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Area

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None

I. Introduction

HENDRY COUNTY COMPREHENSIVE PLAN

REQUIREMENTS

The previous Hendry County Comprehensive Plan was adopted in 1980. Subsequent to its adoption, the State of Florida amended Chapter 163 F.S., creating the 1985 "Growth Management Act". This version of the Comprehensive Plan is a revision of the 1980 Plan in compliance with the amended statute.

The purpose of the 1980 Comprehensive Plan was to analyze the County's development and to provide guidelines for its future growth. The 1980 Comprehensive Plan included guidelines for Plan implementation. The purpose of the 2000 Comprehensive Plan revision is to analyze the County's development and to provide implementable and financially feasible goals, guidelines and policies for meeting Hendry County's existing infrastructure deficiencies and future infrastructure needs for the County's projected growth. The difference in purposes is significant. The requirements for the 1980 Comprehensive Plan did not explicitly specify the implementation means; the requirements for the 2000 Comprehensive Plan revision mandate implementation.

The 2000 Comprehensive Plan revision requirements are presented in the "Local Government Comprehensive Planning and Land Development Regulation Act" (Chapter 163 F.S.) and the "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance" (Chapter 9J-5 F.A.C.). The regulations specify that a plan revision is to be carried out, when it is to be completed, how it is to be completed, what it is minimally to contain, and what it is ultimately to achieve. The goals, objectives and policies of the revised Comprehensive Plan are required to be specific, objective and measurable, and they are to be financially feasible. Existing deficiencies are required to be identified and programmed for solution, and the means to meet projected needs for future growth are required to be provided.

According to Chapter 163 (F.S.) and 9J-5 (F.A.C.) specific plans are to be made to ensure that future growth will not deteriorate the level of service of existing facilities, and that improvements to facilities will be met to keep pace with growth. Ultimately the Comprehensive Plan must provide that infrastructure, facilities and services will be in place at the time that impacts from growth and development of the County occur.

The specific elements required for Hendry County to include in the Comprehensive Plan revision are:

- Future Land Use
- Traffic Circulation
- Housing
- Recreation and Open Space
- Combined Element Including Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge

- 1 - Conservation
- 2 - Intergovernmental Coordination
- 3 - Capital Improvements

4 This Comprehensive Plan includes a chapter for each of these elements.

5 **CONTEXT OF PLANNING**

6 The 1985 Florida Growth Management Act (the previously mentioned Chapter 163
7 F.S.) essentially views planning and the comprehensive plan as a process, an orderly and
8 incremental one. The revised Comprehensive Plan is to be fully evaluated by the local
9 government in five years, and its contents revisited as necessary. Annually, the Capital
10 Improvements Element, which was not previously required for Florida comprehensive plans,
11 is to be revisited. The goals, objectives and policies are to include the mechanisms, and the
12 timing, for the means to plan implementation.

13 The revised Comprehensive Plan is required to be followed by changes in land
14 development regulations, and by a system to ensure that facilities are in place concurrent with
15 development impacts. Clearly the Comprehensive Plan is to be a process requiring constant
16 monitoring and incremental evaluation. In addition, twice per year a local government is
17 permitted to amend the Comprehensive Plan to make changes deemed necessary by new
18 information, conditions and/or circumstances.

19 Because the revised Comprehensive Plan is to be viewed as a process, it was
20 important that Hendry County attempt to analyze existing development conditions and
21 project future growth to the extent possible given existing data and information. In analyzing
22 such data and information, the best effort is put forth to understand existing and probable
23 future conditions. During the analysis, it becomes apparent that some needed data and
24 information is just not available for varying reasons. If the unavailable data and information
25 is important or vital to a proper analysis, then it is necessary as a part of the planning process
26 to include seeking the data and information in the Comprehensive Plan's goals, objectives,
27 and/or policies.

28 It is not to be considered alarming that certain data and information are not available
29 at any given phase in the Comprehensive Plan's process; it is only necessary that a planned
30 attempt be made to obtain it, so that it may be used in future analyses. The unavailability of
31 some data and information was encountered in the development of this revision of the
32 Hendry County Comprehensive Plan.

33 **DATA ANALYSIS AND SUPPORT DOCUMENTATION**

34 Prior to the preparation of this 2000 Hendry County Comprehensive Plan a Data
35 Analysis was prepared as support documentation for the revised Plan. The Data Analysis is
36 not adopted as a part of this Comprehensive Plan, but is adopted as the primary analytical

1 basis for the revised Plan in compliance with the 1985 Growth Management Act, and the
2 Goals, Objectives, and Policies, are based upon the Data Analysis findings.

3 As mentioned in the section above, and as described in the Data Analysis and further
4 within this Comprehensive Plan, certain data and information have simply not been available
5 to facilitate adequate planning in some parts of the Comprehensive Plan elements. For most
6 of these deficiencies it has been possible to identify the means for obtaining the currently
7 unavailable data and information. For these, the means and timing for obtaining them are
8 included in this Plans' Goals, Objectives, and Policies. As the necessary analyses are made
9 from the data and information obtained in the future, the Comprehensive Plan will be
10 amended as relevant to the Goals, Objectives, and Policies of the Comprehensive Plan.

11 COUNTY LOCATION AND SETTING

12 Hendry County is a rather large county geographically (approximately 1,185 square
13 miles), but it has a comparatively small population (BEBR 1990 estimate: 25,773). The
14 growth rate is rather modest compared to Florida's coastal counties. According to BEBR
15 estimates, Hendry County grew by 38.6% between 1980 and 1990. BEBR projects a
16 declining annual growth rate for Hendry County, from a 3.5% annual growth rate between
17 1985 and 1990, to a 2.5% annual growth rate between 1990 and 1995, to a 1.65% annual
18 growth rate between 1995 and 2000.

19 Most of the population of Hendry County is concentrated in and around the
20 incorporated cities of Clewiston and LaBelle.

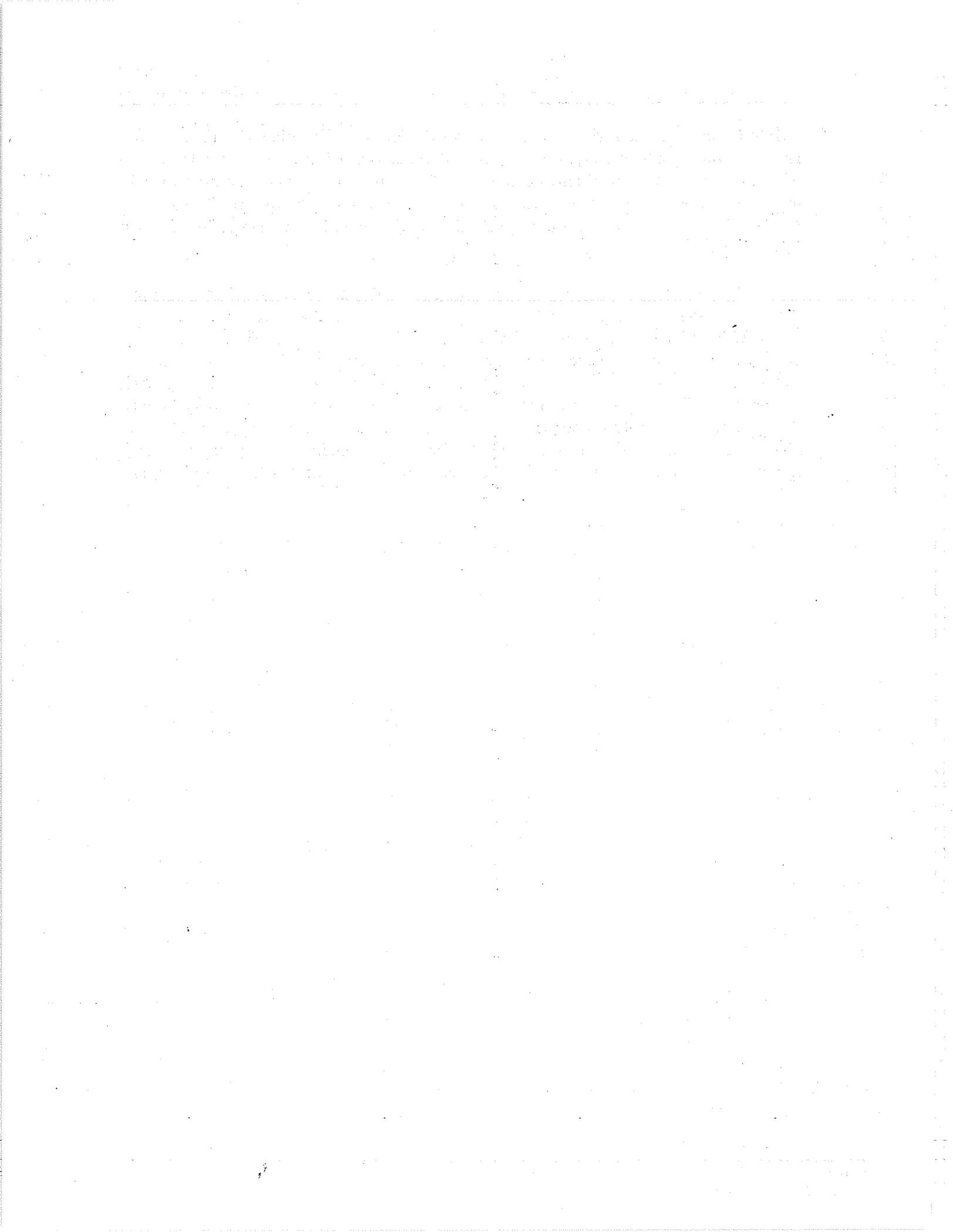
21 There are a few subdivisions in other areas of the County, and the large Port LaBelle
22 development lies just east of the City of LaBelle. There is little urban residential sprawl in
23 the traditional sense. There is little deconcentration of commercial uses, except in reasonable
24 proximity to residential areas. Strictly defined, industrial uses are few and small. The largest
25 industrial-type facilities are in fact agricultural uses, serving sugar cane and citrus.

26 Hendry County is a part of what is referred to as Southwest Florida. Hendry County
27 shares land boundaries with the counties of Broward, Charlotte, Collier, Glades, Lee and
28 Palm Beach. Hendry County also contacts Martin and Okeechobee Counties at a point in
29 Lake Okeechobee. Only Lee County lies between Hendry County and the Gulf of Mexico,
30 and only Palm Beach County lies between Hendry County and the Atlantic Ocean. The
31 Caloosahatchee River traverses the northwest corner of the County, and the northeast corner
32 of the County forms part of the south shoreline of Lake Okeechobee. The Big Cypress
33 Seminole Indian Reservation lies in the southeast part of Hendry County.

34 The land use and economy of Hendry County are dominated by agricultural activity;
35 primarily sugar cane, citrus and vegetable growing, and cattle raising. Sugar refining and
36 citrus processing are also a part of the County's agricultural economy. Hendry County has
37 several land owners with vast agricultural land holdings in the county. The development of
38 citrus agriculture has been particularly rapid in recent years. The intensity of land

1 development for citrus agriculture, and the conversion of other agricultural uses to citrus
2 growing, will begin to place some pressures on the County's facilities, services and resources
3 if the trend of planting more citrus continues. Citrus products must be processed, must be
4 moved to markets, and new workers and satellite industries are to be expected. To the extent
5 feasible given the existing and projected data, this Comprehensive Plan addresses these
6 expectations.

7 The climate of Hendry County is subtropical with warm average temperatures year
8 round. As with most of Southwest Florida, Hendry County is a rather level, low area that has
9 poor natural drainage, and contains many man-made canals, levees, and related surface water
10 management features. However, land elevations are considerably higher than in the coastal
11 counties, with some points rising over 40 feet. Without exception, the Data Analysis
12 prepared for this Comprehensive Plan reflects this general description of Hendry County.
13 However, the Data Analysis does so in much greater detail. The following Comprehensive
14 Plan elements also reflect this general description of Hendry County, drawing upon
15 conclusions from the Data Analysis in the development of the Goals, Objectives, and
16 Policies.



II. Future Land Use Element Goals, Objectives & Policies

1 INTRODUCTION

2 The Future Land Use Element, although the first element to be presented in this
3 Comprehensive Plan, actually has a pivotal role in the Plan. The Future Land Use Element,
4 and its attendant Future Land Use Map, is both created by the other elements of the
5 Comprehensive Plan and impacts upon them. The locations and the densities of land use
6 categories are shaped to a large extent by information from the other elements of this
7 Comprehensive Plan, and the other elements of the Plan are influenced by and support the
8 Future Land Use Element. It is the Future Land Use Element (along with the Future Land
9 Use Map) that states the sizes, locations, densities (intensities), and other characteristics of
10 the land use categories for future land development in Hendry County.

11 The purpose of the Future Land Use Element is the designation of future land use
12 patterns in Hendry County by providing land use classifications for all lands in the County,
13 and presenting them on the Future Land Use Map. The Goals, Objectives, and Policies of this
14 Element establish the meaning and definitions of the land use categories on the Future Land
15 Use Map, and present the criteria for development within the specific categories.

16 Both the land use categories and the criteria for development are based on analyses
17 of the County's facilities and resources, and their relative locations. These facilities and
18 resources include the infrastructure to support existing development and future growth, and
19 the conditions and capacities of the natural resources to support development. Most of these
20 natural resources are environmentally sensitive to varying degrees. The small Future Land
21 Use Maps presented in this text are for general illustrative purposes only, and are not
22 intended for regulatory purposes. The official Future Land Use Map Series includes the
23 following four maps:

- 24 Map 1: Land Use Year 2010
25 Map 2: FEMA Flood Prone Areas
26 Map 3: Land Surface Elevations
27 Map 4: Land Cover

28 The term "Future Land Use Map" is used interchangeably in this Plan with "Map 1:
29 Land Use Year 2010". This official map series is prepared at the scale of one inch equals two
30 miles, except Map 4: Land Cover which is a Florida Game and Fresh Water Fish Commis-
31 sion LandSat photograph map at the scale of approximately one inch equals 2.5 miles. These
32 maps are an integral part of the Hendry County Comprehensive Plan.

33 The analysis mentioned above is the Data Analysis, the support documentation for
34 the Hendry County Comprehensive Plan. The Data Analysis is not adopted as a part of this
35 Comprehensive Plan, but is the analytical basis for conclusions drawn from this Comprehen-
36 sive Plan. The following section highlights the land use conclusions from Data Analysis. For
37 the analyses and the statistical conclusions, refer to that document.

1 The Goals, Objectives, and Policies for future land use are found in the final section
2 of this Element. Because of the nature of the Future Land Use Element, the Goals,
3 Objectives, and Policies in this Element draw upon many issues concluded from the various
4 other elements.

5 **CONCLUSIONS FROM THE DATA ANALYSIS**

6 This section highlights the conclusions from the data analysis for the Future Land Use
7 Element. Baseline population data are necessary for the completion of many of the data
8 analysis activities for the land use and the other elements of the Comprehensive Plan.
9 Population projections for the County are presented and distributed among the Cities of
10 Clewiston and LaBelle, and the unincorporated area of Hendry County. Further, resident and
11 seasonal population estimates and projections are made, and the population is analyzed
12 according to its location in the rural and urban areas of the County, disregarding municipal
13 boundaries.

14 The entire unincorporated area of the County is broken down into(13) planning
15 sectors to make the analyses in other elements more meaningful from a locational standpoint,
16 and to essentially coincide with the 1990 U.S. Census Population Enumeration Districts.

17 The Data Analysis identifies, locates and analyzes the existing land uses in Hendry
18 County. It also generally defines and analyzes the nature of existing development in the
19 County. The Data Analysis for the Future Land Use Element draws upon the results of the
20 analyses in nearly all of the other elements to relate the land uses to the locations of public
21 facilities and natural (although man-altered) resources within the County. The Data Analysis
22 projects the future land uses, the land requirements, the density of uses, and the redevelop-
23 ment needs. Proposed generalized future land uses for Hendry County are presented through
24 tables and maps.

25 Residential uses developing within Hendry County are in large part mobile homes
26 placed on individual lots. Some of these are being located in areas with adequate public
27 facilities, but some are not and continued concentrations of development in some areas may
28 require extensions of centralized potable water and/or sewer facilities in the future.

29 The Port LaBelle community provides a large area with the potential for varying
30 densities in accordance with its Development of Regional Impact development orders. Port
31 LaBelle has centralized sewer and water facilities which are now owned and operated by the
32 County and primarily serve that development. In 1994, Hendry County amended its Future
33 Land Use Map for the Port LaBelle DRI whereby approximately 15,000 acres were returned
34 to agriculture. The DRI was amended because the developer, Atlantic Gulf Communities,
35 went bankrupt and the Port LaBelle Corporation did not have the resources to develop the
36 DRI. As such, approximately 15,000 acres reverted to agriculture. This, of course, decreased
37 the land uses that were previously residential on the FLUM. As such, Policy 2.1.6 has been
38 amended to address the changes resulting from the DRI amendments. The remaining Port
39 LaBelle DRI lands not converted to Agriculture are still classified as Special Density Use.

1 While the agricultural uses in Hendry County in general have undergone some
2 transformation to citrus, this land use has also increased as a result of the 1994 Comprehen-
3 sive Plan Amendment which reverted a portion of the Port LaBelle DRI to agricultural.
4 Presently approximately 545,000 acres are designated for agricultural uses. The demand for
5 agricultural property to be developed for citrus has since increased considerably in Hendry
6 County. In southwest Florida, Hendry County has the largest number of acres for citrus.
7 According to a study prepared by the University of Florida, Institute of Agriculture and Food
8 Sciences, more than 90% of agricultural sales in southwest Florida come from four
9 commodities: citrus, being the largest; vegetable; sugar cane; and, nursery crops. In the five
10 counties, Charlotte, Collier, Glades, Hendry, and Lee, Hendry County far exceeds the other
11 counties by 71% in agricultural lands. Hendry County has approximately 100,000 acres in
12 citrus and 70,000 acres in sugar. Of the 545,000 acres designated as agricultural, approxi-
13 mately 337,000 acres are considered pasture land and undevelopable.

14 Another area within the County that is experiencing some transformation is within
15 the Agricultural/Conservation land use category. As part of the compliance review of the
16 Evaluation and Appraisal Report (EAR), the Department of Community Affairs (DCA)
17 requested that Hendry County use the Florida Fish and Wildlife Conservation Commission
18 infrared photography to determine what areas should be classified as Conservation. As a
19 result of that infrared map, approximately 110,000 acres were designated Agricultural/
20 Conservation. Of those 110,000 acres, approximately 31,000 acres were acquired by
21 the public interest for conservation purposes. For instance, all of the land that was abandoned
22 by the Atlantic Gulf Communities, approximately 15,000 acres, were identified as
23 Agriculture and Agriculture/Conservation. This acreage is now being considered for
24 acquisition as a panther habitat.

25 In 1994, the Existing Land Use Map showed approximately 176,000 acres as
26 wetlands or Agriculture/Conservation. While this is a large discrepancy of 65,000 acres, the
27 discrepancy could be explained because the Big Cypress Indian Reservation contains a
28 number of conservation acreage and is counted separately on the Future Land Use Map. This
29 reduced the Hendry County Future Land Use Map for Agriculture/Conservation category by
30 46,000 acres. Another reason why the Existing Land Use Map may have reflected a higher
31 Agriculture/Conservation land use category than the Future Land Use is that some of the
32 acres that show up Agriculture on the Future Land Use Map contain wetlands and fall within
33 that category for existing land use calculations. This totals approximately 18,000 acres. The
34 distribution for the Existing Land Use Map is entirely different than the Future Land Use
35 calculations. For instance, for agricultural purposes, 340,000 acres were designated for
36 agricultural use on the Future Land Use, and only 133,000 acres on the exiting land use map.
37 As stated earlier, citrus comprises a significant portion of Hendry County's agriculture lands.
38 The Existing Land Use Map provides a more realistic count on acres that could be considered
39 for agricultural use or, at some point, was agriculture or has the development potential to be
40 converted for agricultural uses.

II. FUTURE LAND USE ELEMENT

1 As part of the 1997 Plan Amendment, Leisure/Recreation was added as a land use
 2 category. The Leisure/Recreational use was established primarily due to Berry Groves,
 3 whereby, there was a proposal to develop a parcel known as Murphy Groves for a
 4 recreational vehicle (RV) park with ancillary facilities. Murphy Groves lies north of SR 80,
 5 just east of the Hendry County line and along the banks of the Caloosahatchee River. This
 6 site encompasses approximately 200 acres which would be developed as a recreational
 7 vehicle park. In addition to the 200 acres that would be developed for recreational purposes,
 8 24 acres were proposed for commercial uses to accommodate the RV park. In reviewing the
 9 proposed amendment, DCA felt that there were several inconsistencies with the existing
 10 policies of the Comprehensive Plan which dealt with the delivery of services such as potable
 11 water and sanitary sewer. Other DCA issues included the need for recreational activities and
 12 facilities outside of Hendry County's residential areas. As part of the review process, an
 13 alternative was made in addressing this policy. The amendment then proposed a policy
 14 change which would allow recreational activities and facilities in agriculture areas. Policy
 15 2.1.13 was established to provide standards for the development of a Leisure/Recreation
 16 category.

17 Additionally, a result of some discrepancies in the original Future Land Use Map,
 18 Ordinance No. 94-0, was adopted on September 27, 1994. The FLUM was amended to
 19 accurately reflect existing conditions as well as future trends. The following is a brief
 20 narrative for the areas referenced in said Ordinance and adopted as Plan and accompanying
 21 map amendments.¹

22 *Double "J" Acres* - This development is approximately two miles east of the Lee-
 23 Hendry County line and south of State Road #80. Double "J" Acres was originally
 24 developed in the late 1960' s. The lot sizes range from one to five acres. There are
 25 currently 44 dwelling units in Double "J" Acres, which are mostly mobile homes.
 26 Double "J" Acres was appropriately designated as Residential: Pre-Existing Rural
 27 Estates on the Future Land Use Map of the Comprehensive Plan as of 1994.

28 *Highway Business Center* - This unrecorded subdivision begins two miles east of the
 29 Lee-Hendry County line and continues easterly approximately one and one-half miles
 30 along the south right-of-way of SR 80. The name of this development is a misnomer
 31 as there is no commercial activity. In actuality, there were approximately 75 lots,
 32 most being approximately one acre in size. None of these lots were used for
 33 commercial activity, but there were residential units on 37 lots with a mixture of
 34 mobile homes and conventional housing. Due to the already developed character of
 35 this strip of land it was designated Residential: Pre-Existing Rural Estate as of 1994.

1 ¹The reference and descriptions of the map changes are included in the currently adopted Comprehensive
 2 Plan as Attachments to Ordinance 94-0, Exhibit "A", Future Land Use 2000, June 1992, and Exhibit "B", Proposed
 3 Future Land Use Map Amendments. Additional changes since the adoption of Ordinance 94-0 are marked as such.

1 Less than one mile east of the Lee-Hendry County line, and immediately north of CR
2 78, there is an unrecorded residential development with lots ranging from two to five
3 acres in size. These lots were divided in the late sixties or early seventies. There were
4 25 residential homes as of 1994. Only a few vacant lots remained in this area. Due
5 to the characteristics of this development, it was designated as Residential: Pre-
6 Existing Rural Estates on the Future Land Use Map of the Comprehensive Plan as
7 of 1994.

8 *Big Oak Acres* - This subdivision, in the North LaBelle area, is approximately one-
9 quarter of a section in size. The lots in Big Oak Acres were five to ten acres in size
10 while the remainder of North LaBelle developed at a much greater density. As a
11 result of the greater density in most of North LaBelle, and the proximity to the City
12 of LaBelle, this area was designated as Medium Density - Residential on the Future
13 Land Use Map in 1994. The designation allows a maximum of two units per acre.

14 Being concerned about the character of their subdivision, residents of Big Oak Acres
15 appeared before the Board of County Commissioners at a final public hearing on the
16 1994 Comprehensive Plan. Upon hearing their concerns, the Board of County
17 Commissioners acknowledged the unique characteristics and designated the area as
18 Residential: Pre-Existing Rural Estates in 1994.

19 Today, we are examining an area immediately east of Big Oak Acres in North
20 LaBelle which is designated Medium Density, Residential, and Commercial on the
21 FLUM. Unfortunately, within the area designated Commercial residential structures
22 were developed at a density of two dwelling units per acre. Obviously, the acreage
23 was inadvertently designated Commercial on the FLUM. The appropriate land use
24 designation should be Medium Density Residential. This area encompasses
25 approximately 12 acres and is designated as numbers 4 & 5 on the Proposed Future
26 Land Use Map amendments.

27 *Commercial Area #1* - This commercial area had its origins in the late 1960's, long
28 before Hendry County adopted its first Comprehensive Plan. The first business
29 establishment manufactured modular housing units and additions. In 1981, this
30 business was sold with the new owner converting the facility into a farm equipment
31 dealership. Subsequently, four other commercial facilities were developed on
32 adjacent properties.

33 This commercial area encompassed less than ten acres. Since it was a well
34 established commercial area prior to the adoption of the Comprehensive Plan, the
35 area was amended on the Future Land Use Map to Commercial as of 1994.

36 Within the general vicinity and adjacent to the ten acre Commercial tract mentioned
37 above, another Commercial area was established. In the late 1970's, this two acre
38 strip, which lies 300 feet to the east along SR 80, became an offshoot of the farm

1 equipment dealership. The area was overlooked during the 1994 Plan Amendment
2 and is identified as number 1 on the Proposed Future Land Use Map amendment.

3 *Commercial Area #2* - Immediately south of SR 80, and west of Hendry Isles
4 Boulevard is a shopping center known as Pioneer Plaza. This shopping center which
5 serves the communities of Pioneer Plantation, Hendry Isles, and Horseshoe Acres in
6 Glades County, and the motoring public, was built in 1983. Situated on approxi-
7 mately ten acres, this shopping center was designated Commercial on the Future
8 Land Use Map in 1994.

9 *City Outparcel* - Concurrent with the preparation of the Comprehensive Plan, the
10 City of LaBelle was in the process of annexing the LaBelle Airport and adjacent
11 parcels. The Future Land Use Map of the Hendry County Comprehensive Plan was
12 adjusted just prior to the adoption to identify those parcels which were to be annexed
13 into the City of LaBelle. However, one parcel immediately west of the LaBelle
14 Airport was not annexed as indicated.

15 This parcel which is approximately 20 acres in size lies between the east right-of-way
16 line of SR 29 on the west, and the LaBelle Airport on the east. The westerly portion
17 (eight or more acres) is owned by Hendry County, and was vacant. The easterly
18 portion of this 20 acre parcel is divided among several owners, with land uses
19 ranging from residential to industrial. Considering the variety of land uses, this 20
20 acre parcel was designated Transitional on the Future Land Use Map in 1994.

21 *Reservation Parcel* - There is an area of approximately 320 acres which was
22 originally classified as Pre-Existing Rural Estate. This parcel is located immediately
23 south of the Seven "K" Estates subdivision and northeast of the Midway Acres
24 Subdivision. Analysis of the area indicated that the predominant use was agriculture
25 with the exception of a couple of small parcels which had limited commercial use.
26 Since there was no indication of future residential activity, the classification of the
27 area was reverted to Agriculture, vesting any existing non-agricultural activity in
28 1994.

29 Several parcels surrounded by Port LaBelle, but were not part of the development,
30 reverted to Agriculture in 1994 because they were highly productive parcels.

31 *Commercial Area #3* - This area identified as number 2 on the Proposed Future Land
32 Use Map, lies in Section 28, Township 43 South, Range 28 East on the north side of
33 SR 80. The commercial uses in this area were established in the early 1970's. The
34 area encompasses approximately two acres. When the Comprehensive Plan was
35 adopted in 1991, because of the regional scope of the Future Land Use Map, this area
36 was overlooked and the commercial use was inadvertently deleted. This area should
37 be redesignated Commercial.

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1 *South LaBelle* - This area starting at the easterly section of Cowboy Way and
2 extending along SR 29 identified as number 3 on the Proposed Future Land Use
3 Map, lies in Section 17, Township 43 South, Range 29 East and is approximately 30
4 acres. The established residential uses came about during the high growth subdivi-
5 sions of the 1920's which include Sheffield Terrace, Pinecrest Replat, Booth
6 Subdivision, Hendry Smith, Royal Palm Estates, Favor Subdivision, and Lucky
7 Subdivision. The majority of these subdivisions are non-conforming based on lot size
8 and today's standards. The area consists of lots approximately 6,600 square feet in
9 area. As a result of the nonconformity of these lots and the establishment of the
10 residential use within the area, the preferable land use designation should be High
11 Density Residential on the Future Land Use Map in lieu of the existing Transitional
12 land use category. Furthermore, this area was originally designated High Density
13 Residential when Hendry County adopted its first Comprehensive Plan.

14
15 In addition to the nonconforming subdivisions that were platted in the 1920's,
16 another subdivision known as Sunshine Acres was established in this general area.
17 The subdivision consists of one acre parcels with some agriculture use. Many of the
18 residents keep farm animals such as horses and cows on the property. Based upon its
19 location and surrounding uses, it should be designated Low Density Residential on
20 the FLUM.

21 *Commercial Area #4* - This area is located in Montura Ranch Estates. Commercial
22 uses were established in the early 1920's as part of the boom-time subdivisions of
23 Montura Estates. However, as a result of the 1991 Comprehensive Plan, the
24 commercial uses were deleted inadvertently and replaced with the Recreational land
25 use designation. To correct the technical map error, the Recreational land use
26 category was shifted slightly to reflect the Montura Ranch Clubhouse and Park area.
27 The commercial area that was removed was approximately two acres and is identified
28 as number 7 on the Proposed Future Land Use Map.

29 Another area, which is identified as number 8 on the Proposed Future Land Use Map,
30 lies in Sections 20 and 21, Township 45 South, Range 33 East, immediately South
31 of the City of Clewiston. The area is designated High Density Residential and covers
32 a quarter section in both Sections 20 and 21. During the 1991 Comprehensive Plan
33 amendment, the area was given a rather irregular shape and did not conform to any
34 geographical boundary or platted subdivision. To correct the irregularity of the land
35 use, plat maps and zoning maps were compared to determine the most appropriate
36 boundary to delineate the land use. The area has been delineated along district
37 property lines to make interpretation easier and more accurate based on existing
38 conditions. This area consists of 236 acres. In correcting this error, the Medium
39 Density land use category is proposed to be extended farther east.

40 The remaining five map changes are technical in nature and were done to align the
41 boundaries of the land uses with the Section lines for better interpretation. Prior to

1 this form of delineation, it was difficult to determine the designation of properties on
2 the Future Land Use Map especially in areas outside Clewiston as described above.

3 The correct location is the eastern boundary of Sections 16-21, Township 48 south,
4 Range 30 east, which is a six square mile site. This site should be designated Public
5 on the Future Land Use Map. In amending the Comprehensive Plan, it was noted that
6 the existing jail site identified on the Future Land Use Map which is in Sections 31-
7 33, Township 47 south, Range 30 east and Sections 4-6, Township 48 south, Range
8 30 east was incorrect and should be designated Agriculture. This map error is among
9 six others that were identified while updating the Comprehensive Plan.

10 In the EAR, concerns were expressed that the Transitional land use category appeared
11 to be very difficult to maintain. As such, some of the Transitional land use areas have been
12 tightened. The first area to be examined is located north of SR 80 east of the City of LaBelle
13 better known as Fort Denaud. The land uses being proposed are Low Density Residential and
14 Pre-Existing Rural Estates.

15 For the most part, much of the area is subdivided into two acre tracts or less. The area
16 proposed for Pre-Existing Rural Estates includes Travis Gresham Subdivision and Phillips
17 Subdivision. At a minimum, the lots are one dwelling unit per two acres. Development in the
18 area started around the late 1960's and early 1970's as large estate residential communities
19 with an agricultural character. The area has remained relatively untouched since its inception
20 and therefore should be designated Pre-Existing Rural Estates.

21 To the west of the Phillips Subdivision is an area that is relatively vacant, but has
22 seen some activity in the past for single family subdivision mobile homes. The density is
23 primarily one dwelling unit per acre according to the most recent zoning maps and property
24 appraisal records. Considering the present trend to subdivide the area into one acre lots, it
25 is reasonable to designate the area Low Density Residential instead of the present
26 Transitional land use designation.

27 The area south of SR 80 which includes Berry Groves processing plant and
28 surrounding citrus groves has been proposed for Agriculture as the land use designation. The
29 predominant use is agriculture and with the present trend should remain as such. Therefore,
30 the proposal is to redesignate this area Agriculture.

31 The second Transitional area which should be amended is better known as South 29.
32 Residential Pre-Existing Rural Estates is being proposed for Sections 28 (except the strip
33 along SR 29), and 27, Township 42 south, Range 29 East. Support for this proposal is found
34 in the plat maps from the early 1960's. The area consists of 1,300 acres east of SR 29, four
35 miles south of the City of LaBelle. Lots are primarily two acres or more. In recent years, a
36 number of large tracts have been subdivided into five acre tracts or less. This trend is
37 projected to continue thus giving additional support to designate this area Pre-Existing Rural
38 Estates.

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1 The corridor along SR 29 will retain its Transitional land use designation because of
 2 the mixture of land uses along the roadway. Other areas in the South 29 community will
 3 revert to Agriculture. Since Plan adoption, the primary uses have been agriculture such as
 4 plant nurseries, citrus groves, grazing land, and other silviculture businesses. Additionally,
 5 the majority of the lands are ten acre tracts or larger. In some cases, the properties are
 6 conservation areas or are adjacent to such uses. Therefore, the rationale to revert back to
 7 Agriculture is consistent with the existing and intended use.

8 The third Transitional area examined was the Felde community. This community is
 9 somewhat unique in that during the 1991 Comprehensive Plan amendment, several residents
 10 expressed the desire to have their property retain its Agriculture designation. The trend in the
 11 community has been large two acre or more estate homes with ancillary agriculture uses.
 12 More property owners are converting their properties to wholesale nurseries or similar uses.
 13 In other cases, properties larger than five acres have subdivided the tracts into small two acre
 14 parcels. Overall, the area has retained its pristine agriculture character. The proposal is to
 15 amend those areas which have less than five acres to a residential land use category allowing
 16 one unit per two acres. Rather than create a new land use category, it is felt that our Plan
 17 amendments should include an expansion of the pre-existing Rural Estate categories to
 18 include other than large scale lot subdivisions. This will accommodate what is taking place
 19 in the Felde area which is the creation of two acre subdivided lots through scattered
 20 ownership.

21 The Transitional corridor along SR 29 will retain its designation because there are
 22 a mixture of uses, and there still remains a number of vacant parcels. The remaining
 23 Transitional land use has reverted to Agriculture which is consistent with the existing uses.

24 In many cases the acreage has reverted back to Agriculture from the existing
 25 Transitional land use. Areas such as Felde included approximately 5,200 acres of
 26 Transitional land in which 2,600 acres are being proposed Residential Pre-Existing Rural
 27 Estates. Areas along SR 80 are also being designated Residential: Pre-Existing Residential
 28 from the existing Transitional land use designation. By streamlining the Transitional land use
 29 category, this will allow for better monitoring of the remaining Transitional uses within this
 30 category.

31 **GOALS, OBJECTIVES AND POLICIES**

32 **GOAL:** To ensure the development and maintenance of a functional and well
 33 related pattern of land use types that provides for population growth,
 34 land development and redevelopment, and the appropriate distribu-
 35 tion, location, densities and intensities of use consistent with adequate
 36 services and facilities and consideration of natural resources.

37 **OBJECTIVE 2.1 FUTURE LAND USE CATEGORIES AND MAP:** The Future Land Use
 38 Map 2010, prepared at the scale of one inch equals two miles and

1 dated as of the effective date of this Comprehensive Plan, is hereby
2 adopted as the County's Future Land Use Map and shall direct the
3 pattern for future development and redevelopment of the unincorporated
4 area of Hendry County. The small Future Land Use Map
5 presented in this text is for general illustrative purposes only, and is
6 not intended to be regulatory. The following policies describe the land
7 use categories located on the Future Land Use Map 2010, and
8 describes the nature, densities, intensities, and criteria for permitting
9 of various land uses within each land use category.

10 **Policy 2.1.1:**

11 **AGRICULTURE:** The areas designated on the Future Land Use Map
12 as Agriculture are distributed widely around Hendry County. This
13 category includes various uses defined as agriculture, as follows:
14 cultivation of crops, raising of livestock, and production and
15 processing of agricultural products, including cropland, pastureland,
16 orchards, vineyards, nurseries, groves, specialty farms, ornamental
17 horticulture, confined feeding operations, silviculture, food process-
18 ing and production, and similar uses. In addition to these uses defined
19 as agriculture, this category also includes the complimentary uses in
the paragraphs below.

20 This category also includes cluster agricultural housing and migrant
21 farm labor housing at a minimum lot area of five acres if designed as
22 communities and approved by the County as Planned Unit Develop-
23 ments. Agricultural housing and migrant farm labor housing commu-
24 nities are generally defined as residential developments in active
25 agricultural areas, where housing in proximity to agricultural areas
26 will significantly reduce employee vehicle trips to the work place
27 and/or provide temporary housing for migrant workers and their
28 families. Publicly owned parks and other recreation facilities are
29 permitted in all residential and agricultural land use categories, except
30 where prohibited or restricted by the Land Development Code.

31 These agricultural housing and migrant farm labor communities may
32 contain ancillary commercial, recreation and appropriate other
33 necessary mixed uses if approved by the County as part of the
34 Planned Unit Development. No more than 15% of the land area
35 within the perimeter of the development shall be developed as
36 commercial use.

37 For these agricultural housing and migrant farm labor housing
38 communities, this category permits single family attached and
39 detached homes, mobile homes, duplexes, and multiple family
40 dwelling units when developed at a density of not more than four
41 units per acre. Up to six units per acre are permitted if treated potable

II. FUTURE LAND USE ELEMENT

1 water and centralized sewage collection and treatment are utilized. In
2 multiple family dwelling buildings the density may be up to ten
3 family units per acre. In any event, complete and adequate infrastruc-
4 ture for all units in the development shall be provided by the
5 developer.

6 Planned Unit Developments in this category shall be further subject
7 to the Policies following Objective 2.2 of this Element.

8 This category may also include other agricultural related or support-
9 ing businesses, where locating within agricultural areas better serves
10 the County's agricultural uses, reduces vehicle trips, and when
11 developed and approved as a planned unit development.

12 This category also includes public facilities and quasi-public
13 facilities, including environmental services, public noncommercial
14 recreation and utilities. Industrial category uses may be developed in
15 this category as Planned Unit Developments subject to Policy 2.2.1
16 of this Element. For non-agriculture uses within this category the
17 FAR shall be 0.40. For purposes of this policy, environmental
18 services facilities shall include water treatment facilities, sewage
19 treatment and disposal facilities, solid waste facilities constructed
20 under a general permit (but not those for which a construction permit
21 is required) as set forth in Chapter 62-4, F.A.C., water drainage,
22 pumping and retention facilities, and similar facilities designed to
23 protect and enhance the environmental impacts of development and
24 land use.

25 This category also includes single family residences if developed at
26 a density of not more than one unit per five acres, provided that no
27 more than 1,000 single family residences, other than in Planned Unit
28 Developments, may be permitted in this land use category during the
29 planning period.

30 Furthermore, single family homes shall not be permitted on more than
31 three parcels of less than ten acres which result from the subdivision
32 or redivision of a parcel of land within a ten year period.

33 Except for those uses defined as Agriculture, single family residences,
34 or for which the Planned Unit Development process is being
35 proposed may require any or all of the uses included in this category
36 to be permitted only by Special Exception.

37 Where commercial development or mixed residential-commercial
38 development is permitted, additional limitations shall be included

1 within the Land Development Regulations and shall include:
2 limitations on the size and character of uses to those which primarily
3 serve the needs of the residential portion of the development, other
4 uses within the development, or nearby residential areas which are
5 inadequately served by existing commercial uses; limitations on the
6 location of commercial uses within the development so that they are
7 primarily accessible from within the development and from other
8 nearby areas which lack necessary commercial services, but not
9 located so as to attract additional traffic from beyond a short distance
10 or to provide service directly to adjacent arterial or collector high-
11 ways; limitations requiring buffering within commercial areas to
12 protect adjacent or nearby residential areas.

13 Where schools are being proposed in areas designated as Agriculture,
14 the standards shall be consistent with Objective 2.3 and correspond-
15 ing policies.

16 **Policy 2.1.1a:**

17 **AGRICULTURE/CONSERVATION:** The areas designated on the Future
18 Land Use Map as Agriculture/Conservation include generally rural
19 areas with a large proportion of wetlands. Permitted uses and
20 densities/intensities shall be the same as for Agriculture (Policy 2.1.1)
except:

- 21 (a) No industrial development (including agriculture related)
22 shall be permitted within a wetland;
- 23 (b) Non-residential development shall be limited to ensure that
24 wetlands are preserved and that activities which impair the
25 natural function of the wetland are prohibited; and
- 26 (c) Residential development within wetland areas shall not
27 exceed one unit per 20 acres.
28

29 All other activities shall be discouraged away from wetlands so that
30 incompatible land uses are minimized. Where incompatible land uses
31 are allowed to occur, mitigation shall be considered as a means to
32 compensate for the loss of wetlands (Rule 9J-5.013(3)(b), FACIL-
33 ITY). All activities in wetlands within this district shall comply with
34 state and federal laws and rules regulating wetland development,
35 specifically: FDEP regulations pursuant to Chapters 373 and 403,
36 Florida Statutes, and U.S. Army Corps of Engineers regulations
37 pursuant to Section 404 of the Clean Water Act, as amended.

1 Publicly owned parks and other recreation facilities are permitted in
2 all residential and agricultural land use categories, except where
3 prohibited or restricted by the Land Development Code.

4 Nothing in this policy shall prevent a landowner from establishing
5 that a given parcel in this category, or part thereof, is not a wetland
6 under the definition set forth in the Conservation Element Policy
7 7.1.1. Such parcels or parts thereof which are determined not to be
8 wetlands shall be subject to agricultural category restrictions as set
9 forth in Policy 2.1.1, above.

10 **Policy 2.1.2:**

RESIDENTIAL/LOW DENSITY: The areas designated on the Future
11 Land Use Map as Residential/Low Density are outlying areas
12 primarily without either treated potable water or centralized sewage
13 collection and treatment. This category included detached single
14 family dwellings and mobile homes at a density of not more than one
15 unit per acre. Publicly owned parks and other recreation facilities are
16 permitted in all residential and agricultural land use categories, except
17 where prohibited or restricted by the Land Development Code.

18 **Policy 2.1.3:**

RESIDENTIAL/RURAL ESTATES: The areas designated on the Future
19 Land Use Map as Residential/Rural Estates are located along the
20 Caloosahatchee River. For purposes of safety this category includes
21 only detached single family dwellings at a density of not more than
22 one unit per acre. Publicly owned parks and other recreation facilities
23 are permitted in all residential and agricultural land use categories,
24 except where prohibited or restricted by the Land Development Code.

25 **Policy 2.1.4:**

RESIDENTIAL/MEDIUM DENSITY: The areas designated on the Future
26 Land Use Map as Residential/Medium Density are areas primarily
27 without either treated potable water or centralized sewage collection
28 and treatment. This category includes detached single family
29 dwellings and mobile homes at a density of not more than two units
30 per acre. Publicly owned parks and other recreation facilities are
31 permitted in all residential and agricultural land use categories, except
32 where prohibited or restricted by the Land Development Code.

33 Mixed use developments including residential uses and commercial
34 uses may be permitted in this category if developed and approved as
35 a Planned Unit Development. Up to 15% of the land area within the
36 development perimeter may be developed as commercial use.

37 Where commercial development or mixed residential-commercial
38 development is permitted, commercial uses shall be limited in
39 addition to the 15% total area limitation. These additional limitations

1 shall be included within the Land Development Regulations and shall
2 include: limitations on the size and character of uses to those which
3 primarily serve the needs of the residential portion of the develop-
4 ment, other uses within the development, or nearby residential areas
5 which are inadequately served by existing commercial uses; limita-
6 tions on the location of commercial uses within the development so
7 that they are primarily accessible from within the development and
8 from other nearby areas which lack necessary commercial services,
9 but not located so as to attract additional traffic from beyond a short
10 distance or to provide service directly to adjacent arterial or collector
11 highways; limitations requiring buffering within commercial areas to
12 protect adjacent or nearby residential areas.

13 No more than 50% of the area designated Residential-Medium
14 Density shall be developed for residential use during the planning
15 period.

16 **Policy 2.1.5:**

RESIDENTIAL/HIGH DENSITY: The areas designated on the Future
17 Land Use Map as Residential/High Density are areas with relatively
18 good road access and include either or both of treated potable water
19 and centralized sewage collection and treatment, or are located such
20 that provision of these facilities could be feasible within a reasonable
21 time period, although not necessarily within the time frame of this
22 Comprehensive Plan. Publicly owned parks and other recreation
23 facilities are permitted in all residential and agricultural land use
24 categories, except where prohibited or restricted by the Land
25 Development Code.

26 This category includes attached and detached single family dwellings,
27 mobile homes, duplexes, and multiple family dwellings if developed
28 at a density of not more than the relevant density allowed under
29 Policy 2.4.7 of this Element, or six single family units per acre, or ten
30 family units in multiple family dwellings per acre, whichever is more
31 restrictive.

32 No more than 50% of the area designated "Residential-High Density"
33 shall be developed for residential use during the planning period.

34 **Policy 2.1.6:**

RESIDENTIAL/SPECIAL DENSITY AND USE:² The area currently
35 designated as Special Density and Use includes Port LaBelle, Units
36 1-9 which were vested from the Development of Regional Impact

1 ²Revised December 13, 1994 (Ordinance No. 94-14). Changes made to reflect new adopted language and
2 are not marked.

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1 Review process, Pinehurst Park, a portion of the area included in the
 2 Development of Regional Impact Application for Master Develop-
 3 ment Approval, and a portion of Increment I (Units 10-13 which went
 4 through the Development of Regional Impact Review. This category
 5 includes those uses identified in the Application for Master Develop-
 6 ment Approval, the use for a 54.7 acre parcel known as Pinehurst
 7 Park as it was granted zoning approval on July 26, 1973; and the
 8 Application for Incremental Development Approval for Increment I
 9 (Banyan Village). Those uses permitted in the granting of zoning and
 10 the approval of subdivision plats for Port LaBelle, 1973, and the date
 11 for implementing the Development of Regional Impact review
 12 process as outlined in Section 380.6, Florida Statutes. Publicly owned
 13 parks and other recreation facilities are permitted in all residential and
 14 agricultural land use categories, except where prohibited or restricted
 15 by the Land Development Code.

16 Following are the densities and intensities of use permitted under this
 17 category:

	Maximum Residential Density	Maximum Non-residential Intensity
DRI		
Port LaBelle	3 DU/AC	0.25 FAR
Pinehurst Park	6 DU/AC	

25 The total area of non-residential uses within a single development in
 26 this category shall not exceed ten percent of the total area of the
 27 development, and the total floor area of non-residential uses shall not
 28 exceed 200 square feet per planned residential unit (at build-out).
 29 Non-residential uses may include retail and service commercial,
 30 governmental and support services, agriculture, and employment
 31 uses. The limitations set out in this policy may be modified for an
 32 individual DRI development, but only through a plan amendment.
 33 Commercial development will be clustered when appropriate to
 34 provide services at appropriate locations within the total develop-
 35 ment.

Policy 2.1.6a:

36 **RESIDENTIAL/PRE-EXISTING RURAL ESTATES:** This category is
 37 designed to reflect the existence of a number of large scale lot sales
 38 developments and other rural subdivided parcels approximately two
 39 acres in size which were created in Hendry County in the past.
 40 Because of the highly fragmented ownership of individual parcels of
 41 land within these developments, overall density reduction is not
 42 practical. Management of development within these areas shall
 43 consist of limits on density and intensity of activities (see chart

below), requirement that new development or redevelopment meet state standards for use of wells and septic tanks or that community water or sewer systems be used, and a prohibition on building permits on future subdivisions of existing lots. Publicly owned parks and other recreation facilities are permitted in all residential and agricultural land use categories, except where prohibited or restricted by the Land Development Code.

