The lake receives drainage from numerous sources in the Kissimmee River basin, including the Kissimmee River, Indian Prairie Canal, Fisheating Creek, and the Taylor Creek/Nubbin Slough area. On the south end of Lake Okeechobee, a levee some 85 miles long allows for near-total control of lake elevation through a system of gates and pumps connecting six major flood control canals (C-44, C-43, Miami, North New River, Hillsboro, and West Palm Beach canals). The primary land use adjacent to the northern shoreline of the lake is dairy farming. Land use south of the lake is intensive farming of sugar cane and vegetables. There are also some citrus groves and wetlands in this area. Urbanization in this basin is minimal.

Taylor Creek

Taylor Creek flows through the City of Okeechobee. Rising from small tributaries in the central part of the county, it flows southward through the eastern half of the city and then into Lake Okeechobee. Much of Taylor Creek's course through the city is channelized, and a significant amount of its flow is diverted around the city by the L-63(N) Canal, meeting the creek at a point 1.5 miles north of the city limits. Water quality is a problem, as the loss of wetlands has impaired natural purification processes.

As the restoration of the floodplains of the tributaries to Lake Okeechobee and the Everglades gets under way, Taylor Creek may be included, since the creek is environmentally significant as the last link in the chain of rivers and sloughs to Lake Okeechobee.

I. REGIONALLY SIGNIFICANT HISTORIC SITES AND PROPERTIES

(A) Polk County:

Preservation of historic properties has been supported by the citizens in every city in this Region. Thus, the list of historic buildings is a long one. The following list distinguishes four categories of historic sites and properties in Polk County: (1) those designated as National Historic Landmarks, (2) those listed on the National Register of Historic Places, (3) those which either have been determined eligible by the Keeper of the Register or considered eligible by Florida Division of Historical Resources for listing on the National Register, (4) and those that are listed under the Florida African-American Heritage Trail.

Note: The following codes may be used to denote the standard of condition, and adequacy of resources, or facilities within the region. An “X” indicates the resource or facility meets or exceeds the standard “NA” indicates that the standard is not applicable to the facility or situation.

Standard - I = in good condition, II = protected from harm, and III = adequately meets the needs of the region

(1) The following list identifies properties that are listed on the “Florida Master Site File” of historical places by the Florida Department of State, Division of Historical Resources, as of January, 1997. The properties are listed by City and zip-code address, and does not necessarily reflect the geographical location of the below mentioned properties.

(A) Highlands County:

The following list distinguishes three categories of historic sites and properties in Highlands: (1) those listed on the National Register of Historic Places, (2) those which either have been determined eligible by the Keeper of the Register or considered eligible by Florida Division of Historical Resources for listing on the National Register, (3) and those that are listed under the Florida African-American Heritage Trail.

(1)The following list identifies properties that are listed on the “Florida Master Site File” of historical places by the Florida Department of State, Division of Historical Resources, as of January, 1997. The properties are listed by City and zip-code address, and does not necessarily reflect the geographical location of the below mentioned properties.

(C) Hardee County

The following list distinguishes two categories of historic sites and properties in Hardee County: (1) those listed on the National Register of Historic Places, (2) and those which either have been determined eligible by the Keeper of the Register or considered eligible by Florida Division of Historical Resources for listing on the National Register.

(2)The following list identifies properties that are listed on the “Florida Master Site File” of historical places by the Florida Department of State, Division of Historical Resources, as of January, 1997. The properties are listed by City and zip-code address, and does not necessarily reflect the geographical location of the below mentioned properties.

(D) DeSoto County

The following list distinguishes two categories of historic sites and properties in DeSoto County: (1) those listed on the National Register of Historic Places, (2) those which either have been determined eligible by the Keeper of the Register or considered eligible by Florida Division of Historical Resources for listing on the National Register.

(3)The following list identifies properties that are listed on the “Florida Master Site File” of historical places by the Florida

Department of State, Division of Historical Resources, as of January, 1997. The properties are listed by City and zip-code address, and does not necessarily reflect the geographical location of the below mentioned properties.

(E) Okeechobee County

The following list distinguishes four categories of historic sites and properties in Okeechobee County: (1) those designated as National Historic Landmarks, (2) those listed on the National Register of Historic Places, (3) those which either have been determined eligible by the Keeper of the Register or considered eligible by Florida Division of Historical Resources for listing on the National Register, (4) and those properties determined to have other historic significance or value.

(4)The following list identifies properties that are listed on the “Florida Master Site File” of historical places by the Florida Department of State, Division of Historical Resources, as of January, 1997. The properties are listed by City and zip-code address, and does not necessarily reflect the geographical location of the below mentioned properties.

IECONOMIC DEVELOPMENT RESOURCES

(A)DeSoto County:

*The total number of persons in the Civilian labor force is, 9, 318; the total number of persons unemployed is, 548, and the percent of unemployed civilian labor force is, 5.9%. Below is a listing of the largest Employers and location of their Facilities that fall within the CFRPC region:

Note: The following codes may be used to denote the standard of condition, and adequacy of resources, or facilities within the region. An “X” indicates the resource or facility meets or exceeds the standard “NA” indicates that the standard is not applicable to the facility or situation.

Standard - I = in good condition, II = protected from harm, and III = adequately meets the needs of the region

(A)Hardee County:

* The total number of persons in the Civilian labor force is, 8, 474; the total number of persons unemployed is, 701, and the percent of unemployed civilian labor force is, 8.3%.

(A)Highlands County:

* The total number of persons in the Civilian labor force is, 23,655; the total number of persons unemployed is, 1,443, and the percent of unemployed civilian labor force is, 6.1%.

(A)Okeechobee County:

* The total number of persons in the Civilian labor force is, 12,795; the total number of persons unemployed is, 708, and the percent of unemployed civilian labor force is, 5.5%.

(A)Polk County:

* The total number of persons in the Civilian labor force is, 185,018; the total number of persons unemployed is, 13,341, and the percent of unemployed civilian labor force is, 7.2%.

*Indicates information gathered from 1990 Census data table 144, (CP-2-11).

**CFRPC sources

(A)Downtown Development Districts:

This includes Main Street projects, and U.S.A./Community Redevelopment Agency (CRA) improvements within the CFRPC's region.

(A)Phosphate Mining:

The phosphate industry owns 466,440 acres in central Florida, over half of which is in active mining areas. By 1990, a total of 218,229 acres had been mined.

I.REGIONAL TRANSPORTATION FACILITIES

(A) Highway Systems

*The region is crossed by two major highways, increasing the probability of future development in the region due to good transportation links to the surrounding urban areas. I-4 runs east and west in the northern half of Polk County, linking Tampa and Orlando. The second major transportation link, U.S. Highway 27, runs north and south. It links the Orlando Urban Area to this region. Route 27 is heavily traveled by local residents to reach local amenities; and, by tourists visiting attractions in the region and north and south of the region. Other north-south routes are 98, 37, 33, 17, and 441. Highways 98 and 37 are heavily traveled locally and run through the length of the region.

*The region also has several east-west highways which link the two coasts. Highways 60, 62, 64, 70, and 72 are heavily traveled by local residents as well as out-of-region residents. These highways are in generally good condition with relatively little traffic, as they run through rural areas. Highway 17/92 is another east-west link, between Lakeland, Winter Haven and Haines City, and ends in Orlando.

Note: The following codes may be used to denote the standard of condition, and adequacy of resources, or facilities within the region. An “X” indicates the resource or facility meets or exceeds the standard “NA” indicates that the standard is not applicable to the facility or situation.

Standard - I = in good condition, II = protected from harm, and III = adequately meets the needs of the region

* Information collected from the OEDP report of Region VII dated October 1993

**CFRPC sources

(B) Aviation Facilities

The region contains numerous private airstrips that serve private and commercial properties. Three of these are South Lakeland Airport, Chalet Suzanne Airport and River Ranch Resort Airport. The Region contains one reliever airport, Lakeland Linder Regional, and eight general aviation airports listed in the table below.