Following are the densities and intensities of use permitted under this category:

<u>Development</u>	<u>Maximum Residential Density</u>	<u>Maximum Non-Residential Intensity</u>
a) Montura/Flaghole	1 du/ac	0.25 FAR
b) Pioneer Plantation	1 du/2ac	0.25 FAR
c) Fort Denaud Acres	1 du/2ac	0.25 FAR
d) Double "J" Acres	1 du/5ac	N/A
e) Highway Business Center	1 du/2ac	N/A
f) Big Oak Acres	1 du/2ac	N/A
g) Scott and Wendy Lanes	1 du/2ac	N/A
h) All Others	1 du/2ac	0.25 FAR

Policy 2.1.7:

COMMERCIAL: The areas designated on the Future Land Use Map as Commercial permit various types of uses predominantly connected with the sale, rental, and distribution of products or performance of services, including retail, shopping, office, financial, and other related business uses. Residential uses may be permitted if ancillary to commercial uses. Intensity shall be limited to a maximum Floor to Area ratio of 0.5.

Policy 2.1.7a:

Hendry County shall limit commercial development to areas with direct access to collector and arterial roads and only if it is consistent with the Future Land Use Map.

Policy 2.1.8:

INDUSTRIAL: The areas designated on the Future Land Use Map as Industrial permit various types of uses predominantly connected with manufacturing, assembling, processing and/or storage of products. Residential uses are specifically not permitted, but ancillary support uses such as motels/hotels and restaurants are permitted when appropriate. Industrial intensity shall be limited to a maximum Floor Area Ratio (FAR) of 0.75. Within a mix of uses, the percent distribution shall be limited to 30% for Industrial and 70% for all other uses.

1 **Policy 2.1.8a:** A planned industrial land use category shall be established to allow
2 mixed uses such as motels/hotels, restaurants, and other similar
3 commercial uses when appropriate to serve the principal use. Such
4 planned development shall be located in Industrial Parks that have a
5 minimum lot area of 200 acres.

6 **Policy 2.1.9:** **PUBLIC:** The areas designated on the Future Land Use Map as Public
7 permit public and semi-public uses, including government buildings,
8 schools, churches, utilities, solid waste handling and disposal
9 facilities, airports, and similar public and semi-public uses. Publicly
10 owned parks and other recreation facilities are permitted in all
11 residential and agricultural land use categories, except where
12 prohibited or restricted by the Land Development Code.

13 No specific density or intensity standards exist for these uses except
14 for schools because of their diverse nature. By the same token, there
15 can be no specific locational standards because of the widely varying
16 criteria upon which location is based. In order to ensure that such
17 facilities are consistent with locational needs and are compatible with
18 other development in the area, the Land Development Regulations
19 shall provide for review of public facilities by the Board of County
20 Commissioners. In considering the appropriateness of location and
21 the need for design or operating restrictions, the Board shall require
22 review of such facilities based on the following:

- 23 a) location of the facility in terms of the general area served and
24 to be served during the planning period;
- 25 b) whether the facility in terms of the general area served and to
26 be impacted by the facility, and whether future development
27 consistent with this plan will be encouraged or impeded by
28 the facility;
- 29 c) whether the location and design is consistent with the applica-
30 ble state or federal standards, and whether there is a state or
31 federal review process which will be undertaken; and
32
- 33 d) whether provisions of the prior plan or prior land develop-
34 ment regulations were, in part, the basis for the location
35 and/or permitting of the project.
36

37 **Policy 2.1.9a:** The Public land use FAR intensity standard of 0.5 shall be included
38 in Table 53-2 Table of Dimensional and Density Regulations of the
39 Hendry County Land Development Regulations.

1 **Policy 2.1.10:** **RECREATION:** The areas designated on the Future Land Use Map as
 2 Recreation are sites currently developed with recreation sites and
 3 facilities, and undeveloped sites that are publicly owned and desig-
 4 nated for development as parks or other recreation use. Publicly
 5 owned parks and other recreation facilities are permitted in all
 6 residential and agricultural land use categories, except where
 7 prohibited or restricted by the Land Development Code. Intensity for
 8 all Recreational land uses shall be limited to a maximum FAR of 0.5.

9 **Policy 2.1.10.a:** For the purpose of distinguishing recreational uses, the County will
 10 subdivide the use by type of activities. User-oriented outdoor
 11 recreational uses are those which can be provided almost anywhere
 12 and largely the responsibility of the County. Resource-based recre-
 13 ation is dependent on a combination of elements in the natural and/or
 14 cultural environments and are usually met with the assistance of State
 15 and Federal governments. The County shall adopt the following
 16 standards for user-oriented and resource-based recreational activities:

<i>Recreational Activity</i>	<i>Standard (unit/Population)</i>
User-Oriented:	
Golf	9 Holes/25,000
Tennis	1 Court/2,000
Baseball/Softball	1 Field/5,000
Basketball	1 Court/5,000
Football	1 Field/6,000
Resource-Based:	
Camping (RV/Trailer and Tent)	1 Acre/6,750
Horseback Riding	1 Mile/5,000
Hiking	1 Mile/6,750
Picnicking	1 Picnic Area/6,000

29 **Policy 2.1.11:** **TRANSITION:** The areas designated on the Future Land Use Map as
 30 Transition are mixed use areas with some non-conforming uses which
 31 are agriculture. There are scattered residential and commercial use
 32 areas that are likely to be infilled with additional residential uses. This
 33 category includes agricultural uses, residential uses, and commercial
 34 uses occupying no more than one percent of the land area in each map
 35 area so designated. The maximum gross residential density in this
 36 category shall be two units per acre. The maximum FAR for non-
 37 residential uses shall be 0.5.

38 Publicly owned parks and other recreation facilities are permitted in
 39 all residential and agricultural land use categories, except where
 40 prohibited or restricted by the Land Development Code.

1 **Policy 2.1.12:** Reserved.

2 **Policy 2.1.13:** **LEISURE-RECREATION (LR):** The areas designated on the Future
3 Land Use Map as Leisure-Recreation are sites which are currently
4 developed with leisure/recreation facilities and undeveloped sites
5 which are designated for development as leisure/recreation facilities.
6 This land use category includes various uses which because of their
7 nature are intended to provide for the leisure and recreation activities
8 of the residents of Hendry County and to encourage and promote
9 recreation tourism in the County. Uses allowed within the LR
10 category shall be limited to recreation vehicle parks, campgrounds,
11 marinas, and golf courses, and ancillary uses.

12 **Policy 2.1.13a:** **SITE STANDARDS:** LR's shall have frontage on, or direct access to, an
13 arterial roadway.

14 On-site parking shall be provided to meet the demand of the use.
15 Interior traffic-circulation patterns shall facilitate the safe movement
16 of vehicular, bicycle and pedestrian traffic. Buffering shall be
17 provided where the effects of lighting, noise and other such factors
18 would adversely affect adjacent land uses.

19 **Policy 2.1.13b** **SITE CHARACTERISTICS:** Leisure-Recreation areas are ground and
20 facilities oriented primarily toward providing recreation-related
21 services for residents and visitors of Hendry County.

22 Leisure-Recreation lands shall be designated and mapped on the
23 Future Land Use Map series as "Leisure-Recreation" or "LR"; and
24 shall include existing leisure/recreation sites.

25 Active recreation, leisure and accessory commercial development
26 shall occur within designated LR areas. The following factors shall be
27 taken into consideration when determining new LR areas:

- 28 a) Accessibility to arterial roads.
- 29 b) Proximity to recreational attractions that would support the
30 proposed development to include, but not be limited to:
31 recreational water bodies, government recreational facilities,
32 natural amenities, or other tourist attractions.
- 33 c) Any land proposed for development in a Leisure-Recreation
34 area shall have a minimum of 500 feet of depth.

- 1 d) Any land proposed for development in a Leisure-Recreation
2 area shall not contain more than 200 acres.
- 3 e) All development in a Leisure-Recreation area shall insure
4 provisions for a potable water and wastewater treatment
5 system(s).
- 6 f) All developments in a Leisure-Recreation area shall have
7 adequate provisions for all public services including, but not
8 limited to, police, fire and EMS services.
- 9 g) Leisure-recreational facilities need not be within urban and
10 residential areas. All leisure-recreational facilities shall be
11 approved as a Planned Unit Development.
- 12 h) Permanent Residential and/or camping structures permanently
13 anchored intended for temporary and/or seasonal use, not
14 exceed 180 days at one time, may be developed in conjunc-
15 tion with a commercial recreational facility provided that the
16 gross density does not exceed five units per acre. For the
17 purpose of computing density, all dwelling units, campsites,
18 etc., shall be counted. No year round structures occupancy
19 will be allowed except for that required by the operations
20 staff.
- 21 i) Any commercial activity permitted in a Leisure-Recreation
22 area shall be allowed if it is in accordance with the Land
23 Development Regulation which include minimum require-
24 ments for setbacks, orientation of structures, buffering, and
25 the like.
- 26 j) The developer shall be responsible for all required infrastruc-
27 ture improvements (both construction and maintenance)
28 including, but not limited to, central water and sewer facilities
29 and roads. All improvements shall be consistent with the
30 Level of Service Standards contained in the Comprehensive
31 Plan.
- 32 k) Each leisure recreational development may be developed in
33 phases or units provided each phase or unit contains its
34 proportionate share of required improvements.
- 35 l) Any proposed marinas shall not conflict with the Regional
36 Marina Siting Plan and shall not be constructed until all
37 applicable state and federal permits are obtained.

1 m) In order to provide optimum setback, visibility and access to
2 any recreational water body, the placement of amenities such
3 as golf courses, tennis courts, etc., shall be encouraged to
4 buffer the water body from more intensive uses, such as RV
5 campsites. Buildings and/or RV pads shall be set back a
6 minimum of 50 feet from the U.S. Corp of Engineers C-43
7 Right of Way Line.

8 **Policy 2.1.13c:** **RETAIL AND COMMERCIAL:** Retail commercial uses within a
9 Leisure-Recreation area shall not be designated for the purpose of
10 serving the active recreational or leisure uses within the Leisure-
11 Recreation area. Any commercial activity generated by off-site users
12 shall be secondary. Not more than five percent of the gross land areas
13 (excluding golf courses, club houses and marina) within a total
14 Leisure-Recreation area shall be developed for retail commercial uses;
15 except that whenever a developers applications includes data and
16 analysis to support more are commercial use the maximum shall be
17 no more than seven percent.

18 **Policy 2.1.14:** By September 1999, Hendry County shall review and amend its
19 official Zoning Map to ensure its consistency with the Future Land
20 Use Map.

21 **Policy 2.1.15:** Hendry County shall continually maintain and update, when neces-
22 sary, Development Regulations which assure efficient, high quality
23 design construction.

24 **OBJECTIVE 2.2** **PLANNED UNIT DEVELOPMENTS AND OTHER INNOVATIVE LAND**
25 **DEVELOPMENT TECHNIQUES:** The use of Planned Unit Develop-
26 ments is specifically encouraged in order to achieve efficiencies of
27 land use and development in terms of demands on public facilities
28 and services, and impacts upon any natural systems. A PUD develop-
29 ment, including mining, shall consist of a minimum area of 25 acres,
30 provided that:

- 31 a) a development consisting of mining activity shall have a
32 minimum area of 25 acres;
- 33 b) a development consisting of agricultural worker housing shall
34 have a minimum area of five acres; and
- 35 c) a development consisting of a non-residential development
36 within a transitional land use category shall have a minimum
37 area of one acre.

1 The criteria for use of such Planned Unit Development and possible
2 other innovative land development techniques shall generally be
3 established in the Land Development Regulations, but developers
4 may propose alternatives that are consistent with this Comprehensive
5 Plan. Mixed-use developments, properly planned, are specifically
6 encouraged.

7 Potential uses allowed in a Planned Unit Development if the County
8 Commission considers them appropriate for the particular develop-
9 ment being proposed and compatible with nearby uses are as follows:

- 10 a) Single family dwelling, detached or attached.
- 11 b) Duplexes, triplexes and quadraplexes.
- 12 c) Multi-family housing developments.
- 13 d) Adult congregate living facilities and boarding houses.
- 14 e) Retail sales establishments, except stores selling automobiles,
15 other large motorized vehicles or mobile homes.
- 16 f) Motels/hotels.
- 17 g) Personal service establishments.
- 18 h) Repair service establishments which provide repair services
19 of a minor nature, such as: radio and television repair ser-
20 vices; watch, clock and jewelry repair services; and shoe
21 repair services.
- 22 i) Finance, insurance and real estate service establishments.
- 23 j) Business service establishments.
- 24 k) Communication service establishments.
- 25 l) Professional service establishments.
- 26 m) Education service establishments.
- 27 n) Indoor amusement, entertainment and/or recreation establish-
28 ments.

1 to the extent that such provisions are consistent with this Comprehen-
2 sive Plan.

3 **Policy 2.2.1:** Planned Unit Developments in areas designated Agriculture on the
4 Future Land Use Map may only be used to permit industrial uses
5 which are compatible with agribusiness, or regional utility facilities,
6 or mining and extractive uses, or uses set forth in Policy 2.1.1 of this
7 Element.

8 **Policy 2.2.2:** Planned Unit Developments in areas designated Agriculture on the
9 Future Land Use Map and which allow residential uses in excess of
10 one single family residence per five acres must meet the following
11 criteria:

- 12 a) The Planned Unit Development will not cause any facility
13 subject to a level of service standard in this plan to go below
14 that standard.
- 15 b) Planned Unit Developments for more than ten housing units
16 must contain adequate recreational space for the housing
17 occupants.

18 **Policy 2.2.3:** For land parcels within areas designated Transition on the Future
19 Land Use Map, an annual report shall be prepared to ensure that the
20 uses comply with Policy 2.1.11 and reflect existing conforming land
21 uses as permitted uses.

22 **Policy 2.2.4:** For land parcels within areas designated Transition on the Future
23 Land Use Map, the Land Development Regulations (as Adopted
24 September 1, 1991) may allow changes in use from agriculture to
25 residential upon a showing that the proposed residential use will not
26 cause any facility subject to a level of service standard set forth in this
27 plan to go below such standard, and that the proposed residential use
28 meets one or more of the following criteria:

- 29 a) The use will infill land areas between existing residential
30 uses.
- 31 b) The use will extend and be compatible with an adjacent
32 residential use.
- 33 c) The use will initiate residential use in an area which because
34 of infrastructure, natural features, proximity to public or
35 private facilities, or other factors is particularly suitable for
36 residential development.

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- 1 d) The use will be part of a planned unit development.
- 2 e) Residential development shall be limited to a maximum gross
- 3 density of two dwelling units per acre. Furthermore, no more
- 4 than ten percent of the lands designated as Transitional may
- 5 be developed for residential use during the planning period.
- 6 The Land Development Regulations shall include standards
- 7 ensuring the location of residential development in areas
- 8 adequately served (meeting adopted level of service stan-
- 9 dards) by roads, drainage, and other required facilities, and
- 10 providing for separation and/or buffers between residential
- 11 development and incompatible non-residential development.

Policy 2.2.5:

12 For land parcels within areas designated Transition on the Future

13 Land Use Map, changes in use from agriculture to commercial are

14 allowed upon a showing that the proposed commercial use will not

15 cause any facility subject to a level of service standard set forth in this

16 plan to go below that standard, that the proposed commercial use will

17 not cause the total area in which commercial use is allowed to exceed

18 one percent of the immediate area designated Transition and the

19 proposed commercial use meets one or more of the following criteria:

- 20 a) The use will be one which will provide products or services
- 21 primarily for residents or agribusinesses in the immediate
- 22 area.
- 23 b) The use will be adjacent to an existing commercial use and
- 24 will be compatible therewith.
- 25 c) The use will be part of a planned unit development.

26 The Land Development Regulations shall provide that, where

27 property in the Transition land use category is developed under

28 Planned Unit Development zoning, the limit on the percentage of

29 commercial area within the development shall not apply, provided

30 that the scale and character of the commercial area shall be primarily

31 to serve the needs of the residential portion of the development, other

32 uses within the development, or nearby residential areas which are

33 inadequately served by existing commercial uses. The regulations

34 shall also contain limitations on the location of commercial uses

35 within the development so that they are primarily accessible from

36 within the development and from other nearby areas which lack

37 necessary commercial services, but not located so as to attract

38 additional traffic from beyond a short distance or to provide service

39 directly to adjacent arterial or collector highways; and shall include

1 limitations requiring buffering within commercial areas to protect
2 adjacent or nearby residential areas.

3 **Policy 2.2.6:** Uses by special exception and planned unit developments may be
4 granted and approved only after a public hearing pursuant to adequate
5 notice in a manner consistent with Hendry County Ordinance No.
6 83-6, as amended.

7 **Policy 2.2.7:** The Land Development Regulations adopted September 1, 1991,
8 requires that applications for Planned Unit Developments (PUD's)
9 show the location of all wetlands within the area of the proposed
10 development. No final permit for a Planned Unit Development shall
11 be issued which will allow an activity to interfere with the function
12 of any wetland or other environmentally sensitive land.

13 **OBJECTIVE 2.3** **SCHOOL SITING:** Hendry County shall continue to coordinate with
14 the Hendry County School Board on the siting of new schools
15 ensuring that schools are located in close proximity to urban residen-
16 tial areas and other public facilities such as parks, libraries, and
17 community centers.

18 **Policy 2.3.1:** Hendry County shall allow schools in the Agriculture, Public, and
19 High Density Residential land use categories, consistent with the
20 following criteria.

- 21 a) Schools shall be located in a coordinated manner ensuring
22 that the planning, construction, and opening of educational
23 facilities are coordinated in time and location, concurrent with
24 both need and necessary services and infrastructure, and to
25 ensure compatibility with the Comprehensive Plan.
- 26 b) The proposed location is compatible with present and pro-
27 jected uses of adjacent property.
- 28 c) The proposed location is well drained and soils are suitable
29 for development or are adaptable for development and
30 outdoor educational purposes with drainage improvements.
- 31 d) The proposed location is not within a velocity flood zone or
32 floodway.
- 33 e) Proposed school sites should be located away from industrial
34 uses, railroads, airports, and similar land uses to avoid noise,
35 odor, dust, and traffic impacts and hazards.

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- 1 f) Disrupting influences caused by school yard noises and traffic
2 shall be buffered to ensure sufficient distances from hospitals,
3 adult communities, and nursing homes.
- 4 g) In the planning, siting, land acquisition and development of
5 the facility, evaluation shall include consideration of the
6 student population density of the area (such as sufficient
7 student population of the existing rural communities), and
8 public safety.
- 9 h) There are no significant environmental constraints that would
10 preclude development of a public educational facility on the
11 site.
- 12 i) Hendry County shall advise the School Board of all Plan
13 amendments that may affect the location of new schools and
14 proposed improvements.
- 15 **Policy 2.3.2:** Development of public school sites shall be consistent with the
16 following standards:
- 17 a) *Elementary Schools:* A minimum of four acres for the first
18 200-students, plus one acre for each additional 100 students.
- 19 b) *Middle Schools/Junior High Schools:* A minimum of six
20 acres for the first 300 students plus one acre for each addi-
21 tional 100 students.
- 22 c) *Senior High Schools:* A minimum of seven acres for the first
23 300 students plus one acre for each additional 50 students up
24 to 1,000 students, plus one acre for each additional 100
25 students thereafter.
- 26 d) *Area Vocational-Technical School:* A minimum of 20 acres
27 for the first 500 students plus one acre for each additional 50
28 students up to 1,000 students.
- 29 e) *Community College:* A main campus site shall be a minimum
30 of 100 acres. Each separate center site shall contain a mini-
31 mum of 40 acres for the first 500 students plus two acres for
32 each additional 100 students. Special-purpose center site
33 acreage shall be appropriate to contain the functions identified
34 in the program.

- f) Middle and High schools shall be located on collector or arterial roadways which have sufficient capacity to carry student and parent traffic and are suitable for high volume traffic during evening and special events as determined by acceptable traffic engineering standards.
- g) Ingress and egress should not create detrimental impacts on roads adjacent to the site and the site must provide for adequate on-site parking and circulation of user vehicles.
- h) Approaches to the site should be safe for pedestrians, bicycles, cars and buses.
- i) The location arrangement and lighting of play fields and playgrounds shall be located and buffered as may be necessary to minimize impacts to adjacent residential property.
- j) All driveways and parking areas on public school sites shall adhere to the minimum setback requirements established for the zoning district.
- k) Maximum building height shall be 35 feet for elementary, middle and high schools within 100 feet of residential zoned property.
- l) Building setbacks from property lines for all schools shall adhere to the minimum building setback requirements established for the zoning district.

Policy 2.3.3:

Upon issuance of a development order for a new school, the necessary public facilities such as, but not limited to, sanitary sewer, solid waste, potable water, drainage, and roads are to be in place to serve the proposed use. Furthermore, the School Board shall obtain a written agreement from the service provider assuring adequate capacity is available.

Policy 2.3.4:

Public facilities should be in close proximity, and operating at the adopted level of service, before a development order can be issued for a new school.

Policy 2.3.5:

Hendry County shall request that the School Board submit for review information on renovations, additions, and proposed expansions to property owned by the School Board to assure the availability of public facilities and land use consistency, as the proposal relates to future planned improvements.

1 **Policy 2.4.2:**

2 All amendments to this Comprehensive Plan and its provisions and/or
3 maps shall coordinate the future land uses with the appropriate
4 underlying historic and natural resources, soils and topography, and
5 the availability of facilities and services, based on appropriate data
6 and analysis, as indicated in this and the other elements of this
7 Comprehensive Plan. This coordination shall consist of reviewing, at
8 the time of consideration of the proposed amendment(s), the existing
9 data regarding these historical and natural resources and determining
10 what, if any, impacts on these resources will result from the proposed
11 change. Where adverse impacts are found by the Board of County
12 Commissioners, it shall determine that the impacts are or can be
13 mitigated through policies or restrictions included with the amend-
14 ments, or it shall not approve the amendments. Similarly, if the Board
15 is to approve the proposed amendment(s), the Board shall find that
16 the proposed amendment(s) do not adversely affect the ability of the
17 County to provide necessary services and facilities. Concurrency
 regulations shall apply to areas affected by plan amendments.

18 **Policy 2.4.3:**

19 With the Land Development Regulations adopted September 1, 1991,
20 establish within zones or districts, adhering to the Future Land Use
21 Map, criteria and standards specific enough to implement this Plan
22 and regulate the future development of land in accordance with the
 provisions of this Plan, so that:

- 23 a) historic and natural resources are protected by the adoption of
24 such provisions as, but not limited to, identification of the
25 actual location of such resources through references to official
26 maps contained in this Plan, requirements for designing
27 development projects to manage these resources, provisions
28 for conservation easements and similar methods for perman-
29 ently protecting these resources, and provisions for protec-
30 tion of resources through PUD or cluster development review
31 techniques;
- 32 b) soils and topography are suitable, by the adoption of such
33 provisions as, but not limited to, special requirements for
34 construction and other development activities on slopes or
35 soils which are excessively wet or unable to support large
36 structures; and
- 37 c) facilities and services are available sufficiently to support
38 proposed development, as indicated in this and the other
39 elements of this Plan, and specifically as provided in the
40 Concurrency Management System established pursuant to
41 Policy 9.2.2 of the Capital Improvements Element.

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1 d) The owner/developer of any site shall be responsible for the
2 on-site management of stormwater runoff at the time of
3 development or redevelopment in a manner so that most-
4 development runoff rates are the same as pre-development
5 conditions.

6 The number of zones may be more numerous than those specified in
7 Objective 2.1, and the criteria and standards may be more restrictive
8 and/or specific, as long as they are consistent with the provisions of
9 this Comprehensive Plan.

Policy 2.4.4:

10 All proposed subdivisions shall be developed in adherence with this
11 Plan, with criteria and standards specific enough to implement this
12 Plan and regulate the future subdivisions and platting of land in
13 accordance with the provisions of this Plan, so that the protection of
14 historic and natural resources, the suitability of soils and topography
15 and the availability of facilities and services are required.

Policy 2.4.5:

16 All new development and redevelopment shall be subject to
17 concurrency review. This review shall not be deemed to prohibit the
18 use of private on-site sewage treatment systems or septic tanks, or the
19 use of private well for potable water, where centralized public or
20 private sanitary sewer and potable water system are not available for
21 use by the development.

22 Development orders or permits for any proposed developments under
23 the development permitting jurisdiction of Hendry County shall not
24 be issued until it is demonstrated that the Level of Service Standards
25 are met prior to the impacts on the systems from the proposed
26 development. Development orders shall be specifically conditioned
27 on the availability of the facilities and services necessary to serve the
28 proposed development. The specific means for such demonstration of
29 the ability to meet the Standards shall be specified within the
30 procedures of the Concurrency Management System (Chapter XI).

Policy 2.4.6:

31 **HISTORIC RESOURCES:** There are various Indian mounds, historic
32 fort locations, and the Hendry County Courthouse listed in the Florida
33 Master File of historic and archaeological places. These historical
34 sites are identified on the map titled "Historic/Archaeologi-cal Sites"
35 in the Conservation Element.

36 Any development proposal which encompasses a historic and/or
37 archaeological site which is listed on the Florida Master File shall be
38 identified and reviewed by Hendry County staff for historic signifi-
39 cance. The developer shall conduct a systematic archaeological,

1 historical, and if buildings are present, architectural surveys to
2 determine if significant resources are present.

3 **Policy 2.4.7:**

4 Facilities Requirements for Densities: Densities permitted for each
5 residential land use category shall be subject to the following criteria
6 for sewer and water facilities. A maximum of 2.0 dwelling units per
7 acre shall be permitted without either central potable water and or
8 sewer systems, provided that appropriate on-site potable water and
9 wastewater disposal systems are utilized, 4.0 units per acre may be
10 permitted with either central potable water or sewer systems,
11 provided that the central facility system is an appropriate individual
12 on-site system. Densities greater than 4.0 units per acre shall be
13 permitted only if both central potable water and sewer systems are
14 utilized. Package plants of adequate capacity may be considered as
15 central facility systems, provided they are approved by the appropriate
16 agencies having jurisdiction over their use. Any individual on-site
17 facility systems utilized shall be approved by the appropriate agencies
having jurisdiction over their use.

18 **Policy 2.4.8:**

19 No residential, commercial, or industrial land uses shall be permitted
20 where septic tanks are intended as the method for sewage treatment
21 unless use of septic tanks meets the Hendry County Health Depart-
22 ment preapproval criteria for subdivisions. Such review shall
23 determine that native soils and other site characteristics are suitable
24 for septic tank usage prior to the approval of each subdivision. At a
25 minimum, the criteria for septic tanks shall be consistent with Rule
64E-6, F.A.C. and other applicable state laws and regulations.

26 **Policy 2.4.9:**

27 Development which requires the storage, generation, or use of
28 hazardous materials will be regulated in the FEMA 100-year
floodplain by the following criteria:

29 Prior to occupancy, each specific tenant or owner that uses, handles,
30 stores or displays hazardous materials or generates hazardous waste
31 shall meet the requirements of this policy. For purposes of this plan,
32 "hazardous materials" and "hazardous waste" shall mean those
33 certain 127 priority pollutants, volatile organics, and trace metals
34 referenced in the Clean Water Act administered by the Environmental
35 Protection Agency (as may be amended from time to time). Specifi-
36 cally, hazardous waste is to be as defined in 40 CFR, Part 261, as
37 modified by Rule 17-720.030, F.A.C. as of June 1, 1992. The tenant
38 or owner shall construct an appropriate spill containment system
39 which shall be designed to hold spilled hazardous materials for
40 cleanup and to prevent such materials from entering the storm water
41 drainage system. In addition to a containment system, tenants or

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1 owners shall also develop an appropriate early warning monitoring
2 program. The containment system and monitoring program shall be
3 acceptable to the Department of Environmental Protection and the
4 South Florida Water Management District and shall serve all
5 structures or areas where hazardous materials are used, handled,
6 stored or displayed, or where hazardous wastes are generated. The
7 County reserves the right to inspect all buildings within the project,
8 during normal working hours.

9 For uses which involve 1,100 or more pounds of solid hazardous
10 materials or waste or 110 gallons or more of liquid materials on a site
11 at a give time, the following regulations shall be imposed:

- 12 a) The hazardous materials or waste shall be located within
13 enclosed watertight buildings and shall be elevated not less
14 than 18 inches above the 100-year flood elevation.
- 15 b) The users must install at least two monitoring wells on the
16 site and in a scientifically acceptable manner provide reports
17 of test data from the wells to ensure that no contamination of
18 the groundwater is occurring.
- 19 c) Each site shall have a containment system adequate to prevent
20 the transportation of hazardous materials from the site to
21 surface, groundwater, and stormwater drainage systems.

22 Application of fertilizers and pesticides in compliance with state and
23 federal law are exempt from this policy.

Policy 2.4.10:

24 In addition to density restrictions in other parts of the Comprehensive
25 Plan, density and intensities of use in the 100-year FEMA floodplains
26 shall be restricted to the extent necessary to preserve the flood storage
27 capacity and other hydrological functions of the floodplain, and to
28 protect important biological and ecological functions of a floodplain.
29 For floodplains which drain directly into waters designated as
30 "Outstanding Florida Waters", residential densities which exceed one
31 unit per five acres are presumed to impair the hydrological, biological,
32 and ecological functions of the floodplain. Except within five
33 miles from the existing city boundaries of LaBelle and Clewiston, for
34 floodplains which drain into other water bodies of the state, residential
35 densities which exceed one unit per acre are presumed to impair
36 the hydrological, biological, and ecological function of a floodplain.

37 A landowner may overcome the presumptions created in this policy
38 by competent and substantial scientific or engineering evidence

1 showing that a specific use will not impair the hydrological and
2 important biological and ecological functions of the affected
3 floodplain, provided that the densities and intensities of use as shown
4 on the Future Land Use Map shall not be exceeded.

5 **OBJECTIVE 2.5** **REDEVELOPMENT, COMPATIBILITY AND INCONSISTENT USES:** The
6 Land Development Regulations adopted September 1, 1991 shall
7 specifically encourage redevelopment, infill development, compatibil-
8 ity with adjacent uses, and curtailment of uses inconsistent with the
9 character and land uses of surrounding areas, and shall discourage
10 urban sprawl, as provided in the following policies:

11 **Policy 2.5.1:** In order to encourage redevelopment and infill development, low
12 density requirements shall not be established for the area shown on
13 the Future Land Use Map and described in Policy 2.1.4 as Residen-
14 tial/ Medium Density, except for areas beyond one mile from the
15 boundary of any incorporated city in Hendry County.

16 **Policy 2.5.2:** In order to discourage urban sprawl, developments designated
17 medium density residential shall be required to provide public utilities
18 to the extent that such utilities are available, and shall require that
19 developers of subdivisions in areas where public utilities are not
20 available provide either package plants or pre-engineering for on-site
21 systems for the ultimate users.

22 **Policy 2.5.3:** Criteria, standards, and related provisions established in the Land
23 Development Regulations for reducing the impacts from any land
24 uses that are not in conformance or are inconsistent with this
25 Comprehensive Plan shall as a minimum:

- 26 a) Regulate the subdivision and platting of land.
- 27 b) Regulate the use, intensity and location of land development
28 in a manner that is compatible with adjacent land uses and
29 provides delineation in the Conservation Element.
- 30 c) Protect Conservation Use lands designated on the Future Land
31 Use Map and those delineated in the Conservation Element.
- 32 d) Regulate areas subject to seasonal and periodic flooding by
33 requiring adequate drainage and stormwater.
- 34 e) Ensure safe and convenient on-site traffic flow and vehicle
35 parking needs through the Site Plan review process and off-
36 street parking regulations.

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1 f) Ensure that public facility, utility and service authorization
 2 has been procured prior to issuing any development order and
 3 that construction of said facilities, utilities, and services is
 4 concurrent with development.

5 g) Provide that development orders and permits shall not be
 6 issued which result in a reduction of the level of services for
 7 affected public (community) facilities.

8 The purpose of such regulations shall be to eliminate or reduce use
 9 inconsistent with the character of the surrounding area. Such criteria,
 10 standards, and related provisions shall not cause undue hardship,
 11 economic or otherwise, to the owners of such nonconforming uses.

12 **Policy 2.5.4:** Reserved.

13 **Policy 2.5.5:** The County shall request of the Hendry County Area Housing Com-
 14 mission that neighborhood surveys be conducted by the end of 2003
 15 for the purpose of establishing target areas for neighborhood and
 16 housing redevelopment and rehabilitation. The County will cooperate
 17 with such efforts of the Area Housing Commission by imposing its
 18 eligibility for grant applications to assist such surveys and subsequent
 19 programs identified to provide solutions for neighborhoods needing
 20 redevelopment and/or rehabilitation.

21 **Policy 2.5.6:** The County shall continue to revise and update its Land Development
 22 Regulations to ensure consistency with the Comprehensive Plan.
 23 Problems revealed from reviewing these codes will be promptly
 24 remedied so as to remove regulations which unnecessarily increase
 25 the cost of housing without significantly improving the protection of
 26 the public health and safety.

27 **Policy 2.5.7:** Place highest priority on redevelopment projects suggested by the
 28 actions in Policy 2.5.3 above on those projects addressing greater
 29 neighborhood improvement, rather than on the rehabilitation of
 30 singular homes. Such priority shall extend to areas with existing
 31 public or private sewer and potable water systems available, although
 32 improvements to them or expansion of them may be required.

33 **Policy 2.5.8:** The County shall continue to monitor and evaluate existing non-
 34 conforming uses in order to eliminate the intrusion of any commercial
 35 and industrial uses into residential areas, unless the benefits from the
 36 services provided outweigh the detrimental effects, unless the mixed
 37 use conditions are replanned and approved by the County, or unless

1 such intrusions are meeting vital economic functions for the areas so
2 intruded.

3 **Policy 2.5.9:** Agricultural lands that became nonconforming upon the adoption of
4 the Comprehensive Plan may continue to be used for agricultural
5 purposes regardless of the Future Land Use designation herein and
6 future zoning designations.

7 **OBJECTIVE 2.6** **ON-SITE REQUIREMENTS:** Establish criteria and standard for safe and
8 convenient on-site design and operation for proposed housing
9 subdivisions of more than two lots, and all multiple family dwellings,
10 commercial, and industrial uses.

11 **Policy 2.6.1:** All new developments shall be required to meet design and operation
12 Level of Service Standards for on-site stormwater management
13 systems.

14 **Policy 2.6.2:** In an ongoing effort to provide safe, convenient and well planned
15 communities/subdivisions, the County shall require a traffic analysis
16 study for all new residential developments with 20 or more dwelling
17 units. The traffic study will provide the basis to determine if addi-
18 tional safety measures are needed.

19 **Policy 2.6.3:** All new development shall be required to meet on-site vehicle traffic
20 circulation with particular attention paid to vehicles or with State and
21 County roads.

22 **Policy 2.6.3a:** The land development regulations shall require that all proposed new
23 commercial, industrial and multi-family residential developments
24 provide on-site traffic lanes designed to allow on-site maneuverability
25 without interfering with traffic on nearby roadways.

26 **Policy 2.6.4:** On-site open space requirements shall provide adequate light and air
27 for adjacent developments and to enhance on-site amenities, conve-
28 nience and safety.

29 **Policy 2.6.5:** For safety purposes and avoidance of congestion, all driveways or
30 other ingress-egress points onto State roads shall be located no closer
31 than one-fourth mile to each other. Such regulations shall exempt
32 existing lots of record from the requirements of this Policy.

33 **OBJECTIVE 2.7** **FUTURE LAND USE MAP SERIES/CONSERVATION:** The small maps
34 included in this text are for general illustrative purposes only and are
35 not intended for any regulatory purposes (See Future Land Use Map
36 Series).

1 During the planning period, the County shall provide for the conser-
2 vation and appropriate use of mineral resources to ensure that the
3 water quality and quantity of wetlands, surface waters, or aquifers
4 shall not be degraded or reduced by mining, and that there will be no
5 net loss or impairment of natural functions of wetlands or surface
6 waters due to mining. This objective will be accomplished through
7 the implementation of the policies set forth below.

8 **Policy 2.7.1:**

9 **WETLANDS:** Wetlands are areas identified by plant communities
10 commonly associated with lands inundated by water for a significant
11 period each year. Those communities are shown on the Future Land
12 Use Map Series map titled Priority Wetlands for Listed Species and
13 Land Cover. The maps provide general location for various swamps,
14 marshes, and wet prairies. This policy is intended to protect and
15 conserve wetlands and shall include restrictions on the density of
16 development within wetlands to one unit per 20 acres, and shall
17 require all uses in wetlands to meet applicable state and Federal
regulations and permitting requirements.

18 The County shall support the Everglades SWIM Plan as implemented
19 by the Water Management District. Such support shall consist of, but
20 not be limited to, review of the SWIM Plan to determine which
21 portions should be incorporated into the County's Comprehensive
22 Plan, distribution of information on the SWIM Plan to landowners,
23 developers, and staff who are affected by its provisions, and provision
24 of available information to the District to assist the District in its own
25 implementation efforts.

26 Hendry County shall discourage incompatible uses within wetlands.
27 Permissible uses shall include single family and two-family residen-
28 tial dwellings. All other uses will be directed away from wetlands.
29 Where incompatible uses are allowed to exist, mitigation shall be
30 provided to compensate for loss of wetlands. Permits will be issued
31 by any agency of Hendry County that provides evidence that the
32 requirements of Chapters 373 and 403, Florida Statutes, Section 404
33 of the (Federal) Clean Water Act, and Section 10 of the (Federal)
34 River and Harbours Act are met. Unless necessary permits have
35 already been obtained under the foregoing laws, any permit issued by
36 the County shall be contingent upon the issuance of state and federal
37 permits.

38 **Policy 2.7.1a:**

39 Hendry County shall work towards the establishment of mitigation
40 areas within the County to ensure that local impacts to protect
wildlife and species are mitigated locally.

Policy 2.7.2:

GROUNDWATER PROTECTION: The South Florida Water Management District has established limits and boundaries of public potable water wellfields, cones of influence, and groundwater aquifer recharge areas. The map titled "Extractive Uses" is provided to illustrate areas identified as cones on influence.

Any land use proposed for development within one-half mile of any well designated on the map titled "Map 2: FEMA Flood Prone Areas" as a potable water well is to be reviewed as a Special Exception in order to determine impact on groundwater resources from the proposed use and specific development. Such review shall address, but is not limited to, restrictions on land uses which involve pollutants and/or restrictions on handling and storage of hazardous/toxic materials in order to minimize the opportunity for contamination. Hendry County shall continue to monitor and implement programs to protect groundwater quality and eliminate potential sources of contamination. This shall be made measurable by implementing and enforcing the following policies:

Policy 2.7.2a:

The County's land development regulations shall designate a protection area of 1,000 feet in radius from each public potable water well as the wellfield protection zone. The first 300 foot radius closest to the well shall be a zone of exclusion, where no development activities shall be permitted except that relate with water supply provision. Within the remainder of the zone of protection, land uses shall be regulated to prohibit the following:

- a) Landfills;
- b) Activities that require the storage, use or transportation of restricted substances the Resource Conservation and Recovery Act's or the Environmental Protection Agency's hazardous wastes lists (including, but not limited to, landfills, gasoline stationed, petroleum storage, and pesticide storage and handling;
- c) Feedlots or other commercial animal facilities;
- d) Wastewater treatment plants and their ancillary facilities;
- e) Mines; and,
- f) Excavation of borrow pits, waterways or drainage facilities which intersect the water table.

II. FUTURE LAND USE ELEMENT

1 only current rating system pertains to septic tank suitability, and has
2 served as a guide for the location of land use categories and densities.

Policy 2.7.3a:

3 The septic tank permitting process shall be conducted by the Hendry
4 County Environmental Services Department and be consistent with
5 the Department of Health.

Policy 2.7.4:

6 **MINERALS:** Possible commercially valuable minerals are not
7 specifically mapped in the Future Land Use Map Series maps, due to
8 the lack of specific locational information. The generalized locations
9 of mineral deposits are illustrated in the data analysis, but the
10 locations are not specific enough for the Future Land Use Map series.
11 It is noted on the maps that Hendry County has extensive areas of
12 mineral resources including sand, sand shell and marl, and some peat,
13 covering nearly the entire land area of the County.

14 Areas planned for mineral extraction shall be identified and reserved
15 until needed for extraction operations. In addition, whenever a
16 commercially usable mineral resource is identified (through the
17 submission of a land use application for any extraction operation), the
18 area of potential extraction activity associated with the proposed
19 operation shall be identified. No conflicting land uses shall be
20 permitted within such identified area during the period of activity of
21 the extraction operation.

22 Environmentally sensitive lands, including wetlands, surface waters,
23 upland habitat adjacent to wetlands and surface waters, floodplains,
24 and endangered and threatened species habitat must be restored after
25 mining to their condition prior to mining, according to type, function,
26 and extent, at the same location. In other areas, restoration shall be
27 required consistent with State law. Restoration shall be based on a
28 restoration plan submitted and approved concurrent with the submis-
29 sion and approval of the application for the mining permit.

30 Mining shall be prohibited in environmentally sensitive lands where
31 the restoration of the natural functions of these lands is not feasible
32 in accordance with guidelines of the preceding paragraph. Mining
33 shall also be prohibited within 500 feet of a residential land use
34 category, except that where opaque fences and/or berms are provided,
35 this setback may be reduced to 200 feet. No mining permit shall be
36 issued until the applicant meets the standards set forth in Policy 2.7.1.

Policy 2.7.5:

37 **CALOOSAHATCHEE RIVER:** The Caloosahatchee River is shown on
38 the all of the Future Land Use Map Series. The Caloosahatchee River
39 (also designated canal number C-43) is rated a Class III river

1 according to the surface water quality classification system of the
2 FDEP. This classification represents benefits from the river for
3 recreation, fish, and wildlife, and is a middle range classification in
4 the FDEP system which runs from Class I (potable water) to Class V
5 (industrial). The Caloosahatchee River is under the management of
6 the South Florida Water Management District (SFWMD).

7 "Map 1: Future Land Use Map 2010" of the Future Land Use Map
8 Series and the policies of the Future Land Use Element restrict
9 residential density along the Caloosahatchee River to one unit per
10 acre to provide protection for the River.

11 **Policy 2.7.6:**

12 **LAKE OKEECHOBEE:** The Hendry County shore of Lake Okeechobee
13 is shown on all of the Future Land Use Map Series maps. Although
14 the boundary of Hendry County extends in a triangular shape from the
15 approximately four-mile length of Lake shore in the County to a point
16 in the Lake, nearly one-half of the shoreline is within the incorporated
17 area of the City of Clewiston, and the South Florida Water Manage-
18 ment District has the primary management responsibility for the Lake.
19 "Map 1: Future Land Use Map 2010" of the Future Land Use Map
20 Series designates the shore area of the County as Conservation. Land
21 uses within the Conservation category shall permit limited residential
22 development (one dwelling unit per 20 acres maximum density), as
23 well as open space and public facility uses.

24 The County shall support the implementation of the adopted Lake
25 Okeechobee SWIM Plan prepared by the Water Management District.
26 Such support shall consist of, but is not limited to, review of the
27 SWIM Plan to determine which portions should be incorporated into
28 the County's comprehensive plan, distribution of information on the
29 SWIM Plan to landowners, developers, and staff who are affected by
30 its provisions, and provision of available information to the District
31 to assist the District in its own implementation efforts.

32 **Policy 2.7.7:**

33 **FLOODPLAINS:** The floodplains established by the Federal Emer-
34 gency Management Agency (FEMA) as the 100-year floodplain on
35 the Federal Insurance Rating Maps (FIRM) for the national flood
36 insurance program covers a very large area of Hendry County. These
37 areas are shown on "Map 2: FEMA Flood Prone Areas" map of the
38 Future Land Use Map Series. The County has adopted the
39 FEMA-required flood hazard regulations, and shall continue to
40 maintain these regulations.

No building permit, except for a single family or two-family residen-
tial unit, or land use or development permit will be issued by any

II. FUTURE LAND USE ELEMENT

agency of Hendry County until the applicant provides evidence that the requirements of the National Flood Insurance Act of 1973, as amended, have been or will be complied with by the applicant.

Density and intensity of development shall be based on the land use category within which the property is located. If the floodplain area is a wetland, use, density, and intensity shall be as established for the agriculture/conservation category.

The following general development standards shall apply within a defined 100-year floodplain:

- a) Development involving the storage, use, transfer, generation, or disposal of hazardous materials or waste shall be prohibited or shall conform to the guidelines in Future Land Use Policy 2.4.9.

Policy 2.7.8:

Development is to be clustered or located on upland areas if available on parcels which contain wetlands, and all development shall avoid the creation of lots which do not include buildable upland areas, if upland areas are available.

OBJECTIVE 2.8

WILDLIFE HABITAT OF ENDANGERED AND THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN/VEGETATIVE COMMUNITIES: Vegetative (plant) communities are shown on "Map 4: Land Cover" of the Future Land Use Map Series. Due to a lack of appropriate locational information, no areas have currently been designated as wildlife habitat of endangered and threatened species and species of special concern. Although these areas have not been designated, the County shall act to provide protection for wildlife habitat and related vegetative communities, and other environmentally sensitive lands. Viable populations of wildlife and endangered species shall be maintained. This Objective shall be implemented by a program of activities which includes the following:

Policy 2.8.1:

It shall be the policy of Hendry County to protect habitat for threatened or endangered species or species of special concern from destruction by large scale developments, as defined herein. Until such time as specific locational information is available concerning such species, and/or until Hendry County attains the fiscal capacity to hire or otherwise retain biological assistance, Hendry County will require that all developers of proposed developments of 100 units or more and not within Development of Regional Impact thresholds, shall submit lists of wildlife known to inhabit the proposed site. The Land Development Regulations shall provide that for sites which require

1 a survey of native vegetation pursuant to Policy 2.8.2, wildlife habitat
2 shall be inventoried and endangered and threatened plant and animal
3 species and species of special concern shall be inventoried. Sufficient
4 area shall be established on the site and in conjunction with adjacent
5 properties to maintain viable populations of wildlife and viable
6 populations of endangered and threatened species and species of
7 special concern. Individuals of such species which cannot be
8 maintained on site, shall, if possible, be relocated to appropriate
9 habitat on or off-site. The Development of Regional Impact process
10 is deemed adequate to cover proposed development meeting these
11 thresholds. After adequate information is obtained, the Land Develop-
12 ment Regulations shall be revised to address protection of the natural
13 functions of wildlife habitats.

14 The lists obtained in such a manner shall be retained by the County
15 as wildlife inventory. The County shall refer the lists and develop-
16 ment proposals to the Florida Game and Fresh Water Fish Commis-
17 sion for review and comment on said proposal. The developer will be
18 required to implement activities which will reasonably address any
19 recommendation made by the Florida Game and Fresh Water Fish
20 Commission.

21 Hendry County shall retain current lists of Endangered and Threat-
22 ened Species and Species of Special Concern prepared by the Florida
23 Game and Fresh Water Fish Commission, and shall notify the
24 appropriate authorities whenever a submitted list contains one or
25 more of these species.

26 **Policy 2.8.2:**

27 Proposed developments of 100 units or more, and not falling within
28 the Development Regional Impact thresholds, shall designate on a
29 map or plan of the proposed development site the locations of any
30 areas of five acres or more dominated by 50% or more with native
31 vegetation. In the course of the development of the property, a portion
32 of such development area shall be conserved and protected. The
33 specific areas conserved or protected shall include, as a minimum,
34 those lands necessary for protection of habitat for threatened and
35 endangered species. Such areas shall be incorporated into open space
36 areas through planned unit development and/or cluster provisions,
37 provided that if over 50% of the site involves such areas, no more
38 than one-half of the total site shall be required to be preserved. The
39 regulations shall also provide that when such areas are found in non-
40 residential projects or in residential projects of less than 100 units,
41 such areas shall be preserved in open space uses up to 25% of the
42 total site. The removal or destruction of native vegetation prior to
development, except where necessary for legitimate agricultural or

1 silvicultural uses, shall be construed to be clearing of land as an
2 adjunct to construction, and shall be subject to all policies governing
3 the removal or destruction of vegetation as they apply to develop-
4 ment. This policy is subject to the policies setting out the legal status
5 of the Comprehensive Plan.