* Information gathered from the Strategic Regional Policy Plan Data and Analysis back ground papers dated February 1996

(C) Rail Facilities

**Long-distance inter-city rail service is provided by Amtrak, a federal government-owned corporation. Current services in Florida consist of eight trains per day to, and from the northeast United States and service to, and from Los Angeles three times per week. Some of these trains provide intrastate service.

*Information gathered from the published Amtrak National Timetable Schedules dated April 1996

** Information gathered from the Strategic Regional Policy Plan Data and Analysis back ground papers dated February 1996

I.PUBLIC FACILITIES

*Growth Management in Florida (Chapter 163, Florida Statutes, as amended), and Chapter 9-J5 of the Florida Administrative Code

directs counties, cities, towns, and villages in the State to prepare, maintain and live by the Comprehensive Plans required by law. This section contains a county-by-county summary of the public facilities and services that are provided to the individual municipality. In all cases, with the exception of Polk County, the counties do not provide public water of sewer services; therefore, the providing city, or cities, that provide those services are identified.

(A) DeSoto County:

The City of Arcadia is the only incorporated municipality in DeSoto County, and is the sole governmental entity in the county that provides potable water and sewer treatment facilities

Note: The following codes may be used to denote the standard of condition, and adequacy of resources, or facilities within the region. An “X” indicates the resource or facility meets or exceeds the standard “NA” indicates that the standard is not applicable to the facility or situation.

Standard - I = in good condition, II = protected from harm, and III = adequately meets the needs of the region

| | |
|-----------------------------------|--|
| <i>Colleges and Universities:</i> | |
|-----------------------------------|--|

*Data compiled from the OEDP report of Region VII dated October 1993

(B) Hardee County:

Due to the nature of Hardee County, county-wide sanitary sewer facilities are not feasible.

| | |
|-----------------------------------|--|
| <i>Colleges and Universities:</i> | |
|-----------------------------------|--|

*Data compiled from the OEDP report of Region VII dated October 1993

(C) Highlands County:

*Highlands County has studied the demands, and capacity needs of the population on its potable water systems.

| | |
|-----------------------------------|--|
| <i>Colleges and Universities:</i> | |
|-----------------------------------|--|

*Data compiled from the OEDP report of Region VII dated October 1993

(D) Okeechobee County:

*The City of Okeechobee is the only incorporated municipality in Okeechobee County. The city provides most of the urbanized portion of the county with potable water, and sewer treatment facilities.

| | |
|-----------------------------------|--|
| <i>Colleges and Universities:</i> | |
|-----------------------------------|--|

*Data compiled from the OEDP report of Region VII dated October 1993

**Data compiled from the City of Okeechobee, City Comprehensive Plan dated May 1992

(E) Polk County:

*Polk County contains fifteen incorporated municipalities. Some of these municipalities provide sanitary sewer and potable water services to their communities and to adjacent unincorporated portions of Polk County. The cities of Davenport, Dundee, and Lake Hamilton provide no sanitary sewer facilities.

| | | | | |
|-----------------------------------|---|----|----|---------------------------|
| <i>Colleges and Universities:</i> | | | | |
| Polk Community College | X | NA | NA | Lakeland, Winter Haven |
| University of South Florida | X | NA | NA | Lakeland extension campus |
| Florida Southern College | X | NA | NA | Lakeland |

| | | | | |
|------------------------------------|---|----|----|--------------|
| Southeastern Bible College | X | NA | NA | Lakeland |
| Spurgeon Baptist Bible College | X | NA | NA | Mulberry |
| Warner Southern College | X | NA | NA | Lake Wales |
| Webber College | X | NA | NA | Lake Wales |
| Ridge Vocational Technical School, | X | NA | NA | Winter Haven |
| Traviss Vocation Technical School, | X | NA | NA | Lakeland |

*Data compiled from the OEDP report of Region VII dated October 1993

#Data compiled from Polk Counties Comprehensive Plan dated August 1990

##Data compiled from the Polk County School Board dated January 1997

(F) Energy

| | | | | |
|---|---|----|----|--------|
| Generation Facilities | X | NA | NA | Active |
| Transmission Lines and Substations for Basic Distribution Network | X | NA | NA | Active |

(G) Telecommunications

| | | | | |
|--|---|----|----|--------|
| Major Television and Radio Transmission Facilities | X | NA | NA | Active |
| Major Telephone and Data Transmission Facilities | X | NA | NA | Active |

I. EMERGENCY PREPAREDNESS

(A) Evacuation Routes and Resources:

Note: The following codes may be used to denote the standard of condition, and adequacy of resources, or facilities within the region. An “X” indicates the resource or facility meets or exceeds the standard “NA” indicates that the standard is not applicable to the facility or situation.

Standard - I = in good condition, II = protected from harm, and III = adequately meets the needs of the region

| | | | | |
|---|---|----|----|--------|
| Interstate Highways and other limited access highways | X | NA | NA | Active |
| Other Highways leaving the Region | X | NA | NA | Active |
| Major Thoroughfares between evacuation areas and shelters | X | NA | NA | Active |
| Bridges | X | NA | NA | Active |
| Transit Systems | X | NA | NA | Active |
| Airports | X | NA | NA | Active |

(B) Emergency Shelters

*The five inland counties of Central Florida have a total shelter capacity of approximately 59,000 spaces. This includes primary American Red Cross, county operated shelters, and alternate shelters (churches, lodges, and other public buildings). Space available in hotels and motels is estimated at approximately 16,337 beds. Space is calculated at twenty square feet per person for Red Cross Shelters. Hotel, and Motel occupancy rates have been calculated at 60% for the hurricane months of June through November, which is an average based on telephone and, or written correspondence with the facilities. Public facilities would include: designated public schools K-12, and universities as available. Other institutional facilities would include, but are not limited to: prisons, emergency operating centers, communication facilities, police and fire and rescue stations, military bases, emergency health care facilities, and flood control structures.

| | | | | |
|--------|---|---|--|--|
| DeSoto | X | X | | *The total “at risk population” in the county is 14,218. The available number of public facilities are 4,425. The available number of private sector facilities are 140/560 (rooms/persons); therefore, there are a deficit of 9,233 spaces county wide. |
| Hardee | X | X | | *The total “at risk population” in the county is 11,452. The number of available public facilities is 4,142. The number of private sector |

| | | | | |
|------------|---|---|---|--|
| | | | | facilities is 71/284 (rooms per persons); therefore, there is a deficit of 7,026 space's county wide. |
| Highlands | X | X | X | *The total "at risk population" in the county is 31,650. The number of available public facilities is 31,096. The number of private sector facilities is 1,527/6,108 (rooms per persons); therefore, there is a surplus of 5,554 space's county wide. |
| Okeechobee | X | X | | *The total "at risk population" in the county is 23,354. The number of available public facilities is 5,595. The number of private sector facilities is 291/1,164 (rooms per persons); therefore, there is a deficit of 16,595 space's county wide. |
| Polk | X | X | | *The total "at risk population" in the county is 72,224. The number of available public facilities is 13,614. The number of private sector facilities is 4,778/19,112 (rooms per persons); therefore, there is a deficit of 39,471 space's county wide. |
| Totals | X | X | | *The total "at risk population" in the region is 152,898. The number of available public facilities is 58,872. The number of private sector facilities is 6,807/27,228 (rooms per persons); therefore, there is a deficit of 66,771 space's district wide. |

*Central Florida Regional Hurricane Evacuation Study Update, 1995

(C) Designated Florida Greenways

The following Greenways and Trailways located within the CFRPC's region are recognized through the Governor's Proclamation as being regionally significant.