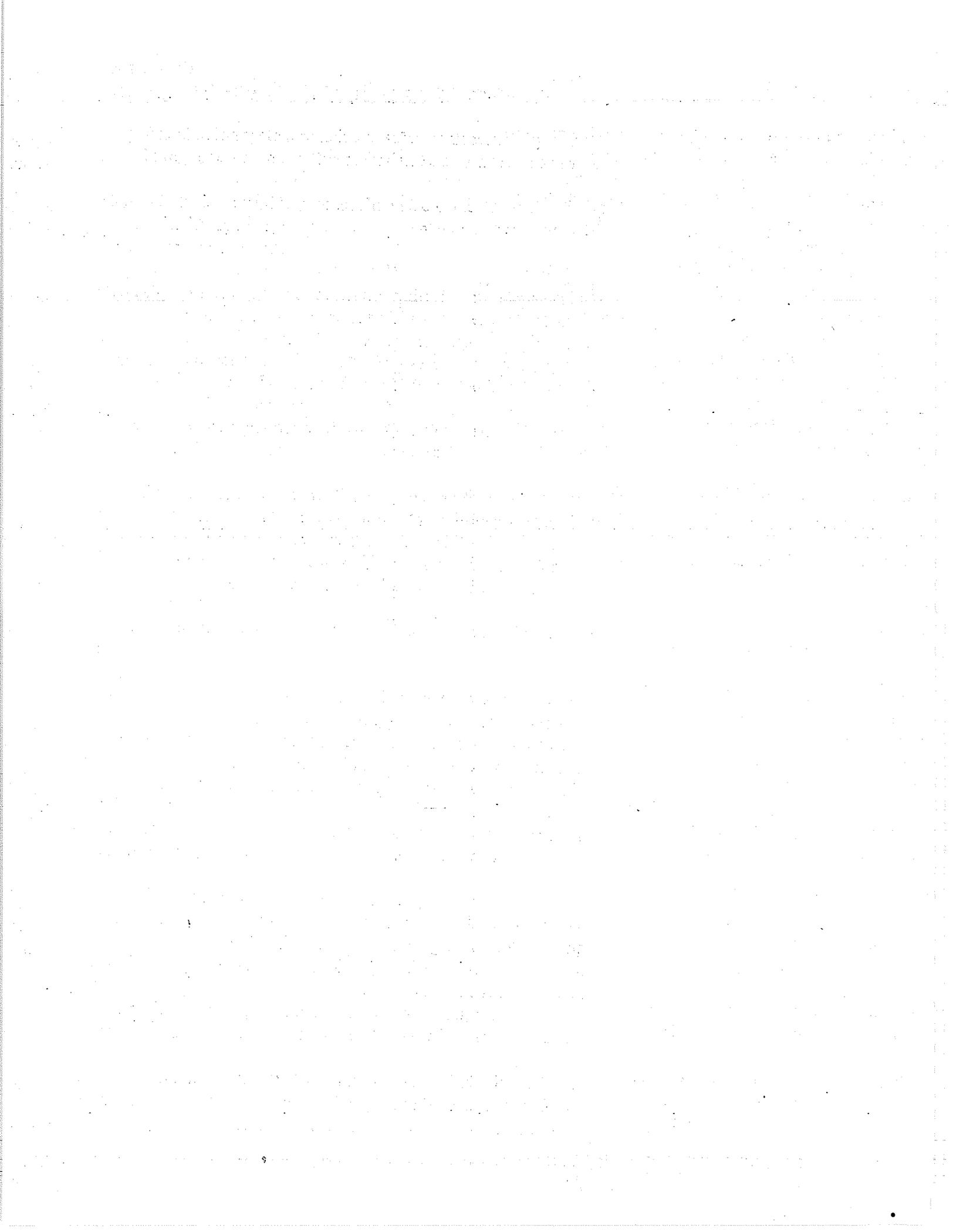
6 **OBJECTIVE 2.9:** **ECONOMIC DEVELOPMENT/REDEVELOPMENT:** The County shall
7 establish economic development and redevelopment strategies to
8 manage Hendry County's future in economic development.

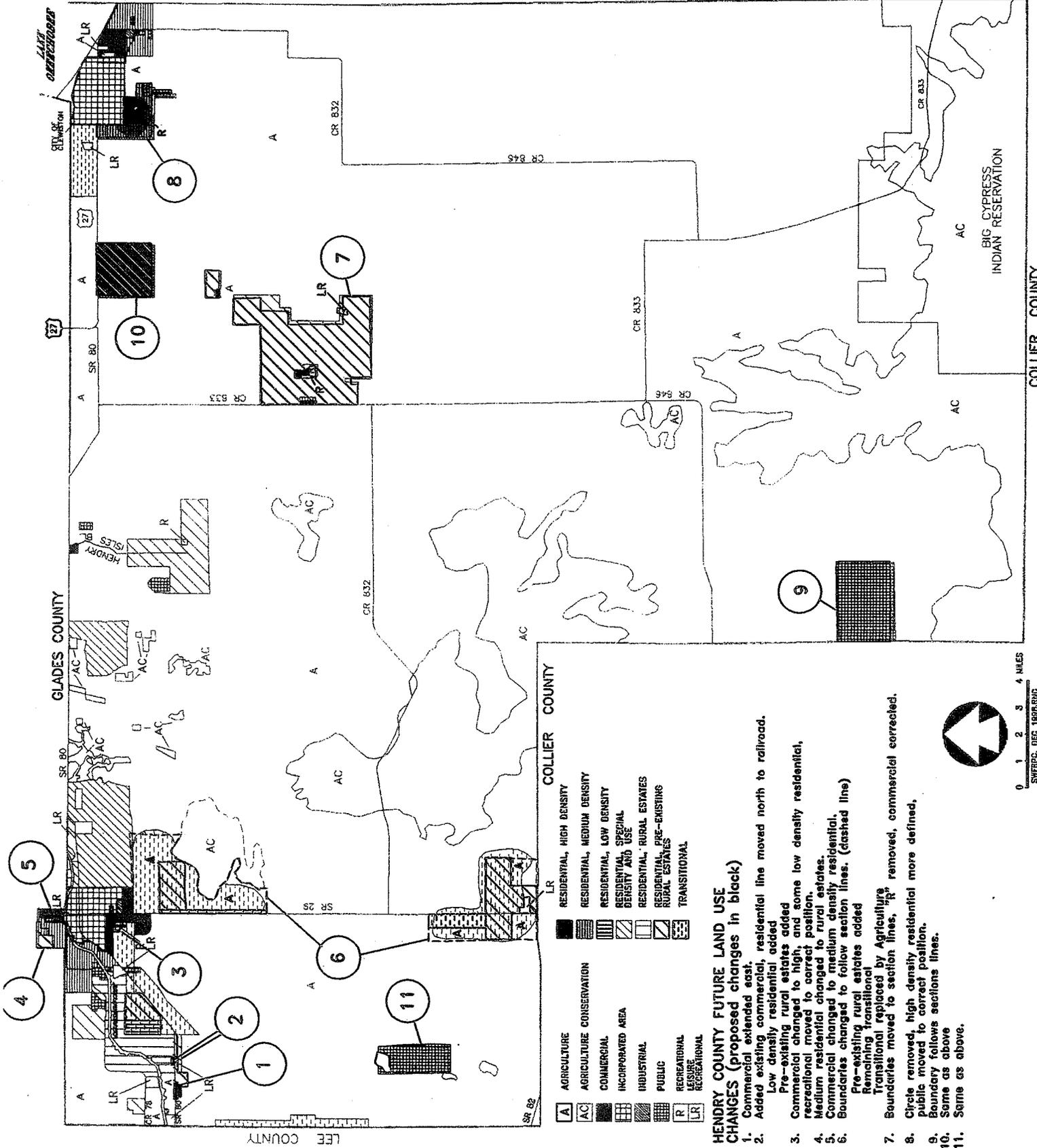
9 **Policy 2.9.1:** The County shall establish an Economic Development Council to act
10 as an independent agency in economic development.

11 **Policy 2.9.2:** The County shall formulate an Economic Strategy Action Plan to
12 combat County unemployment.

13 **Policy 2.9.3:** The County shall determine what the County environment is in
14 economic needs and plan goals in a strategic plan.

15 **Policy 2.9.4:** The County shall adopt an optional Economic Development Element.





COLLIER COUNTY

- RESIDENTIAL, HIGH DENSITY
- RESIDENTIAL, MEDIUM DENSITY
- RESIDENTIAL, LOW DENSITY
- RESIDENTIAL, SPECIAL DENSITY AND USE
- RESIDENTIAL, RURAL ESTATES
- RESIDENTIAL, PRE-EXISTING RURAL ESTATES
- TRANSITIONAL

GLADES COUNTY

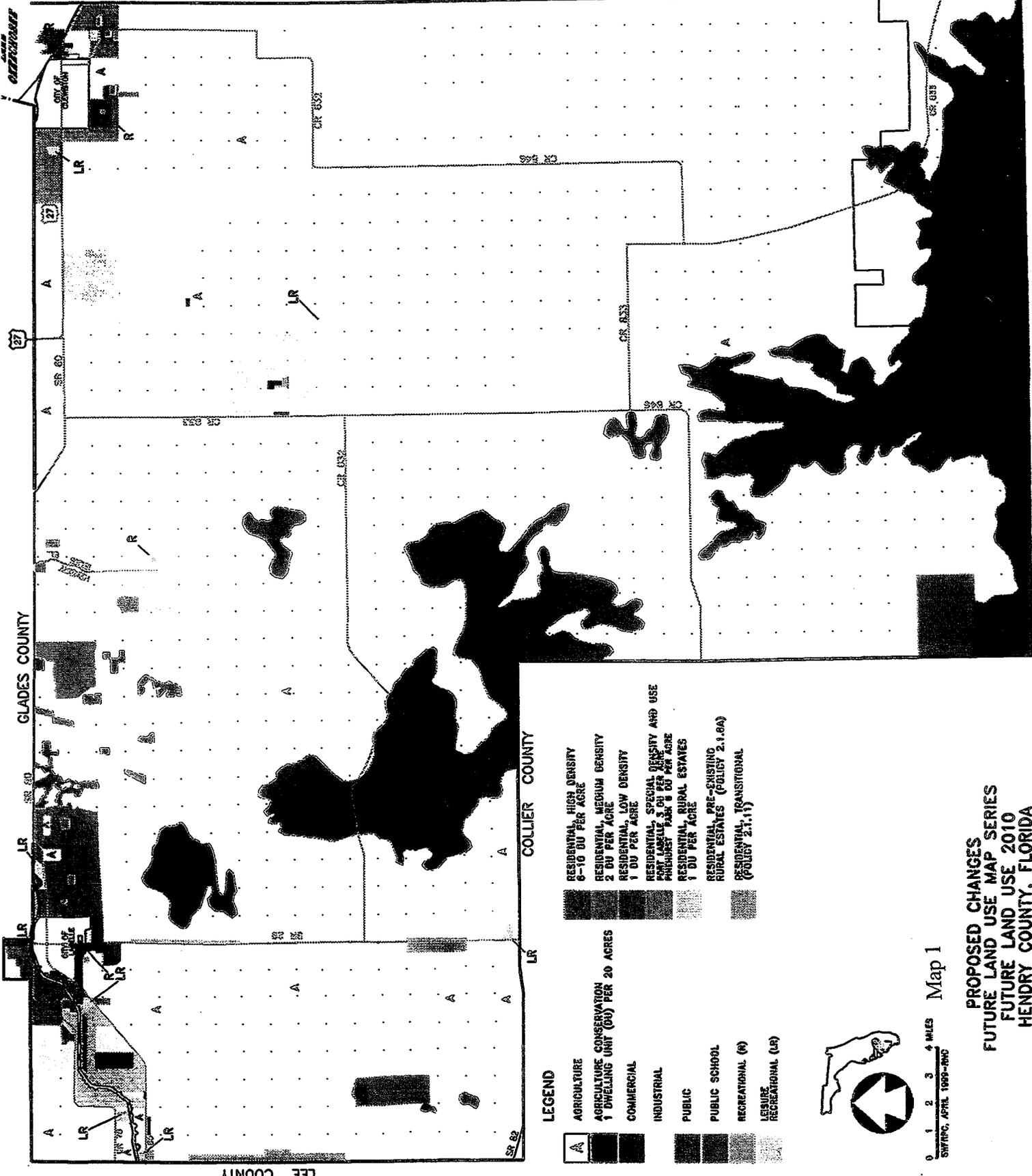
- AGRICULTURE
- AGRICULTURE CONSERVATION
- COMMERCIAL
- INCORPORATED AREA
- INDUSTRIAL
- PUBLIC
- RECREATIONAL LEISURE
- RECREATIONAL

HENDRY COUNTY FUTURE LAND USE CHANGES (proposed changes in black)

1. Commercial extended east.
2. Added existing commercial, residential line moved north to railroad. Low density residential added
3. Pre-existing rural estates added
4. Recreational moved to high, and some low density residential, Medium residential changed to rural estates.
5. Commercial changed to medium density residential.
6. Boundaries changed to follow section lines. (dashed line) Pre-existing rural estates added
7. Remaining transitional
8. Boundaries moved to section lines, "R" removed, commercial corrected.
9. Circle removed, high density residential more defined, public moved to correct position.
10. Boundary follows sections lines.
11. Same as above.



0 1 2 3 4 MILES
SWFPPC, DEC 1995, RRD



- LEGEND**
- AGRICULTURE
 - AGRICULTURE CONSERVATION 1 DWELLING UNIT (DU) PER 20 ACRES
 - COMMERCIAL
 - INDUSTRIAL
 - PUBLIC
 - PUBLIC SCHOOL
 - RECREATIONAL (R)
 - LEISURE RECREATIONAL (LR)
 - RESIDENTIAL HIGH DENSITY 6-10 DU PER ACRE
 - RESIDENTIAL MEDIUM DENSITY 2 DU PER ACRE
 - RESIDENTIAL LOW DENSITY 1 DU PER ACRE
 - RESIDENTIAL, SPECIAL DENSITY AND USE (MAY INCLUDE 3 DU PER ACRE PREDEST. PARK 8 DU PER ACRE)
 - RESIDENTIAL, RURAL ESTATES 1 DU PER ACRE
 - RESIDENTIAL, PRE-EXISTING RURAL ESTATES (POLICY 2.1.8A)
 - RESIDENTIAL, TRANSITIONAL (POLICY 2.1.1)

0 1 2 3 4 MILES
SWFWPC, APRIL 1999-RWC

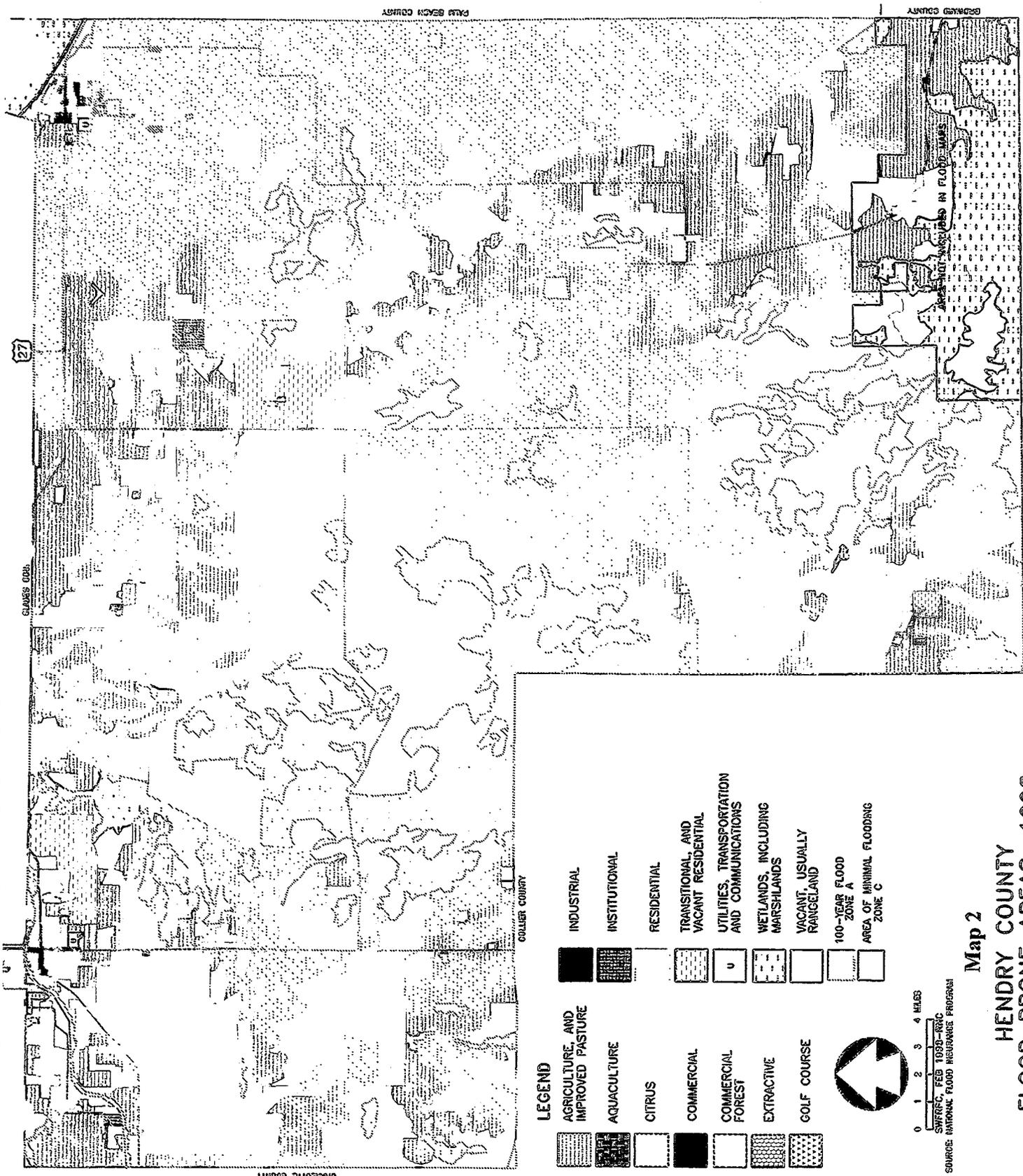
Map 1

**PROPOSED CHANGES
FUTURE LAND USE MAP SERIES
FUTURE LAND USE 2010
HENDRY COUNTY, FLORIDA**

LEE COUNTY

GLADES COUNTY

COLLIER COUNTY

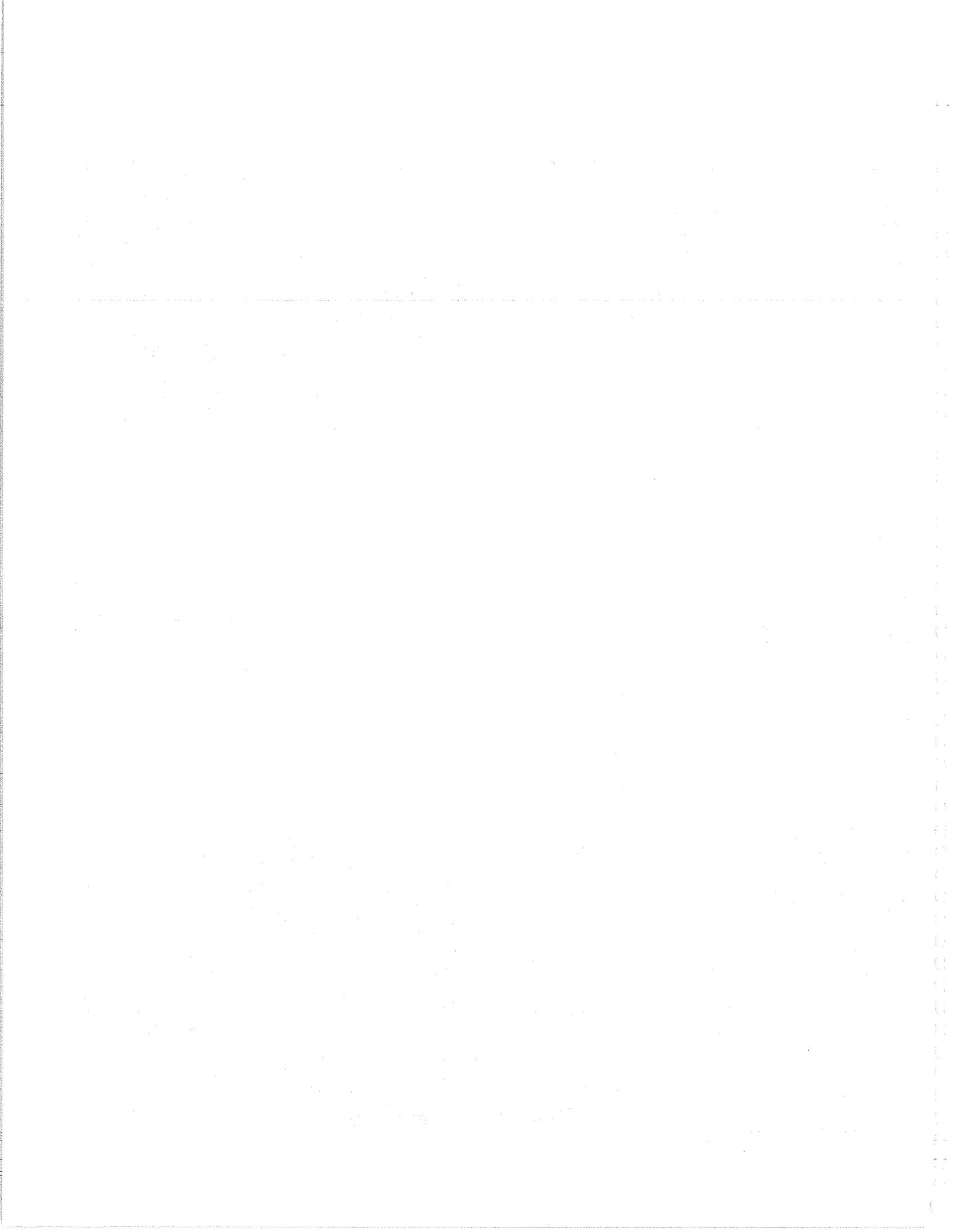


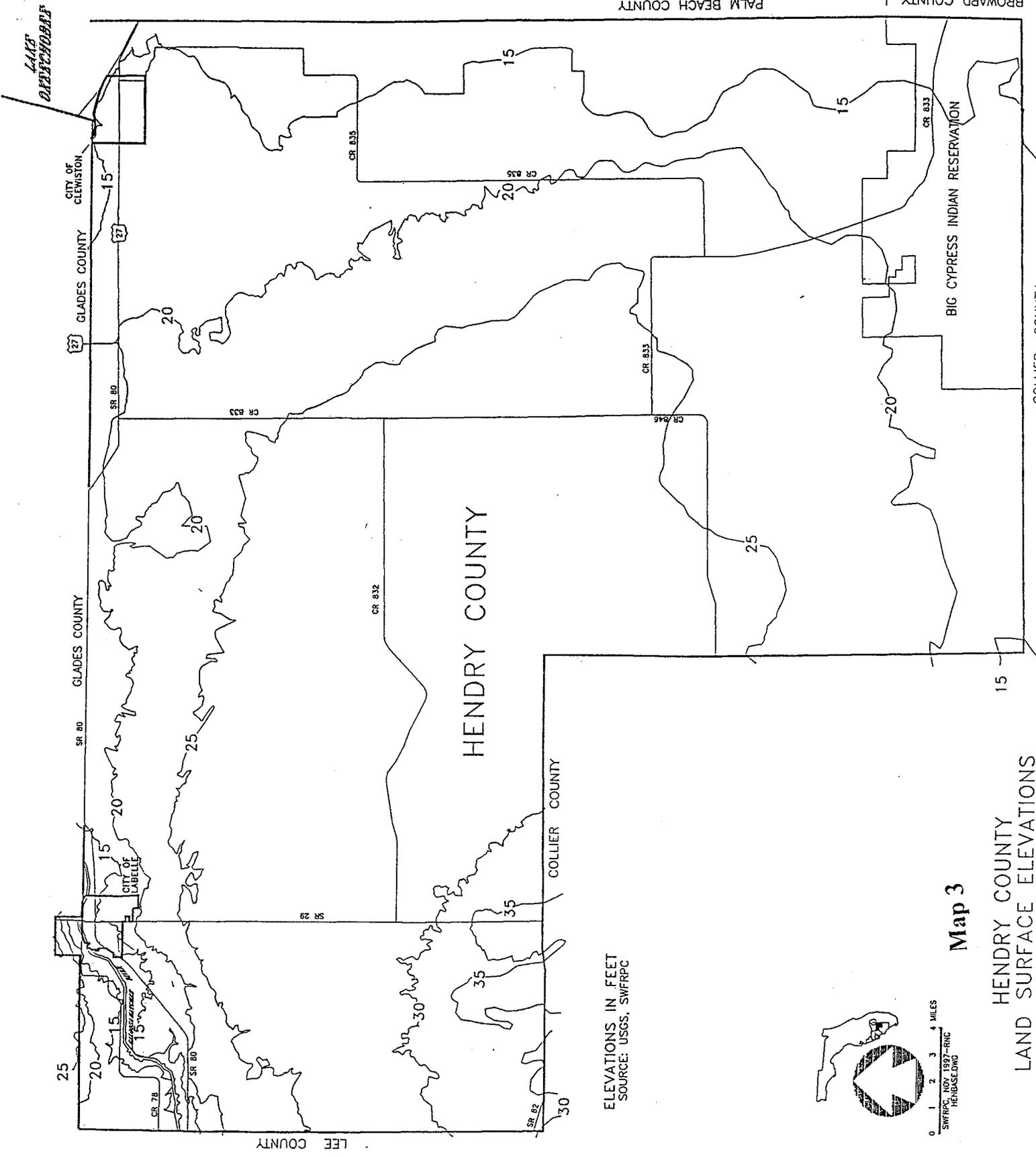
- LEGEND**
- | | | | |
|--|-----------------------------------|--|--|
| | AGRICULTURE, AND IMPROVED PASTURE | | INDUSTRIAL |
| | AQUACULTURE | | INSTITUTIONAL |
| | CITRUS | | RESIDENTIAL |
| | COMMERCIAL | | TRANSITIONAL, AND VACANT RESIDENTIAL |
| | COMMERCIAL FOREST | | UTILITIES, TRANSPORTATION AND COMMUNICATIONS |
| | EXTRACTIVE | | WETLANDS, INCLUDING MARSHLANDS |
| | GOLF COURSE | | VACANT, USUALLY RANGELAND |
| | | | 100-YEAR FLOOD ZONE A |
| | | | AREA OF MINIMAL FLOODING ZONE C |

0 1 2 3 4 MILES
 SWFFRC, FEB 1993-RRIC
 SOURCE: NATIONAL FLOOD INSURANCE PROGRAM

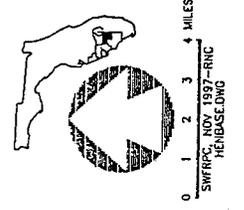


Map 2
 HENDRY COUNTY
 FLOOD PRONE AREAS, 1998





ELEVATIONS IN FEET
SOURCE: USGS, SWFRPC



Map 3

HENDRY COUNTY
LAND SURFACE ELEVATIONS

BROWARD COUNTY | PALM BEACH COUNTY

CITY OF CLEWISTON

GLADES COUNTY

GLADES COUNTY

CITY OF LABELLE

LEE COUNTY

HENDRY COUNTY

COLLIER COUNTY

COLLIER COUNTY

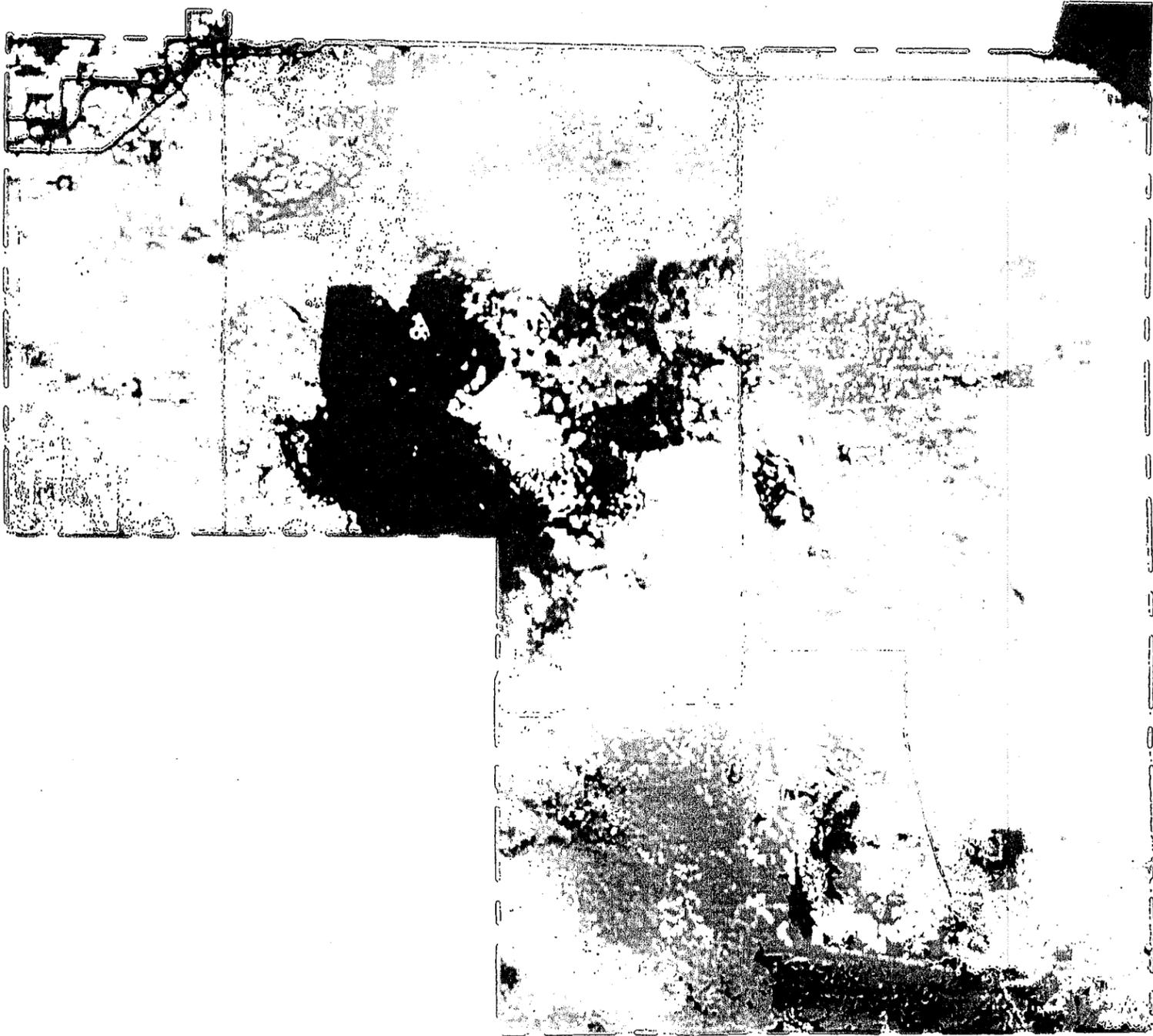
BIG CYPRESS INDIAN RESERVATION

FLORIDA
DEPARTMENT OF
TRANSPORTATION

Map 4

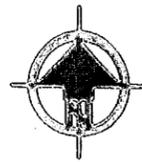
Hendry County, Florida

Land Cover



Legend

Class Name	Area
Coastal strand	0.0
Dry prairie	30,923.0
Wetlands	12,417.5
Sand pine scrub	0.0
Sandhill	0.0
Key oak scrub	0.0
Managed hardwood-pine forests	3,431.2
Hardwood hammock and forests	13,321.6
Tropical hardwood hammock	0.0
Coastal salt marsh	0.0
Freshwater marsh & wet prairie	23,426.3
Cypress swamp	19,531.9
Hardwood swamp	1,452.9
Bay swamp	0.0
Shrub swamp	2,392.1
Mangrove swamp	0.0
Bonnetland hardwoods	0.0
Open water	7,776.6
Grassland (agriculture)	141,032.6
Shrub and brushland	22,699.9
Exotic plant communities	0.0
Barren	30,072.0
Major roads	
County boundary	



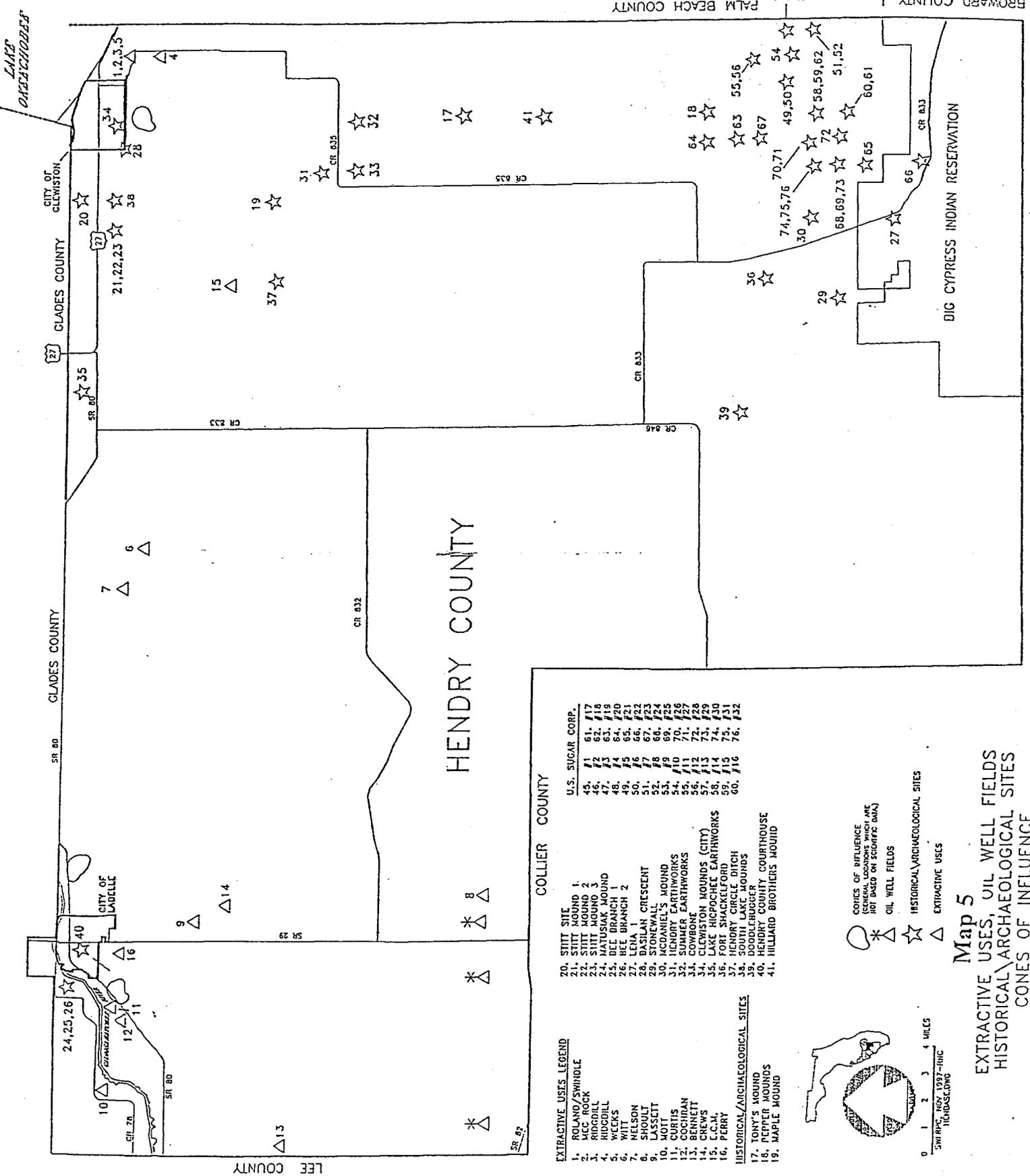
Scale



1 : 350000

SOURCE DATA
Landsat Thematic Mapper Satellite Imagery
April 3, 1986

Map prepared by FGFWFC
03/10/99



- EXTRACTIVE USES LEGEND**
1. ROLAND/SWHOLE
 2. MCC ROCK
 3. RIDGILL
 4. WEEKS
 5. WITT
 6. NELSON
 7. SELLER
 8. LASSITT
 9. MOTT
 10. CURTIS
 11. COCHRAN
 12. BENNETT
 13. CREWS
 14. C.C.M.
 15. PERRY
- HISTORICAL/ARCHAEOLOGICAL SITES**
17. TONY'S MOUND
 18. PEPPER MOUNDS
 19. MAPLE MOUND
- COLLIER COUNTY**
- U.S. SUGAR CORP.**
45. 71
 46. 72
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 101. 127
 102. 128
 103. 129
 104. 130
 105. 131
 106. 132
- STITT SITE**
20. STITT MOUND 1
 21. STITT MOUND 2
 22. STITT MOUND 3
 23. MATUSIAK MOUND
 24. WEL BRANCH 1
 25. WEL BRANCH 2
 26. BASILAN CRESCENT
 27. STONWALL
 28. MCDANIEL'S MOUND
 29. HENDRY EARTHWORKS
 30. SUMMER EARTHWORKS
 31. COWBONE
 32. CLEWISTON MOUNDS (CITY)
 33. LAKE HICPOCHEE EARTHWORKS
 34. FORT SHACKELFORD
 35. HENDRY CIRCLE DITCH
 36. SOUTH LAKE MOUNDS
 37. HILLIARD BROTHERS MOUND
 38. HENDRY COUNTY COURTHOUSE
 39. HILLIARD BROTHERS MOUND
 40. HILLIARD BROTHERS MOUND
 41. HILLIARD BROTHERS MOUND



0 1 2 3 4 MILES
 SWRPMC, NOV 1987-1988
 1:100,000

Map 5

EXTRACTIVE USES, OIL WELL FIELDS
 HISTORICAL/ARCHAEOLOGICAL SITES
 CONES OF INFLUENCE

- CONES OF INFLUENCE (GENERAL LOCATIONS WHICH ARE NOT BASED ON SCIENTIFIC DATA)
- OIL WELL FIELDS
- HISTORICAL/ARCHAEOLOGICAL SITES
- EXTRACTIVE USES

BROWARD COUNTY 1
 PALM BEACH COUNTY
 45.46
 47.48
 53.57

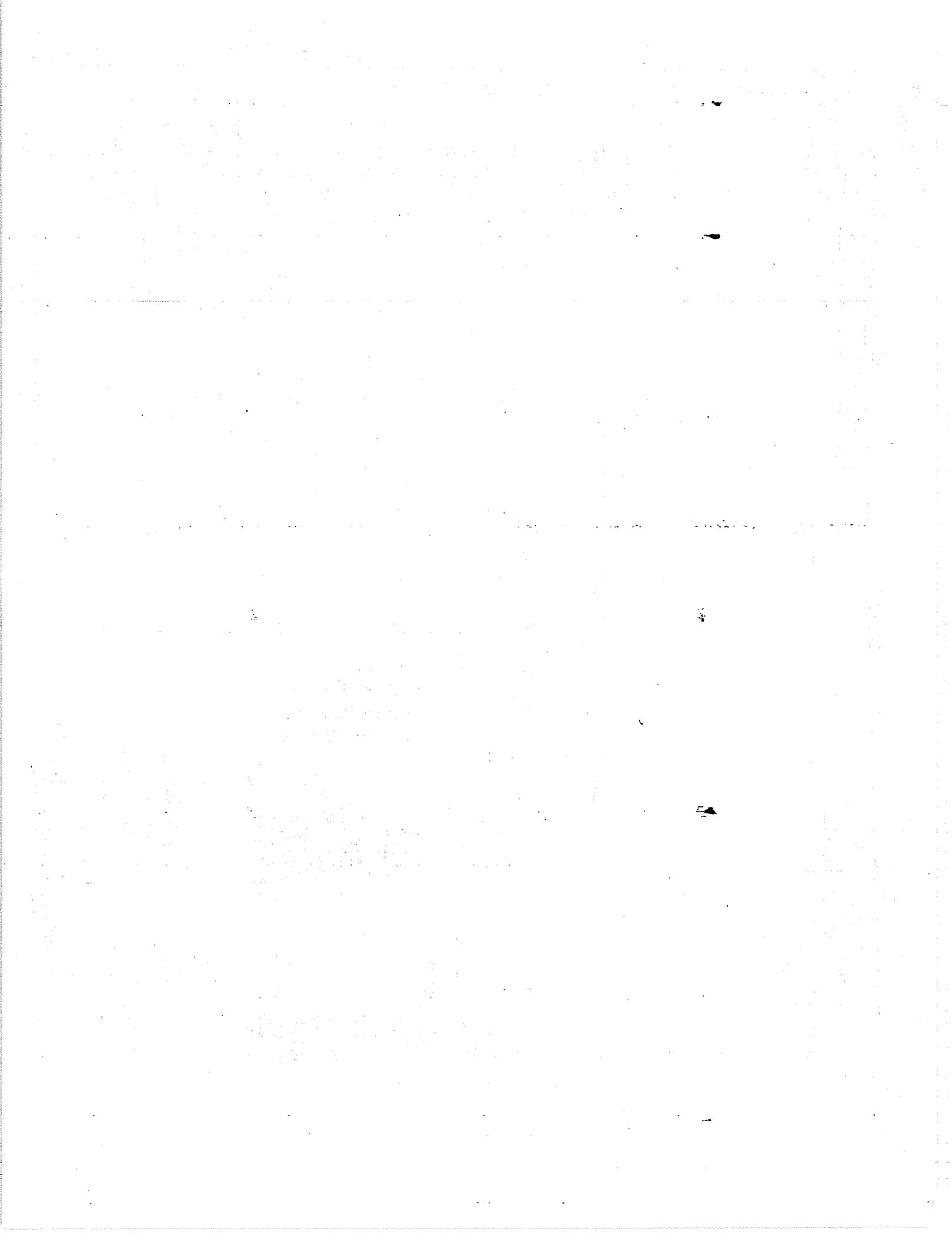
LAKE OKECHOBEE

CITY OF CLEWISTON

CLADES COUNTY

CITY OF LABELLE

CLADES COUNTY



III. Traffic Circulation Element Goals, Objectives & Policies

INTRODUCTION

The purpose of the Traffic Circulation Element is to establish the actions necessary to provide and maintain a safe, convenient, and efficient traffic circulation system in Hendry County, to meet the needs of the County's existing development and projected future growth.

The Traffic Circulation Element is composed of goals, objectives, and policies for a locally desirable road circulation system, and of the requirements of the Florida Department of Transportation concerning the State road system within Hendry County. Much of the content of the Traffic Circulation Element is that required by the Florida Growth Management Act contained in Chapter 163 F.S. and Chapter 9J-5 F.A.C. Pursuant to Section 9J-5.019, local governments were required to integrate their Traffic Circulation Element into a Transportation Element if located within Metropolitan Planning Organization (MPO) boundaries. Because of the County's rural character, this rule does not apply. Another legislative change is Rule 9J-5.0055(4) which requires the County to adopt a long-term transportation concurrency system. While the County has a concurrency management system which includes roads, the system is tied to the 5-Year Schedule of Capital Improvements, not a ten-year plan. The transportation concurrency management system ensures that roads are developed or will be developed concurrent with development.

Rule 9J-5.0055 requires local governments to adopt Level of Service (LOS) standards on County Roads consistent with the Florida Intrastate Highway System (FIHS) and on State Roads which purposes to connect urban and rural areas throughout the state. The legislation was enacted in 1990, but did not become effective until 1991-1992. According to the legislation, the adopted LOS in rural areas is "B", and "C" in urban areas. As such, the adopted LOS for SR 80 and SR 29 through LaBelle is "C". SR 27 through Clewiston is also LOS "C". All other segments of the State Roads in unincorporated Hendry County are required to maintain LOS "B".

CONCLUSIONS FROM THE DATA ANALYSIS**County Roads**

Data is available for the State roadway system within Hendry County, but there are many deficiencies for County roads. They are as follows:

- 1) Since the early 1970's, traffic counts have not been available for any segments of County roads.
- 2) Road capacities for County roads have not been established.
- 3) Accident data for County roads is unavailable without considerable original research.

- 1 4) Traffic projections for County roads are difficult to project because sufficient
2 data is not available to establish trends.

3 Even without the above noted data and information, most of the Goals, Objectives,
4 and Policies required by the State regulations can be addressed. Even the LOS standards can
5 be established, although there will be no quantifiable means to monitor them until further
6 data and information is available, and further analyses conducted. The Goals, Objectives,
7 and Policies in the final section of this Traffic Circulation Element address these problem
8 areas.

9
10 **State Roads**

11 There is adequate data and information available for the State (and U.S.) roads in
12 Hendry County. SR 80 and US 27 (also designated as SR 25) are classified by FDOT as
13 Urban Arterials, and the LOS standard for these arterials is established through the FIHS at
14 Level "C" for segments within incorporated areas. SR 29 is also an Arterial Road, and has
15 a LOS standard of "C" in LaBelle and "B" in the unincorporated areas.

16 Since the four lane completion of SR 80 in 1997 west of SR 29, the level of service
17 within the City of LaBelle has improved to a LOS of "C", and is projected to remain at that
18 LOS until 2005. Other segments of SR 80 in the County are projected to fall to a LOS of
19 "D" by 2005. Acquisition of right-of-way for widening of SR 80 from the County line to the
20 City of LaBelle is complete. Improvements are planned for completion by the end of fiscal
21 year 2007.

22 A segment of SR 29 north of SR 80 in LaBelle in the area of the Caloosahatchee
23 River bridge has improved to LOS "A", according to 1997 traffic volume counts by FDOT.
24 This may be attributed to the roadway improvements that occurred on SR 80. FDOT has
25 identified SR 29 in its 2010 Needs Plan for future improvements.

26 The adopted FDOT Plan does not include any planning for the segment of SR 29
27 north of SR 80 in LaBelle, but the latest drafted Plan includes complete Planning, Design and
28 Engineering work for the entire Hendry County SR 29 corridor from the Collier County line
29 to the Glades County line. This was planned for the 1990-91 year, but has since been updated
30 to year 2001-2002.

31 Vehicle accident data for the State roads indicate predictably that most accidents
32 occur within the Cities of Clewiston and LaBelle. Also predictably, the more serious
33 accidents that have occurred away from the cities may be a factor of excessive speed.

34
35 **County Roads**

36 Although sufficient data and information are not available for quantitative analysis
37 of County-maintained road segments, the County Road and Bridge Department via the
38 expertise of the County Engineer has made an interim inventory of deficiencies in the County

III. TRAFFIC CIRCULATION ELEMENT

1 Road system. These deficiencies are identified in the Data Analysis and are presented in the
 2 Schedule of Capital Improvements in the Capital Improvements Element of this
 3 Comprehensive Plan.

4 The deficiencies identified include needs for some County road resurfacing, some
 5 road widening, some drainage improvements, and some paving of roads not previously
 6 paved. These deficiencies are based on the best professional evaluation by the County
 7 Engineer. Once sufficient data and information are available for a more quantitative analysis,
 8 some of the specific projects may be modified, some may be deleted, and others may be
 9 added.

10 Desirable LOS Standards for County-maintained roads are LOS "D". For County
 11 maintained road segments that intersect State Roads, the desired LOS is "C".

GOALS, OBJECTIVES AND POLICIES

13 **GOAL:** To achieve and maintain a coordinated, balanced traffic circulation
 14 system within Hendry County for the convenient, safe, effective and
 15 efficient movement of people and goods.

17 **OBJECTIVE 3.1:** Adopt acceptable Levels of Service Standards (LOS) for all roads
 18 within the unincorporated area of Hendry County to provide a safe,
 19 convenient, effective and efficient traffic circulation system, in
 20 accordance with the guidelines of the Florida Department of
 21 Transportation (FDOT).

22 **Policy 3.1.1:** All segments of all State roads in Hendry County designated on the
 23 Future Traffic Circulation Map as Urban Arterials shall have the LOS
 24 Standard of "C". These include SR 80 and SR 25 (US 27) which are
 25 part of the Florida Intrastate Highway System (FIHS).

26 **Policy 3.1.2:** All segments of all State roads in Hendry County designated on the
 27 Future Traffic Circulation Map as Rural Arterials shall have the LOS
 28 Standard of "B". This includes SR 29, SR 80, and SR 25 in the
 29 unincorporated County.

30 **Policy 3.1.3:** All segments of all County roads in Hendry County shown on the
 31 Future Traffic Circulation Map within one mile of any boundary line
 32 of the City of Clewiston or the City of LaBelle shall have the LOS
 33 Standard of "C" as established through the FIHS.

34 **Policy 3.1.4:** All segments of all County roads in Hendry County shown on the
 35 Future Traffic Circulation Map not described in Policy 3.1.3 shall
 36 have the LOS Standard of "C" at peak hour.
 37

III. TRAFFIC CIRCULATION ELEMENT

1 **OBJECTIVE 3.2:** Maintain acceptable levels of service for County roads within Hendry
2 County in order to continue to provide a safe, convenient, effective
3 and efficient traffic circulation system.

4 **Policy 3.2.1:** Proposed road projects designed to meet LOS Standards shall be
5 prioritized in accordance with the following guidelines:

- 6 a) Project needed to protect public safety and health.
- 7 b) Project needed to meet existing deficiency, especially in areas
8 with high accident frequency.
- 9
- 10 c) Project is a rational extension of existing roads.
- 11 d) Project promotes infill development in existing development
12 areas.

13 **Policy 3.2.2:** The Concurrency Management System shall be consistent with the
14 Capital Improvements Element and maintain a continuing evaluation
15 of levels of service on County roadways.

16 **Policy 3.2.3:** The current Land Development Regulations and/or Concurrency
17 Management System shall require that all new or expanded
18 developments meet the adopted LOS Standard on roads impacted by
19 the development.

20 **Policy 3.2.4:** Needed roadway improvement projects designed to increase traffic
21 capacity shall be included in the Capital Improvements Element and
22 annual budget to ensure timely construction.

23 **OBJECTIVE 3.3:** By the end of 2005, the County shall develop a system for monitoring
24 and analyzing traffic on County roads in the unincorporated area of
25 Hendry County.

26 **Policy 3.3.1:** During the year 2000, Hendry County officials shall meet with
27 transportation planners of the Florida Department of Transportation
28 and the Southwest Florida Regional Planning Council to seek advice
29 on designing a traffic monitoring and analysis system that can be run
30 by Hendry County personnel, and by the end of 2001 complete the
31 system design including segment breakdowns for all County roads.

32 **Policy 3.3.2:** By the end of 2000, the speed limits on County roads shall be
33 inventoried.

III. TRAFFIC CIRCULATION ELEMENT

- 1 **Policy 3.3.3:** By the end of 2000, the County shall begin a program of taking traffic
2 counts on County roads toward establishing at least peak hour traffic
3 on all segments of County roads.
- 4 **Policy 3.3.4:** By the end of 2000, the County shall complete a summary of
5 accidents on County roads by accident type and location.
- 6 **Policy 3.3.5:** By the end of 2001, the County shall establish the capacities of all
7 County road segments.
- 8 **Policy 3.3.6:** By the end of 2001, the County shall begin utilizing the traffic
9 monitoring and analysis system as a part of the Concurrency
10 Management System.
- 11 **OBJECTIVE 3.4:** Beginning in 2001, utilize a traffic monitoring system for County
12 roads for the Concurrency Management System.
- 13 **Policy 3.4.1:** The interim monitoring system shall be utilized on all proposed
14 developments of 20 acres or more and requiring access on County
15 roads shown on the Future Traffic Circulation Map, excluding
16 agricultural developments.
- 17 **Policy 3.4.2:** Proposals for developments meeting the threshold in Policy 3.4.1
18 shall provide traffic counts for at least one 24-hour period on a
19 weekday for the County road from which access is required for the
20 proposed development.
- 21 **Policy 3.4.3:** The County Engineer, in conjunction with the Hendry County
22 Planning Department, shall analyze the traffic impact of proposed
23 developments meeting the threshold in Policy 3.4.1 on a case by case
24 basis utilizing the speed limits of the County road, the FDOT capacity
25 guidelines, and the latest edition of the ITE "Trip Generation"
26 manual. If the proposed use or uses are not included in the ITE "Trip
27 Generation" manual, the developer shall provide estimated traffic
28 generation figures for the proposed development, acceptable to the
29 County Engineer. The p.m. peak hour trip generation shall be
30 assumed to be ten percent of annual average daily traffic.
- 31 **OBJECTIVE 3.5:** Maintain a county-wide Future Traffic Circulation Map and review
32 annually for possible update requirements, coordinating the traffic
33 circulation system with the Future Land Use Map.
- 34 **Policy 3.5.1:** The map entitled "Hendry County Future Traffic Circulation Map",
35 at the scale of one inch equals two miles, is the official Future Traffic
36 Circulation Map of Hendry County and shall be updated each year in

III. TRAFFIC CIRCULATION ELEMENT

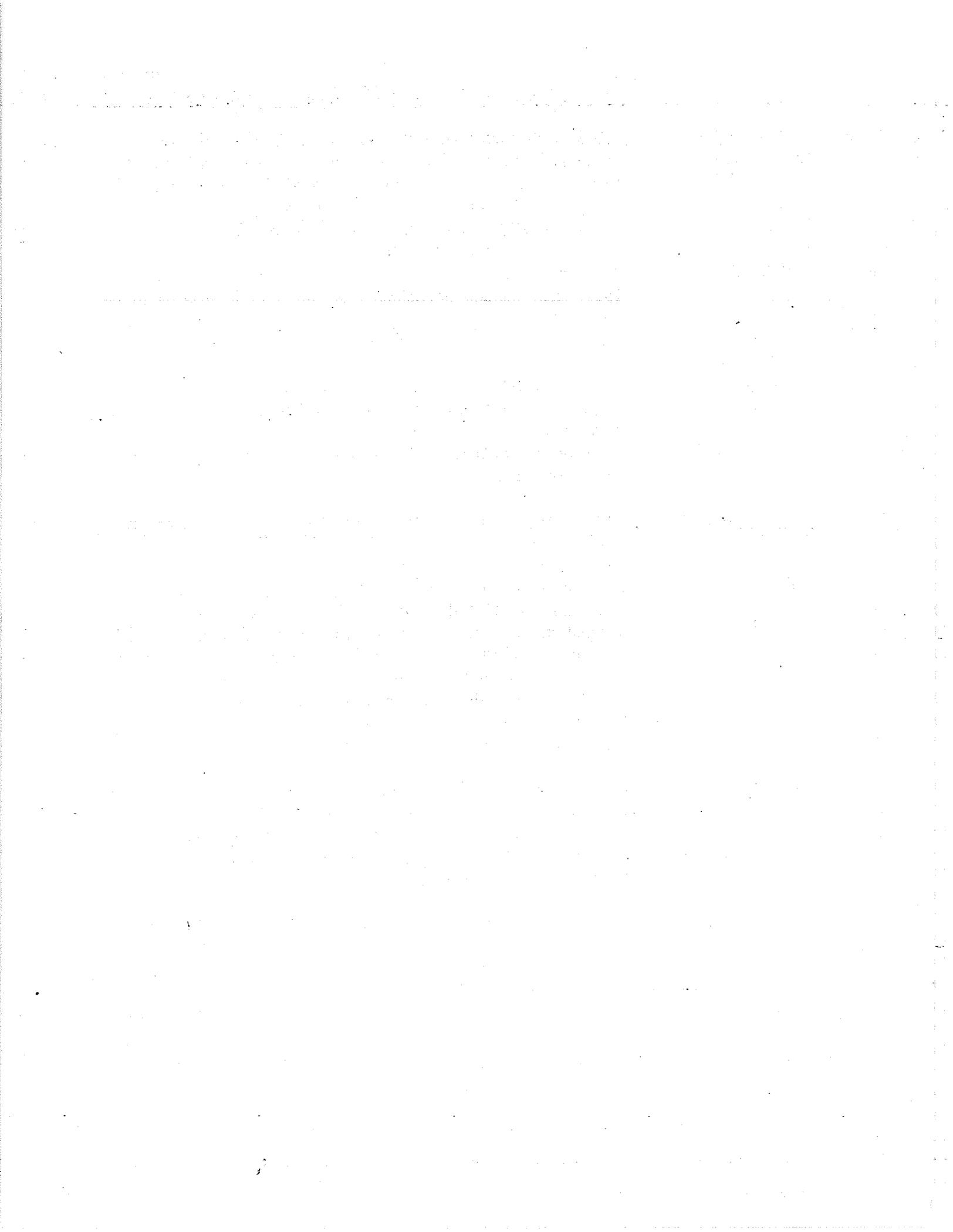
- 1 accordance with the review of the County's Capital Improvements
2 Element.
- 3 **Policy 3.5.2:** New roads and capacity-increasing improvements to existing
4 roadways shall be in compliance with the Future Traffic Circulation
5 Map and coordinated with the Future Land Use Map.
- 6 **Policy 3.5.3:** Revisions of the roads on the Future Traffic Circulation Map shall be
7 coordinated with and connect or directly serve existing development
8 areas or projected growth areas shown on the Future Land Use Map.
- 9 **OBJECTIVE 3.6:** The County shall coordinate traffic circulation planning and projects
10 with the FDOT 5-year Transportation Plan and the transportation
11 planning of other entities and programs.
- 12 **Policy 3.6.1:** The County shall meet with officials of the Florida Department of
13 Transportation, the City of LaBelle, and the Southwest Florida
14 Regional Planning Council to determine the necessity for and form of
15 a Special Transportation Area for parts of the City of LaBelle and
16 adjacent unincorporated areas on SR 29 and SR 80.
- 17 **Policy 3.6.2:** The County shall coordinate with the Florida Department of
18 Transportation and the Southwest Florida Regional Planning Council
19 as specified in Policy 3.3.1.
- 20 **Policy 3.6.3:** Reserved.
- 21 **Policy 3.6.4:** The County shall annually exchange copies of any adopted
22 transportation improvement programs and budget with the Cities of
23 Clewiston and LaBelle and adjacent counties.
- 24 **Policy 3.6.5:** The County shall meet annually with the City officials in Clewiston
25 and LaBelle to coordinate traffic planning and road projects for the
26 coming year.
- 27 **Policy 3.6.6:** Each year the County shall meet with representatives of the
28 agricultural community to discuss and prioritize specific
29 transportation and traffic circulation needs relative to future growth
30 in agricultural development in Hendry County.
- 31 **Policy 3.6.7:** The County shall continue to contact the owners of the abandoned
32 CSX railroad right-of-way east of SR 29 to discuss future plans for
33 the property, and to explore possible future use of the right-of-way for
34 transportation and drainage purposes.

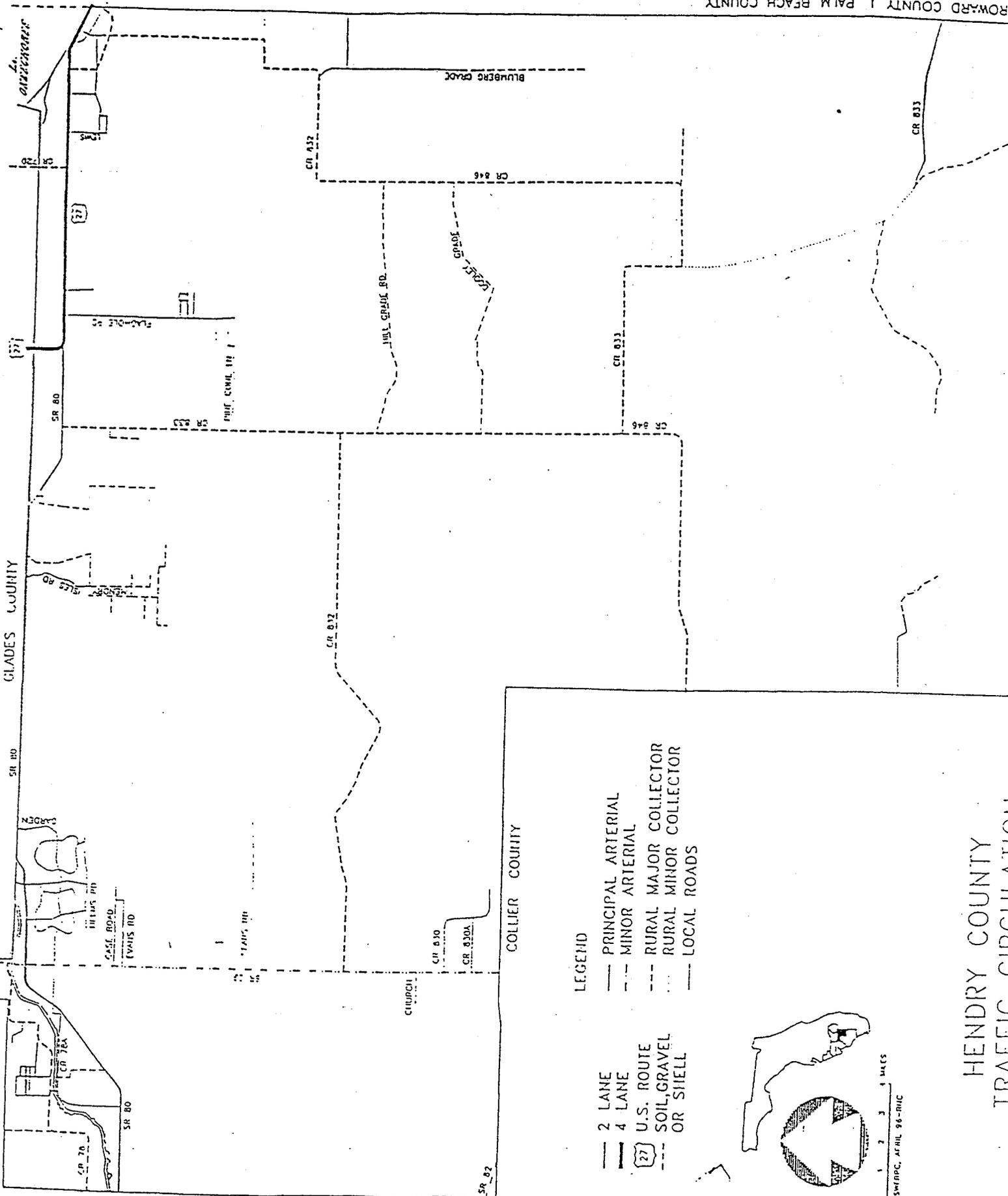
III. TRAFFIC CIRCULATION ELEMENT

- 1 **Policy 3.6.8:** The County shall review any future development proposals and traffic
2 improvement projects for consistency with the FDOT 5-Year
3 Transportation Plan.
4
- 5 **OBJECTIVE 3.7:** Provide for protection of existing and future rights-of-way from
6 building encroachment.
- 7 **Policy 3.7.1:** Fully respecting private property rights, the County shall provide for
8 adequate building and other structural setbacks with the Land
9 Development Regulations, adopted September 1, 1991, so that land
10 uses along the highways after expansion will be compatible with
11 right-of-way boundaries.
- 12 **Policy 3.7.2:** The County shall continue to coordinate with the Florida Department
13 of Transportation to determine the right-of-way necessary for the
14 improvements included on FDOT's funded construction plans or
15 projects.
- 16 **Policy 3.7.3:** By the end of 2000, the County shall inventory the County road
17 rights-of-way to support future traffic planning studies.
- 18 **Policy 3.7.4:** By the end of 2001, the County shall develop criteria and policies for
19 preservation of existing rights-of-way and acquisition of future
20 rights-of-way.
- 21 **OBJECTIVE 3.8:** Establish development regulations for protection of existing roadways
22 from future congestion and hazards from future development on
23 County and State roads.
- 24 **Policy 3.8.1:** The Land Development Regulations, to be revised in 1999, shall
25 include criteria and provisions controlling access points (entrances
26 and exits, driveways and other roads) onto principal and minor
27 arterials, and rural major collectors by such means of required
28 separation, frontage roads, shared access, and similar features. These
29 regulations shall be consistent with applicable state standards for
30 access to state maintained highways.
- 31 **Policy 3.8.2:** Reserved
- 32 **Policy 3.8.3:** Reserved.
- 33 **OBJECTIVE 3.9:** The County shall provide for efficient, safe, and convenient on-site
34 and nearby traffic flow for proposed developments.

III. TRAFFIC CIRCULATION ELEMENT

- 1 **Policy 3.9.1:** The County shall continue to enforce off-street (on-site) vehicle
2 parking requirements through the Subdivision Regulations to ensure
3 that needed parking for proposed new and expanded commercial,
4 industrial, and multiple family residential developments are contained
5 on-site through adequate numbers of usable parking spaces.
- 6 **Policy 3.9.2:** The Land Development Regulations, to be adopted by September 1,
7 1999, shall include provisions requiring bicycle parking to be
8 provided on-site for proposed new and expanded commercial and
9 multiple family residential developments.
- 10 **Policy 3.9.3:** The Land Development Regulations shall continue to require that all
11 proposed new commercial, industrial and multiple family residential
12 developments that provide on-site traffic lanes are to be designed to
13 allow on-site maneuverability without interfering with traffic on
14 nearby roadways.
- 15 **OBJECTIVE 3.10:** The County shall provide for bicycle and pedestrian ways in proposed
16 traffic projects.
- 17 **Policy 3.10.1:** Proposed new roads or improved roads classified as rural minor
18 collectors or local roads shall be designed to accommodate bicycle
19 and pedestrian circulation separate from motorized vehicle traffic if
20 such road is located within one-half mile of a boundary line of the
21 City of Clewiston or the City of LaBelle, and if in the opinion of the
22 County Engineer, bicycle and pedestrian traffic can be provided so
23 that the safety of the bicyclist and pedestrian can be reasonably
24 assured.
- 25 **Policy 3.10.2:** Bicycle paths and pedestrian sidewalks or trails shall not be required
26 for major arterials, minor arterials, or rural major collectors, but if
27 provided shall be separated from the roadway edge by a distance that,
28 in the opinion of the County Engineer, can provide reasonable safety
29 for the bicyclist and pedestrian.





LEGEND

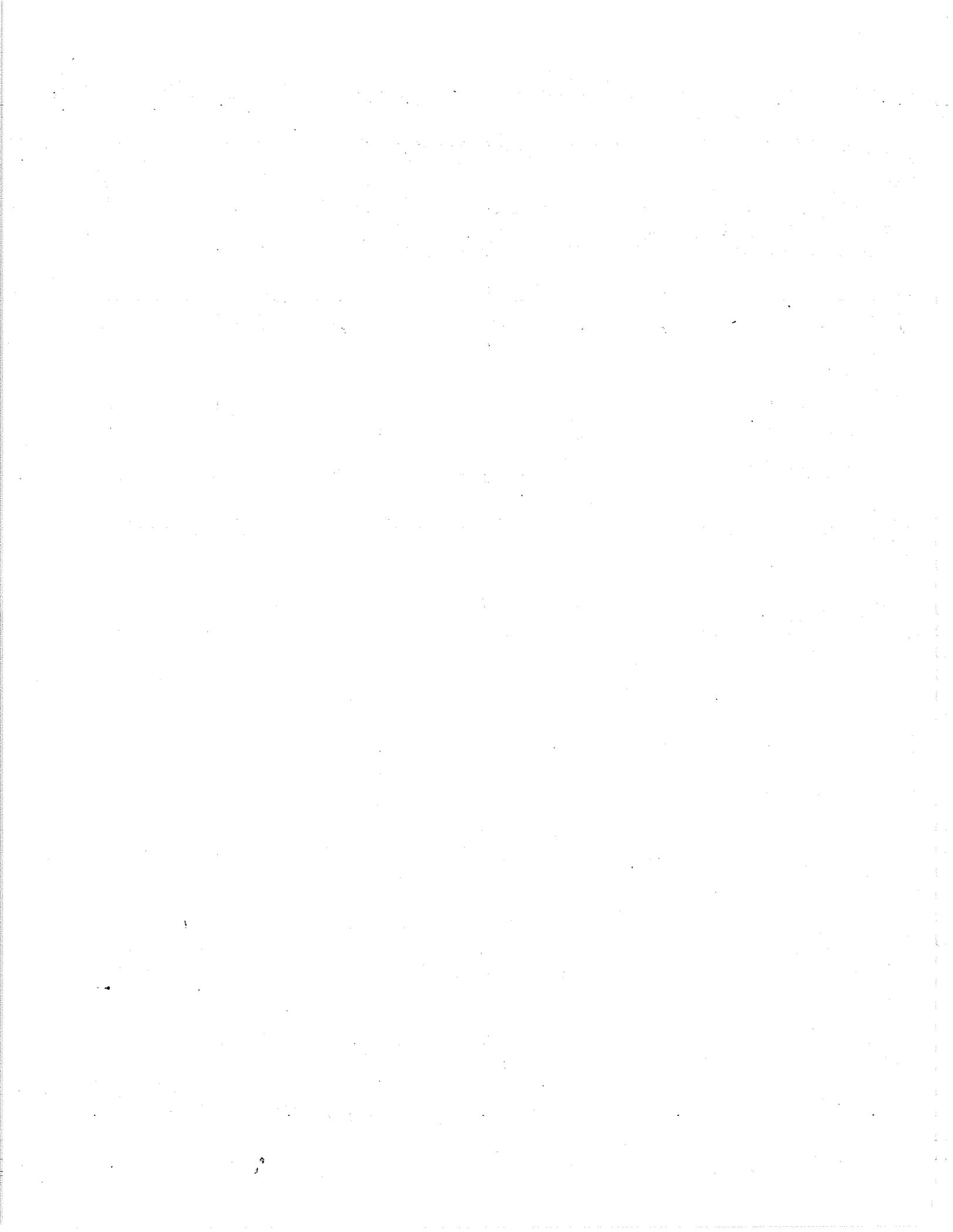
- PRINCIPAL ARTERIAL
- - - MINOR ARTERIAL
- · · RURAL MAJOR COLLECTOR
- · - RURAL MINOR COLLECTOR
- LOCAL ROADS

- 2 LANE
- 4 LANE
- 27 U.S. ROUTE
- SOIL, GRAVEL OR SHEL



0 1 2 3 4 MILES
SWFPPC, APRIL 94-911C

HENDRY COUNTY
TRAFFIC CIRCULATION



IV. Housing Element Goals, Objectives & Policies

1 INTRODUCTION

2 The purpose of the Housing Element of the Comprehensive Plan is to meet the
3 identified and projected deficits in the supply of housing in Hendry County. This Element
4 is to address the activities of the Hendry County government toward meeting these deficits,
5 and toward providing direction and guidance to private sector housing development efforts.

6 The Housing Element also provides an insight on housing affordability needs and the
7 demand and need for farmworker housing within Hendry County. As part of an ongoing
8 attempt to determine the farmworker population, the County participated in the
9 "Farmworkers in Southwest Florida" study prepared by the University of Florida, Institute
10 of Food and Agricultural Sciences (IFAS) and the Southwest Florida Regional Planning
11 Council (SFRPC). This study attempted to enumerate the farmworkers in Southwest Florida
12 and their distribution among the five counties; Charlotte, Collier, Glades, Hendry, and Lee.

13 A previous study was prepared by the Shimberg Center for Affordable Housing in
14 1997. However, this study only focused on migrant workers — farmworkers who travel with
15 or without family members. Seasonal farmworkers, according to this study, were defined as
16 year round residents and were excluded from this study since they were assumed to be a part
17 of the permanent population. For purposes of this Housing Element, farmworkers are
18 defined as individuals that work in the agriculture industry for nine out of the 12 months per
19 year.

20 As stated earlier, the Housing Element also provided insight to housing affordability
21 needs. As such, for purposes of defining housing for very-low, low and moderate income
22 households the following will apply:

23	Very low income households	=	< 30% of median income
24	Low income households	=	30 to 50% of median income
25	Moderate income households	=	50 to 80% of median income

26 The following section highlights the conclusions of the Data Analysis section on
27 housing. From these conclusions the Housing Goals, Objectives, and Policies are presented
28 in the final section of this Element.

29 CONCLUSIONS FROM THE DATA ANALYSIS

30 The Data Analysis inventories the existing housing stock, analyzes its make-up and
31 adequacy, and projects future demand for housing units and land requirements. Base data
32 utilized in the Data Analysis was prepared by the Bureau of Economic and Business
33 Research (BEBR) and the Shimberg Center for Affordable Housing using the 1990 U.S.
34 Census data. Building permit data from the years 1990 through 1999 are used to update the
35 housing unit counts and to determine the distribution of units during that period by type.

1 Building permit data was collected during the 1990 through 1997 period by planning
2 sectors that approximated the 1990 U.S. Census Enumeration Districts (ED's). This
3 permitted a relatively accurate determination of residential growth location.

4 Housing projections provided by the Shimberg Center indicate that approximately
5 1,419 single family housing units and 102 multi-family residential housing units will be
6 required by the year 2000, and an additional 1,049 units will be needed by the end of the year
7 2005 (See Table IV-1). It is projected that 324 affordable renter-occupied units will be
8 needed for very-low income households by the year 2000 (See Table IV-2). Through the year
9 2010, the change in this distribution is expected to be 8,211 conventional single family
10 homes, and 214 multiple family units.

11 **Table IV-1**
12 **Projected Demand and Need for Housing**

Hendry Co.	Est. 1995 Tot. Units		Projected Demand						Projected Need					
	SF	MF	2000		2005		2010		2000		2005		2010	
Clewiston	1,616	578	1,840	657	1,899	677	1,955	698	224	79	283	99	339	120
LaBelle	1,324	102	1,216	94	1,339	104	1,467	114	(108)	(8)	15	2	143	12
Unincorporated	6,168	153	7,471	184	8,288	204	9,099	224	1,303	31	2,120	51	2,931	71
County Total	9,108	833	10,527	935	11,526	985	12,521	1,036	1,419	102	2,418	152	3,413	203

18 Note: Household estimates and projections for 'All Households' are estimated separately, therefore owner and
19 renter households do not add up to total households; the differences are due to rounding and are minor. The
20 'County Total' of households is a sum of jurisdictions.

21 Key: SF = Single Family
22 MF = Multi-Family

23 Source: Shimberg Center for Affordable Housing at the University of Florida, 1998.

24 **Table IV-2**
25 **Hendry County**
26 **Household Need by Income Categories**

Income Categories	Owner-Occupied Units				Renter-Occupied Units			
	1995	2000	2005	2010	1995	2000	2005	2010
30% of median = \$7,471	513	437	335	226	-279	-324	-373	-421
50% of median = \$12,452	1,402	1,263	1,077	882	-258	-334	-421	-503
80% of median = \$19,923	2,613	2,380	2,087	1,757	601	478	343	210
120% of median = \$29,885	2,502	2,140	1,697	1,228	556	361	166	-19
200% of median = \$49,808	1,251	718	84	-558	0	-236	-463	-678

33 Source: Shimberg Center for Affordable Housing at the University of Florida, 1998.

34 The tenure of housing is projected to remain at approximately 70% owner-occupied
35 and 30% renter occupied for the entire period through the year 2005. The projected
36 approximate price range for the future housing demand for the period through 2010 is as
37 follows:

PROJECTED PRICE RANGE DISTRIBUTION

Price Range	Percent
Under \$35,000	18%
\$35,000 - \$49,999	21%
\$50,000 - \$99,999	46%
\$100,000 - \$199,999	12.25%
\$200,000 and over	2%

Rental units are projected by rent range in the Data Analysis, but the number of projected units is very small. The projected rent range is between \$350 and \$449 a month.

According to the Florida Department of Health (DOH), there are 19 DOH licensed migrant labor camps in Hendry County with the capacity to house 1,501 workers.

The Data Analysis projects a seasonal population of 11% over the resident population for 1996 and 9% for the year 2000. These percentages were projected based on seasonal temporary units for migrant farm laborers. These percentages assume that approximately 25% of migrant farm labor in Hendry County will find their temporary residences outside the County. The number of housing units to meet the demand for migrant farm labor is 2,468 dwelling units, according to the Shimberg study. Another study conducted by the University of Florida (IFAS) to determine the farmworker population and housing needs estimated that approximately 960 housing units would be needed for this segment of Hendry County's population. The study determined that roughly 34,000 farmworkers worked in Southwest Florida. Of that, 22% or 7,500, worked in Hendry County. The Department of Health permits a maximum of five (5) individuals to a unit. The Shimberg study estimated a population of 10,270 farmworkers with a migrant worker housing capacity of 2,563. The IFAS study estimated a migrant housing capacity of 2,725. A preliminary study prepared by the Hendry County Area Housing Commission estimated that approximately 460 units would be needed by 2000. Since the study prepared by IFAS specifically addresses Southwest Florida migrant farmworker population, the County would accept this study.

To address the need for farmworker housing within the County, it is assumed that approximately 200 units are needed annually to keep up with the demand. The Area Housing Commission has taken the position to provide approximately 40 units per year to meet the demand. As such, the Housing Commission recently purchased 40 units outside the City limits of Clewiston to accommodate farmworkers within Hendry County. Furthermore, the Housing Commission is researching funding sources to assist in this endeavor.

GOALS, OBJECTIVES AND POLICIES

GOAL: To assure the availability of safe, decent, and sanitary housing for the existing and anticipated future residents of Hendry County.

- 1 **Policy 4.2.3:** Hendry County, in cooperation with the Hendry County Area
2 Housing Commission, shall continue to research State, Federal,
3 private foundation grant and low-interest loan, and other programs
4 available for funding housing rehabilitation, structural and aesthetic
5 improvements, and demolition.
- 6 **Policy 4.2.4:** Hendry County will continue to prepare and submit housing
7 assistance applications, as available, for the purposes of housing
8 rehabilitation, structural and aesthetic improvements, and demolition.
- 9 **Policy 4.2.5:** By September 2010, Hendry County and the Area Housing Commis-
10 sion will develop an on-going approach for surveying housing
11 conditions, researching available funding programs, researching or
12 surveying for lower income family data, and applying for funding
13 assistance to encourage the creation and preservation of affordable
14 housing.
- 15 **OBJECTIVE 4.3:** **SPECIAL NEED HOUSEHOLDS:** In order to assist those individuals
16 with special housing needs in Hendry County, an application shall be
17 submitted in 1999 - 2000 by Hendry County, to HUD requesting an
18 additional 50 unit allocation for the existing Section 8 housing
19 program.
- 20 **Policy 4.3.1:** When the 2000 U.S. Census data becomes available, the County shall
21 determine the number of households with special needs in Hendry
22 County.
- 23 **Policy 4.3.2:** Reserved.
- 24 **OBJECTIVE 4.4:** **HISTORICALLY SIGNIFICANT HOUSING:** An inventory of local
25 historically significant housing will be initiated in 2000.
- 26 **Policy 4.4.1:** By December 2000, conduct research or surveys to inventory the
27 historically significant housing in Hendry County. The activities may
28 include further inquiries to the Florida Master File, the National
29 Society for Historical Preservation, the National Register of Historic
30 Places, local historic societies, interviews with long term citizens, and
31 other techniques. This survey may include other historic structures
32 or sites.
- 33 **Policy 4.4.2:** Historically significant housing shall be afforded protection status by
34 the Land Development Regulations in order to allow reasonable
35 maintenance improvements, and specific criteria and standards for
36 such status shall be included in the Land Development Regulations.

1 **Policy 4.4.3:** Hendry County shall request the assistance of the State of Florida to
2 identify significant historic resources within the unincorporated areas
3 which are in need of protection and develop management and
4 restoration plans as appropriate.

5 **Policy 4.4.4:** Historically significant properties shall be protected through designa-
6 tion as historic sites by the State or County.

7 **OBJECTIVE 4.5:** **RURAL AND FARM WORKER HOUSEHOLDS:** Hendry County will
8 continue to participate with the Area Housing Commission to monitor
9 and assist in the provision of adequate and affordable migrant
10 housing.

11 **Policy 4.5.1:** Reserved.

12 **Policy 4.5.2:** The County shall continue to monitor the success of Mira Verde and
13 Greentree Village in order to promote strategies geared toward the
14 provision of safe, sanitary, and affordable farmworkers housing.

15 **Policy 4.5.3:** The County shall continue the public-private partnership among the
16 Hendry County Area Housing Commission, the Hendry County
17 government, and agricultural employers of migrant farm laborers to
18 seek solutions of various facets involved in the housing issue,
19 including the location of existing housing, the preferred location of
20 any new housing, the financing sources for migrant housing, and any
21 related issues of mutual concern.

22 **Policy 4.5.4:** Request the Southwest Florida Regional Planning Council to become
23 involved in researching existing migrant housing and other aspects of
24 the migrant farm labor housing issue.

25 **Policy 4.5.5:** Hendry County shall utilize the study prepared by the Institute of
26 Food and Agricultural Sciences (IFAS) and the Southwest Florida
27 Regional Planning Council (SWFRPC), on the number of farmworke-
28 rs in southwest Florida and their characteristics, to better determine
29 the future housing needs and services for this segment of the
30 population.

31 **Policy 4.5.6:** By 2010, Hendry County will provide the impetus to allow an
32 additional 200 units annually of affordable housing for farmworkers
33 within the County through public and private funding sources.

34 **OBJECTIVE 4.6:** **PUBLIC/PRIVATE:** Under the auspices of the Hendry County Area
35 Housing Commission, the County shall establish a coalition among
36 the local governments, financial institutions, developers, builders,

- 1 other construction trades, real estate brokers, materials suppliers,
2 mobile home sales owners, and others involved in the housing
3 market, to monitor the housing market and identify the needs of the
4 system in production of housing for the residents of Hendry County.
- 5 **Policy 4.6.1:** Reserved.
- 6 **Policy 4.6.2:** The County shall develop a program of concerns of the coalition and
7 revolve meetings around themes toward seeking remedies for any
8 problems surfaced.
- 9 **Policy 4.6.3:** The County shall consider the use of such a coalition group as a
10 sounding board for the Hendry County Area Housing Commission
11 and its projects and programs.
- 12 **OBJECTIVE 4.7:** Sites shall be sufficient to accommodate the projected housing needed
13 for low and moderate income households, and sufficient sites shall be
14 provided for low and moderate housing in agricultural areas for the
15 projected need for rural and farmworker housing as shown in the data
16 and analysis supporting this Comprehensive Plan.
- 17 **Policy 4.7.1:** Sites for multi-family low and moderate income housing projects
18 shall be promoted and allowed in agriculture area, and in areas of
19 high and medium density consistent with the Future Land Use
20 Element and the locational standards contained in Housing Element
21 Objective 4.1 and its policies.
- 22 **Policy 4.7.2:** By September 2010, the County shall require all new agricultural
23 developments to provide analysis on the housing needs of their
24 farmworkers/laborers in order to provide adequate safe and sanitary
25 housing.
- 26 **Policy 4.7.3:** Utilizing data from the Shimberg Center for Affordable Housing and
27 IFAS, the County will implement a program to assist the private
28 sector in providing affordable housing for very-low, low, and
29 moderate income households.

V. Recreation and Open Space Element Goals, Objectives & Policies

1 INTRODUCTION

2 The purpose of the Recreation and Open Space Element of the Comprehensive Plan
3 is the establishment of a system of public and private recreation and open space sites which
4 are available to the public. This Element is to recognize existing deficiencies in such space,
5 and to plan for the needs of projected future growth.

6 The Data Analysis, the support documentation for the Comprehensive Plan,
7 inventoried existing public and private recreation sites, facilities and open spaces available
8 to the public. The Data Analysis also analyzed the current adequacy of these sites, facilities
9 and open spaces, and projected future needs. It is from the conclusions of the Data Analysis
10 that the Goals, Objectives, and Policies of this Recreation and Open Space Element are
11 developed.

12 Since the original adoption of its Comprehensive Plan in 1991, Hendry County has
13 been in the process of developing the following parks:

14 *Bob Mason Waterfront Park* — The Bob Mason Waterfront Park, funded in part by
15 a grant from the Florida Recreation Development Assistance Program (FRDAP), is
16 located on a riverfront parcel of land leased from the South Florida Water
17 Management District (SFWMD) for a period of 25 years. The 2.38 acre park on the
18 Intracoastal Waterway (C-43 Canal/Caloosahatchee River) features a floating
19 sundeck, concrete walk and gangway, restroom facility, shuffleboard courts,
20 accessible, fenced modular play system; picnic tables; and off-street parking with
21 handicapped ramp. The park is located at 303 North River Road (CR 78), LaBelle,
22 Florida. The County considers this park to be a community park. The entire park is
23 specially designed to be ADA accessible.

24 *Hendry/LaBelle Community Sports Park* — The Hendry/LaBelle Community Sports
25 Park was created in 1995. The Board of County Commissioners donated 6.08 acres
26 of land to the Hendry/LaBelle Recreation Board and there was a community contest
27 to name the park. The first and only recreational elements in the park are two
28 basketball courts. With grant funding provided by the FRDAP, Hendry County will
29 be adding the following elements to the park: 1600 foot paved fitness trail with nine
30 exercise stations; fenced modular play system; racquetball/handball court; covered
31 pavilion; picnic tables; refurbished basketball courts; and demonstration gardens.
32 This park is also considered a community park, located at 1100 Forestry Division
33 Road, LaBelle, Florida. The entire park is specially designed to be ADA accessible.

34 *Goodno Historical Recreational Trail* — The Goodno Historical Trail is a proposed
35 project located on a 12 mile section of abandoned railroad bed which spans Glades
36 and Hendry Counties. The Glades County section runs from the Intracoastal
37 Waterway south to SR 80 and in Hendry County SR 80 south to Sears Road, two
38 miles east of SR 29. This proposed project will create a non-motorized recreation
39 trail designed for bicyclists, hikers, and equestrians. The County has received a grant

1 from the Department of Community Affairs, Sustainable Lake Okeechobee Initiative,
2 to develop an ecotourism assessment of the trail and the FDOT has included this
3 project in their 5-year plan to stabilize the railroad bed and resurface the timber
4 bridges. (FDOT District One provided funding for the Lake Okeechobee Scenic
5 Trail.)

6 Hendry County proposes to apply for FRDAP awards each year; the funding is
7 available from the FDEP. The County is allowed two open projects each funding period.
8 These funds can be used to acquire park land, improve existing recreational facilities, or
9 develop recreational sites. The next project will be in East Hendry County in the
10 Clewiston/Hooker's Point area.

11 **CONCLUSIONS FROM THE DATA ANALYSIS**

12 *Community Parks*

13 By 1994, community parks comprised roughly 443 acres of recreational facilities in
14 the County. The Port LaBelle Golf Course comprises over 65% of the land designated as
15 community parks. Because of its varied activities the County has deleted this facility from
16 the community park category. The facility is now categorized as a regional park which also
17 serves Glades County. By eliminating this 289 acre site from the community park facilities,
18 there will be a need for additional community type recreational facilities, specifically, the six
19 acre site presently known as the Hendry/LaBelle Community Sports Park.

20 *Undeveloped Parks*

21 Through the FRDAP, the County was able to secure funding to purchase a six acre
22 tract that has been proposed for a future park facility in the South LaBelle area. Another
23 facility under consideration for improvement contains approximately 13 acres. It has been
24 identified for a community park and is located south of Banyan Village. No improvements
25 have been built on this facility at the present time.

26 The inventory of recreation and open space acreage conducted in the Data Analysis
27 is summarized as follows:

28 **RECREATION AND OPEN SPACE 1998 (ACRES)**

Area	Neighborhood Park	Community Park	Regional Park	Total
Unincorporated County	28.5	58.8	289.0	376.3
Clewiston	20.3	230.4	0.0	250.7
LaBelle	10.0	10.5	0.0	20.5
Total	58.8	299.7	289.0	647.5

ADDITIONAL RECREATION ACREAGE NEEDS*

Area	Neighborhood Parks		Community Parks		Regional Park	
	2000-2005	2006-2010	2000-2005	2006-2010	2000-2005	2006-2010
Countywide	8.9	3.1	10.1	3.5	479	35.32
Unincorporated County	20.7	2.9	None needed During Planning Period			
Urban Area	11.6	4.4				
Seasonal Total	1.0	4.6				

*Assumes appropriate acreage added in each period.

Source: Department of Environmental Protection, Division of Recreation and Parks *Outdoor Recreation in Florida*, 1994.

As can be seen in the above tables, by deleting the Port LaBelle Golf Course from the community parks category, this creates a need for additional community park facilities in Hendry County. It should also be noted that there will be a deficiency in neighborhood parks in the next planning period.

GOALS OBJECTIVES AND POLICIES

GOAL: To achieve and maintain a publicly accessible recreation and open space system in Hendry County for the benefit of all residents and visitors.

OBJECTIVE 5.1: **LEVEL OF SERVICE.** Ensure adequate acreage for recreational land to meet the present needs and future demands of Hendry County. For the purposes of this objective, which shall be achieved by undertaking the activities described in the policies below, needs shall be based on combined incorporated and unincorporated population and facilities to meet these needs shall include municipal and County facilities.

Policy 5.1.1: Community Parks - On a county-wide basis community park acreage shall be no less than 2.0 acres per 1,000 of the official Hendry County population count or estimate.

Policy 5.1.2: Neighborhood Parks - The standard for this park acreage shall be based on the urban population of Hendry County. On an urban population basis, neighborhood park acreage shall be no less than 1.75 acres per 1,000, and no less than 2.0 acres per 1,000 of the official urban population count or estimate by the end of 2010.

Policy 5.1.3: Total Park Acreage - On a countywide basis, the total park acreage in Hendry County shall be no less than 4.0 acres per 1,000 of the estimated countywide population. The estimated countywide

1 population shall be that published in the latest edition of the Florida
2 Statistical Abstract.

3 **Policy 5.1.4:** The total population to be served by recreation sites and facilities
4 shall be based on the total of resident and one-half of the additional
5 seasonal population.

6 **Policy 5.1.5:** **REGIONAL PARK** - An area of natural or ornamental quality for
7 outdoor recreation, such as picnicking, boating, fishing, horseback
8 riding, hiking, biking, golf course, trails, swimming, camping, tennis,
9 basketball, and like sports. This type of facility should be within one
10 hour driving time. The standard for this park shall be no less than 25
11 acres per 1,000 of the official population with a desirable size not less
12 than 250 acres.

13 **OBJECTIVE 5.2:** **PUBLIC ACCESS.** Ensure public access to all recreation sites in
14 Hendry County.

15 **Policy 5.2.1:** All parks and recreation sites owned by the Hendry County
16 government shall be open to the public.

17 **Policy 5.2.2:** Reserved.

18 **Policy 5.2.3:** The County shall continue to require in its Land Development
19 Regulations that at least a portion of new recreation developments,
20 and recreation sites in other new developments, be open to the public.

21 **Policy 5.2.4:** Reserved.

22 **Policy 5.2.5:** The existing access points to the Caloosahatchee River and Lake
23 Okeechobee are as shown on the Future Land Use Map. The County
24 shall maintain public access to those water bodies, and shall evaluate
25 the feasibility of providing additional access to the Caloosahatchee
26 River for the purpose of fishing and other recreation by 2010.

27 **OBJECTIVE 5.3:** **FACILITIES IN RECREATION AREAS.** The County shall ensure that
28 adequate facilities are provided in all publicly owned parks and
29 recreation areas. This shall be accomplished by undertaking the
30 activities described in the policies below.

31 **Policy 5.3.1:** Reserved.

32 **Policy 5.3.2:** Reserved.

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land holdings to determine which are potentially appropriate for open space preservation.

Policy 5.6.3:

By the end of 2001 negotiate with the South Florida Water Management District concerning the availability and development of a fishing and passive recreation area along the L-1, L-2, and L-3 levee and canal areas in eastern Hendry County.

**VI. Environmental Services Element
Goals, Objectives & Policies**

VI. ENVIRONMENTAL SERVICES ELEMENT**1 INTRODUCTION**

2 The purpose of this Environmental Services Element (sanitary sewer, solid waste,
3 drainage, potable water, and natural groundwater aquifer recharge) is to provide for necessary
4 public facilities and services correlated to future land use projections. The Hendry County
5 Comprehensive Plan contains an Environmental Services Element, which includes all of
6 these sub-elements.

7 Because of the wide divergence among the types of facilities included in this overall
8 Element, this Element handles each topic as a major sub-element. These are presented in
9 separate sub-element sections broken down in the following order:

- 10 A. Sanitary Sewer
- 11 B. Potable Water
- 12 C. Solid Waste
- 13 D. Drainage
- 14 E. Natural Groundwater Aquifer Recharge

15 Each sub-element has an introduction, a section on conclusions from the Data
16 Analysis, and Goals, Objectives, and Policies.

17 The Data Analysis, the support documentation for this Comprehensive Plan, also
18 analyzed each of the topics as a separate sub-element corresponding directly to the structure
19 of this Element. Most of the data and information for this Element were available to support
20 the analyses for these topics, but some data and information were not available or not yet
21 existing. These data and information constraints are noted in the individual sub-elements,
22 and the need for the data and information is included in the Goals, Objectives, and Policies
23 presented in the final sections of each sub-element.

24 A. SANITARY SEWER**25 INTRODUCTION**

26 The purpose of this sub-element for Hendry County is to plan for future development
27 relative to the availability of wastewater collection, treatment and disposal. Since 1994,
28 Hendry County has acquired the former General Development Utilities (GDU) centralized
29 public sewer facilities also known as Port LaBelle. The service area is rather limited because
30 it is restricted to the Port LaBelle development.

31 CONCLUSIONS FROM THE DATA ANALYSIS

32 The Data Analysis inventories and evaluates the major public and private sanitary
33 sewer systems, and projects future needs. There are various small package treatment
34 facilities serving special purposes such as mobile home and RV parks, and agricultural labor

VI. ENVIRONMENTAL SERVICES ELEMENT

1 camps. These facilities serve the purpose of collecting, treating and disposing of wastewater
2 for their sites, but they are confined to specific uses. The future impacts of these existing
3 plants on future development in Hendry County will be negligible.

4 The focus in the Data Analysis is on the former GDU sanitary sewer systems in Port
5 LaBelle which primarily serves this development. The existing system has the potential to
6 serve future development in Hendry County possibly including parts of the unincorporated
7 area in the future.

8 The City of Clewiston has a permitted sewer treatment capacity of 1.5 MGD. Current
9 operating capacity is at approximately 1.3 MGD, with an average daily flow of 1.22 MGD.
10 This leaves an available remaining capacity of 0.28 MGD, which is insufficient to serve the
11 projected population. Plans to expand the existing facility are being reviewed and should be
12 implemented by the fiscal year 2000. The expansion will include a 1,000,000 GPD upgrade
13 which would increase the capacity to 2.5 MGD. This facility would serve the projected
14 population to 2020.

15 The sanitary sewer system in the City of LaBelle has a design capacity of 220,000
16 GPD, and an average daily flow of 180,000 GPD, leaving an excess capacity of 40,000 GPD.
17 On-site septic tank systems have a history of working well in many parts of the City of
18 LaBelle, and only about 24% of the City's land area is served by sanitary sewer. This system
19 is deemed adequate to serve the projected population through the year 2010, given that it is
20 capable of being supplemented by septic tanks in soils with rather high suitability for septic
21 tank use. The commercial and industrial users make up a substantial portion of the
22 customers for the LaBelle system.

23 The Port LaBelle sewer system is owned by Hendry County and the development
24 encompasses approximately 10,000 acres. The design capacity of the Port LaBelle treatment
25 system is 500,000 GPD, with an average daily flow of 130,000 GPD. Presently, there are
26 1,818 connections with an average daily flow per person of 75 caps. The Port LaBelle
27 system is deemed adequate for the existing population and can serve an additional 823
28 residents, but has the potential to be upgraded as the community grows. Port LaBelle is
29 essentially self-supporting with sewer service, with some areas utilizing septic tanks until
30 densities justify extending the central collection system. The other sanitary sewer system
31 serving unincorporated Hendry County is the Hendry County Correctional facility. The
32 design capacity of the treatment plant is 300,000 GPD.