| | | | | |
|--|---|---|----|---|
| General James A. Van Fleet State Trail | X | X | NA | Located in Lake, Polk, and Sumter counties |
| Green Swamp Segment of the Florida Trail | X | X | NA | Located in Hernando, Lake, Pasco, Polk, and Martin counties |
| Lake Okeechobee Greenway | X | X | NA | Located in Glades, Henery, Highlands, Martin, Okeechobee, and Palm Beach counties |
| Reedy Creek, Marion Creek, and the Upper | X | X | NA | Located in Osceola and Polk counties |

| | | | | |
|-----------------------------------|---|---|----|---|
| Kissimmee River Basin Greenway | | | | |
| Lakeland Urban Area Greenway | X | X | NA | Located in Polk county |
| Alafia River Greenway | X | X | NA | Located in Hillsborough and Polk counties |
| Fisheating Creek Greenway | X | X | NA | Located in Highlands and Glades counties |
| Hillsborough River Greenway | X | X | NA | Located in Hillsborough, Pasco, and Polk counties |
| Kissimmee River Greenway | X | X | NA | Located in Polk, Glades, Highlands, Okeechobee, and Osceola counties |
| Peace River Greenway | X | X | NA | Located in Charlott, DeSoto, Hardee, and Polk counties |
| Withlacoochee River Greenway | X | X | NA | Located in Hernando, Lake, Pasco, Polk, Marion, Sumter, Citrus, and Levy counties |
| The Florida Trail System | X | X | NA | Located throughout the state |
| The Florida National Scenic Trail | X | X | NA | Located throughout the state |

(D) Table 4: SWFWMD Water Management Structures and Facilities

| Structure/Facility Name | County | Owner/Operator |
|-------------------------|-----------|-----------------------|
| Lake Gibson | Polk | SWFWMD operated |
| Lake Parker | Polk | SWFWMD operated |
| Banana Lake | Polk | SWFWMD owned/operated |
| Lake Arietta | Polk | SWFWMD owned/operated |
| Lake Lena | Polk | SWFWMD operated |
| Lake Hancock | Polk | SWFWMD owned/operated |
| Scott Lake | Polk | SWFWMD operated |
| Lake Henry | Polk | SWFWMD owned/operated |
| Lake Smart | Polk | SWFWMD operated |
| Lake Fannie | Polk | SWFWMD operated |
| Lake Hamilton | Polk | SWFWMD operated |
| G-90 | Highlands | SWFWMD owned/operated |

source: SWFWMD District Water Management Plan, Sept. 1994

(E) Table 5: 82 Lakes of More than 100 Acres in Polk County

| Lake Name | Acres | Lake Name | Acres |
|--------------|-------|---------------|-------|
| Agnes | 386 | Easy | 419 |
| Alfred | 716 | Effie | 102 |
| Annie | 539 | Elbert | 173 |
| Arbuckle | 3828 | Eloise | 1160 |
| Artana | 3026 | Eva | 173 |
| Arietta | 758 | Fannie | 829 |
| Banana | 432 | Garfield | 655 |
| Bess | 148 | Gibson | 474 |
| Biggum | 198 | Haines | 736 |
| Blue LWR | 118 | Hamilton | 2162 |
| Bonnet | 354 | Hancock | 4,519 |
| Buffum | 1543 | Hartridge | 434 |
| Cannon | 336 | Hatcheneia | 6665 |
| Clincil | 1207 | Henry | 857 |
| Connie | 236 | Hollingsworth | 356 |
| Crooked Lake | 5,538 | Howard | 628 |
| Crystal | 158 | Idylwild | 102 |
| Daisy | 133 | Jessie | 190 |
| Deer | 125 | Joein | 163 |

| Lake Name | Acres | Lake Name | Acres |
|------------------|--------------|------------------|--------------|
| Debson | 117 | Jollana | 926 |
| Dexter | 153 | Lena | 207 |
| Eagle | 651 | Leonore | 393 |
| Livingston | 1203 | Rochelle | 578 |
| Lowery | 903 | Rosalie | 4597 |
| Lil Hamilton | 367 | Ruby | 255 |
| Lulu | 301 | Saddlebag | 287 |
| Mariam | 199 | Scoot | 285 |
| Mariana | 503 | Shipp | 283 |
| Marion | 2990 | Smart | 275 |
| Mattie | 1078 | Starr | 147 |
| McLeod | 512 | Striety | 321 |
| Mid Hamilton | 106 | Surveyors | 293 |
| Mirror | 123 | Tennessee | 112 |
| Moody | 391 | Tiger | 2200 |
| Mud | 133 | Tracy | 136 |
| Myrtle | 413 | Trask | 163 |
| Otis | 143 | Trout | 143 |
| Parker (LKLD) | 2272 | Van | 592 |
| Parker (LWR) | 123 | Wailles | 326 |
| Pierce | 3729 | Wedhya- kapka | 7532 |