33 While there are no specific records of this number of septic tanks in the County, it
34 is estimated that approximately 5,200 residents are served by on-site septic tanks.

35 GOALS, OBJECTIVES AND POLICIES

36 GOAL 6.A: To provide for environmentally efficient, economically feasible
37 wastewater systems that fulfill the policies and desires of Hendry
38 County and requirements of all regulatory agencies.

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OBJECTIVE 6.A.1: Adopt acceptable Level of Service Standards for the sanitary service areas of the County to ensure that adequate removal and disposal of wastewater is available for both current and future population demands and coordinate with service providers to remove existing sanitary sewer system deficiencies.

Policy 6.A.1.1: The adopted Level of Service Standard for determining the availability of adequate capacity for proposed developments in areas where a centralized sewer system is available shall be a minimum of 115 gallons per person per day and 75 gallons per person per day for the Port LaBelle system. For development served by septic systems, compliance with state regulations shall be the measure of adequate level of service.

Policy 6.A.1.2: Appropriately designed septic tanks or package treatment plants may be utilized to support development in areas where centralized sewer systems are not available or cost effective, as long as the soils are adequate to support such alternative systems. Adequacy of soils shall be determined using applicable state standards for septic systems.

Policy 6.A.1.3: Reserved.

OBJECTIVE 6.A.2: Within the County's Five-Year Capital Improvement Plan, areas identified for sewer line connection shall be coordinated in a manner to ensure capacity is available in high growth areas and some unincorporated areas near Clewiston remain a priority over the next five years.

Policy 6.A.2.1: The County will continue to coordinate with the City of Clewiston to assure that extensions are made in areas of greatest growth and in areas where the soils are least capable of supporting septic tanks. This coordination shall include, but is not limited to initiatives to be made by the County to share land use information with the City, and an initiative to review soils data (as it relates to sewer needs). The County shall request the opportunity to review the City's capital improvements plans and shall provide comments and recommendations.

OBJECTIVE 6.A.3: The County shall maximize use of existing sewer facilities and discourage urban sprawl with infill development. In addition, limit the extension of sewer service to areas designated for urban development on the Future Land Use Map. This Objective shall be implemented through the following policies:

VI. ENVIRONMENTAL SERVICES ELEMENT

Policy 6.A.3.1:

The Future Land Use Element and Map allows the greatest density and the most flexibility for development in the areas near the Cities where sewer facilities are available, or are more feasible for sewer extensions than the more remote areas.

Policy 6.A.3.2:

The County, as per the data and analysis of its Evaluation and Appraisal Report, shall endeavor to halt the negative impacts of rural sprawl (defined as existing antiquated subdivisions without full infrastructure) by offering existing residents the opportunity to have needed infrastructure through such financing mechanisms as Municipal Service Taxing Units (MSTUs) and Municipal Service Benefit Units (MSBUs).

These special taxing districts are created by the County to use the tax money collected in the identified district specifically for infrastructure improvements within the district.

B. POTABLE WATER**INTRODUCTION**

The purpose of the Potable Water Sub-element of the Comprehensive Plan is to address the existing deficiencies, the coordination of extensions and capacity increases, the maximization of use of existing facilities to discourage urban sprawl, and the conservation of potable water resources.

In addition to the sanitary sewer system acquired by the County, a potable water facility was also acquired. This facility was also owned by General Development Utilities (GDU). Like the sanitary sewer system, the service is limited because of its location. Presently, only residents in the Port LaBelle area receive service. Small potable water systems are located in the other areas of the County such as in mobile home parks and RV parks. Currently there are 1,428 customers being served by the Port LaBelle facility.

The following section contains the conclusions drawn from the Data Analysis. The final section of this sub-element is the Goals, Objectives, and Policies pertaining to potable water in Hendry County.

CONCLUSIONS FROM THE DATA ANALYSIS

According to the Southwest Florida Water Management District (SFWMD), Hendry County's population has increased by 32% from 22,393 in 1985 to 29,587 in 1995 (U.S. Bureau of the Census, 1998), and is projected to grow to 42,700 by 2020 (BEER, 1998). Hendry County is one of the fastest growing counties in agricultural production in Florida, especially in citrus. It is anticipated that future growth in citrus acreage will take place, but at a much slower rate than was experienced during the 1984 to 1992 period.

The centralized potable water systems in Hendry County are the Cities of Clewiston and LaBelle, Port LaBelle, and the South Shore Water Association. Of the total 1995 population of 29,587 in Hendry County, 27,714 or 94%, were in the western portion of the County. Of these, 18,617 were served by public utilities. The Clewiston and South Shore Water Association systems do not have treatment systems, and purchase treated potable water for resale and distribution from the U.S. Sugar Corporation. The U.S. Sugar Corporation operates its treatment facility in the Clewiston area, and also provides potable water for its own sugar refining facility. Both LaBelle and Port LaBelle have treatment and distribution facilities. The demands for these utilities totaled 3.84 mgd (1,402 mgy) in 1995. The population served by these utilities is projected to grow to 28,365 by 2020, with average demands of 5.98 mgd (2,183 mgy), and 1-in-10 demands of 6.33 mgd (2,310 mgy).

The U.S. Sugar Corporation utilizes Lake Okeechobee as its main source of water, and utilizes the shallow aquifer as a backup supply. The LaBelle system draws its water from the shallow aquifer, and the Port LaBelle system uses the sandstone aquifer as its source.

VI. ENVIRONMENTAL SERVICES ELEMENT

1 The City of Clewiston provides potable water service within the City and to areas
2 immediately south and west of the City. The South Shore Water Association supplies
3 potable water to some of the area east of Clewiston. The City of LaBelle system serves the
4 City and some small areas outside the City.

5 The Hendry County water system serves areas of the Port LaBelle community, and
6 has the responsibility for serving all of the Port LaBelle community as it builds out. The
7 service areas of the major centralized potable water systems in Hendry County are shown in
8 Map 1.

9 There are various other small potable water systems in Hendry County serving special
10 purposes, such as mobile home and RV parks and agricultural labor camps. The Big Cypress
11 Seminole Reservation and the Hendry Correctional Institution. These smaller and special
12 facilities are not likely to impact or be impacted by future developments in Hendry County,
13 and are not analyzed in the Data Analysis.

14 The major suppliers of centralized potable water are the cities of Clewiston and
15 LaBelle. The impact of development on these systems are much greater because of the urban
16 character of the municipalities. Of the three systems in operation, Clewiston has the largest
17 facility. The water treatment facility in Clewiston is still owned by the U.S. Sugar
18 Corporation which through capacity allocation contracts provides water to the City and
19 outlying area. However, the City owns and operates the distribution facility in which water
20 is piped to customers. The average usage for the City is 0.20 MGD.

21 In addition to the City of Clewiston, South Shore Water Association (SSWA) also
22 distributes water to unincorporated areas in the County mainly the Hooker Point community.
23 Other areas include the City of Moore Haven in Glades County and South Bay in Palm Beach
24 County.

25 The Port LaBelle potable water system has an average flow rate of 0.18 MGD, and
26 serves an estimated population of 2,200. The design treatment capacity of the facility is 0.5
27 MGD, leaving an excess capacity of 0.32 MGD. This system is also deemed adequate to
28 serve the population for Port LaBelle through the planning period to the year 2005. Upgrades
29 to the existing system can be done to ensure available capacity for the projected population.
30 For residents who are not connected to centralized water, private wells are certainly an
31 option. As such, wells are widespread in the County. However, like septic tanks, accurate
32 records are not kept on private wells.

33 Urban demands are projected to remain low throughout the planning period in Hendry
34 County because agricultural water demands make up between 97% and 98% of the total
35 demand. Citrus irrigation demands make up about half of the agricultural requirements
36 through the year 2020. Demand is projected to grow by 9%, from 112,066 mgy in 1995 to
37 average demands of 122,239 mgy in 2020.

VI. ENVIRONMENTAL SERVICES ELEMENT

Urban and Agricultural Demand for Hendry County				
Urban and Agricultural Demands	(a) Assessed 1995 (mgy)	(b) Average 2020 (mgy)	(c) Percent Change (a) to (b)	(d) 1-in-10 2020 (mgy)
Urban				
Public Water Supply	1,402	2,183	56%	2,310
Domestic Self- Supply	610	829	36%	880
Recreational Self-Supply	267	267	0%	311
Total Urban	2,279	3,279	44%	3,501
Agricultural				
Citrus	55,608	63,406	14%	75,620
Vegetables, Melons, and Berries	3,303	3,633	10%	4,102
Field Crops (Sugarcane)	47,614	47,614	0%	56,793
Greenhouse/Nursery	3,062	4,129	35%	4,780
Miscellaneous (Cattle Watering)	201	179	-11%	179
Total Agricultural	109,788	118,961	8%	141,474
Total Urban and Agricultural Demands	112,067	122,240	9%	144,975
Source: SFWMD, District-wide Water Supply Assessment, July 1998.				

GOALS, OBJECTIVES AND POLICIES

GOAL 6.B: The County is to provide for the supply and distribution of potable water to consumers in Hendry County consistent with social, economic and environmental principles in order to maintain a safe, healthful and pleasing environment.

OBJECTIVE 6.B.1: The following Level of Service Standards for the potable water service areas of the County shall be used to ensure adequate potable water capacity consistent with both current and future population demands, to correct existing deficiencies, and to ensure that existing supplies are used efficiently to conserve same.

Policy 6.B.1.1: The adopted Level of Service Standard for determining the availability of adequate facility capacity for proposed development in areas where a centralized potable water system is available shall be:

Clewiston	370 gallons/person per day
Port LaBelle	92 gallons/person per day
LaBelle	212 gallons/person per day

VI. ENVIRONMENTAL SERVICES ELEMENT

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OBJECTIVE 6.B.3: The County shall maximize use of existing potable water facilities and discourage urban and rural sprawl with infill development.

Policy 6.B.3.1: The County shall continue to encourage potable water extensions in areas identified on the Future Land Use Map as high density residential as a way to discourage urban and rural sprawl.

C. SOLID WASTE

INTRODUCTION

The purpose of the Solid Waste Sub-element in the Comprehensive Plan is to address the future provision of solid waste disposal in Hendry County. The Data Analysis identified and analyzed the existing solid waste facilities and projected the future demand for solid waste disposal.

The following section highlights the conclusions from the Data Analysis. The final section of this sub-element includes the Goals, Objectives, and Policies for solid waste disposal in Hendry County.

CONCLUSIONS FROM THE DATA ANALYSIS

The Hendry County Landfill facility which served the entire County was closed in 1992. The facility was located in Pioneer Plantation and had a life span of 40 years; however, it only lasted 32 years. Hendry County was exempted for the 1988 Solid Waste Management Act which required a 30% reduction of solid waste going to landfills because of its population size. Since the closure of the Pioneer Plantation facility, the County has been transporting its solid waste to the Lee County landfill. An intergovernmental agreement was signed by both counties for the disposal of Hendry County's solid waste and will expire in 40 years, or until the Hendry-Lee County landfill is operational. Since the closing of the Hendry County Landfill, Lee County has been responsible for the disposal of Hendry County's solid waste. Table 1 shows the solid waste generated by Hendry County since 1993.

Table 1
Solid Waste Generation

Month	FY 92/93 Tons	FY 93/94 Tons	FY 94/95 Tons	FY 95/96 Tons	FY 96/97 Tons	FY 97/98 Tons
October	0.00	2,393.18	2,599.49	3,001.71	3,018.68	2,799.57
November	0.00	2,323.26	2,473.78	2,746.12	2,724.68	2,563.03
December	2,073.11	2,439.25	2,614.53	2,719.12	3,103.84	3,106.44
January	2,283.72	2,852.08	2,935.71	3,053.47	2,898.52	0.00
February	2,064.87	2,852.09	2,590.66	3,048.53	3,295.21	0.00
March	2,901.08	2,887.99	3,422.93	3,675.04	3,256.44	0.00
April	2,417.24	2,659.94	3,018.11	3,283.77	3,221.90	0.00
May	2,618.45	2,657.44	3,273.46	3,298.44	3,141.34	0.00
June	2,860.21	2,879.86	3,188.43	3,086.60	3,672.16	0.00
July	2,631.43	2,450.98	2,853.13	3,139.73	2,985.32	0.00
August	2,734.78	2,718.25	2,807.90	2,723.65	2,769.40	0.00
September	2,376.50	2,484.22	2,750.00	2,692.10	2,842.30	0.00
12 Month Total	24,961.39	31,598.53	34,528.13	36,468.26	36,929.79	8,469.04
Percent Increase*		7.69%	9.3%	5.59%	1.27%	-4.27%

VI. ENVIRONMENTAL SERVICES ELEMENT

	FY 92/93	FY 93/94	FY 94/95	FY 95/96	FY 96/97	FY 97/98
Month	Tons	Tons	Tons	Tons	Tons	Tons

* FY93/94 is based on 10 months' usage and FY97/98 is based on 2 months.

Source: Lee County Solid Waste Department, February 1998.

The proposed Hendry/Lee County Landfill is approximately 1,734 acres located off SR 82 in Hendry County. Development costs for the site will be borne by Lee County and Hendry County will be responsible for all fees associated with the facility's use. Transfer stations will be located in Clewiston and LaBelle. The new landfill site is expected to open by the year 2000.

The pounds per capita per day (PPCD) rate of solid waste disposal in Hendry County was 5.9 PPCD. This rate has remained relatively unchanged since the last planning period. However, the rate was expected to rise one percent per year. Through a county-wide recycling initiative, the anticipated rate increase for disposal waste has been kept in check.

GOALS, OBJECTIVES AND POLICIES

GOAL 6.C: To provide for the removal and disposal of solid wastes generated in Hendry County in a manner that is safe, cost effective, and environmentally sound.

OBJECTIVE 6.C.1: Hendry County shall ensure that there are acceptable level of service capacity standards maintained at the Hendry-Lee disposal facility, that meet State mandated sanitary landfill use reduction requirements.

Policy 6.C.1.1: The Level of Service Standard for the solid waste disposal capacity of sanitary landfill shall be 6.5 pounds per person per day.

Policy 6.C.1.2: Through recycling and other waste reduction methods, the County shall reduce waste disposal in the Hendry-Lee County landfill by 30% this planning period.

Policy 6.C.1.3: The County shall not approve a development order or permit for a proposed development which will exceed the Level of Service Standard of 6.5 pounds per person per day.

OBJECTIVE 6.C.2: Upon completion of the Hendry-Lee County landfill, Hendry County shall use the joint solid waste disposal facilities provided for by its interlocal agreement with Lee County for the disposal of solid waste generated within Hendry County.

Policy 6.C.2.1: Reserved.

- 1 **Policy 6.C.2.2:** Reserved.
- 2 **Policy 6.C.2.3:** No solid waste management facility (as defined by Chapter 403,
3 Florida Statutes) or hazardous waste facility shall be located within
4 the county unless (1) the primary source of wastes is from generators
5 within Hendry County OR (2) there is an interlocal agreement
6 recognized as valid by the Hendry County Board of Commissioners
7 between Hendry County and each jurisdiction from which wastes are
8 generated. In addition, any new solid waste management facility shall
9 be required to comply with the standards set forth in Hendry County
10 Ordinance 90-16.
- 11 **Policy 6.C.2.4:** All land use approvals and permits granted by Hendry County for the
12 joint Lee County/Hendry County solid waste landfill and related
13 facilities shall be conditioned upon compliance by the owner and
14 operators with the restrictions and conditions contained in any then
15 existing agreements between Lee County and owners of land within
16 one and one-half miles of the landfill site to the extent that such
17 agreements are consistent with the Comprehensive Plan, as adopted
18 and amended.
- 19 **OBJECTIVE 6.C.3:** Hendry County shall maximize the use of the shared solid waste
20 disposal facility in Lee County.
- 21 **Policy 6.C.3.1:** Hendry County shall develop programs to reduce quantities going
22 into the existing landfill. These programs may include, but are not
23 limited to, separation of land clearing debris from wastes disposed of
24 in the landfill, and improved recycling activities.
- 25 **Policy 6.C.3.2:** Hendry County shall participate in programs of composting and
26 resource recovery with Lee County under the interlocal agreement.

D. STORMWATER MANAGEMENT FACILITY**INTRODUCTION**

The purpose of the Drainage Sub-element of the Comprehensive Plan is to address existing deficiencies and the future needs in Hendry County. However, as a result of changes to Rule 9J-5.011, the title Drainage has been modified and replaced with Stormwater Management Facility.

Below, the conclusions found in the Data Analysis related to drainage in Hendry County. The final section includes the drainage Goals, Objectives, and Policies.

CONCLUSIONS FROM THE DATA ANALYSIS

The Data Analysis covered Hendry County's rainfall, soils, topography, and major man-made drainage facilities. Similar to most of Southwest Florida, Hendry County's land area is rather flat and poorly drained. Over the years considerable modification has been made to the drainage system in the County. Numerous canals have been excavated, and levees have been constructed. Drainage in the County has been affected by the major State and Federal Projects related to water flow into and out of Lake Okeechobee.

Since 1994, flooding in Hendry County has been somewhat of a problem. Most of which is in the form of standing water, primarily in the wet season from heavy rainfall. This type of flooding occurs as a result of saturated ground conditions from prolonged previous rainfall when infiltration is minimal. Flood protection in eastern Hendry County is provided by a network of canals designed to prevent water from entering the Everglades Agricultural Area. Flooding problems have occurred primarily in the Four Corners area which have been attributed to low density developments in low-lying areas without adequate flood protection.

Within northern Hendry County, a number of canals provide drainage including Townsend Canal, Roberts Canal, C-2, C-3, Hendry-Hilliard Forty-Foot, and Industrial that for the most part drain agriculture lands and provide irrigation sources. Most of the canals connect with the Caloosahatchee River, or to other canals connecting the River. In recent years the County has created a number of Municipal Service Benefit Units (MSBU), with part of the function of them to be localized drainage improvements. The drainage functions of most of these MSBUs currently include studies for improvements to be carried out in residential areas.

Hendry County does not have an adopted master drainage plan. A capacity assessment of the individual drainage facilities in the County has not been conducted, and there is no data available concerning demand on capacity.

Hendry County lies within the permitting and planning jurisdiction of the South Florida Water Management District (SFWMD). Drainage improvements proposed in the County require permits from SFWMD. SFWMD is carrying out drainage improvements in

VI. ENVIRONMENTAL SERVICES ELEMENT

1 the Four Corners area to help alleviate some of the flooding problems created by inadequate
2 flood protection.

3 **GOALS, OBJECTIVES AND POLICIES**

4 **GOAL 6.D:** To assure the control of current and future impacts to natural drainage
5 patterns which may increase uncontrolled storm water run-off to
6 unacceptable levels, and to maintain water quality standards.

7 **OBJECTIVE 6.D.1:** The County shall continue to implement the level of service standards
8 for stormwater management consistent with the South Florida Water
9 Management District.

10 **Policy 6.D.1.1:** For agricultural uses, the Level of Service Standard shall be the
11 requirements of the South Florida Water Management District and the
12 standards for the local water management district in which the
13 proposed agricultural use is located.

14 **Policy 6.D.1.2:** For all land developments the Level of Service Standard shall be a 25
15 year design storm of 24 hour duration and detention shall be such that
16 post-development runoff rates mimic pre-development runoff rates.
17 Water quality standards shall be established by the State Water Policy
18 as set forth in Rule 62, F.A.C. Individual residential lots shall not be
19 required to conform to a specific standard if the development in
20 which the lot is located meets the applicable standard.

21 Stormwater management systems shall also be required to meet the
22 design and performance standards established in Chapter 62, with
23 on-site treatment of the first inch of runoff to meet water quality
24 standards required by Chapter 62. Stormwater discharge facilities
25 must be designed so as to not degrade the receiving water body below
26 the minimum conditions necessary to assure the suitability of water
27 for the designated use of its classification as established in Chapter
28 62, F.A.C. The Land Development Regulations shall provide that all
29 water quality and discharge standards cited in this Policy shall be
30 applied to all development and redevelopment activities, irrespective
31 of exceptions which are contained in the cited regulations.

32 Individual single family and duplex lots which are not part of a
33 subdivision, or which exist as isolated vacant lots within developed
34 subdivisions (and would therefore constitute infill), shall utilize
35 standardized swales or other detention/retention facilities consistent
36 with area drainage requirements, based on professionally accepted
37 and applied engineering principals and standards, which ensure that
38 the adopted water quality and quantity standards are met.

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1 **OBJECTIVE 6.D.2:** The natural drainage patterns of Hendry County have been
2 considerably disrupted over the years, so that certain areas of
3 residential development do experience some problem with retained
4 water after storms. The desire is to reduce this deficiency by
5 continued coordinating activities with the SFWMD.

6 **Policy 6.D.2.1:** The County shall coordinate with the South Florida Water
7 Management District in correction of problems created by the major
8 state and federal drainage projects in the past. The District has
9 programmed correction of some of the problems.

10 **Policy 6.D.2.2:** Include drainage correction design in the design of any roadway
11 improvements undertaken in the future. Design of new roads or
12 major road improvements shall eliminate flooding conditions which
13 specifically result from past road construction, or which can be
14 relieved by new construction.

15 **Policy 6.D.2.3:** The County shall coordinate with the SFWMD and the U.S. Army
16 Corp of Engineers in the Restudy of the Caloosahatchee River to
17 ensure that the natural drainage patterns are not disrupted more than
18 necessary.

19 **OBJECTIVE 6.D.3:** Coordinate the extension of increase of capacity of drainage. This
20 shall be accomplished by carrying out the following activities.

21 **Policy 6.D.3.1:** As referenced in Policy 6.D.2.2 above, the County shall coordinate
22 the completion of drainage improvements with future road projects
23 where the two projects are tied together geographically. Design of
24 new roads or major road improvements shall eliminate flooding
25 conditions which specifically result from past road construction, or
26 which can be relieved by new construction.

27 **Policy 6.D.3.2:** Reserved.

28 **OBJECTIVE 6.D.4:** Maximize use of and protect existing drainage facilities and natural
29 drainage features. This shall be accomplished by undertaking the
30 following activities.

31 **Policy 6.D.4.1:** By the end of 2002, develop a County-wide master drainage and
32 water management plan, to coordinate the different drainage basins
33 and to coordinate the activities and standard of the local water
34 management districts. Where individual basins are functionally
35 related, plans for these basins shall be coordinated.

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1 **Policy 6.D.4.2:** Continue a maintenance schedule for the drainage works in the
 2 County as preventative measures to maximize use of the existing
 3 drainage.

4 **Policy 6.D.4.3:** The County shall continue to monitor stormwater drainage patterns
 5 to ensure that urban development will be designed to maintain pre-
 6 development flow characteristics and that local flooding conditions
 7 be corrected. Where drainage is to a natural drainage feature (such as
 8 a lake, stream or wetland), regulations shall provide for
 9 retention/detention as necessary to improve water quality and flow.
 10 These standards shall be based on applicable SFWMD standards.
 11 These regulations shall include provisions to ensure that natural
 12 drainage features are not modified or destroyed, except that modifica-
 13 tions which do not adversely affect overall drainage functions may be
 14 permitted when necessary for the stormwater management system to
 15 meet the level of service standards in this Plan. Buffers will be
 16 created between development and environmentally sensitive areas,
 17 including wetlands and other surface waters. The purpose of the
 18 buffer is to protect natural resources from the activities and impacts
 19 of development. The buffers shall function to:

20 a) Provide protection to the natural resources from intrusive
 21 activities and impacts of development such as trespass, pets,
 22 visual impacts, vehicles, noise, lights, and stormwater. The
 23 negative impacts of the uses upon each other must be
 24 minimized or, preferably, eliminated by the buffer such that
 25 the long-term existence and viability of the natural resources,
 26 including wildlife populations, are not threatened by such
 27 impacts and activities. In other words, incompatibility
 28 between the uses is eliminated or minimized and the uses may
 29 be considered compatible (which means a condition in which
 30 land uses or conditions can co-exist in relative proximity to
 31 each other in a stable fashion over time such that no use or
 32 condition is unduly negatively impacted directly or indirectly
 33 by another use or condition).

34 b) Types of buffers: The buffer may be a landscaped natural
 35 barrier, a natural barrier, or a landscaped or natural barrier
 36 supplemented with fencing or other man-made barriers, so
 37 long as the function of the buffer and the intent of this policy
 38 is fulfilled.

39 **OBJECTIVE 6.D.5:** Inventory and prioritize drainage facilities needs in the County. This
 40 shall be done by implementing the following activities.

VI. ENVIRONMENTAL SERVICES ELEMENT

- 1 **Policy 6.D.5.1:** The County shall, for drainage problems not being addressed by the
2 South Florida Water Management District, i.e., problems not related
3 to SFWMD facilities, carry out a survey and evaluation program for
4 drainage facilities in the County, and complete by the end of 1993.
- 5 **Policy 6.D.5.2:** Coordinate the survey and inventory mentioned above with the Cities
6 of Clewiston and LaBelle, the South Florida Water Management
7 District, and the local water management districts. Coordination may
8 include (but is not limited to) providing land use and development
9 data and by timing studies to operate in a like time frame.
- 10 **Policy 6.D.5.3:** Information resulting from the drainage inventory shall be used as
11 input to the master drainage and water management plan discussed in
12 Policy 6.D.4.1 above.

VI. ENVIRONMENTAL SERVICES ELEMENT**E. NATURAL GROUNDWATER AQUIFER RECHARGE****INTRODUCTION**

The purpose of the Natural Groundwater Aquifer Recharge Sub-element of the Comprehensive Plan is to address the protection of the functions of recharge areas within Hendry County.

The Data Analysis, the support documentation for this Comprehensive Plan, identifies and analyzes the natural groundwater aquifers in the County to the extent possible given existing available data and information. The conclusions from the Data Analysis are presented in the following section. The Natural Groundwater Aquifer Recharge Goals, Objectives, and Policies are included in the final section of this Sub-element.

CONCLUSIONS FROM THE DATA ANALYSIS

The primary source for data and information concerning natural groundwater aquifers is the South Florida Water Management District (SFWMD). According to the SFWMD, agricultural water demand accounts for 99% of the estimated total demand in Hendry County. The table below provides a breakdown of the estimated water demands within the County in 1995 as well as projections of future demand through 2020.

	(a) Assessed 1995 (mg/y)	(b) Average 2020 (mg/y)	(c) Percent Change (a) to (b)	(d) 1-in-10 2020 (mg/y)
Urban and Agricultural Demands				
Urban				
Public Water Supply	1,402	2,183	56%	2,310
Domestic Self- Supply	610	829	36%	880
Recreational Self-Supply	267	267	0%	311
Total Urban	2,279	3,279	44%	3,501
Agricultural				
Citrus	55,608	63,406	14%	75,620
Vegetables, Melons, and Berries	3,303	3,633	10%	4,102
Field Crops (Sugarcane)	47,614	47,614	0%	56,793
Greenhouse/Nursery	3,062	4,129	35%	4,780
Miscellaneous (Cattle Watering)	201	179	-11%	179
Total Agricultural	109,788	118,961	8%	141,474

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	(a) Assessed 1995 (mg)	(b) Average 2020 (mg)	(c) Percent Change (a) to (b)	(d) 1-in-10 2020 (mg)
Urban and Agricultural Demands				
Total Urban and Agricultural Demands	112,067	122,240	9%	144,975
Source: SFWMD, District-wide Water Supply Assessment, July 1998.				

The priority demand for the County's water supply stems from irrigated commercially grown crops such as citrus, sugarcane, vegetables, sod, cut flowers, and ornamental nurseries. Irrigation requirements for citrus comprise 42% of the total agricultural demand. About 60% of the citrus in Hendry County is permitted for microirrigation systems, which have a potentially high irrigation efficiency. Most of the remainder use seepage systems, which have a relatively low potential irrigation efficiency. The magnitude of water demand for citrus irrigation is such that even small percentages saved will result in significant decreases in demand.

Hendry County has more citrus trees than any other county in Florida, and citrus planting continues at a high rate. Due to higher density planting, Hendry had the third largest acreage planted citrus in the state, behind Polk and St. Lucie counties. Citrus acreage continuously increased from 16,200 acres in 1966 to 73,800 acres in 1990. Presently, there are approximately 99,770 acres of citrus planted in the County. This recent acreage boom is associated with the interregional movements of citrus from central to southwest Florida following the severe freezes in the mid-1980s. Hendry County citrus acreage is projected to grow to 147,200 acres by 2010.

There are three groundwater aquifer systems in the County: the Surficial, Intermediate, and Floridan Aquifer Systems. Because of the lack of advanced treatment, water in the Florida Aquifer System is too saline for most uses, leaving the Surficial and Intermediate Aquifer Systems as the primary sources of groundwater in the County. Map 2 shows the major resources within the County.

The Surficial Aquifer System consists of two aquifers: the water table aquifer and the lower Tamiami aquifer, separated by a confining zone. Due to the system's variable water-bearing characteristics, its susceptibility to drought stress, and its potential impacts to wetlands, the water table aquifer is not heavily used throughout the County. There are some isolated areas where intensive use of this aquifer occurs, however. LaBelle, for example, obtains its potable water supply from the water table aquifer.

The lower Tamiami aquifer is the most prolific aquifer in Hendry County. It supplies all of the groundwater for irrigation in the southeast County area. It is less prolific in the north County area, and in northwestern Hendry County, where the confining beds are absent or insignificant, the lower Tamiami is not a separate aquifer, but a part of the unconfined water table aquifer. Because it is semi-confined in nature, it is less susceptible to drought

VI. ENVIRONMENTAL SERVICES ELEMENT

1 stress than the water table aquifer. It is heavily developed in portions of the southeaster
2 Hendry County, however, and may be reaching its capacity there.

3 The Intermediate Aquifer System consists of two aquifers, the sandstone aquifer and
4 the deeper mid-Hawthorn aquifer. The sandstone aquifer is a moderately productive aquifer
5 that occurs in western Hendry County. Because it is less prolific than the lower Tamiami
6 aquifer, the sandstone aquifer is not able to support the same level of agricultural
7 development. Consequently, there are more severe water supply problems associated with
8 the sandstone aquifer in western Hendry County. Port LaBelle obtains its potable water from
9 the sandstone aquifer.

10 The mid-Hawthorn aquifer yields very small quantities of poor quality water in
11 Hendry County. It is not used as a source of water.

12 The Floridan Aquifer System contains a series of aquifers and producing zones. Some
13 of these zones have the capability to produce large quantities of water through flowing wells.
14 However, the quality of the water is poor. The Floridan Aquifer System is not used as a
15 source of water in Hendry County.

16 Hendry County is one of only two counties within the SFWMD that relies more
17 heavily on surface water than groundwater as a supply source. The Caloosahatchee River (C-
18 43) and Lake Okeechobee are the sources of water for much of northern Hendry County. The
19 U.S. Army Corp of Engineers (COE) controls stages on C-43 primarily for navigation. When
20 water withdrawn for irrigation results in a lowering of the stage, COE releases water from
21 Lake Okeechobee to restore the stage to navigable levels.

22 Presently, the COE and SFWMD are conducting a Restudy of the Caloosahatchee
23 River whereby water will be directed to areas such as Dade and Broward Counties to meet
24 future population needs. The impact of this Restudy will be significant because of
25 agricultural demands on the water supply. Water is drawn from the river or from the lake
26 through a series of canals, which also provide drainage for the northern portion of the
27 County. These canals include the Townsend Canal, Roberts Canal C-2, C-3, Hendry-Hilliard
28 Canal, Forty-Foot Canal, and Industrial Canal. Clewiston's potable water supply is
29 withdrawn from the Industrial Canal.

30 Potential future restrictions on the use of surface water as a supply source may force
31 greater reliance on groundwater as a water supply source. Increasing demand for
32 groundwater, as well as historical flood control and drainage practices, have caused local and
33 regional declines in groundwater levels. Groundwater declines are expected to increase in
34 the future, due to the projected increases in groundwater demands.

35 As mentioned earlier, the COE in conjunction with the SFWMD are conducting a
36 study, The Central and Southern Florida Project Comprehensive Review Study — or Restudy
37 —which involves a review of the region's water management system known as the Central
38 and Southern Florida, or C&SF Project. Congress authorized the C&SF Project in 1948 to

VI. ENVIRONMENTAL SERVICES ELEMENT

1 provide many benefits to the growing region. Flood control, water supply, water
2 management, recreation and prevention of saltwater intrusion are among its features. Over
3 a 20-year period, the U.S. Army Corps of Engineers and its federal and state partners built
4 an elaborate network of 1,000 miles of canals, 150 water-control structures, and 16 major
5 pump stations to route water through much of South Florida. The project is 50 years old and
6 needs to be modernized.

7 The C&SF Project encompasses approximately 18,000 square miles from Orlando
8 to the Keys. Major features include the Kissimmee River, Lake Okeechobee, the Everglades
9 Agricultural Area, the Water Conservation Areas, Everglades National Park, Big Cypress
10 National Preserve, the Caloosahatchee and St. Lucie Rivers, and Biscayne and Florida Bays.

11 There are three primary goals to the Restudy which include:

12 A. *Ecosystem Restoration:* The Restudy is intended to improve the natural
13 systems of the region ranging from Lake Okeechobee to the Florida Bay.
14 Lake Okeechobee should benefit from reduced extreme high and low water
15 levels which are harmful to the lake's ecology. The Caloosahatchee and St.
16 Lucie estuaries should benefit from fewer regulatory releases which send too
17 much fresh water to tide during heavy rains.

18 B. *Water Supply:* The Restudy should increase the amount of fresh water
19 available for all users; agriculture, the general population, and natural
20 systems. Presently, the canal system routes more than 1.7 billion gallons of
21 water a day on average to the estuaries, bays and the ocean. The Restudy
22 should capture some water that flows out to sea and store it in natural above-
23 ground storage areas, in the canal system, and underground. Wastewater
24 reuse also is being considered.

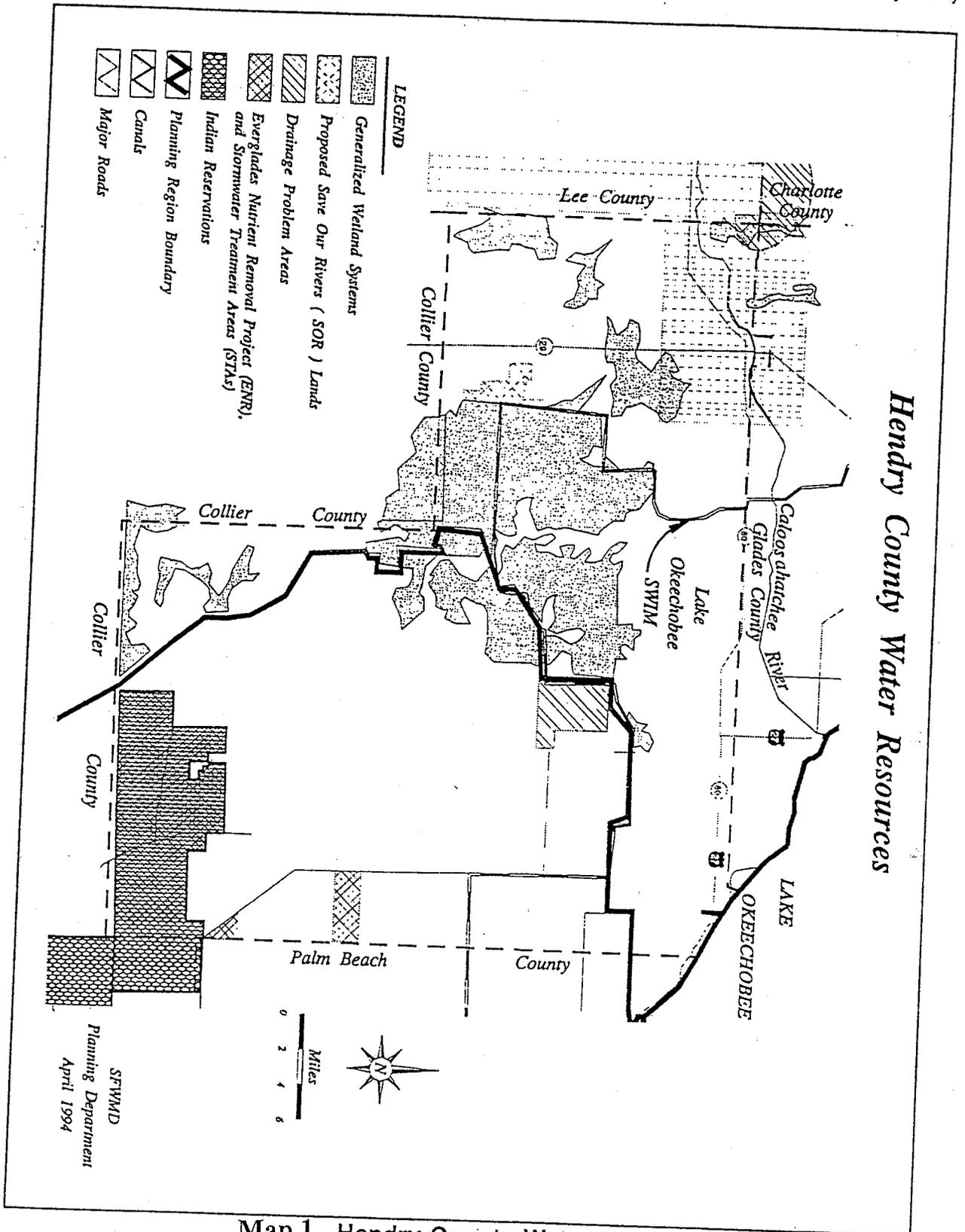
25 C. *Flood Control:* Flood protection could be enhanced as a result of increased
26 water storage. The C&SF Project proposes to provide flood control by
27 routing floodwaters to tide through its 1,000-mile canal network that links to
28 another 800 miles of smaller, locally-managed canals.

29 While the intent of the Restudy is commendable, major concerns have arisen from
30 the public. For agriculture growers, they want to be assured that the existing water source
31 will not be interrupted by the Restudy unless some mitigation is provided. Furthermore,
32 based upon the proposed 20,000 acres that will be needed in Hendry County for retention
33 ponds, the public is concerned about the affects on downstream estuaries and the effect on
34 the local tax rates resulting from lands that are no longer taxable. This Restudy while
35 important, may have some major consequences in the end. Conclusions cannot be drawn
36 until the Restudy is formally implemented and monitored. By the next planning period,
37 further data and information should be available.

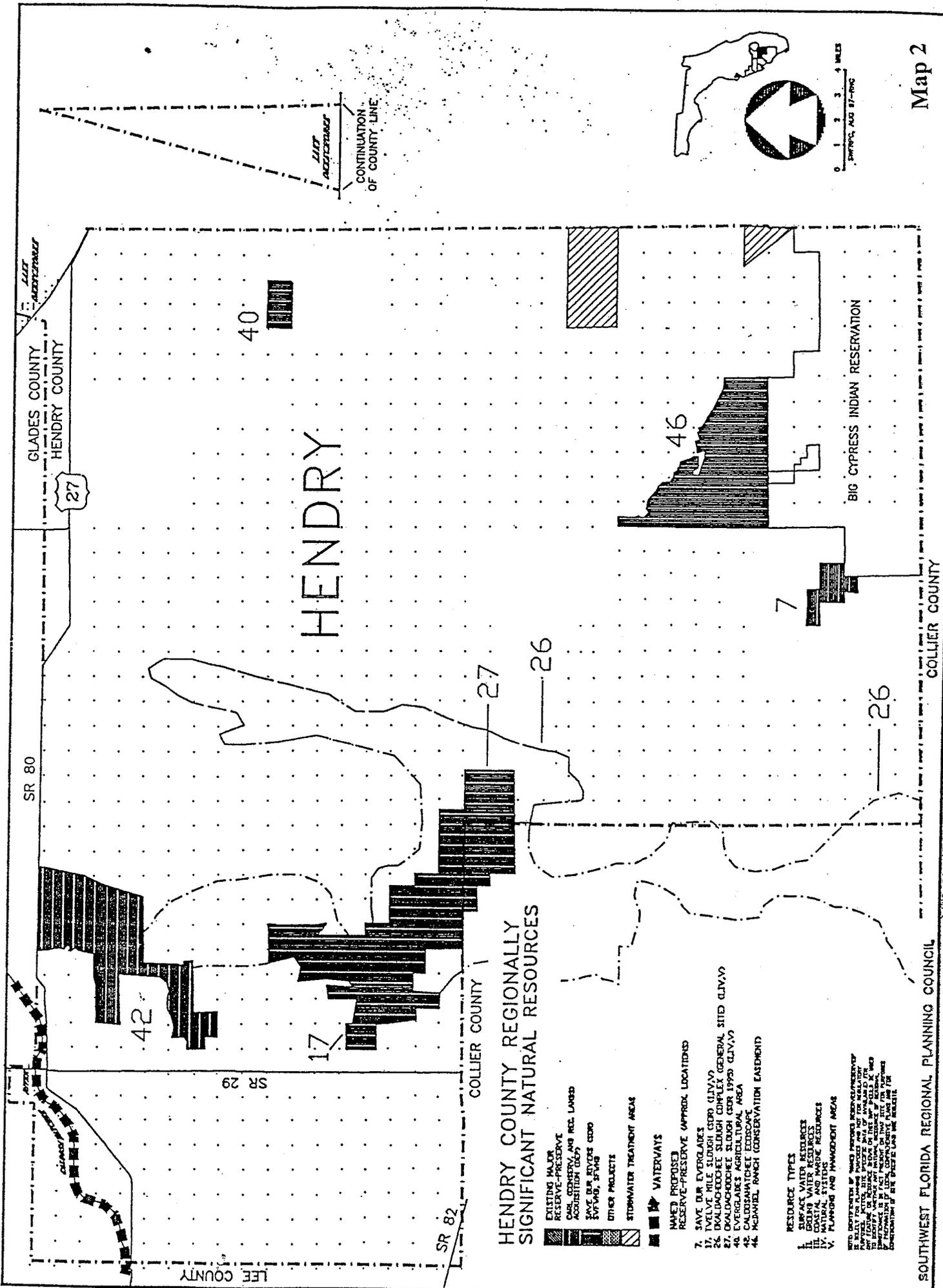
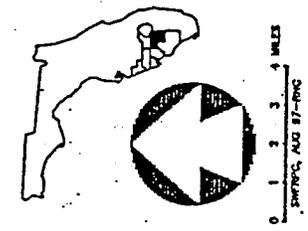
38 GOALS, OBJECTIVES AND POLICIES

VI. ENVIRONMENTAL SERVICES ELEMENT

- 1 a) Except within two miles of the existing city limits of LaBelle
2 or Clewiston, within areas identified pursuant to paragraph (b)
3 below as natural aquifer recharge areas, impervious area for
4 non-residential developments over five acres shall be limited
5 to 30 percent; development under five acres shall be limited
6 to 80%;
- 7 b) Within those areas underlain by the surficial aquifer system
8 as described in Technical Publications Document 88-12
9 published September 1988, by the South Florida Water
10 Management District as natural aquifer recharge areas,
11 impervious area for residential developments with densities
12 under two units per acre shall be limited to 30%; development
13 with densities of two units per acre or more shall be limited
14 to 80%;
- 15 c) The impervious area restrictions shall be used in conjunction
16 with stormwater retention requirements in order to ensure that
17 development within natural aquifer recharge areas does not
18 reduce aquifer recharge quality or quantity (both volumes and
19 rates) below pre-development conditions, and that subsurface
20 storage and flows simulate pre-development conditions.
- 21 **Policy 6.E.2.3:** Reserved.
- 22 **OBJECTIVE 6.E.3:** Upon the SFWMD identifying high and prime recharge areas for
23 aquifers, the County shall assist the District in protecting the source
24 of these aquifers.
- 25 **Policy 6.E.3.1** The County shall assist the SFWMD in its efforts to identify natural
26 recharge areas.
- 27 **Policy 6.E.3.2:** The County shall adopt the SFWMD Surficial and Intermediate
28 Aquifer Systems Map, which designates high and prime recharge
29 areas, as part of this Element and within the Conservation Element.



Map 1 Hendry County Water Resources



HENDRY COUNTY REGIONALLY SIGNIFICANT NATURAL RESOURCES

- EXISTING MAJOR RESERVE-PRESERVE
- CARL GENSHER, AND REL. LANDS ACQUISITION CORP.
- STATE OF FLORIDA CORP. SP-986, SP-987
- OTHER PROJECTS
- STORMWATER TREATMENT AREAS
- WATERWAYS

- NAMED PROPOSED RESERVE-PRESERVE (APPROX. LOCATIONS)**
- 7. BAYE, OUR EVERGLADES
 - 17. MILE SLUGH CTRD. (LIV/V)
 - 26. DALLAS/DOUGHERTY SLUGH CTRD. GENERAL SITE (LIV/V)
 - 27. DALLAS/DOUGHERTY SLUGH CTRD. (LIV/V)
 - 40. EVERGLADES AGRICULTURE AREA
 - 42. CALDISAWHATCHEE EDUCORAK
 - 46. MC-DANIEL RANCH (CONSERVATION EASEMENT)

- RESOURCE TYPES**
- I. BAYE WATERS RESOURCES
 - II. COASTAL AND MARINE RESOURCES
 - III. NATURAL SYSTEMS
 - IV. PLANNING AND MANAGEMENT AREAS
- NOT IDENTIFIED BY NAME PERIODS REPRESENTATIVE IS ONLY FOR PLANNING PURPOSES AND NOT FOR REGULATORY PURPOSES. THIS MAP IS NOT TO BE USED AS A BASIS FOR ANY LEGAL OR REGULATORY ACTION. THE STATE OF FLORIDA DOES NOT WARRANT THE ACCURACY OF THE INFORMATION OR THE DATA, COPIES, OR PRINTS. THE INFORMATION IS FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED FOR ANY OTHER PURPOSE.

GLADES COUNTY
HENDRY COUNTY

27

SR 80

42

SR 29

17

HENDRY

40

COLLIER COUNTY

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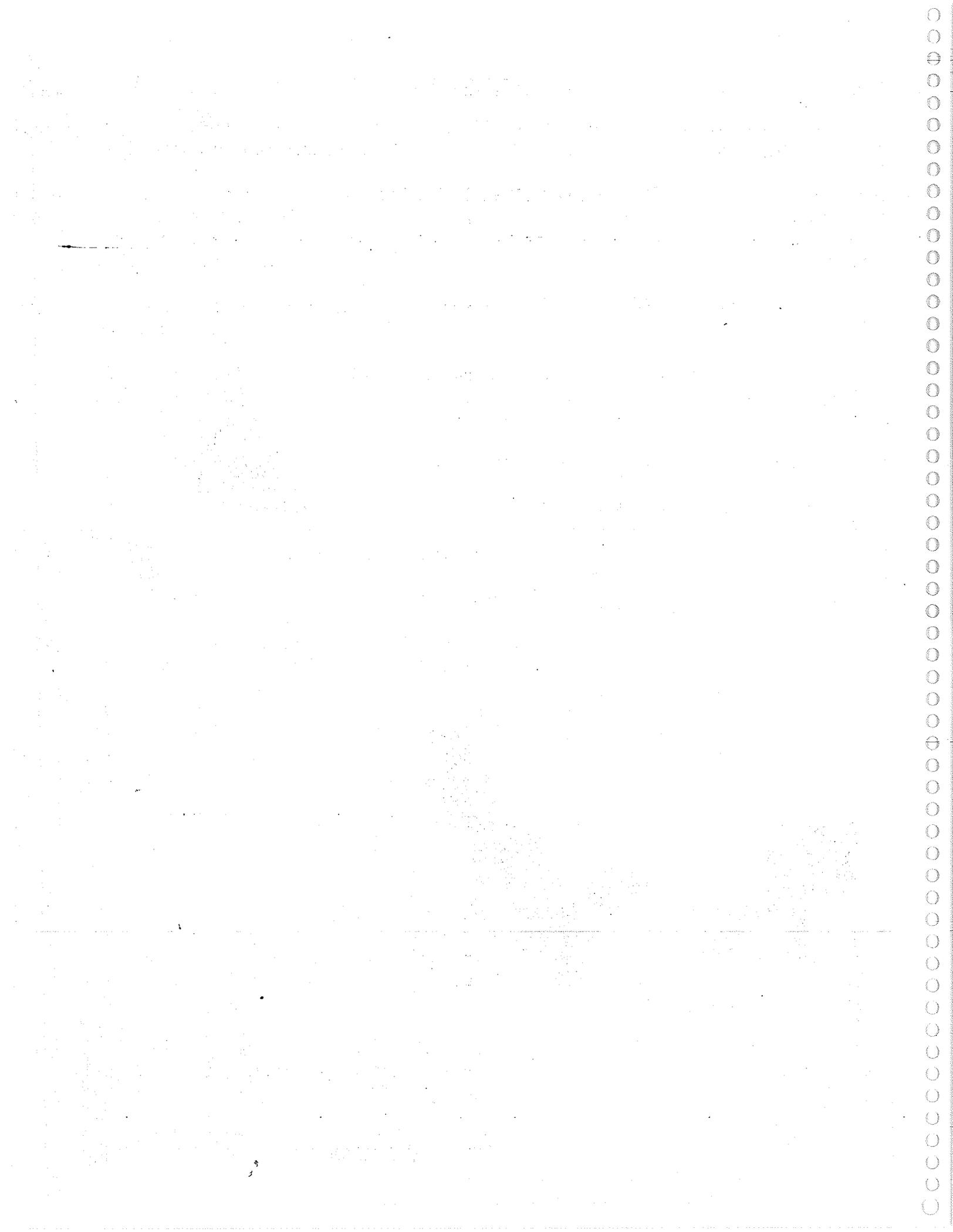
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LIV ACQUISITION
CONTINUATION OF COUNTY LINE





Sandstone Aquifer

Potential Recharge/Discharge for the Lower West Coast Planning Region: Collier, Hendry and Lee Counties



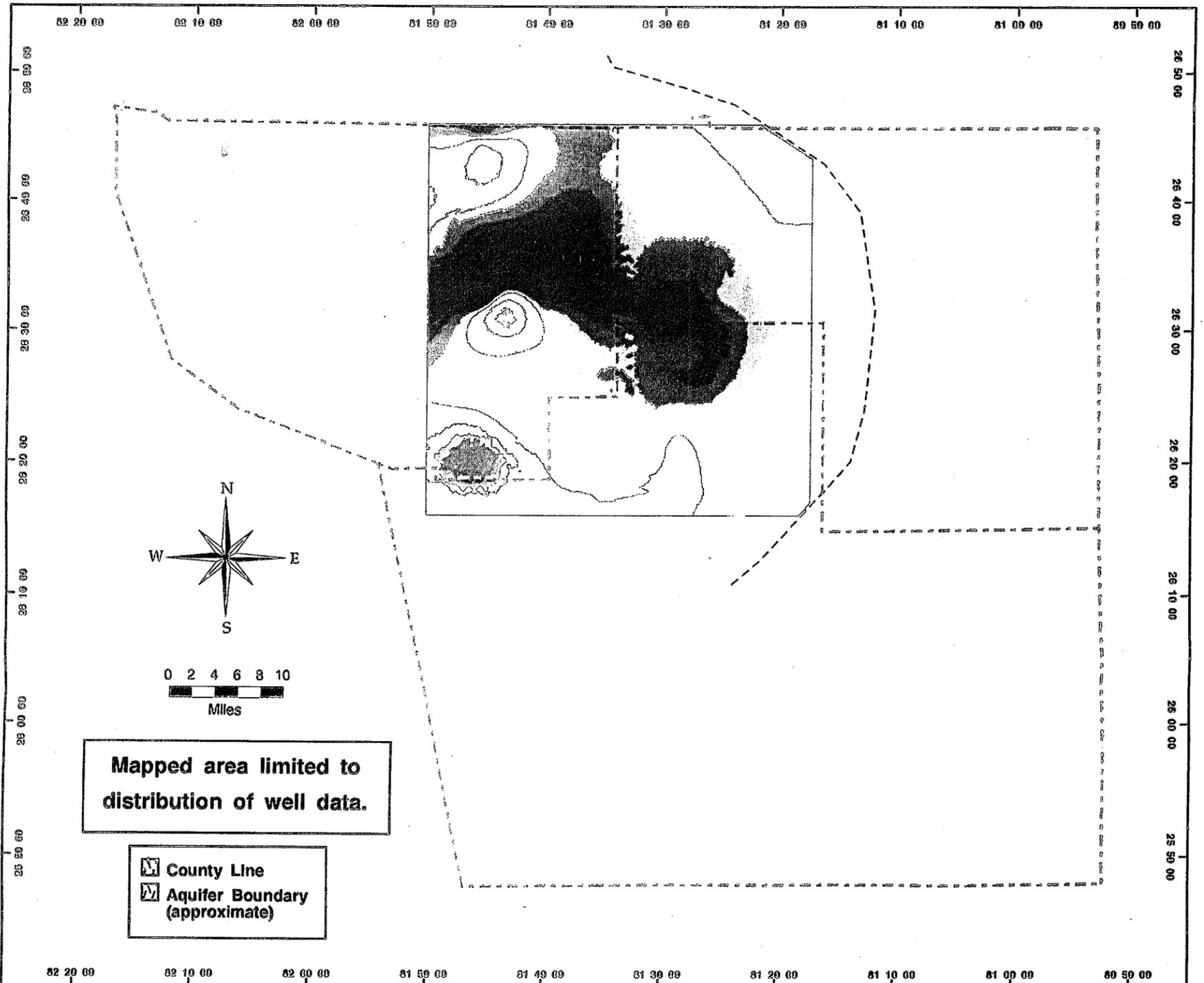
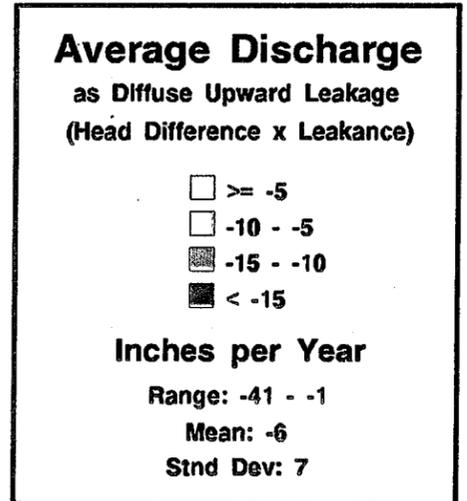
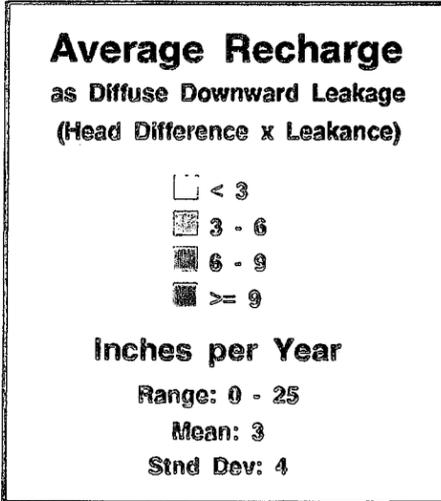
This recharge map was developed using the District's ARC/INFO geographic information system (GIS) software. Leakage rates were determined based on the regional hydraulic pressure differences (averaged over 1982) existing between the Sandstone aquifer and the overlying aquifer (lower Tamlam or unconfined Surficial), and modeled leakage estimates from the upper confining media separating these aquifer systems. A base year of 1982 was selected because of the close comparison between long-term average basin precipitation and total precipitation for that year. Map coverages portray regional assessments of leakage (recharge/discharge) within the semi-confined Sandstone aquifer of the Lower West Coast (LWC) planning region. As such, the map is intended for use as a regional planning aid for ground-water resource management. It is not intended for site-specific assessments.

Leakage is defined as the amount of ground water moving into or out of a confined aquifer through adjacent semi-permeable confining media, thus resulting in the recharge (gain) or discharge (loss) of water to the aquifer system. Rates are typically calculated as the product of hydraulic pressure (head) differences existing between the water bearing unit directly above the aquifer and the aquifer itself, and the leakage of the confining media.

Recharge to the Sandstone aquifer occurs in areas where the elevation of the overlying aquifer is higher than the elevation of the potentiometric surface displayed within the Sandstone aquifer. In these areas, water moves from the overlying aquifer in a downward direction to the Sandstone aquifer, moving through the upper confining media which separates the two.

In contrast, discharge from the Sandstone aquifer occurs in areas where the elevation of the potentiometric surface within the aquifer is higher than the elevation of the aquifer above. In these areas, water moves from the Sandstone aquifer in an upward direction, passing through the upper confining media to the overlying aquifer.

This map is Plate V of Technical Publication 85 - 02, (DRE 327), *Mapping Recharge (Infiltration/Leakage) throughout the South Florida Water Management District (SFWMD)*.





Surficial Aquifer System

Potential Precipitation Recharge and Excess Precipitation for the Lower West Coast Planning Region: Collier, Hendry and Lee Counties

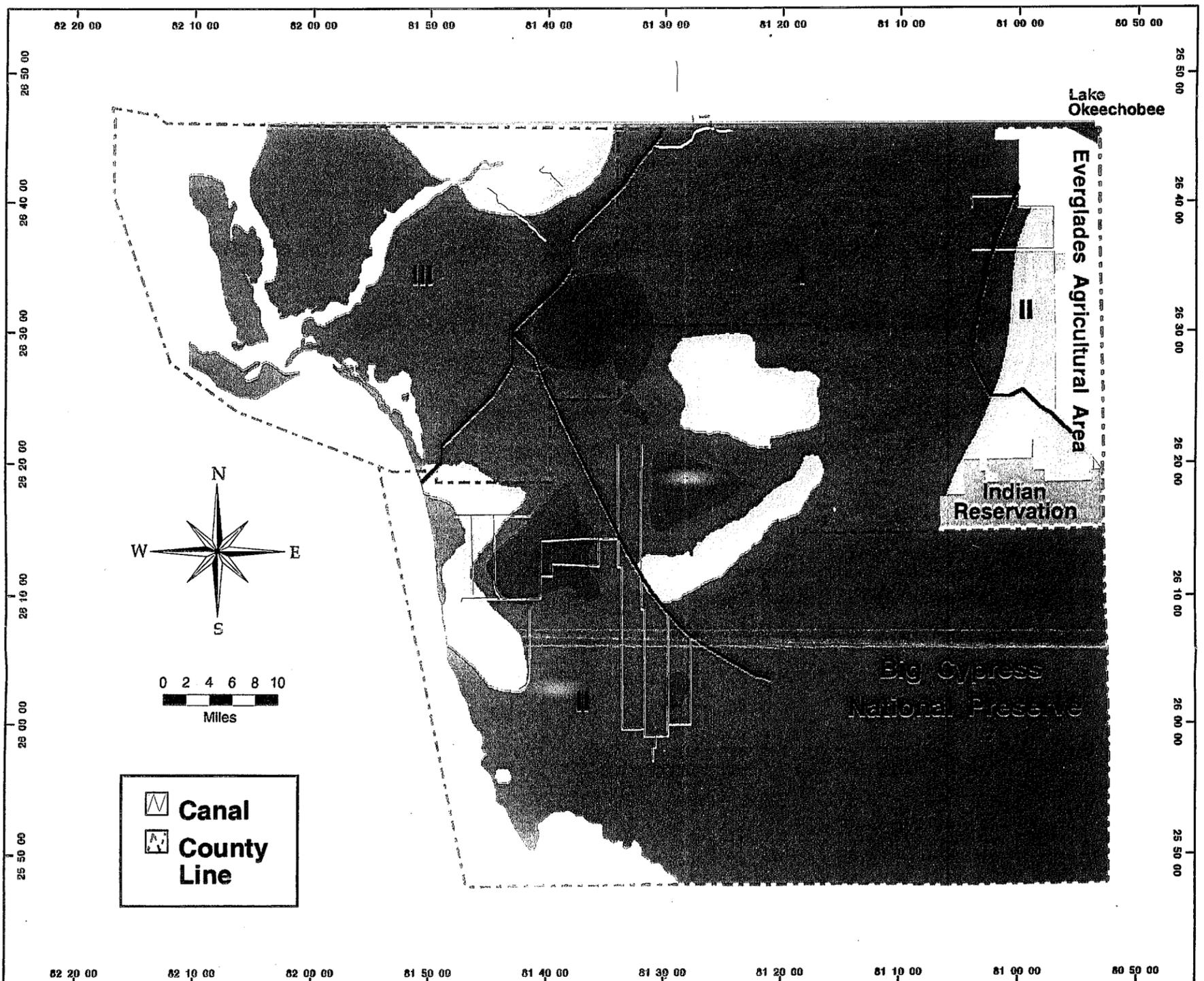
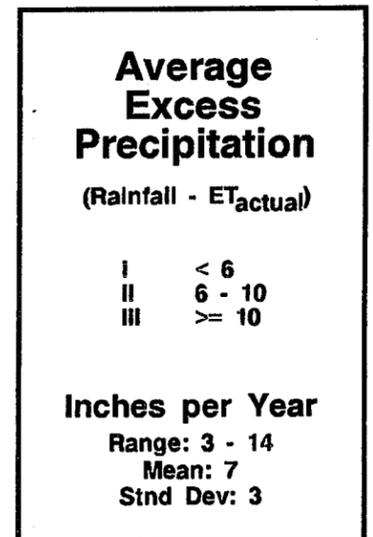
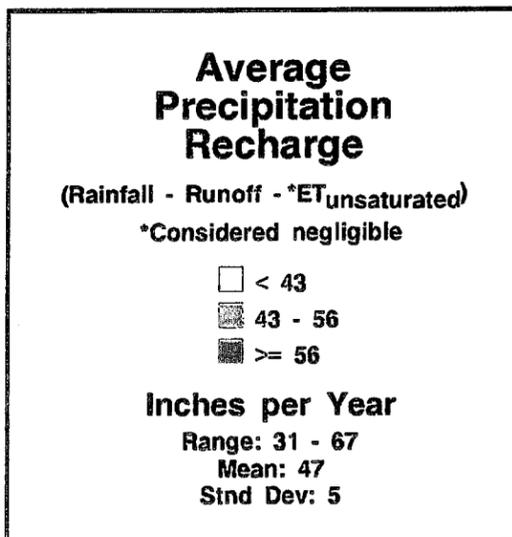


This recharge map was developed using the District's ARG/INFO geographic information system (GIS) software. Recharge rates were determined principally from data sets extracted from existing numerical ground-water flow models and standardized to reflect long-term average annual precipitation trends. Map coverages portray regional assessments of precipitation recharge and excess precipitation within the shallow unconfined Surficial aquifer system of the Lower West Coast (LWC) region. As such, the map is intended for use as a regional planning aid for ground-water resource management. It is not intended for site-specific assessments.

Precipitation recharge is defined as the amount of water derived from rainfall that infiltrates the ground surface, moving through the soil to the water table, thereby increasing ground-water storage. Rates are typically calculated as the result of rainfall minus runoff minus unsaturated evapotranspiration (ET) losses; although unsaturated ET loss, considered negligible as compared to saturated ET loss within south Florida, was not accounted for in the compilation of this map.

Precipitation recharge to the Surficial aquifer system occurs throughout its entire areal extent. However, excess precipitation varies spatially reflecting precipitation trends. Excess precipitation, defined as the difference between long-term average annual rainfall and actual evapotranspiration estimates, represents the amount of residual water potentially available for urban and/or rural supply; assuming runoff as an available component.

This map is Plate III of Technical Publication 95 - 02, (DRE 327), Mapping Recharge (Infiltration/Leakage) throughout the South Florida Water Management District (SFWMD).





Lower Tamiami Aquifer

Potential Recharge/Discharge for the Lower West Coast Planning Region: Collier, Hendry and Lee Counties



This recharge map was developed using the District's ARC/INFO geographic information system (GIS) software. Leakage rates were determined based on the regional hydraulic pressure differences (averaged over 1992) existing between the lower Tamiami aquifer and the overlying water table, and modeled leakage estimates from the upper confining media separating these aquifer systems. A base year of 1992 was selected because of the close comparison between long-term average basin precipitation and total precipitation for that year. Map coverages portray regional assessments of leakage (recharge/discharge) within the semi-confined lower Tamiami aquifer of the Lower West Coast (LWC) planning region. As such, the map is intended for use as a regional planning aid for ground-water resource management. It is not intended for site-specific assessments.

Leakage is defined as the amount of ground water moving into or out of a confined aquifer through adjacent semi-permeable confining media, thus resulting in the recharge (gain) or discharge (loss) of water to the aquifer system. Rates are typically calculated as the product of hydraulic pressure (head) differences existing between the water bearing unit directly above the aquifer and the aquifer itself, and the leakage of the confining media.

Recharge to the lower Tamiami aquifer occurs in areas where the elevation of the water table within the Surficial aquifer is higher than the elevation of the potentiometric surface displayed within the lower Tamiami aquifer. In these areas, water moves from the Surficial aquifer in a downward direction to the lower Tamiami aquifer, moving through the upper confining media which separates the two.

In contrast, discharge from the lower Tamiami aquifer occurs in areas where the elevation of the potentiometric surface within the aquifer is higher than the elevation of the water table above. In these areas, water moves from the lower Tamiami aquifer in an upward direction, passing through the upper confining media to the overlying unconfined Surficial aquifer system.

This map is Plate IV of Technical Publication 85 - 02, (DRE 327), Mapping Recharge (Infiltration/Leakage) throughout the South Florida Water Management District (SFWMD).

Average Recharge as Diffuse Downward Leakage (Head Difference x Leakage)

- < 7
- 7 - 14
- 14 - 21
- >= 21

Inches per Year

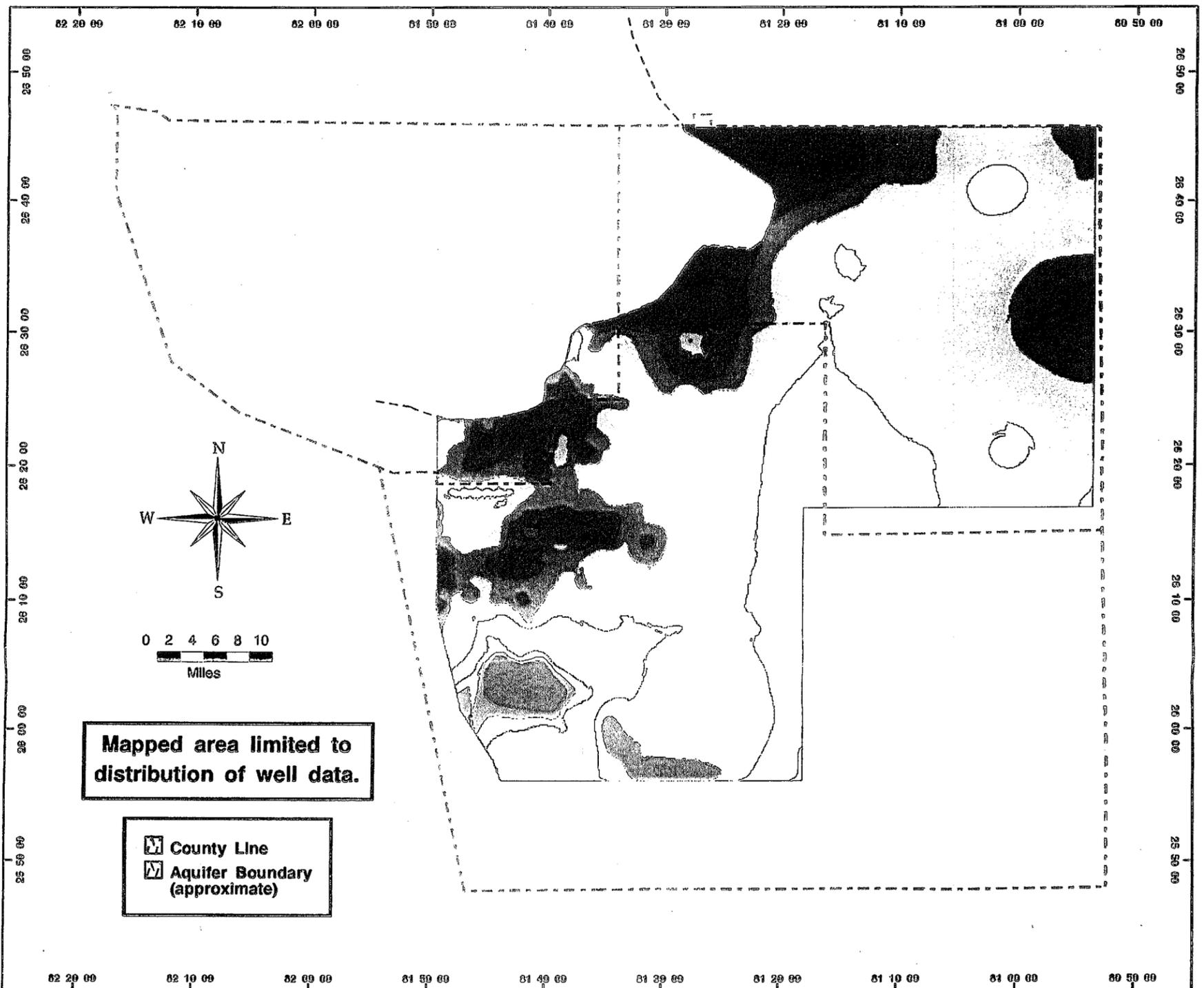
Range: 0 - 349
Mean: 7
Std Dev: 13

Average Discharge as Diffuse Upward Leakage (Head Difference x Leakage)

- >= -16
- 32 - -16
- 48 - -32
- < -48

Inches per Year

Range: -167 - -1
Mean: -16
Std Dev: 28





Surficial Aquifer System

Potential Precipitation Recharge and Excess Precipitation for the Lower West Coast Planning Region: Collier, Hendry and Lee Counties

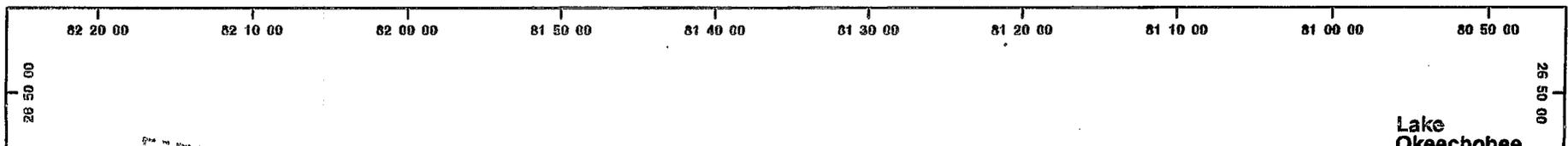
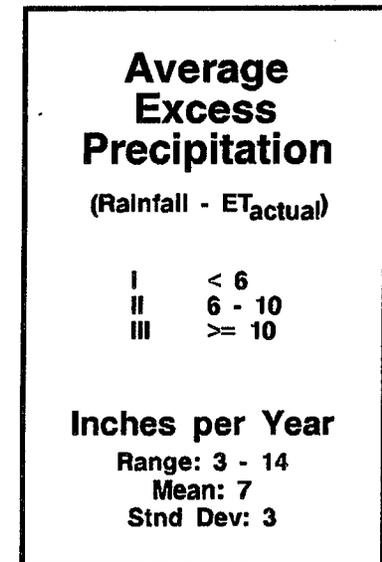
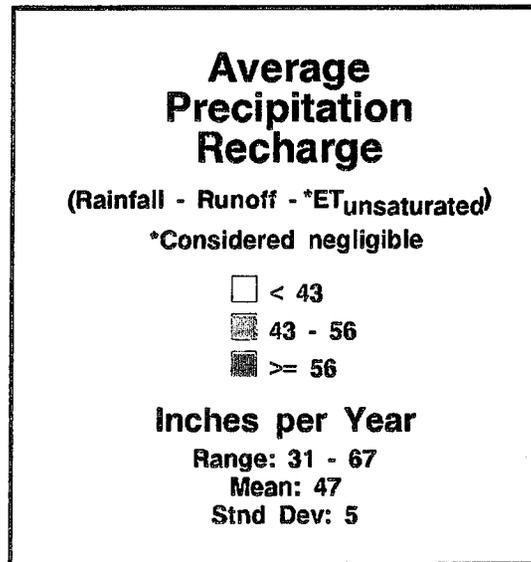


This recharge map was developed using the District's ARC/INFO geographic information system (GIS) software. Recharge rates were determined principally from data sets extracted from existing numerical ground-water flow models and standardized to reflect long-term average annual precipitation trends. Map coverages portray regional assessments of precipitation recharge and excess precipitation within the shallow unconfined Surficial aquifer system of the Lower West Coast (LWC) region. As such, the map is intended for use as a regional planning aid for ground-water resource management. It is not intended for site-specific assessments.

Precipitation recharge is defined as the amount of water derived from rainfall that infiltrates the ground surface, moving through the soil to the water table, thereby increasing ground-water storage. Rates are typically calculated as the result of rainfall minus runoff minus unsaturated evapotranspiration (ET) losses; although unsaturated ET loss, considered negligible as compared to saturated ET loss within south Florida, was not accounted for in the compilation of this map.

Precipitation recharge to the Surficial aquifer system occurs throughout its entire areal extent. However, excess precipitation varies spatially reflecting precipitation trends. Excess precipitation, defined as the difference between long-term average annual rainfall and actual evapotranspiration estimates, represents the amount of residual water potentially available for urban and/or rural supply; assuming runoff as an available component.

This map is Plate III of Technical Publication 85 - 02, (DRE 327), *Mapping Recharge (Infiltration/Leakage) throughout the South Florida Water Management District* (SFWMD).





Lower Tamiami Aquifer

Potential Recharge/Discharge for the Lower West Coast Planning Region: Collier, Hendry and Lee Counties



This recharge map was developed using the District's ARC/INFO geographic information system (GIS) software. Leakage rates were determined based on the regional hydraulic pressure differences (averaged over 1992) existing between the lower Tamiami aquifer and the overlying water table, and modeled leakance estimates from the upper confining media separating these aquifer systems. A base year of 1992 was selected because of the close comparison between long-term average basin precipitation and total precipitation for that year. Map coverages portray regional assessments of leakage (recharge/discharge) within the semi-confined lower Tamiami aquifer of the Lower West Coast (LWC) planning region. As such, the map is intended for use as a regional planning aid for ground-water resource management. It is not intended for site-specific assessments.

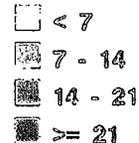
Leakage is defined as the amount of ground water moving into or out of a confined aquifer through adjacent semi-permeable confining media, thus resulting in the recharge (gain) or discharge (loss) of water to the aquifer system. Rates are typically calculated as the product of hydraulic pressure (head) differences existing between the water bearing unit directly above the aquifer and the aquifer itself, and the leakance of the confining media.

Recharge to the lower Tamiami aquifer occurs in areas where the elevation of the water table within the Surficial aquifer is higher than the elevation of the potentiometric surface displayed within the lower Tamiami aquifer. In these areas, water moves from the Surficial aquifer in a downward direction to the lower Tamiami aquifer, moving through the upper confining media which separates the two.

In contrast, discharge from the lower Tamiami aquifer occurs in areas where the elevation of the potentiometric surface within the aquifer is higher than the elevation of the water table above. In these areas, water moves from the lower Tamiami aquifer in an upward direction, passing through the upper confining media to the overlying unconfined Surficial aquifer system.

This map is Plate IV of Technical Publication 85 - 02, (DRE 327), *Mapping Recharge (Infiltration/Leakage) throughout the South Florida Water Management District (SFWMD)*.

Average Recharge as Diffuse Downward Leakage (Head Difference x Leakance)



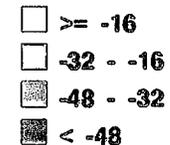
Inches per Year

Range: 0 - 349

Mean: 7

Std Dev: 13

Average Discharge as Diffuse Upward Leakage (Head Difference x Leakance)

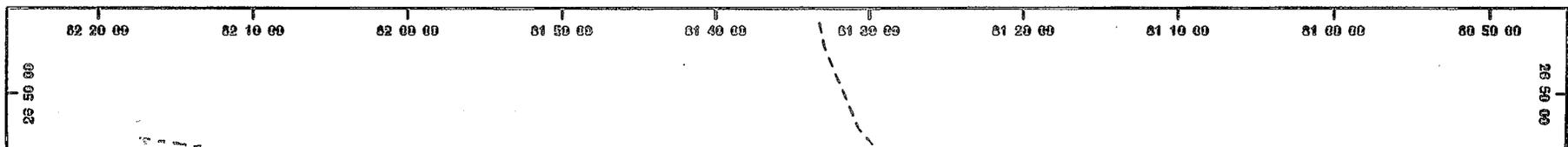


Inches per Year

Range: -167 - -1

Mean: -16

Std Dev: 28



VII. Conservation Element Goals, Objectives & Policies

INTRODUCTION

The purpose of the Conservation Element is to provide for the conservation, appropriate use, and protection of natural resources within Hendry County.

The description of Hendry County's natural resources is included in the Data Analysis, the support documentation for this Comprehensive Plan. In that analysis the natural resources are identified and analyzed concerning their uses, functions and conditions. The conclusions from the Data Analysis are highlighted in the following section, and provide the basis for the Goals, Objectives, and Policies in the final section of this Conservation Element.

In addition to the Map 1: Future Land Use Map 2010 described in the Future Land Use Element, the Future Land Use Map Series also includes three maps titled Map 2: FEMA Flood Prone Areas, Map 3: Land Surface Elevations, and Map 4: Land Cover. These three maps are prepared at the scale of one inch equals two miles, except Map 4 which is approximately one inch equals 2.5 miles. This Element also includes a map titled Historical/Archeological Sites which illustrates the locations of the natural features of Hendry County, and to overlay the Map 1: Future Land Use Map 2010 in conjunction with the Objectives and Policies of this Comprehensive Plan, especially this Conservation Element.

The small maps included in this Element provide a visual inventory of the vegetative state of Hendry County including habitats and wetlands.

CONCLUSIONS FROM THE DATA ANALYSIS

The Data Analysis identifies and discusses natural resources within Hendry County. Specifically covered are the Caloosahatchee River, Lake Okeechobee, wetlands, floodplains, soils, topography, air quality, vegetative communities, wildlife, commercially valuable minerals, hazardous wastes, and water use. The Strategic Habitat Conservation Areas Map and the Biodiversity Hot Spots Map provide a general view of protected and significant natural resources in the County. These specific maps are to be found in the Data and Support Documents of Hendry County's Comprehensive Plan and present an update from original habitat maps. It is to be cautioned that these maps are not at a scale to be property specific, and should be viewed as a regional view only. Below are highlights of the conclusions from the Data Analysis:

- 1) Caloosahatchee River - This river which runs a short distance (approximately 9.5 miles) through Hendry County, has been vastly modified from its natural condition. It has been extensively dredged and lengthened as a canal to connect with Lake Okeechobee. Water levels in the River are controlled by a system of dams and lock gates, although none of these structures lie within the County.

1 Hendry County has land use control authority (zoning and subdivision
2 regulation) along the Caloosahatchee River. SFWMD has permitting
3 jurisdiction over drainage works affecting the River. The Florida Department
4 of Environmental Protection (DEP) and the U.S. Army Corps of Engineers
5 (COE) also exercise authority over the wetlands connected to the
6 Caloosahatchee River. The primary role of Hendry County concerning the
7 River's conservation, use, and protection is cooperation and coordination
8 with these other regulatory agencies.

9 2) Everglades Agricultural Area (EAA) - The Everglades Agricultural Area
10 would serve as a barrier to reduce the impacts of development to the
11 Everglades, reduce levee seepage from the Everglades, increase groundwater
12 recharge, enhance drinking water supplies, improve the Everglade's water
13 supply, and enhance thousands of acres of wetlands that once comprised the
14 Everglades. The project involves using excess stormwater to reduce the
15 seepage loss from the East Coast Protective Levee. Management activities
16 proposed for the marshes propose hydroperiod restoration and the removal
17 of exotic vegetation for the enhancement, preservation and maintenance of
18 the wetlands.

19 3) Lake Okeechobee - Approximately four miles of the south shore of Lake
20 Okeechobee lies in Hendry County. Lake Okeechobee has had considerable
21 modification. Numerous canals have been built to help control the water level
22 of the Lake. The Lake has acted as both a source of water for irrigation during
23 the dry months and as an overflow for draining land during the wet season.

24 Lake Okeechobee is under the management and coordination of the SFWMD,
25 which also has permitting authority for drainage works affecting the Lake.
26 Hendry County has land use development controls, in conjunction with the
27 U.S. Corps of Engineers and SFWMD. DEP and the U.S. Environmental
28 Protection Agency (EPA) establish water quality standards for the Lake. DEP
29 also has wetland authority over connected wetlands, as does the COE. The
30 primary role of Hendry County concerning the Lake's conservation, use, and
31 protection is cooperation and coordination with these regulatory agencies,
32 especially SFWMD.

33 4) Wetlands - As described in the Data Analysis, it has been estimated that
34 around 1900, while still in their primitive state, wetlands made up well over
35 half of the County's total land area. It is currently estimated that less than
36 one-quarter of the County area contains wetlands. Some of the primitive
37 wetlands ceased to exist from natural processes, some of them were drained
38 or their patterns disrupted with Lake Okeechobee projects, and development
39 in the County also altered some of the wetland systems.

1 The major remaining wetlands include Okaloacoochee Slough and part of the
2 Big Cypress Swamp. These major wetland systems serve as drainage and
3 retention for surface water flow and storage, both from rainfall and channeled
4 drainage from development. They also function to provide wildlife habitat.

- 5
- 6 5) McDaniel Ranch - McDaniel Ranch lies in District's L-3/L-4 Basin and
7 drains south onto lands owned by the Seminole Tribe of Florida and onto the
8 Big Cypress National Preserve. Protecting the quality of the water leaving
9 McDaniel Ranch is vitally important to the health of the adjacent ecosystems.
10 Much of the ranch has been converted to improved pasture, and over the next
11 15 to 20 years, most of the pasture will be converted to sugar cane. In spite
12 of agricultural use, the preserve areas within the easement consist of deep
13 cypress swamps, hydric hammocks, and large expanses of broadleaf marsh
14 and wet prairie.

15 Restrictions in the conservation easement will prevent the owners from
16 clearing additional land for pasture or silviculture, excavation, or fertilization
17 of areas other than existing improved pastures. The greatest expanses of
18 natural area are concentrated along the western and southern edges of the
19 ranch. The Florida Game and Fresh Water Fish Commission, now known as
20 the Florida Fish and Wildlife Conservation Commission, has identified this
21 area as critical habitat for the Florida panther and black bear. Incorporation
22 of the preserve areas into the diked detention areas for the surface water
23 management system will enable some over-drained wetlands to be inundated
24 again.

25 Since the property will be sold as conservation easement rather than fee title,
26 the landowners will retain management responsibility. The ranch has been
27 family-owned and managed for more than 60 years, and the natural areas are
28 in very good condition. The landowner will be responsible for continued
29 treatment of exotic vegetation and prescribed burning. The District will
30 conduct a baseline environmental assessment to establish current
31 environmental conditions so the agency can evaluate the management
32 program.

- 33 6) Okaloacoochee Slough - In 1996, the District purchased 21,000 contiguous
34 acres in the project. It is anticipated that CARL will acquire the remaining
35 8,000 acres.

36 In 1997, the District amended the Save Our Rivers (SOR) project boundary
37 to include 1,920 acres that are the primary flowway for water moving from

VII. CONSERVATION ELEMENT

1 District-owned land in Okaloacoochee Slough to other private land in Collier
2 County. Sawgrass slough in the deep water areas, with a fringe of hydric
3 hammocks and wet flatwoods dominate the three sections.

4 The property is used as native range pasture and is very well managed. These
5 lands would be acquired only as conservation easement. Under the proposed
6 conditions of the lease, the landowners would be allowed to continue native
7 range grazing, with no pasture improvement or fertilization. They would be
8 permitted to continue leasing the property for hunting. Continued prescribed
9 burning and exotic treatment programs will be requirements of the lease.

10 The vision for Okaloacoochee Slough is that it continues to be managed for
11 its important and natural resource values. Okaloacoochee Slough is a major
12 headwater for Fakahatchee Strand and Big Cypress National Preserve. Its
13 extensive network of sloughs and isolated wetlands store wet-season runoff
14 from the surrounding uplands and provide year-round base flow to
15 downstream natural areas. The entire project contains more than 12,000 acres
16 of largely undisturbed wetlands, which are surrounded by oak and cabbage
17 palm-dominated hydric hammocks.

18 The District anticipates that the Florida Division of Forestry will be the lead
19 manager of the site. Preliminary discussions have been held with the Division
20 of Forestry and preparation of management plan will take place over the next
21 one to two years.

22 Public access is very limited because of the deep sloughs that dominate the
23 property. There are still 8,000 acres remaining to be acquired through the
24 CARL program. If that occurs, much more upland acreage will become
25 available for public use.

26 7) Floodplains - The Federal Emergency Management Agency (FEMA) has
27 completed only the initial study of the 100-year floodplain in Hendry County.
28 With this study vast areas of the County are shown to be within the 100-year
29 floodplain . In accordance with the FEMA requirements for the National
30 Flood Insurance Program, Hendry County adopted special flood area
31 regulations to cover the area designated as 100-year floodplain .

32 8) Topography - In localized settings Hendry County is rather level.
33 Countywide, however, the elevations vary from just under 15 feet to just over
34 40 feet.

35 9) Soil Erosion - Due to the rather flat topography of Hendry County, there is
36 almost no soil erosion. Some erosion has occurred on the banks of Lake

1 Okeechobee and along the Caloosahatchee River. These are monitored by the
2 SFWMD, and erosion control projects are being carried out as needed.

3 10) Air Quality - The quality of the air in Hendry County is very good. The
4 County has no air quality categories for which it has nonattainment status
5 under the Florida Department of Environmental Regulation or the U.S.
6 Environmental Protection Agency regulations.

7 11) Vegetative Communities - The predominant vegetative communities in
8 Hendry County include grasslands and dry prairies. Of lesser dominance are
9 pinelands, cypress swamps, freshwater marshes, and wet prairies. Much of
10 these areas have been substantially altered by human activity. Maps have
11 been provided outlining possible vegetative communities.

12 Plants of possible occurrence in Hendry County which are currently
13 considered by federal and state agencies to be endangered, threatened, or
14 species of special concern are identified in the Data Analysis.

15 12) Wildlife Habitat - The vegetative communities in Hendry County provide a
16 variety of wildlife habitat. Within the major vegetative communities, there
17 are grasslands, pinelands, wet and dry prairies, marshes, lakes and ponds. The
18 Caloosahatchee River and its banks and tributaries, and Lake Okeechobee
19 and its shores, provide water body habitat for wildlife. It is known that a wide
20 variety of both game and nongame wildlife inhabit these many environments,
21 but there are no existing inventories of the dominant species. As with the
22 vegetative communities infrared maps have been provided on various habitats
23 in the County.

24 13) Commercially Valuable Minerals - The most productive oil field in the South
25 Florida Basin (generally south of the Tampa area) is located in Hendry
26 County. It has an estimated reserve of 50 million barrels. Hendry County also
27 has commercial potential for natural gas production. Other mineral resources
28 include sand, sand shell and marl, and small areas of peat. There may also be
29 some limestone deposits.

30 14) Hazardous Wastes - There are thirteen hazardous waste generating sources
31 within Hendry County identified by U.S. Environmental Protection Agency
32 identification numbers. Four of these are in the LaBelle area and six are in the
33 Clewiston area. The oil operations in the Felda area have three identification
34 numbers. The sources include the Florida Department of Transportation,
35 electric utility, gasoline bulk plant, citrus operation, service stations,
36 automobile dealer, and agricultural machines dealer. Most of these wastes are
37 pesticides containers, waste paints, used solvents, batteries, and used motor
38 oil.

1 15) Groundwater Use - According to the South Florida Water Management
2 District (SFWMD), Hendry County's population has increased by 32% from
3 22,393 in 1985 to 29,587 in 1995 (U.S. Bureau of the Census, 1998), and is
4 projected to grow to 42,700 by 2020 (BEBR, 1998). Hendry County is one
5 of the fastest growing counties in agricultural production in Florida,
6 especially in citrus. It is anticipated that future growth in citrus acreage will
7 take place, but at a much slower rate than was experienced during the 1984
8 to 1992 period.

9 There are three groundwater aquifer systems in the County: the Surficial,
10 Intermediate, and Floridan Aquifer Systems. Because of the lack of advanced
11 treatment, water in the Florida Aquifer System is too saline for most uses,
12 leaving the Surficial and Intermediate Aquifer Systems as the primary sources
13 of groundwater in the County. Map 8 shows the major resources within the
14 County.

15 Hendry County is one of only two counties within the SFWMD that relies
16 more heavily on surface water than groundwater as a supply source. The
17 Caloosahatchee River (C-43) and Lake Okeechobee are the sources of water
18 for much of northern Hendry County. The U.S. Army Corp of Engineers
19 (COE) controls stages on C-43 primarily for navigation. When water
20 withdrawn for irrigation results in a lowering of the stage, COE releases
21 water from Lake Okeechobee to restore the stage to navigable levels.

22 Presently, the COE and SFWMD are conducting a restudy of the
23 Caloosahatchee River whereby water will be directed to areas such as Dade
24 and Broward Counties to meet future population needs. The impact of this
25 restudy will be significant because of agricultural demands on the water
26 supply. Water is drawn from the river or from the lake through a series of
27 canals, which also provide drainage for the northern portion of the County.
28 These canals include the Townsend Canal, Roberts Canal C-2, C-3, Hendry-
29 Hilliard Canal, Forty-Foot Canal, and Industrial Canal. Clewiston's potable
30 water supply is withdrawn from the Industrial Canal.

31 Potential future restrictions on the use of surface water as a supply source
32 may force greater reliance on groundwater as a water supply source.
33 Increasing demand for groundwater, as well as historical flood control and
34 drainage practices, have caused local and regional declines in groundwater
35 levels. Groundwater declines are expected to increase in the future, due to the
36 projected increases in groundwater demands.

1 **GOALS, OBJECTIVES AND POLICIES**

2 **GOAL:** To conserve and enhance the quality of the natural resources in
3 Hendry County for present and future population.

4
5 **OBJECTIVE 7.1:** **FUTURE LAND USE MAP SERIES/CONSERVATION:** In addition to the
6 map titled Map 1: Future Land Use Map 2010 , three other maps
7 make up the Future Land Use Map Series. These maps include Map
8 2: FEMA Flood Prone Areas, Map 3: Land Surface Elevations, and
9 Map 4: Land Cover . The official maps are prepared at the scale of
10 one inch equals two miles, except Map 4: Land Cover which is a
11 FGFWFC LandSat photograph at the approximate scale of one inch
12 equals 2.5 miles. The small maps included in this text are for general
13 illustrative purposes only and are not intended for any regulatory
14 purposes.

15 The categories shown on these three maps are not basic land use
16 categories, but act to overlay the basic land use categories shown on
17 Map 1: Future Land Use Map 2010 . The Policies under this
18 Objective describe the categories shown on these three maps, and
19 describe the nature and applicable criteria and requirements related to
20 each category. The categories require various levels of treatment
21 concerning conservation, use and protection as noted in the Policies
22 below.

23 Because of their dynamic natures and their often conflicting
24 definitions among agencies and professionals, these categories must
25 be considered generalized. A detailed examination of them on a case
26 by case basis may reveal that more or less actual land in the vicinities
27 of the mapped areas act to flag a category as generally existing in an
28 area, and further verification may be necessary.

29 During the planning period, the County shall provide for the
30 conservation and appropriate use of mineral resources to ensure that
31 the water quality and quantity of wetlands, surface waters, or aquifers
32 shall not be degraded or reduced by mining, and that there will be no
33 net loss of or impairment of natural functions of wetlands or surface
34 waters due to mining. This objective will be accomplished through
35 the implementation of the policies set forth below.

36 **Policy 7.1.1:** **WETLANDS:** Wetlands are areas identified by plant communities
37 commonly associated with lands inundated by water for a significant
38 period each year. Those communities are shown on the Future Land

1 Use Map Series maps titled Priority Wetlands and Land Cover. These
2 maps provide general location for various swamps, marshes, and wet
3 prairies. This policy is intended to protect and conserve wetlands and
4 shall include restrictions on the density of development within
5 wetlands to one unit per 20 acres, and shall require all uses in
6 wetlands to meet applicable state and Federal regulations and
7 permitting requirements.

8 The County shall support the Everglades SWIM Plan as implemented
9 by the Water Management District. Such support shall consist of, but
10 not be limited to, review of the SWIM Plan to determine which
11 portions should be incorporated into the County's Comprehensive
12 Plan, distribution of information on the SWIM Plan to landowners,
13 developers, and staff who are affected by its provisions, and provision
14 of available information to the District to assist the District in its own
15 implementation efforts.

16 Hendry County shall discourage incompatible uses within wetlands.
17 Permissible uses shall include single family and two-family
18 residential dwellings. All other uses will be directed away from
19 wetlands. Where incompatible uses are allowed to exist, mitigation
20 shall be provided to compensate for loss of wetlands. Permits will be
21 issued by any agency of Hendry County that provides evidence that
22 the requirements of Chapters 373 and 403, Florida Statutes, Section
23 404 of the (Federal) Clean Water Act, and Section 10 of the (Federal)
24 River and Harbours Act are met. Unless necessary permits have
25 already been obtained under the foregoing laws, any permit issued by
26 the County shall be contingent upon the issuance of state and federal
27 permits.

28 **Policy 7.1.1a:**

29 Hendry County shall work towards the establishment of mitigation
30 areas within the County to ensure that local impacts to protect
wildlife and species are mitigated locally.

31 **Policy 7.1.2:**

32 **GROUNDWATER PROTECTION:** No areas have currently been
33 designated as Groundwater Protection for lack of appropriate
34 locational data and information. The South Florida Water
35 Management District is currently undertaking studies which may have
36 established limits and boundaries of public potable water wellfields,
37 cones of influence, and groundwater aquifer recharge areas. The map
38 titled Extractive Uses is provided to illustrate areas identified as
cones of influence.

1 Any land use proposed for development within one-half mile of any
2 well designated on the map titled Map 2: FEMA Flood Prone Areas
3 as a potable water well is to be reviewed as a Special Exception in
4 order to determine impact on groundwater resources from the
5 proposed use and specific development. Such review shall address,
6 but is not limited to,: restrictions on land uses which involve
7 pollutants and/or restrictions on handling and storage of
8 hazardous/toxic materials in order to minimize the opportunity for
9 contamination. In addition, the following standards shall apply to the
10 location of certain activities within close proximity to public potable
11 water wells: (a) septic tanks shall be prohibited within two hundred
12 (200) feet of a well; (b) any generation, use, storage, transfer,
13 treatment, or disposal of hazardous materials (including hazardous
14 waste, agricultural chemicals, and petroleum products) shall be
15 prohibited within four hundred (400) feet of a well.

16 **Policy 7.1.2a** Work with the SFWMD and COE to ensure that adequate water is
17 available to meet projected agriculture and population needs.

18 **Policy 7.1.2b** Work with the SFWMD to identify new water sources in the County.

19 **Policy 7.1.2c** Adopt measures that efficiently uses the existing water supply by:

- 20 A. Increasing agricultural and urban water conservation;
- 21 B. Eliminating inefficient water use practices; and
- 22 C. Working with the SFWMD to identify specific projects and
23 cost-sharing partnerships with other local governments.

24 **Policy 7.1.3:** **HISTORIC RESOURCES:** There are various Indian mounds, historic
25 fort locations, and the Hendry County Courthouse listed in the Florida
26 Master File of historic and archaeological places. The Indian mounds
27 have not been located on local maps, and to avoid exposure to
28 possible looting and vandalism, these are intentionally omitted from
29 the Future Land Use Map Series. The historic fort locations are
30 located on Map 2: FEMA Flood Prone Areas map, as is the Hendry
31 County Courthouse.

32 Any development proposal which encompasses a historic and/or
33 archaeological site which is listed on the Florida Master File or on the
34 Map 2: FEMA Flood Prone Areas map shall be reviewed by Hendry
35 County staff for historic significance.