| Lake Name | Acres | Lake Name | Acres |
|------------------|--------------|------------------|--------------|
| Reedy | 3486 | Winterset | 548 |

Supplemental Appendix A

Florida Natural Areas Inventory

Species Lists

for

DeSoto, Hardee, Highlands, Okeechobee and Polk Counties

APPENDIX B - PUBLIC PARTICIPATION

- January 19, 1995 - Polk County Farm Bureau, Bartow, 7:00 p.m.
- February 1, 1995 - Central Florida Regional Planning Council Meeting, Sebring, 9:30 a.m.
- March 1, 1995 - Central Florida Regional Planning Council Meeting, Sebring, 9:30 a.m.
- March 9, 1995 - Highlands County Water Task Force, 7:00 p.m.
- March 10, 1995 - Central Florida Development Council Meeting, Bartow, 10:00 a.m.
- March 14, 1995 - DeSoto County Commission Meeting, 9:00 a.m.
- March 16, 1995 - Hardee County Commission Meeting, Wauchula, 8:30 a.m.
- March 21, 1995 - Highlands County Commission Meeting, Sebring, 9:00 a.m.
- April 24, 1995 - Lake Alfred Planning Board, Lake Alfred, 7:00 p.m.
- April 25, 1995 - Lake Wales Planning Board, Lake Wales, 7:00 p.m.
- May 16, 1995 - South Florida Water Management District, Agriculture Advisory Committee Meeting, 10:00 a.m.
- June 5, 1995 - Wauchula City Council Workshop, Wauchula, 6:30 p.m.
- July 19, 1995 - Wauchula Rotary Club, Wauchula, 11:30 a.m.
- August 9, 1995 - Central Florida Regional Planning Council Meeting, Sebring, 9:30 a.m.
- August 10, 1995 - Polk County Farm Bureau, Bartow, 6:30 p.m.
- August 15, 1995 - Lakeland City Commission, Lakeland, 4:00 p.m.
- August 21, 1995 - John Fuller Auditorium, Winter Haven, 4:00 p.m.
- August 22, 1995 - The Recreation Center, Haines City, 4:00 p.m.
- August 23, 1995 - Polk County Commission Chambers, Bartow, 4:00 p.m.

August 24, 1995 - Lake Wales City Commission Chambers, Lake Wales, 4:00 p.m.

August 28, 1995 - Hardee County Commission Chambers, Wauchula, 4:00 p.m.

August 29, 1995 - Okeechobee County, HRS Building, Okeechobee 4:00 p.m.

August 30, 1995 - Highlands County Commission Chambers, Sebring, 4:00 p.m.

August 31, 1995 - Joint Committee on the Peace River, Fort Myers, 1:00 p.m.

August 31, 1995 - DeSoto County Commission Chambers, Arcadia, 4:00 p.m.

September 5, 1995 - Lions Club, Bartow, 11:30 a.m.

September 6, 1995 - Central Florida Regional Planning Council Meeting, Sebring, 9:30 a.m.

September 6, 1995 - Sustainable South Florida Workshop, Sebring, 3:00 p.m.

November 1, 1995 - Central Florida Regional Planning Council Meeting, Sebring, 9:30 a.m.

December 6, 1995 - CFRPC Annual Retreat, CF Industries EMS, Hardee County, 9:00 a.m.

January 17, 1996 - LEPC Annual Retreat, Holiday Inn, Sebring, 2:30 p.m.

February 7, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.