VII. CONSERVATION ELEMENT

1 issued until the applicant meets the standards set forth in Conserva-
2 tion Policy 7.1.1.

Policy 7.1.6:

3 **CALOOSAHATCHEE RIVER:** The Caloosahatchee River is shown on
4 the all of the Future Land Use Map Series. The Caloosahatchee River
5 (also designated canal number C-43) is rated a Class III river
6 according to the surface water quality classification system of the
7 Florida Department of Environmental Protection (FDEP). This
8 classification represents benefits from the river for recreation, fish
9 and wildlife, and is a middle range classification in the DER system
10 which runs from Class I (potable water) to Class V (industrial). The
11 Caloosahatchee River is under the management of the South Florida
12 Water Management District (SFWMD).

13 Map 1: Future Land Use Map 2010 of the Future Land Use Map
14 Series and the policies of the Future Land Use Element restrict
15 residential density along the Caloosahatchee River to one unit per
16 acre to provide protection for the River.

Policy 7.1.7:

17 **LAKE OKEECHOBEE:** The Hendry County shore of Lake Okeechobee
18 is shown on all of the Future Land Use Map Series maps. Although
19 the boundary of Hendry County extends in a triangular shape from the
20 approximately four-mile length of Lake shore in the County to a point
21 in the Lake, nearly one-half of the shoreline is within the incorporated
22 area of the City of Clewiston, and the South Florida Water
23 Management District has the primary management responsibility for
24 the Lake. Map 1: Future Land Use Map 2010 of the Future Land Use
25 Map Series designates the shore area of the County as Conservation.
26 Land uses within the Conservation category shall permit limited
27 residential development [one dwelling unit per 20 acres maximum
28 density], as well as open space and public facility uses.

29 The County shall support the implementation of the adopted Lake
30 Okeechobee SWIM Plan prepared by the Water Management District.
31 Such support shall consist of, but is not limited to, review of the
32 SWIM Plan to determine which portions should be incorporated into
33 the County's comprehensive plan, distribution of information on the
34 SWIM Plan to landowners, developers, and staff who are affected by
35 its provisions, and provision of available information to the District
36 to assist the District in its own implementation efforts.

Policy 7.1.8:

37 **FLOODPLAINS:** The floodplains established by the Federal
38 Emergency Management Agency (FEMA) as the 100-year floodplain
39 on the Federal Insurance Rating Maps (FIRM) for the national flood

1 insurance program covers a very large area of Hendry County. These
2 areas are shown on Map 2: FEMA Flood Prone Areas map of the
3 Future Land Use Map Series. The County has adopted the
4 FEMA-required flood hazard regulations, and shall continue to
5 maintain these regulations.

6 No building permit, except for a single family or two family
7 residential unit, or land use or development permit will be issued by
8 any agency of Hendry County until the applicant provides evidence
9 that the requirements of the National Flood Insurance Act of 1973, as
10 amended, have been or will be complied with by the applicant.

11 Density and intensity of development shall be based on the land use
12 category within which the property is located. If the floodplain area
13 is a wetland, use, density, and intensity shall be as established for the
14 agriculture/ conservation category.

15 The following general development standards shall apply within a
16 defined 100-year floodplain:

- 17 a) Development involving the storage, use, transfer, generation,
18 or disposal of hazardous materials or waste shall be
19 prohibited or shall conform to the guidelines in Future Land
20 Use Policy 2.4.9.

21 **OBJECTIVE 7.2:**

**WILDLIFE HABITAT OF ENDANGERED AND THREATENED SPECIES
AND SPECIES OF SPECIAL CONCERN/VEGETATIVE COMMUNITIES:**
22 Vegetative (plant) communities are shown on Map 4: Land Cover of
23 the Future Land Use Map Series. Due to a lack of appropriate
24 locational information no areas have currently been designated as
25 wildlife habitat of endangered and threatened species and species of
26 special concern. Although these areas have not been designated, the
27 County shall act to provide protection for wildlife habitat and related
28 vegetative communities, and other environmentally sensitive lands.
29 Viable populations of wildlife and endangered species shall be
30 maintained. This Objective shall be implemented by a program of
31 activities which includes the following:
32

33 **Policy 7.2.1:**

34 It shall be the policy of Hendry County to protect habitat for
35 threatened or endangered species or species of special concern from
36 destruction by large scale developments, as defined herein. Until such
37 time as specific locational information is available concerning such
38 species, and/or until Hendry County attains the fiscal capacity to hire
or otherwise retain biological assistance, Hendry County does require

1 that all developers of proposed developments of 100 units or more
2 and not within Development of Regional Impact thresholds shall
3 submit lists of wildlife known to inhabit the proposed site. The Land
4 Development Regulations shall provide that for sites which require
5 a survey of native vegetation pursuant to Policy 7.2.2, wildlife habitat
6 shall be inventoried and endangered and threatened plant and animal
7 species and species of special concern shall be inventoried. Sufficient
8 area shall be established on the site and in conjunction with adjacent
9 properties to maintain viable populations of wildlife and viable
10 populations of endangered and threatened species and species of
11 special concern. Individuals of such species which cannot be
12 maintained on site, shall, if possible, be relocated to appropriate
13 habitat on or off-site. The Development of Regional Impact process
14 is deemed adequate to cover proposed development meeting these
15 thresholds. After adequate information is obtained, the Land
16 Development Regulation shall be revised to address protection of the
17 natural functions of wildlife habitats.

18 The lists obtained in such a manner shall be retained by the County
19 as wildlife inventory. The County shall refer the lists and
20 development proposals to the Florida Game and Fresh Water Fish
21 Commission for review and comment on said proposal. The
22 developer will be required to implement activities which will
23 reasonably address any recommendation made by the Florida Game
24 and Fresh Water Fish Commission.

25 Hendry County shall retain current lists of Endangered and
26 Threatened Species and Species of Special Concern prepared by the
27 Florida Game and Fresh Water Fish Commission, and shall notify the
28 appropriate authorities whenever a submitted list contains one or
29 more of these species.

30 **Policy 7.2.2:**

31 Proposed developments of 100 units or more and not falling within
32 the Development of Regional Impact thresholds shall designate on a
33 map or plan of the proposed development site the locations of any
34 areas of five acres or more dominated by 50% or more with native
35 vegetation. In the course of the development of the property, a portion
36 of such development area shall be conserved and protected. The
37 specific areas conserved or protected shall include, as a minimum,
38 those lands necessary for protection of habitat for threatened and
39 endangered species. Such areas shall be incorporated into open space
40 areas through planned unit development and/or cluster provisions,
41 provided that if over 50% of the site involves such areas, no more
than one-half of the total site shall be required to be preserved. The

1 regulations shall also provide that when such areas are found in non-
2 residential projects or in residential projects of less than 100 units,
3 such areas shall be preserved in open space uses up to 25 percent of
4 the total site. The removal or destruction of native vegetation prior to
5 development, except where necessary for legitimate agricultural or
6 silvicultural uses, shall be construed to be clearing of land as an
7 adjunct to construction, and shall be subject to all policies governing
8 the removal or destruction of vegetation as they apply to develop-
9 ment. This policy is subject to the policies setting out the legal status
10 of the Comprehensive Plan.

11 **Policy 7.2.3:** The land development regulations adopted by the County shall
12 continue to state that no building permit, except for a single family or
13 two family residential unit, or development permit will be issued by
14 any agency of Hendry County until the applicant provides evidence
15 that the requirements of state and federal law as set forth in Policies
16 1.1, 1.8, 2.1, and 2.2 have been or will be complied with by the
17 applicant and that the natural functions of designated or otherwise
18 known environmentally sensitive lands will not be adversely affected
19 by the use for which the application is sought. Wetlands, aquifer
20 recharge areas, native vegetation communities, wildlife habitat, and
21 potable water well cones of influence shall be regulated in accordance
22 with the applicable Comprehensive Plan policies for these resources.

23 **Policy 7.2.4:** Reserved.

24 **Policy 7.2.5:** Reserved.

25 **OBJECTIVE 7.3:** **AIR QUALITY:** Hendry County has no air quality factors for which it
26 is designated a nonattainment area, and has no 24-hour period during
27 a year when air quality standards of the Florida Department of
28 Environmental Protection are not met. However, the County shall act
29 to protect air quality within the means of its jurisdiction, so as to
30 safeguard the health of its residents and prevent damage to the natural
31 environment.

32 **Policy 7.3.1:** The County shall continue to cooperate with the Florida Department
33 of Environmental Protection in its air quality monitoring program in
34 Hendry County.

35 **Policy 7.3.2:** The County shall require appropriate landscaping of parking lots in
36 commercial, industrial and multiple family dwelling developments to
37 reduce pollution through the Land Development Regulations.

VII. CONSERVATION ELEMENT

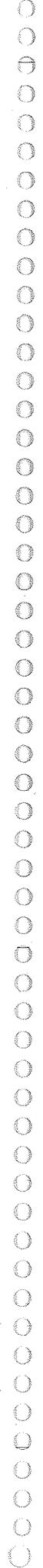
- 1 **Policy 7.3.3:** Reserved.
- 2 **Policy 7.3.4:** Reserved.
- 3 **Policy 7.3.5:** Reserved.
- 4 **OBJECTIVE 7.4:** **MANAGEMENT OF HAZARDOUS WASTES:** There are few handlers of
5 hazardous waste within Hendry County, and these are very typical
6 uses found in most communities. The County desires that storage of
7 hazardous wastes shall be made safer in order that the community's
8 natural resources are protected. No contamination of groundwater,
9 surface water, or potable water wells shall occur during the planning
10 period, due to violation of hazardous wastes standards. This Objective
11 shall be implemented by a program which includes the following:
- 12 **Policy 7.4.1:** Hazardous waste collection and storage facilities shall be restricted
13 to areas shown as "industrial" or "public" on the Future Land Use
14 Map, and shall be subject to the limitations on industrial
15 development. Hazardous waste storage facilities shall not be
16 permitted in wetlands, prime aquifer recharge areas, or well field
17 cones of influence except meeting containment and management
18 standards as provided in Future Land Use Element Policy 4.9.
19 Development orders and permits for hazardous waste generators shall
20 be prohibited if septic tanks would be used in violation of Section
21 381.272(9), Florida Statutes.
- 22 **Policy 7.4.2:** The County shall coordinate its efforts with the regional hazardous
23 waste program as defined in the Southwest Florida Regional Planning
24 Council's Regional Comprehensive Policy Plan.
- 25 **Policy 7.4.3:** The County shall exclude regulation hazardous wastes in the
26 operation of the existing sanitary landfill by exercising reasonable
27 inspection of waste loads and by checking loan manifests of haulers.
- 28 **Policy 7.4.4:** Reserved.
- 29 **OBJECTIVE 7.5:** **NATURAL RESERVES/RECREATION:** The Recreation and Open Space
30 Element identified the Frazier Avenue Nature Park as an existing
31 nature area. This area is wholly within the incorporated area of the
32 City of LaBelle, and is not under the jurisdiction of Hendry County.
33 The County shall seek the preservation of this area by implementing
34 the following policy:

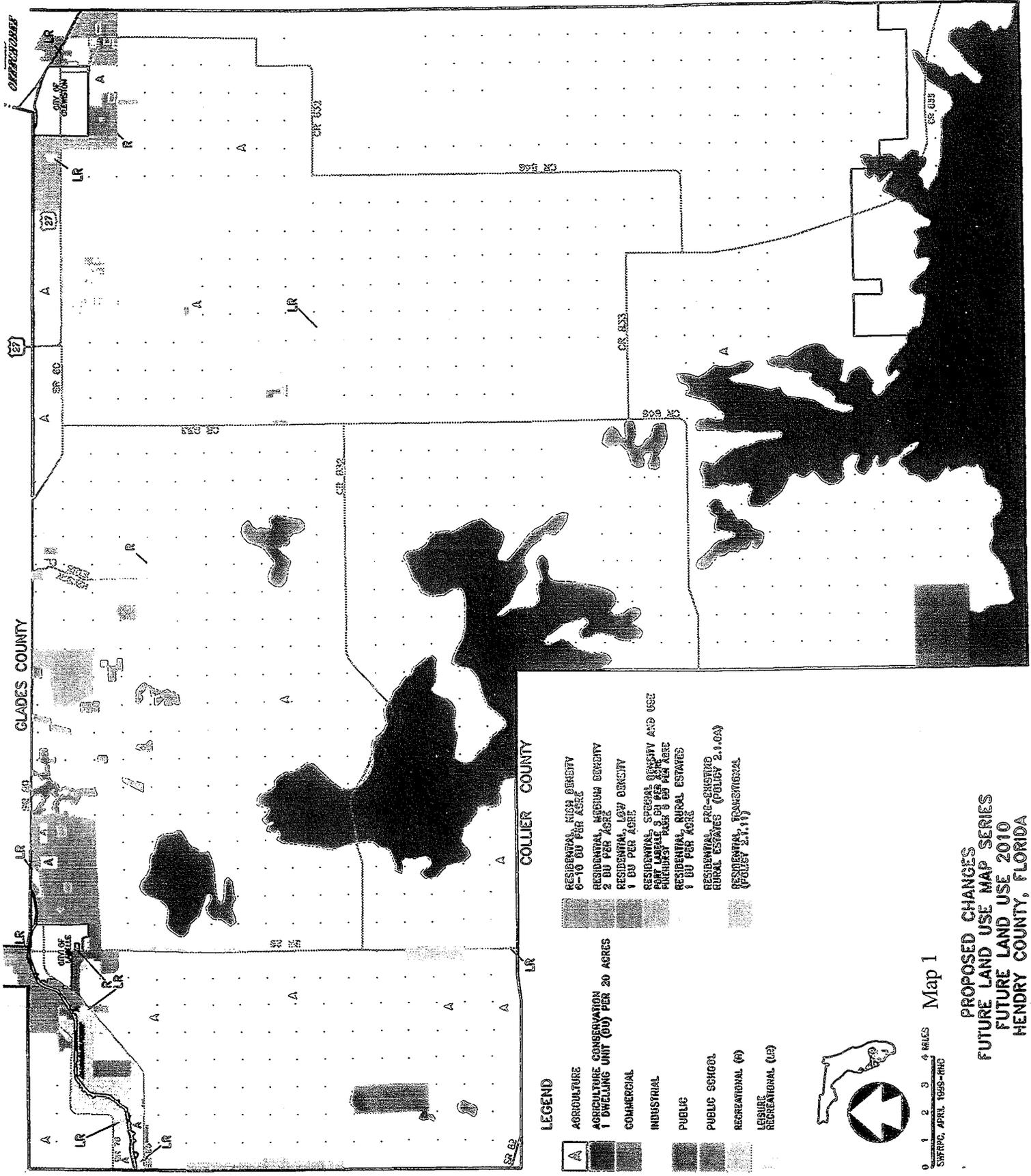
1 **Policy 7.5.1:** The County shall continue to work with the City of LaBelle to make
2 improvements to the Frazier Avenue Nature Park.

3 **OBJECTIVE 7.6:** The County shall seek to conserve, appropriately use, and protect the
4 quality and quantity of current and projected water sources that flow
5 into estuarine or oceanic waters, by implementing the program of
6 activities described in the following policies:

7 **Policy 7.6.1:** The County shall continue to enforce surface water management
8 standards which reduce the quantities of surface water contaminants
9 which reach surface waters flowing into water sources, or estuarine
10 or oceanic waters, natural groundwater recharge areas, and wellhead
11 protection areas used as a source of public water supply.

Faint, illegible text covering the majority of the page, likely bleed-through from the reverse side.

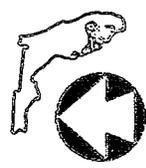




LEE COUNTY

LEGEND

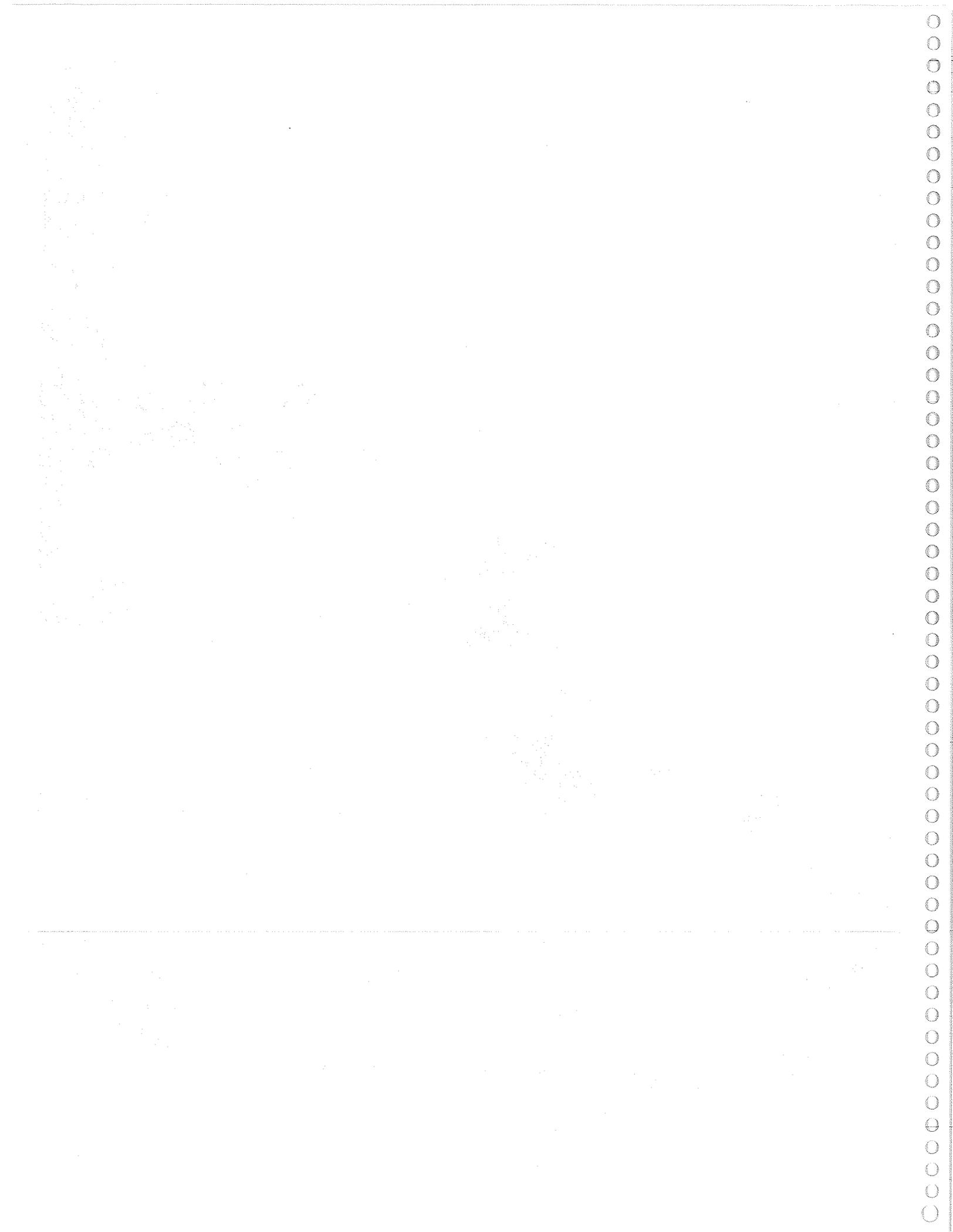
- AGRICULTURE
- AGRICULTURE CONSERVATION
- 1 DWELLING UNIT (DU) PER 20 ACRES
- COMMERCIAL
- INDUSTRIAL
- PUBLIC
- PUBLIC SCHOOL
- RECREATIONAL (R)
- LEISURE RECREATIONAL (LR)
- RESIDENTIAL, HIGH DENSITY
- RESIDENTIAL, MEDIUM DENSITY
- RESIDENTIAL, LOW DENSITY
- RESIDENTIAL, GENERAL DENSITY AND USE
- RESIDENTIAL, RURAL ESTATES
- RESIDENTIAL, PRE-EXISTING RURAL ESTATES (POLICY 2.1.1(A))
- RESIDENTIAL, TRANSITIONAL (POLICY 2.1.1(V))

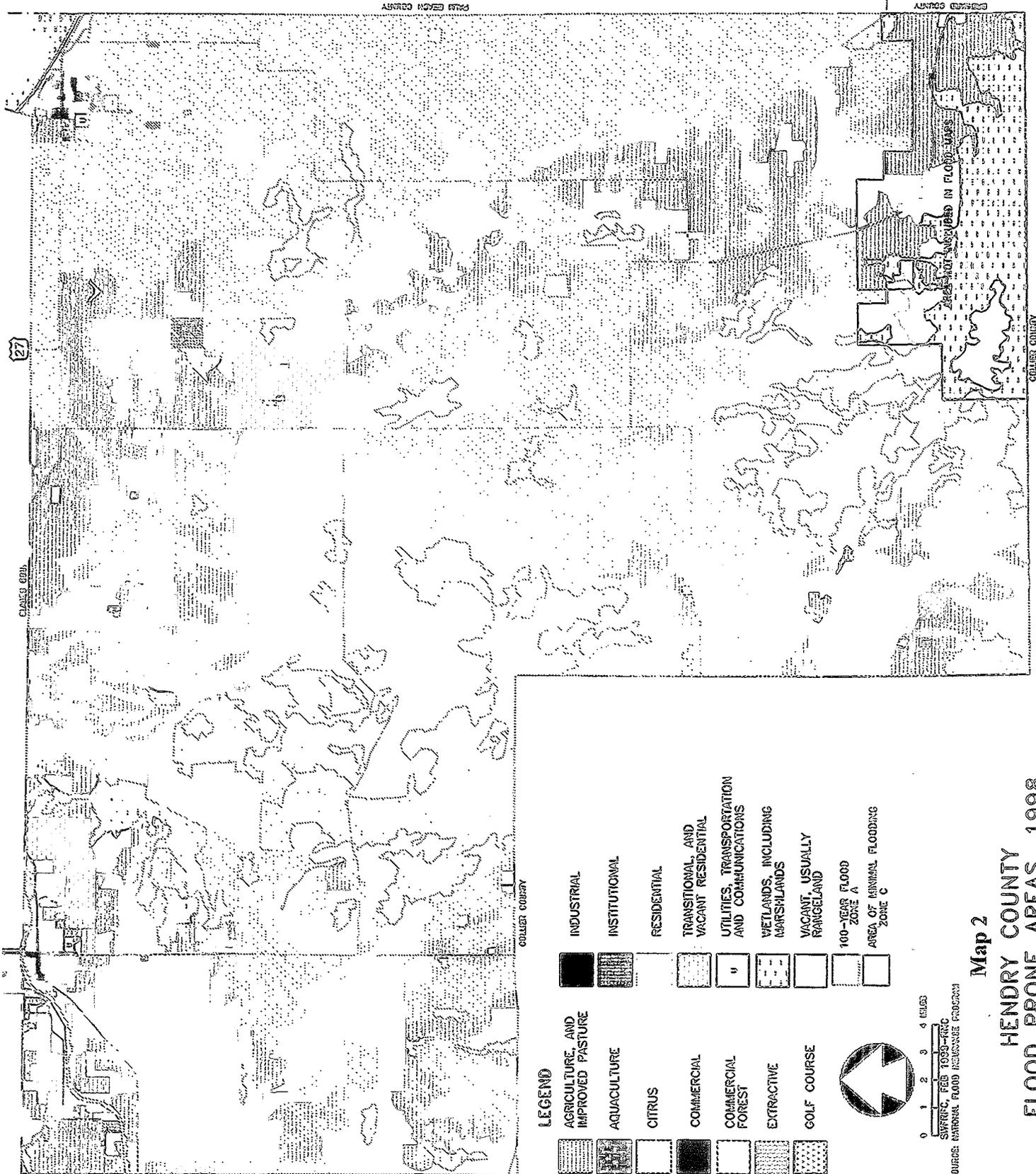


0 1 2 3 MILES
SHRP2C, APRIL 1999-PREC

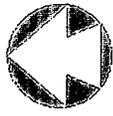
**PROPOSED CHANGES
FUTURE LAND USE MAP SERIES
FUTURE LAND USE 2010
HENDRY COUNTY, FLORIDA**

Map 1





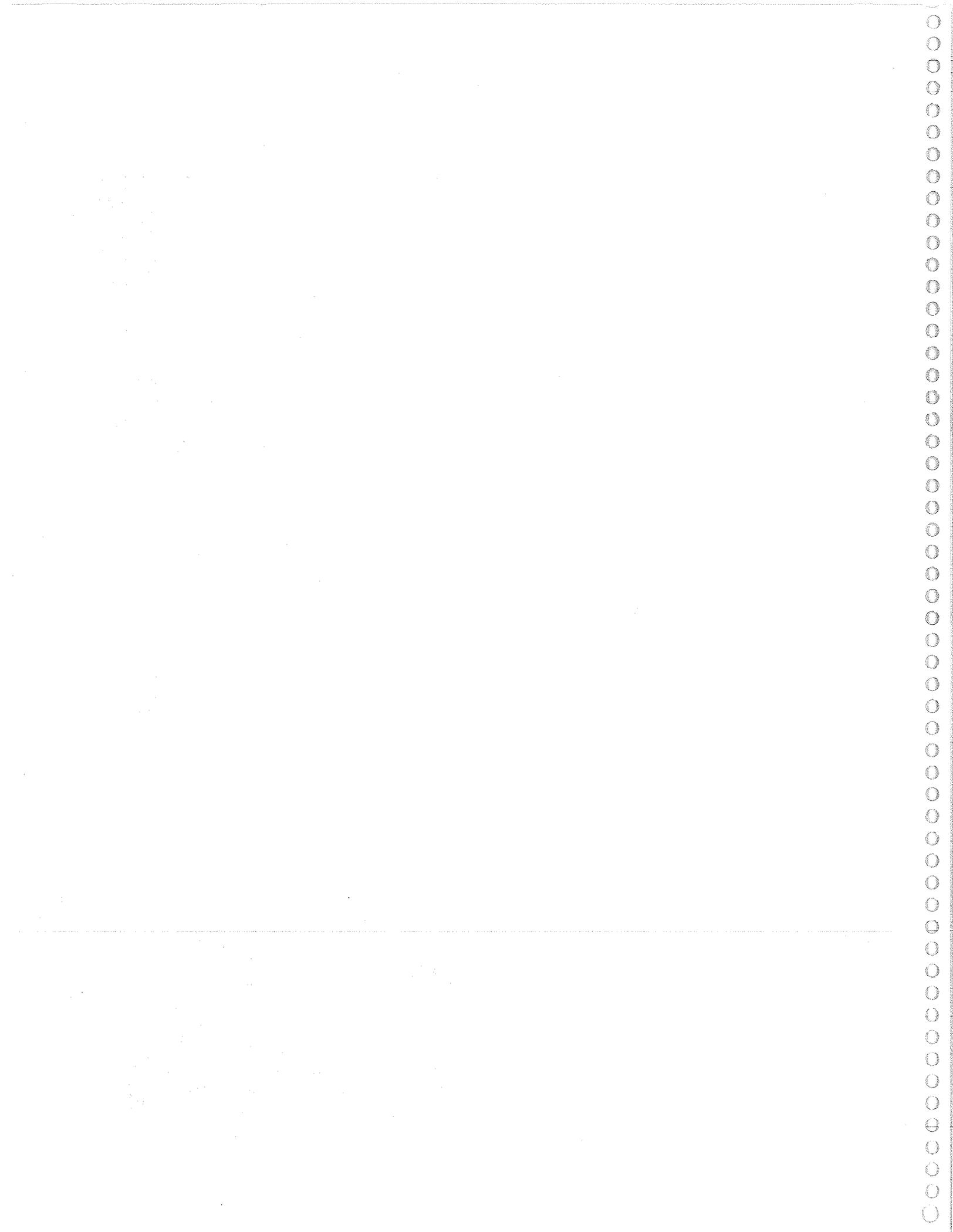
- LEGEND**
- | | | | |
|--|----------------------------------|--|--|
| | AGRICULTURE AND IMPROVED PASTURE | | INDUSTRIAL |
| | AQUACULTURE | | INSTITUTIONAL |
| | CITRUS | | RESIDENTIAL |
| | COMMERCIAL | | TRANSITIONAL AND VACANT RESIDENTIAL |
| | COMMERCIAL FOREST | | UTILITIES, TRANSPORTATION AND COMMUNICATIONS |
| | EXTRACTIVE | | WETLANDS, INCLUDING MARSHLANDS |
| | GOLF COURSE | | VACANT, USUALLY RANGELAND |
| | | | 100-YEAR FLOOD ZONE A |
| | | | AREA OF MINIMAL FLOODING ZONE C |

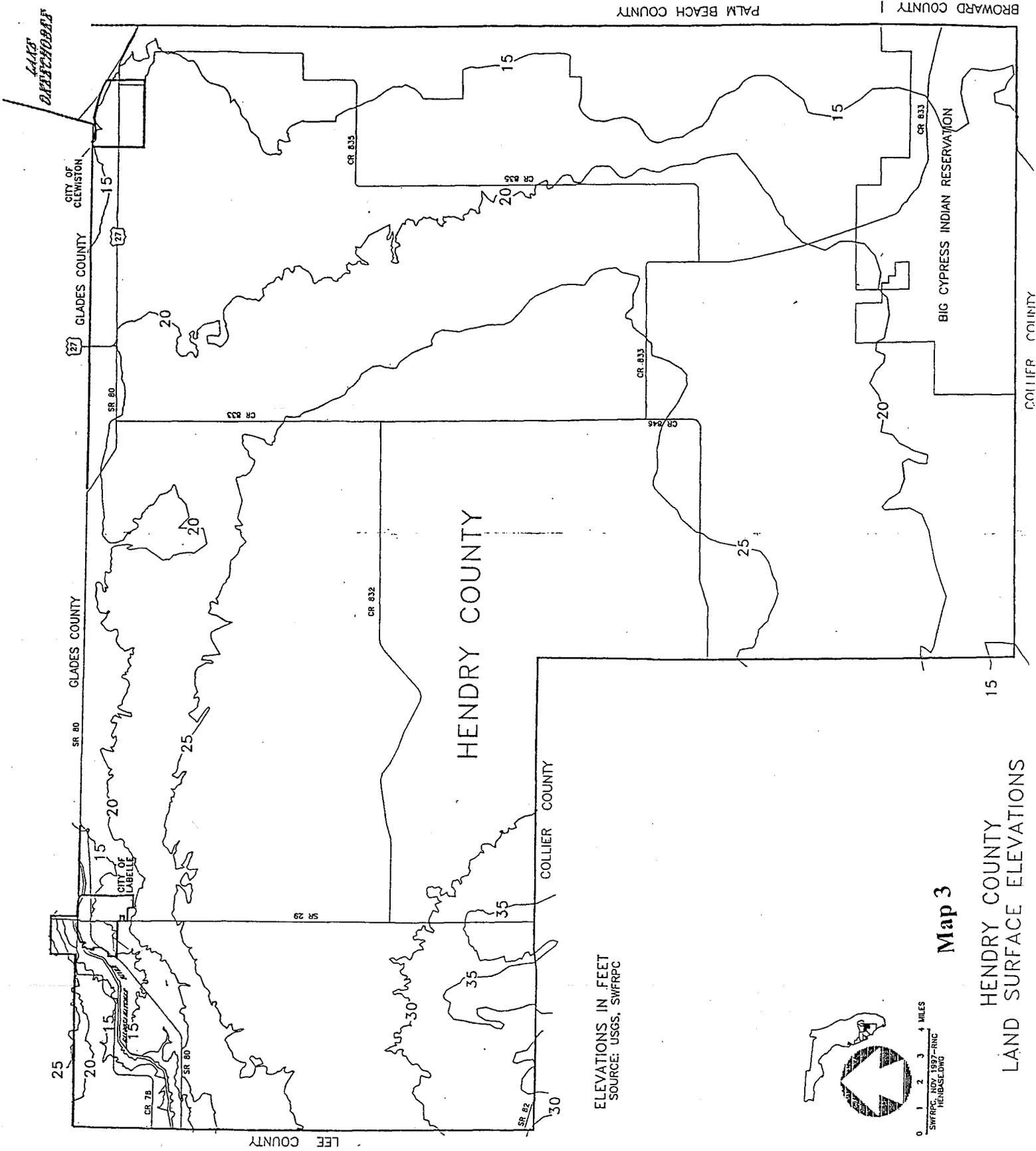


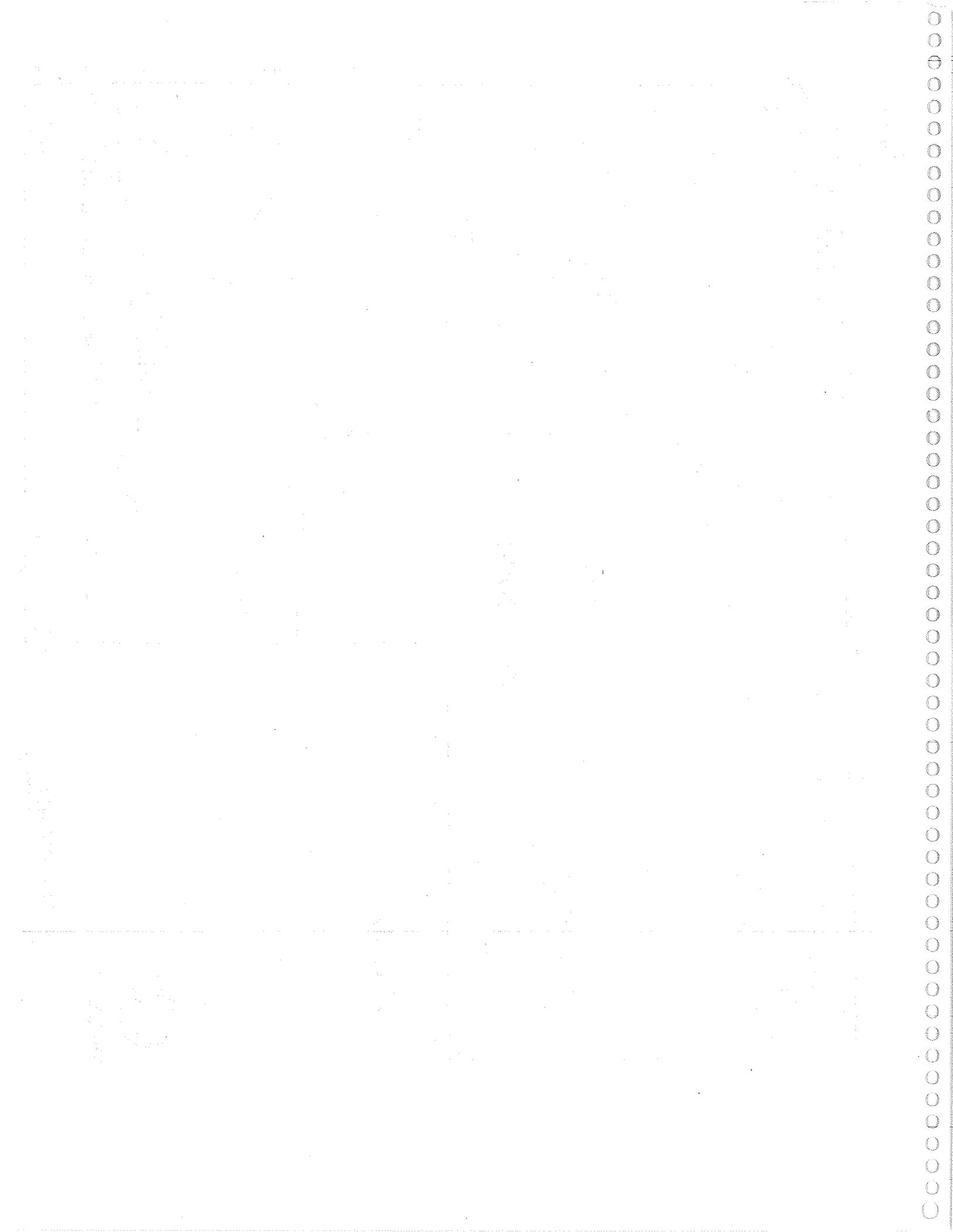
0 1 2 3 4 MILES

SWFPRC, FEB 1998-RRRC
SOURCE: NATIONAL FLOOD INSURANCE PROGRAM

Map 2
HENDRY COUNTY
FLOOD PRONE AREAS, 1998



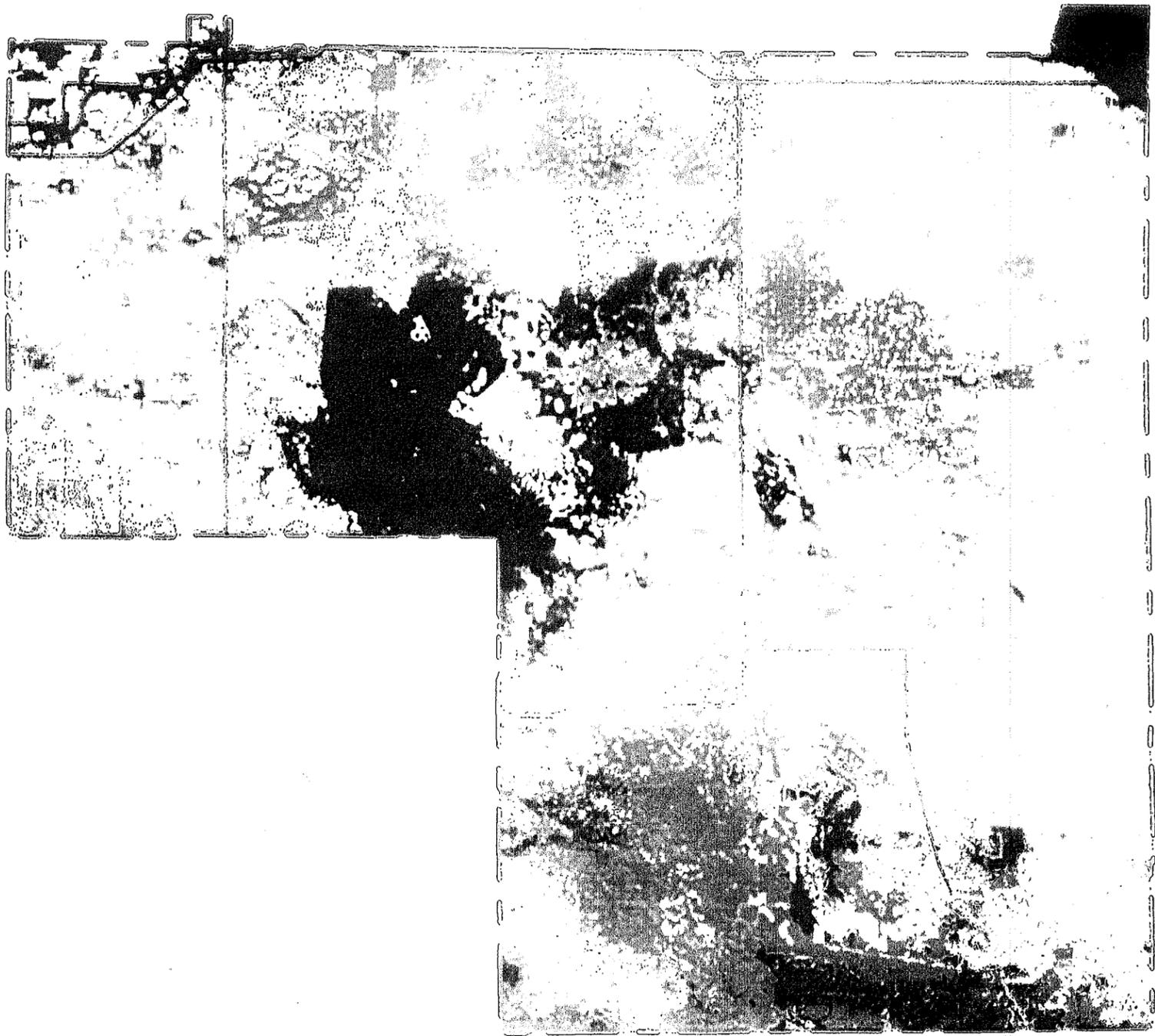




Map 4

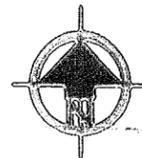
Hendry County, Florida

Land Cover

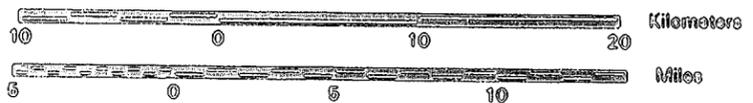


Legend

Class Name	Hexares
Coastal strand	0.0
Dry prairie	30,323.0
Pine lands	12,417.5
Sand pine scrub	0.0
Sandhill	0.0
Koctic oak scrub	0.0
Mixed hardwood-pine forest	3,631.2
Hardwood hammocks and forests	13,320.6
Tropical hardwood hammock	0.0
Coastal salt marsh	0.0
Freshwater marsh & wet prairie	23,426.3
Cypress swamp	19,331.9
Hardwood swamp	1,032.9
Bay swamp	0.0
Shrub swamp	2,392.1
Mangrove swamp	0.0
Bottomland hardwoods	0.0
Open water	7,776.6
Grassland (agricultural)	141,032.6
Shrub and brushland	22,693.9
Exotic plant communities	0.0
Barren	30,972.0
Major roads	
County boundary	



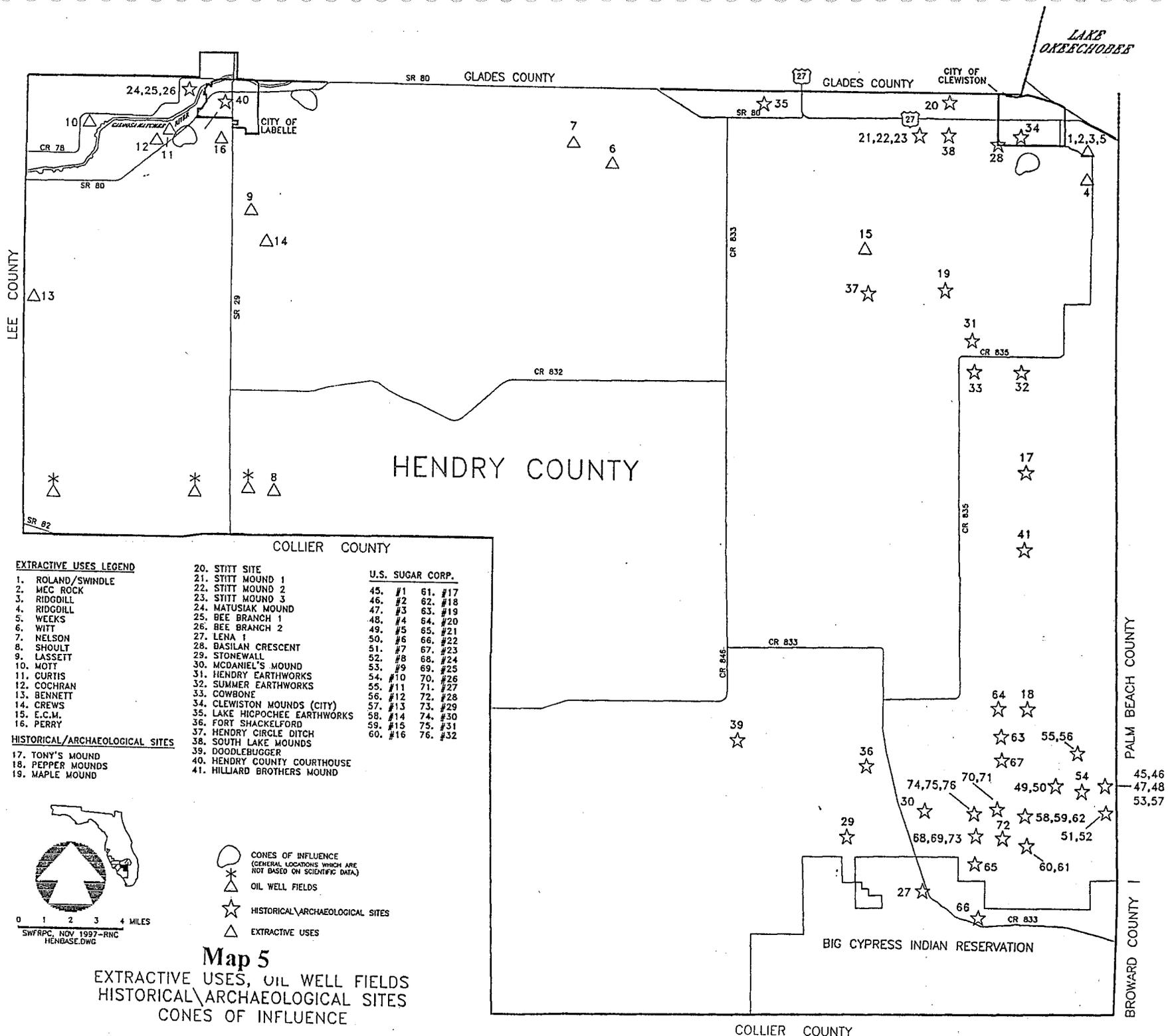
Scale



1 : 350000

SOURCE DATA
Landsat Thematic Mapper Satellite Imagery
April 3, 1986

Map prepared by FGFWFC
03/10/99



EXTRACTIVE USES LEGEND

- 1. ROLAND/SWINDLE
- 2. MEC ROCK
- 3. RIDGDILL
- 4. RIDGDILL
- 5. WEEKS
- 6. WITT
- 7. NELSON
- 8. SHOULT
- 9. LASSETT
- 10. MOTT
- 11. CURTIS
- 12. COCHRAN
- 13. BENNETT
- 14. CREWS
- 15. E.C.M.
- 16. PERRY

HISTORICAL/ARCHAEOLOGICAL SITES

- 17. TONY'S MOUND
- 18. PEPPER MOUNDS
- 19. MAPLE MOUND

20. STITT SITE

- 21. STITT MOUND 1
- 22. STITT MOUND 2
- 23. STITT MOUND 3
- 24. MATUSIAK MOUND
- 25. BEE BRANCH 1
- 26. BEE BRANCH 2
- 27. LENA 1
- 28. BASILAN CRESCENT
- 29. STONEWALL
- 30. MCDANIEL'S MOUND
- 31. HENDRY EARTHWORKS
- 32. SUMMER EARTHWORKS
- 33. COWBONE
- 34. CLEWISTON MOUNDS (CITY)
- 35. LAKE HIPOCHEME EARTHWORKS
- 36. FORT SHACKELFORD
- 37. HENDRY CIRCLE DITCH
- 38. SOUTH LAKE MOUNDS
- 39. DOODLEBUGGER
- 40. HENDRY COUNTY COURTHOUSE
- 41. HILLIARD BROTHERS MOUND

U.S. SUGAR CORP.