February 28, 1996 - John Fuller Auditorium, Winter Haven (Polk County) 6:00 p.m.

February 29, 1996 - Lakeland City Commission Chambers, Lakeland (Polk County) 6:00 p.m.

March 4, 1996 - Lake Alfred City Commission Meeting, Lake Alfred, 7:30 p.m.

March 6, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.

March 7, 1996 - Polk County Commission Chambers, Bartow, 6:00 p.m.

March 12, 1996 - Highlands County Commission Meeting, Sebring, 10:00 a.m.

March 13, 1996 - Highlands County Commission Chambers, Sebring, 6:00 p.m.

March 14, 1996 - Hardee County Commission Chambers, Wauchula, 8:30 a.m.

March 14, 1996 - Okeechobee County Commission Chambers, Okeechobee, 6:00 p.m.

March 18, 1996 - City of Lakeland Commission Meeting, Lakeland, 9:00 a.m.

March 20, 1996 - Hardee County Commission Chambers, Wauchula, 6:00 p.m.

March 21, 1996 - DeSoto County Public Meeting Room, Rm 103, Arcadia, 6:00 p.m.

March 25, 1996 - City of Winter Haven Commission Meeting, Winter Haven, 7:30 p.m.

March 26, 1996 - Polk County Commission Chambers, Bartow, 9:30 a.m.

March 27, 1996 - Central Florida Regional Planning Council Meeting, 9:30 a.m.

March 28, 1996 - Okeechobee County Commission Meeting, 9:00 a.m.

April 4, 1996 - Planners Forum, Bartow, 3:30 p.m.

April 16, 1996 - Highlands County Commission Meeting, Sebring, 10:30 a.m.

April 23, 1996 - DeSoto County SRPP Workshop, Arcadia, 2:00 p.m.

April 22, 1996 - Hardee County SRPP Workshop, Wauchula, 5:30 p.m.

April 25, 1996 - Okeechobee County SRPP Workshop, Okeechobee, 2:00 p.m.

May 1, 1996 - Central Florida Regional Planning Council, Hardee County, 9:30 a.m.

May 16, 1996 - Highlands County SRPP Workshop, Agri-Civic Center, Sebring, 6:30 p.m.

May 22, 1996 - DeSoto/Hardee County SRPP Staff Workshop, Hardee County, 9:00 a.m.

June 10, 1996 - SRPP Workshop, Phosphate Industry Representatives, Bartow, 10:00 a.m.

June 13, 1996 - SRPP Planners Workshop, Sebring, 4:00 p.m.

June 19, 1996 - Central Florida Regional Planning Council, Bartow, 9:30 a.m.

July 10, 1996 - Central Florida Regional Planning Council, Okeechobee, 9:30 a.m.

- August 7, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.
- August 22, 1996 - Council's SRRP Committee, Holiday Inn Sebring, 1:00 p.m.
- August 27, 1996 - Council's SRRP Committee, Holiday Inn Sebring, 9:00 a.m.
- September 4, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.
- September 11, 1996 - Council's SRRP Committee, Holiday Inn Sebring, 9:00 a.m.
- September 25, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.
- November 4, 1996 - “Thirty Day Meeting” with staff of the Governor’s Office and other commenting agencies, Tallahassee, 2:00 p.m.
- December 4, 1996 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.
- January 8, 1997 - Central Florida Regional Planning Council Retreat, Hardee County, 8:00 a.m.
- January 24, 1997 - Council's SRRP Committee, Holiday Inn Sebring, 9:00 a.m.
- January 31, 1997 - Council's SRRP Committee, Holiday Inn Sebring, 9:00 a.m.
- February 4, 1997 - Staff meeting with FDOT District One on Regional Transportation Element.
- February 5, 1997 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.
- February 14, 1997 - Central Florida Regional Planning Council Rule Development Workshop, Sebring, 9:00 a.m.
- March 4, 1997 - Presentation and discussion with the Highlands County Commission, Sebring, 9:30 a.m.
- March 12, 1997 - Central Florida Regional Planning Council, Sebring, 9:30 a.m.