45. #1	61. #17
46. #2	62. #18
47. #3	63. #19
48. #4	64. #20
49. #5	65. #21
50. #6	66. #22
51. #7	67. #23
52. #8	68. #24
53. #9	69. #25
54. #10	70. #26
55. #11	71. #27
56. #12	72. #28
57. #13	73. #29
58. #14	74. #30
59. #15	75. #31
60. #16	76. #32



0 1 2 3 4 MILES
SWFRPC, NOV 1997-RNG
HENDBASE.DWG

- CONES OF INFLUENCE (GENERAL LOCATIONS WHICH ARE NOT BASED ON SCIENTIFIC DATA)
- OIL WELL FIELDS
- HISTORICAL/ARCHAEOLOGICAL SITES
- EXTRACTIVE USES

Map 5
EXTRACTIVE USES, OIL WELL FIELDS
HISTORICAL/ARCHAEOLOGICAL SITES
CONES OF INFLUENCE

Map 6

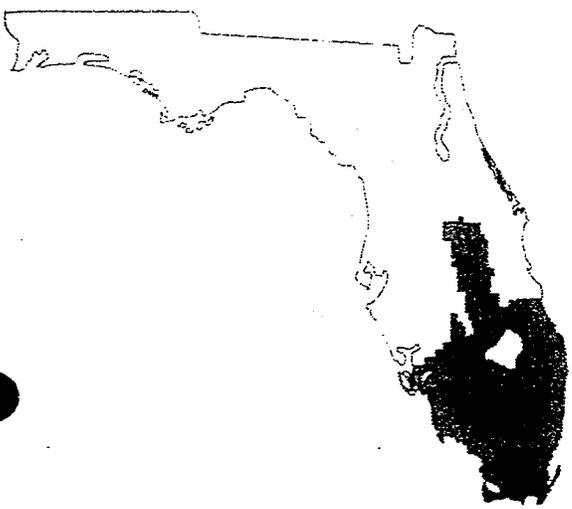
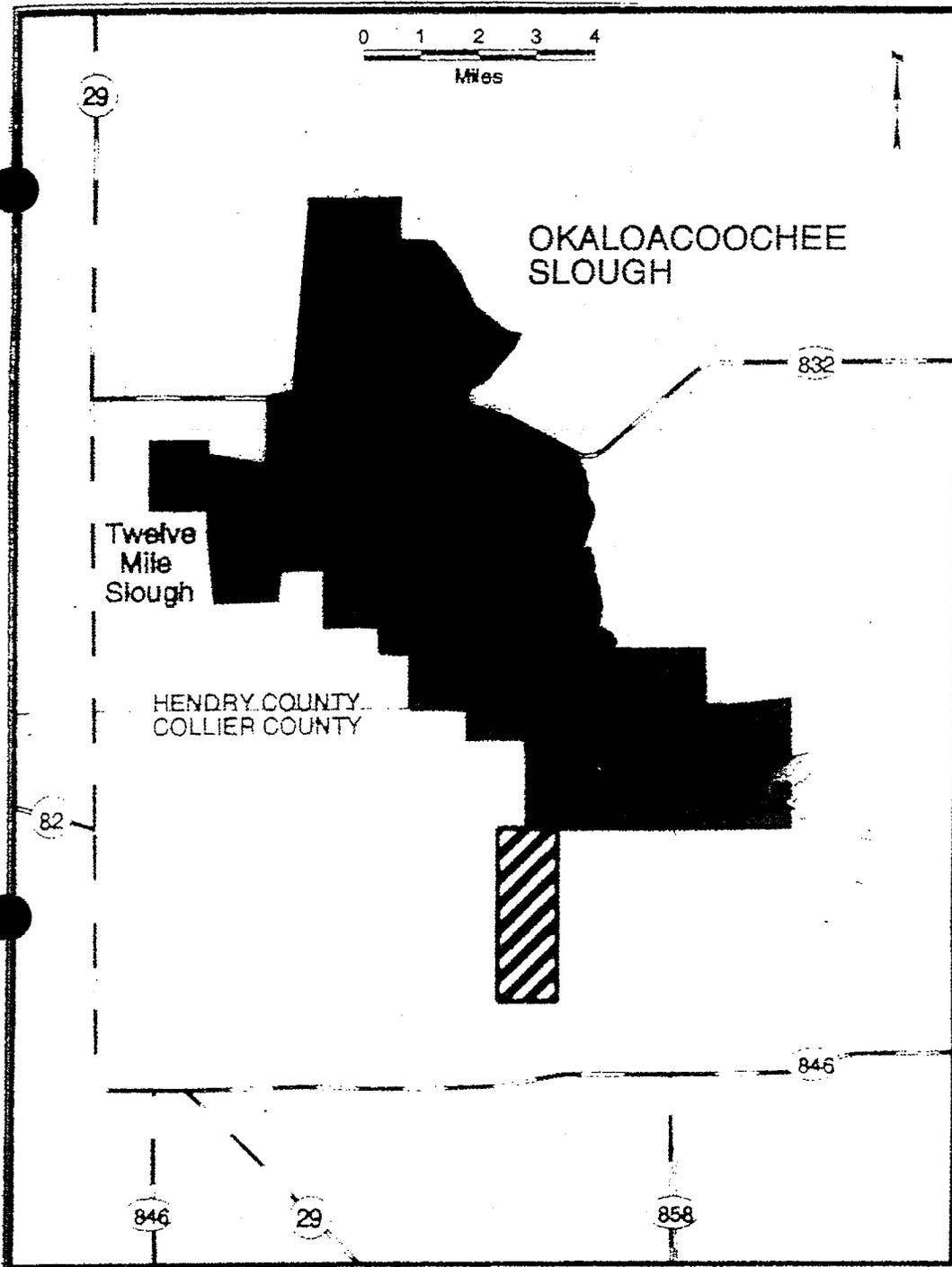
County:
Hendry

Total Projected Area:
31,720 acres

Total Acres Acquired:
21,702 acres

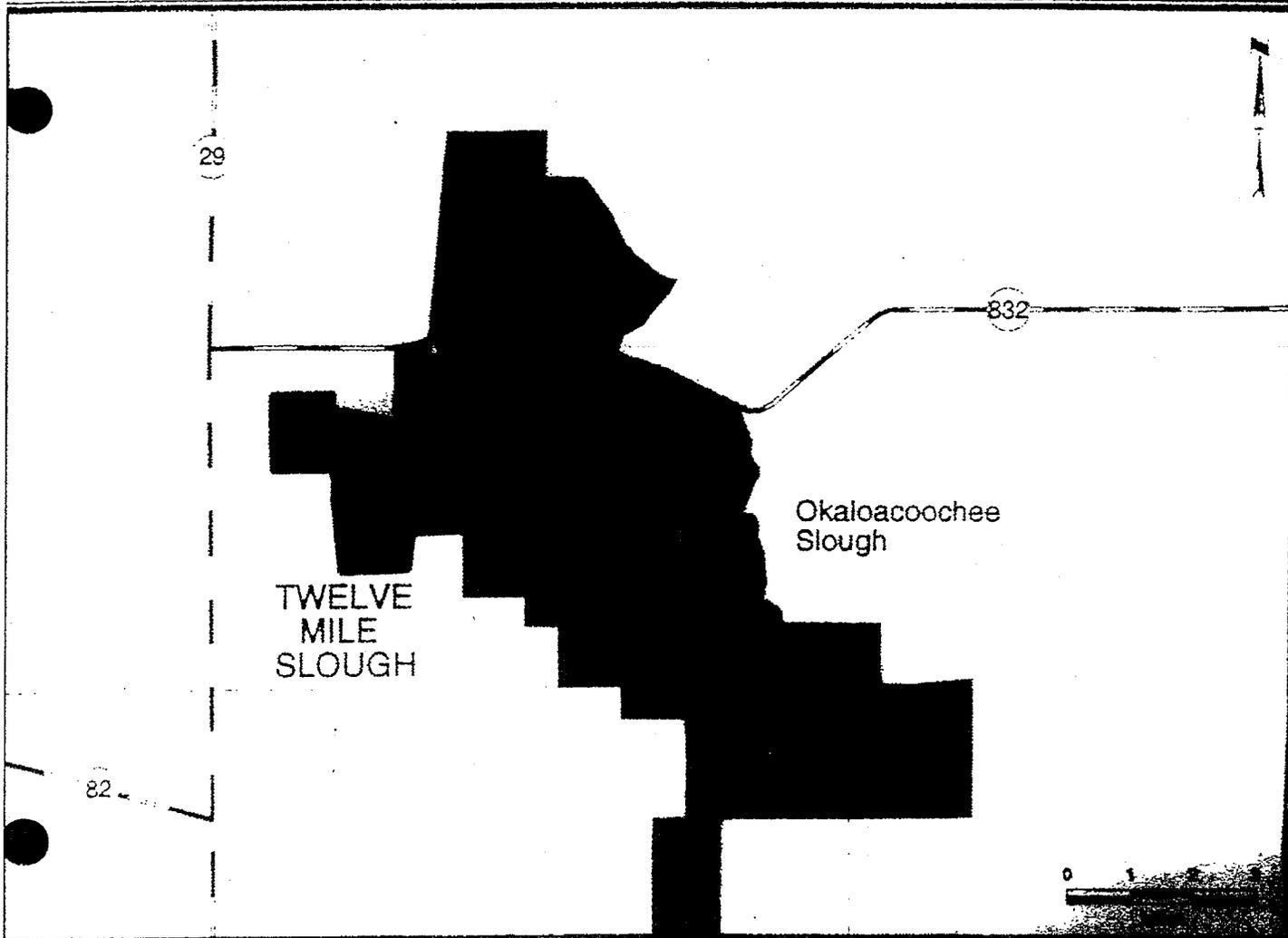
Acres Remaining:
10,018 acres

Number of Owners:
One



-  SOR Lands Acquired to Date
-  Potential Acquisition Areas
-  Other Conservation Areas
-  Other SOR Projects
-  1997 Project Additions
-  SOR Project Boundary

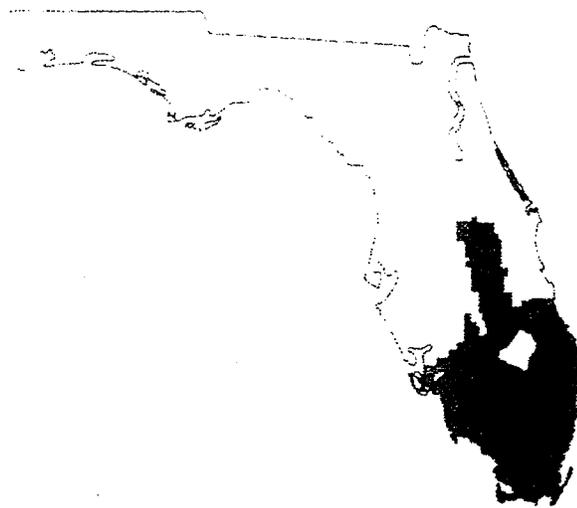




County:
 Hendry

Total Project Area:
 3,300 acres

Number of Owners:
 One

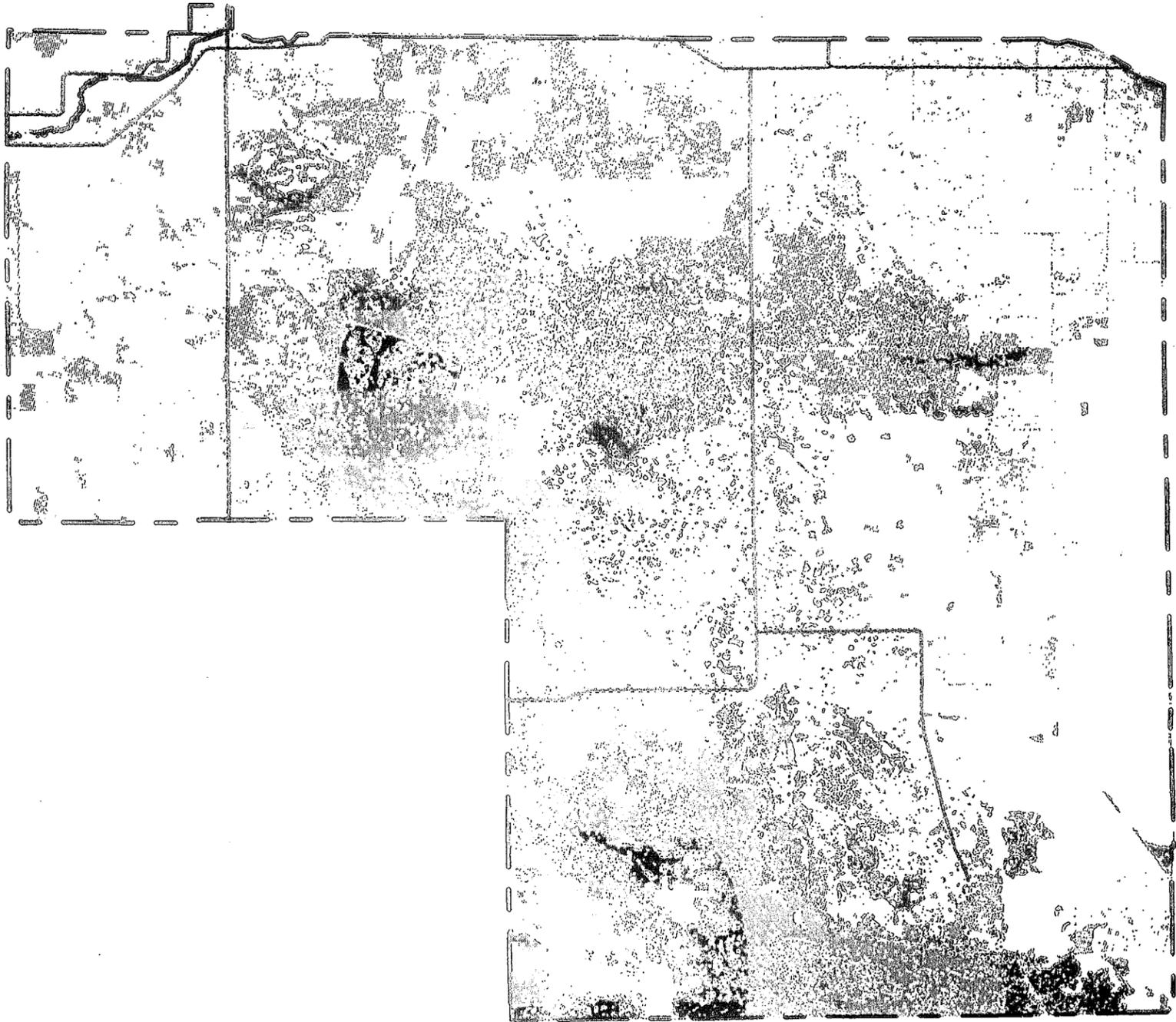


-  SOR
-  Poten
-  Other
-  Other
-  1997
-  SOR



Hendry County, Florida

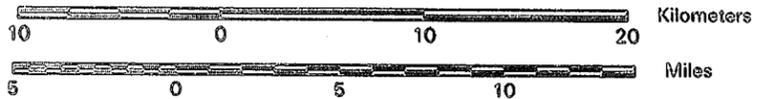
Priority Wetlands for Listed Species



This map represents wetland habitats critical to 33 wetland-dependent species of vertebrates listed as endangered, threatened, and species of special concern by the Florida Game & Fresh Water Fish Commission. Priority wetlands were identified using known occurrence records, species range maps, and vegetative cover data derived from 1985-1989 Landsat Thematic Mapper Imagery. Species overlap indicates the number of wetland-dependent listed species whose ranges co-occur.



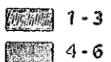
Scale



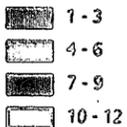
1 : 350000

SPECIES OVERLAP^{***}

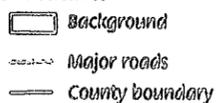
Upland Use Areas^{***}



Wetland Use Areas



Other Features



MAP NOTES

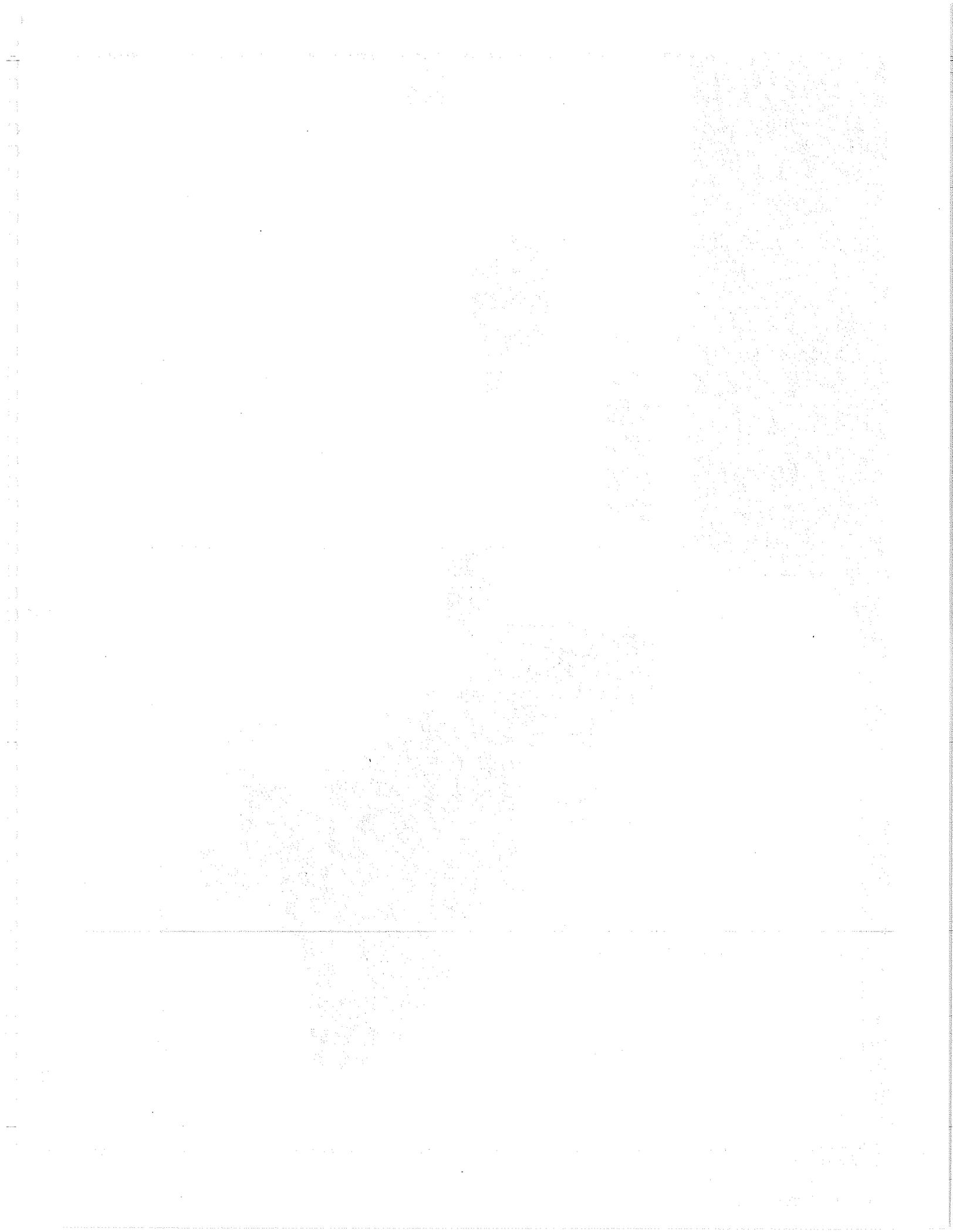
^{**}Indicates wetland-dependent species that also use upland habitats.

^{***}Not all colors representing ranges of species overlap occur in every county.

^{****}Overlap of wetland-dependent listed species that also depend on adjacent upland habitats.

Wetland dependent species in this county:

Alligator, bald eagle, sandhill crane, limpkin, little blue heron, snail kite, snowy egret, tri-colored heron, white ibis, wood stork, big cypress fox squirrel and black bear.



VIII. Intergovernmental Coordination
Element
Goals, Objectives & Policies

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT**1 INTRODUCTION**

2 The purpose of the Intergovernmental Coordination Element of the Comprehensive
3 Plan is to establish processes, procedures, and mechanisms for the effective coordination of
4 Hendry County's Comprehensive Plan and related activities with adjacent local governments,
5 and regional and state agencies.

6 As part of the Intergovernmental Coordination Element under 9J-5, each local
7 government is required to address resolutions to conflicts associated with development
8 proposals. To meet the new Rule change under 9J-5.015 (4), Hendry County has entered into
9 an interlocal agreement with the Southwest Florida Regional Planning Council (SWFRPC)
10 to act as facilitator to any jurisdictional dispute that may occur as a result of development
11 proposals. The SWFRPC also provides technical assistance to the County to secure grants.

12 Another legislative change under 9J-5, encourages local governments to establish
13 joint planning agreements for proposed annexation areas. Since Plan adoption, there have
14 been less than three annexations between the Cities of Clewiston and LaBelle in
15 unincorporated areas. At this rate, it is unforeseeable that any future annexation will occur
16 during the next planning period. Therefore, joint planning agreements are not applicable to
17 the planning process for Hendry County.

18 CONCLUSIONS FROM THE DATA ANALYSIS

19 The governments and agencies with which coordination is necessary were identified
20 in the Data Analysis, the support documentation for this Comprehensive Plan. The Data
21 Analysis acted primarily to inventory these entities, to describe the existing coordination
22 processes, procedures, and mechanisms, and to identify areas within the Comprehensive Plan
23 Elements needing coordination with the other entities. The following salient points were
24 concluded in the Data Analysis:

25 INVENTORY

26 There are numerous entities with which Hendry County must coordinate planning
27 efforts. These are inventoried in detail in the Data Analysis. They are summarized as
28 follows:

- 29 1) Local Inventory - The entities within Hendry County with which coordination
30 is needed include the Cities of Clewiston and LaBelle, the Hendry County
31 School District, local water management districts, the Big Cypress Seminole
32 Reservation, the utility companies, the airports, the Port LaBelle Community
33 Development District, other special purpose districts, and the departments
34 and agencies within the Hendry County government.
- 35 2) Inventory of Adjacent Municipalities - There are no incorporated
36 municipalities adjacent to the boundaries of Hendry County.

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

- 1 3) Inventory of Adjacent Counties - Hendry County is adjacent to other counties
2 both by sharing land boundaries, and having shared boundaries within Lake
3 Okeechobee. Land boundaries are shared with the Counties of Broward,
4 Collier, Glades, Lee and Palm Beach. The northwest corner of Hendry
5 County is the southeast corner of Charlotte County, and Hendry County
6 shares a corner with Martin and Okeechobee Counties near the middle of
7 Lake Okeechobee.
- 8 4) Regional Inventory - The regional entities with which Hendry County
9 requires coordination are the South Florida Water Management District and
10 the Southwest Florida Regional Planning Council.
- 11 5) State Inventory - Hendry County lies within the district areas of many
12 departments and agencies of the State of Florida. These are listed in the Data
13 Analysis.

EXISTING COORDINATION MECHANISMS

14
15 The Data Analysis identified that Hendry County coordinates planning with other
16 entities by both formal mechanisms and informal means. Formally, the County has entered
17 into several interlocal agreements, has formal membership in the Southwest Florida Regional
18 Planning Council, and has committee memberships.

19 Informally, Hendry County has contact with other governmental representatives at
20 meetings, conferences, seminars, etc. that go beyond the formal purposes. Issues, agendas,
21 experiences and related items are informally discussed. The informal planning mechanisms
22 can be especially effective with areas east of Hendry County, because the County is on the
23 eastern boundary of the Southwest Florida Regional Planning Council area and does not
24 participate in a formal planning group with counties to the east.

25 Presently, the County is coordinating with the South Florida Water Management
26 District (SFWMD) and the US Army Corp of Engineers (COE) to address the restudy of the
27 Caloosahatchee River. The current position of the County is to observe and address issues
28 which could alter the Caloosahatchee water supply. Recommendations of the restudy will be
29 submitted to Congress in July of 1999. At that time, Congress will consider the water
30 resources identified by the COE to address the ecosystems of the Everglades and the Florida
31 Bay, in addition to addressing future water supply of neighboring counties
32

COORDINATION OF COMPREHENSIVE PLANS

33
34 Intergovernmental coordination in varying degrees is needed with most
35 Comprehensive Plan Elements. The Data Analysis identified the following as having special
36 coordination requirements:

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

- 1) The basic data assumptions, such as population projections, and the distribution of countywide projections among the Cities of Clewiston and LaBelle and the unincorporated area of Hendry County. The University of Florida's Bureau of Business and Economic Research (BEER) projects population on a countywide basis, but does not provide a breakdown of the projections among the municipalities and the unincorporated area. This distribution must be determined locally. Because of differing planning purposes, it is not completely vital that such projections among these total to the countywide projections, but the projections should be coordinated and generally agree.
- 2) Numerous land uses cross jurisdictional boundaries. Of special concern are wetlands, commercial and industrial lands, platted lands, government land use needs, site location criteria, land use implications on other governmental jurisdictions, and interrelationships of uses.
- 3) Coordination should be effected with adjacent housing densities, seasonal/tourist housing needs, and infrastructure requirements for residential development.
- 4) Traffic circulation and transportation facilities must be coordinated with other transportation agencies and other jurisdictions.
- 5) Identification of environmentally sensitive lands should be coordinated near boundaries with adjacent communities. The conservation, use, and protection of natural resources should be generally coordinated.
- 6) Infrastructure development (sewer, potable water, drainage, solid waste, etc.) must be coordinated with adjacent and nearby jurisdictions.
- 7) The most effective delivery of recreation and open space can be effected through coordination among the jurisdictions within Hendry County.
- 8) The planning process for the development and maintenance of the Comprehensive Plan must be compatible with and further the State Comprehensive Plan and the Regional Policy Plan of the Southwest Florida Regional Planning Council.
- 9) There are no State identified Areas of Critical State Concern within Hendry County.
- 10) Although not comprehensive planning, per se, the regulations and plans of regional, state, federal agencies must be recognized by Hendry County in the comprehensive planning process. This is especially the case with regulatory agencies having jurisdiction within the boundaries of Hendry County.

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT**GOALS, OBJECTIVES AND POLICIES**

GOAL: To effectively coordinate plans and activities with the various local, State, and regional governmental units, districts, boards, and agencies.

OBJECTIVE 8.1: **COORDINATION OF PLAN INTERACTION:** Hendry County will coordinate all points of interaction with other entities concerning jurisdictional issues in the Hendry County Comprehensive Plan.

Policy 8.1.1: Hendry County will continue to be an active participant and observer in the feasibility study being conducted by the U.S. Army Corp of Engineers in the Restudy of the Caloosahatchee River to ensure that Hendry County's water supply remains adequate for its future population.

Policy 8.1.2: In order to keep other governmental entities informed copies of future amendments to the Comprehensive Plan to adjacent governmental entities and other appropriate agencies for their review and comments during the adoption process.

Policy 8.1.3: Hendry County will continue to pursue the Florida Department of Transportation concerning the operating levels of service on State roads within and nearby the City of LaBelle and to address the traffic circulation projects and programs for SR 80 and SR 29.

Policy 8.1.4: Reserved.

Policy 8.1.5: Hendry County will continue to coordinate with Lee County on the proposed Hendry-Lee County sanitary landfill including the actions necessary to permit, develop, and use the site.

Policy 8.1.6: Hendry County will furnish copies of proposed rezonings of major developments or improvements proposed in boundary areas to the Cities of Clewiston and LaBelle, and the adjacent counties.

Policy 8.1.7: Coordinate with the South Florida Water Management District concerning wetland mapping, permitting in wetland areas, the location of groundwater aquifer recharge areas, cones of influence, the locations of wellfields for public potable water supplies, and the water quality the Caloosahatchee River and Lake Okeechobee.

Policy 8.1.8: Hendry County shall request that the School Board submit for review information on renovations, additions, and proposed expansions to

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

- 1 property owned by the School Board to ensure the availability of
2 public facilities and land use consistency, as the proposal relates to
3 future planned improvements.
- 4 **Policy 8.1.9:** Hendry County shall advise the School Board of all Plan amendments
5 that may affect the location of new schools and proposed
6 improvements.
- 7 **Policy 8.1.10:** During pre-development program planning and site selection
8 activities, the County, as service provider, will coordinate with the
9 Hendry County Public School system to consider all reasonable
10 opportunities to collocate new libraries, parks, and other facilities
11 with public schools, where compatible, and the potential exists to
12 create logical focal points for community activity. Early review and
13 coordination activities will be modified as necessary to timely
14 consider these potentials.
- 15 **Policy 8.1.11:** The County will maintain, as a particular area of attention in its
16 planning program, a systematic review of the aesthetics and physical
17 conditions between its boundary and those between unincorporated
18 areas and other cities in an effort to improve the appearance of these
19 areas and the compatibility and transition between the adjoining
20 communities. Joint planning area agreements will be implemented if
21 appropriate.
- 22 **OBJECTIVE 8.2:** **LEVEL OF SERVICE STANDARDS:** Hendry County will annually
23 coordinate the Level of Service Standards with these entities having
24 operational and maintenance responsibilities for these facilities
25 required by the Comprehensive Plan.
- 26 **Policy 8.2.1:** Hendry County shall contact the U.S. Sugar Corporation, the City of
27 Clewiston, the South Shore Water Association, the City of LaBelle,
28 and General Development Utilities concerning the Level of Service
29 Standards for potable water and the available treatment plant
30 capacities.
- 31 **Policy 8.2.2:** Hendry County shall contact the City of Clewiston, the City of
32 LaBelle, and General Development Utilities concerning the Level of
33 Service for sanitary sewer and the available treatment plant
34 capacities.
- 35 **Policy 8.2.3:** Hendry County shall contact the South Florida Water Management
36 District concerning any changes in its Level of Service Standards for
37 drainage.

IX. Capital Improvements Element Goals, Objectives & Policies

PART 1. PURPOSE

INTRODUCTION

The purpose of the Capital Improvements Element is to bring required capital improvements programming directly into the Plan, so that infrastructure to support the Comprehensive Plan is programmed to be in place when needed. The Comprehensive Plan is required to be financially feasible, and it is with the Capital Improvements Element that this feasibility and affordability for the County is established.

The Capital Improvements Element is less than a complete capital improvements program, because it includes financial programming only for the limited infrastructure required by the Growth Management Act. However, the Capital Improvements Element is more than many capital improvement programs, because it includes analyses and policies for some infrastructure not even provided by Hendry County. Further, the Capital Improvements Element may be used as an integral tool to guide, direct and limit growth.

The infrastructure applicable for needs analysis by Hendry County according to the Growth Management Act includes roads, sanitary sewer, potable water, solid waste, drainage, and recreation/open space. Financial programming is required for the actual infrastructure among these for which Hendry County has fiscal responsibility, and these include roads, solid waste, drainage, and recreation/open space.

STATE REQUIREMENTS

In accordance with the "Local Government Planning and Land Development Regulation Act" (the Growth Management Act, Chapter 163 F.S.) and the "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance" (Chapter 9J-5 F.A.C.), the general purposes of the data analysis for the Capital Improvements Element of the Hendry County Comprehensive Plan is to:

- 1) Evaluate the need for public facilities as identified in the other elements;
- 2) Estimate the cost of needed improvements for which Hendry County has fiscal responsibility;
- 3) Analyze the fiscal capability of the County to finance and construct improvements;
- 4) Adopt financial policies to guide the funding of improvements;
- 5) Schedule the funding and construction if improvements in a manner necessary to ensure that capital improvements are provided when required based on the needs identified in the other elements;

- 1 6) In addition, the Capital Improvements Elements is to include the
2 requirements to ensure that an adequate Concurrency Management System
3 will be implemented by Hendry County.

4 The basic data required by the above State regulations to accomplish these purposes
5 include:

- 6 1) The public facilities needs identified in the other elements of the
7 Comprehensive Plan;
- 8 2) The identification of education and health systems service areas and
9 locations; and
- 10 3) An inventory of existing revenue sources and funding mechanisms for capital
11 improvement financing.

12 The State required data analyses include:

- 13 1) Current Hendry County practices that guide the timing and location of
14 construction, extension, or increases in capacity of each public facility.
- 15 2) General fiscal implications of:
- 16 a) Existing facilities needs;
- 17 b) Future needs for each type of facility;
- 18 c) Relative priority of needs among facility types;
- 19 d) Analysis to include support of Future Land Use Element.
- 20 3) Costs of needed capital improvements for:
- 21 a) Mitigation of existing deficiencies;
- 22 b) Replacement;
- 23 c) New growth needs pursuant to Future Land Use Element; and
- 24 d) Basis of cost estimates.
- 25 4) Impact of new or improved public educational and public health care systems
26 and facilities on the provision of infrastructure.

IX. CAPITAL IMPROVEMENTS ELEMENT

- 1 5) The use of timing and location of capital improvements to support efficient
2 land development and the Goals, Objectives, and Policies of the Future Land
3 Use Element.
- 4 6) Consideration of State agency and South Florida Water Management District
5 plans for public facilities within Hendry County.
- 6 7) Assessment of Hendry County's ability to finance capital improvements
7 based upon anticipated population and revenues, including:
- 8 a) 5-Year forecasting of revenues and expenditures;
- 9 b) Projection of current bond debt service;
- 10 c) Projection of ad valorem tax base, assessment ratio, and mileage rate;
- 11 d) Projection of other tax bases and revenues;
- 12 e) Projection of operating costs considerations;
- 13 f) Projection of debt capacity.
- 14

PART 2. CAPITAL IMPROVEMENTS DATA ANALYSIS**GUIDING THE TIMING AND LOCATION OF PUBLIC FACILITIES**

17 Hendry County currently is utilizing capital improvements planning or programming
18 for the provision of public facilities under its fiscal responsibility (for the purposes of the
19 Comprehensive Plan requirements, including roads, solid waste, drainage, and parks). In
20 addition, annual capital expenditures are budgeted during the County's annual budget
21 process. The County's limited resources are applied on a basis of prioritizing emergencies
22 first, and then meeting the most salient needs for repairs, maintenance and replacement,
23 especially concerning safety.

24 Because these improvements are generally needed in areas of highest use, the location
25 of projects typically are the populated residential areas and areas of greatest use by the
26 public. Once these more demanding needs are met, then the County can focus on other more
27 general needs. Most of these concern road projects; asphaltting dirt roads or extending some
28 segments to accommodate better traffic flow. Some minor drainage problems are also
29 addressed. Most of these projects are minor in scope because of the limited resources. Nearly
30 all such projects are located in the most populated areas or areas of greatest use by the public.

31 Generally, the timing and location of public facilities, and using timing and location
32 as a tool to support efficient land development has been through this priority process and

1 through the land development regulations. Land subdivisions and other developments by
2 ordinance cannot be developed without the provision of facilities included as a part of
3 development plans. Developments are not permitted unless in an area that can provide such
4 facilities. Even developments in areas without central sewer and potable water must provide
5 adequate wastewater disposal and potable water. The soils must be adequate to support septic
6 tanks and groundwater must be available to support the proposed development. Adequate
7 traffic circulation and road access is required.

8 **PUBLIC FACILITIES NEEDS/FISCAL IMPLICATIONS**

9 The Hendry County Data Analysis and the previous elements of this Comprehensive
10 Plan describe the public facilities in Hendry County and present analyses of their capacities
11 for providing services to the existing population, and for serving projected future growth.
12 The emphasis is on supporting the Future Land Use Element.

13 **STATE ROADS**

14 The Florida Department of Transportation (FDOT) is the entity responsible for State
15 maintained roads in Hendry County, and it is the FDOT analyses of State roads upon which
16 the County has relied. The following is an update to the State Road classifications since the
17 adoption of the Comprehensive Plan:

- 18 1. There is currently adequate data and information available for the State (and
19 U.S.) roads in Hendry County. SR 80 and US 27 (also designated as SR 25)
20 are classified by FDOT as Major Arterials, and the LOS standard for these
21 arterials is established by FDOT at Level "C" for all road segments. SR 29
22 is classified as a Minor Arterial, and has a LOS standard of "D" established
23 for all its segments.
- 24 2. Since the four lane completion of SR 80 in 1997 west of SR 29, the level of
25 service within the City of LaBelle has improved to a LOS of "C", and is
26 projected to remain at that LOS until 2005. Other segments of SR 80 in the
27 County are projected to fall to a LOS of "D" by 2005. Acquisition of right-of-
28 way for widening of SR 80 from the County line to the City of LaBelle is
29 complete. Improvements are planned for completion by the end of fiscal year
30 2007.
- 31 3. A segment of SR 29 north of SR 80 in LaBelle in the area of the
32 Caloosahatchee River bridge has fallen to LOS "E", and the FDOT LOS
33 Standard for SR 29 is LOS "D". While the segments of SR 29 with the heavy
34 traffic volumes are within the City of LaBelle, part of this segment lies within
35 the unincorporated area of the County.

- 1 4. The adopted FDOT Plan does not include any planning for the segment of SR
2 29 north of SR 80 in LaBelle, but the latest drafted Plan includes complete
3 Planning, Design and Engineering work for the entire Hendry County SR 29
4 corridor from the Collier County line to the Glades County line. This was
5 planned for the 1990-91 year, but has since been updated to year 2001-2002.
- 6 5. Vehicle accident data for the State roads indicate predictably that most
7 accidents occur within the Cities of Clewiston and LaBelle. Also predictably,
8 the more serious accidents have occurred away from the cities where it is
9 probable that speed was a factor.

10 **COUNTY ROADS**

11 Although sufficient data and information is not available for quantitative analysis of
12 County-maintained road segments, the County Road and Bridge Department via the expertise
13 of the County Engineer has made an interim inventory of deficiencies in the County Road
14 system. These deficiencies are identified in the Data Analysis and are presented in the
15 Schedule of Capital Improvements in the Capital Improvements Element of this
16 Comprehensive Plan.

17 The deficiencies identified include needs for some County road resurfacing, some
18 road widening, some drainage improvements, and some paving of roads not previously
19 paved. These deficiencies are based on the best professional evaluation by the County
20 Engineer. Once sufficient data and information are available for a more quantitative analysis,
21 some of the specific projects may be modified, some may be deleted, and others may be
22 added.

23 Desirable Level of Service (LOS) Standards for County-maintained roads include
24 LOS "D" for all road segments within one mile of any boundary of an incorporated city, and
25 LOS "C" for the balance of the County-maintained roads as shown on the Future Traffic
26 Circulation Map.

27 **SANITARY SEWER**

28 There are three centralized sanitary sewer systems in Hendry County; the City of
29 Clewiston, the City of LaBelle, and Port LaBelle (large unincorporated planned
30 community/DRI).

31 The Clewiston system serves the City and portions of the unincorporated area south
32 and east of the City. The LaBelle system primarily serves the business community and some
33 residential areas within the City. The Port LaBelle system serves the planned community,
34 which includes primarily residential with some commercial uses, schools, and related uses.

IX. CAPITAL IMPROVEMENTS ELEMENT

1 Analyses of these systems indicate that all of them have adequate treatment plant
2 capacities to serve the growth of the Cities and County through the year 2010. Some line
3 extensions will be necessary to serve the anticipated growth areas around these systems, but
4 none of the systems plan to construct the extensions themselves. These extensions will occur
5 on an as-needed basis, and will be financed by the developers involved.

6 Projected growth outside the service areas of these systems is not substantial, and
7 new development in the outlying areas will primarily be served by on-site septic tank
8 systems. It is not anticipated that any farmworker housing communities will be developed
9 prior to the end of 1995, but whether before or after that date they will most probably be
10 served by a mix of septic tanks and new package or other type of central treatment facilities.
11 These would all be developer financed.

POTABLE WATER

13 There are three centralized potable water systems in Hendry County; the City of
14 LaBelle, Port LaBelle, and the U.S. Sugar Corporation which provides treated potable water
15 to the City of Clewiston and the South Shore Water Association distribution systems.

16 All of these systems have adequate treatment capacity for projected growth in and
17 around their service areas through the year 2010. Some line extensions will be necessary to
18 serve the surrounding projected growth areas of the County, and these extensions will be
19 developer funded, not planned extensions of the systems.

20 As discussed in the sanitary sewer section above, projected growth in areas outside
21 the potable water systems service areas is not substantial, and new development in the
22 outlying areas will primarily be served by private on-site wells. Should a farmworker housing
23 community be proposed for the outlying areas, such development would probably be served
24 by a mix of private wells and small treatment plant. Any central systems would be developer
25 funded.

SOLID WASTE

27 The Hendry County Landfill facility which served the entire County was closed in
28 1992. The facility was located in Pioneer Plantation and had a life span of 40 years; however,
29 it only lasted 32 years. Hendry County was exempted from the 1988 Solid Waste
30 Management Act which required a 30% reduction of solid waste going to landfills because
31 of its population size. Since the closure of the Pioneer Plantation facility, the County has
32 been transporting its solid waste to the Lee County landfill. An intergovernmental agreement
33 was signed by both counties for the disposal of Hendry County's solid waste and will expire
34 in 40 years, or until the Hendry-Lee County landfill is operational. Since the closing of the
35 Hendry County Landfill, Lee County has been responsible for the disposal of Hendry
36 County's solid waste. However, one of the major problems associated with this arrangement
37 has been the low tipping fee charged by Hendry County to drive-in customers. Due to the low
38 costs, Lee County is receiving waste from other entities outside of Hendry County such as

IX. CAPITAL IMPROVEMENTS ELEMENT

1 Glades County and even parts of Palm Beach County. Typically, the disposal site will charge
 2 an average of \$25.00 to \$35.00 per vehicle to dump. In Hendry County's case, only \$10.00
 3 is charged making it extremely economical for haulers to dump at the landfill. Table 1 shows
 4 the Solid Waste generated by Hendry County since 1993.

Table 1

Solid Waste Generation

	FY	FY	FY	FY	FY	FY
	92/93	93/94	94/95	95/96	96/97	97/98
Month	Tons	Tons	Tons	Tons	Tons	Tons
8 October	0.00	2,393.18	2,599.49	3,001.71	3,018.68	2,799.57
9 November	0.00	2,323.26	2,473.78	2,746.12	2,724.68	2,563.03
10 December	2,073.11	2,439.25	2,614.53	2,719.12	3,103.84	3,106.44
11 January	2,283.72	2,852.08	2,935.71	3,053.47	2,898.52	0.00
12 February	2,064.87	2,852.09	2,590.66	3,048.53	3,295.21	0.00
13 March	2,901.08	2,887.99	3,422.93	3,675.04	3,256.44	0.00
14 April	2,417.24	2,659.94	3,018.11	3,283.77	3,221.90	0.00
15 May	2,618.45	2,657.44	3,273.46	3,298.44	3,141.34	0.00
16 June	2,860.21	2,879.86	3,188.43	3,086.60	3,672.16	0.00
17 July	2,631.43	2,450.98	2,853.13	3,139.73	2,985.32	0.00
18 August	2,734.78	2,718.25	2,807.90	2,723.65	2,769.40	0.00
19 September	2,376.50	2,484.22	2,750.00	2,692.10	2,842.30	0.00
20 12 Month Total	24,961.39	31,598.53	34,528.13	36,468.26	36,929.79	8,469.04
21 Percent Increase*		7.69%	9.3%	5.59%	1.27%	-4.27%

22 * FY93/94 is based on 10 months' usage and FY97/98 is based on 2 months.

23 Source: Lee County Solid Waste Department, February 1998.

24 The proposed Hendry/Lee County Landfill is approximately 1,734 acres located off
 25 SR 82 in Hendry County. Development costs for the site will be borne by Lee County and
 26 Hendry County will be responsible for all fees associated with the facility's use. Transfer
 27 stations will be located in Clewiston and LaBelle. The new landfill site is expected to open
 28 by the year 2000.

29 The pounds per capita per day (PPCD) rate of solid waste disposal in Hendry County
 30 was 5.9 PPCD. This rate has remained relatively unchanged since the last planning period.
 31 However, the rate was expected to rise one percent per year. Through a county-wide
 32 recycling initiative, the anticipated rate per capita for disposal waste has been kept in check.

33 STORMWATER MANAGEMENT FACILITY

34 The primary jurisdiction and concern over drainage by the County is in residentially
 35 developed areas, and in other areas in conjunction with roads. Currently no specific
 36 deficiencies have been identified for drainage under the County's jurisdiction, except as
 37 related to roads.

1 The County has Municipal Services Benefit Units (MSBU) in several, primarily
2 residential, areas of the County with the intent to study, identify and correct drainage
3 problems which may be found (the general purposes of these MSBUs also include some
4 roads and street lighting).

5 Since adoption, the Comprehensive Plan has been amended to include the appropriate
6 projects in the Schedule of Capital Improvements. Funding for these improvements will be
7 via assessments on benefitting properties within the MSBUs.

8 **RECREATION AND OPEN SPACE**

9 Hendry County has fiscal responsibility for providing parks and recreation for the
10 unincorporated area of the County. Utilizing the State standards for neighborhood parks, the
11 County is somewhat deficient in this recreation category. By the end of 2005 the County
12 would need to add approximately 20 acres to accommodate the population in the
13 unincorporated area, and approximately three more acres by the end of the year 2010.
14 However, most of the County's population dwells in and around the incorporated Cities of
15 Clewiston and LaBelle, and it is reasonable to view the provision of recreation facilities in
16 coordination with the Cities from an "urban" perspective.

17 There are three established recreation MSBUs in Hendry County. One serves the west
18 side of the county, one serves the east, and one serves the unincorporated Harlem area south
19 of Clewiston. These MSBUs are currently being used for operations, repairs and
20 maintenance, and for more minor facilities. These MSBUs can generate sufficient funds to
21 develop the additional neighborhood park acreage need.

22 Recreation facilities, which include the actual development of parks within
23 the recreational acreage, are considered to be adequate for the present, but will need
24 revisiting by the year 2005. The County will need to monitor and evaluate the existing
25 facilities as it grows.

26 **PUBLIC EDUCATION AND HEALTH CARE SYSTEMS**

27 The State requirements under Chapter 9J-5.016(1)(b) and Chapter 9J-5.016(2)(d)
28 include analyzing public education and health care facilities in the Capital Improvements
29 Element for their possible impacts on the provision of infrastructure, although no other
30 analysis is required for the other Comprehensive Plan Elements. The following discussions
31 review these facilities.

32 **PUBLIC EDUCATION SYSTEMS**

33 The Hendry County School District provides for elementary and secondary education
34 in Hendry County. The District teaching facilities are located in the incorporated areas of
35 Clewiston and LaBelle, and the unincorporated area of Port LaBelle which lies just east of
36 the City of LaBelle. Total enrollment in the system as of the end of the 1997-1998 school

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1 year was 7,206, with 4,036 in the Clewiston area and 3,170 in the LaBelle area. Annual
2 increases in enrollment have been averaging approximately 2%-3% in the Clewiston area and
3 4%-5% in the LaBelle area.

4 According to the Hendry County School Board, several improvements are planned
5 in both Clewiston and LaBelle. Presently, there are three elementary schools in the City of
6 Clewiston which include Westside, Eastside, and Central Elementary schools. A fourth
7 school is planned, but will not be constructed until the budget year 2000-2001. In the
8 meantime, approximately 300 students are being schooled in a temporary holding center
9 which is part of Clewiston Middle School. A new middle school was built in Clewiston and
10 opened September 1998. At present, no new sites have been identified for new schools.
11 Construction is occurring on existing sites. For example, in Clewiston as new buildings are
12 constructed, the existing structures are being demolished.

13 In LaBelle there are two Elementary Schools, Country Oaks and LaBelle Elementary.
14 A third elementary school was scheduled to open by the end of 1998, on the existing LaBelle
15 Middle School site. There are two phases to this project in which both a new middle school
16 and elementary school will be constructed on the same site. The middle school was
17 completed by at end of 1998.

18 Funding for these projects is from the State P.E.C.O. fund and bond dollars.
19 Additional funding will come from revenues generated by Pari-Mutual Race Track activities
20 and property taxes.

21 PUBLIC HEALTH CARE SYSTEMS

22 There is one hospital in Hendry County, located within the City of Clewiston. There
23 are currently no programs for new, expanded or improved facilities that would impact upon
24 the infrastructure in Hendry County.

25 EXISTING REVENUE SOURCES AND FUNDING MECHANISMS

26 Hendry County has the same range of capital improvements revenue sources and
27 funding mechanisms available to all non-charter counties in Florida. The specific utilized
28 sources and mechanisms are presented below.

29 AD VALOREM TAX

30 The State limits Hendry County to ten mills for this general taxing authority. The
31 1998-99 budget is based upon a total of ten mills on a tax base of approximately \$1.4 billion.
32 After deducting the funds allocated to the incorporated areas of the County, the total
33 budgeted Ad Valorem tax yield to the County is \$1.2 billion. The County has the authority
34 to use the Ad Valorem tax to fund capital improvements, but all of these taxes (and more)
35 are required to operate the County government. None of the proceeds from the Ad Valorem
36 tax is currently being utilized for capital improvements.

1 Over the years many counties, including Hendry County, have relied heavily on ad
2 valorem taxes for most financing of all types of government operations and activities. This
3 trend is changing, and other sources of revenue geared more to service users are growing in
4 use.

5 **STATE REVENUE SHARING**

6 The funds from this source are from revenues collected by the State of Florida,
7 including cigarette, intangibles and motor fuels taxes. The funds are distributed to the County
8 by formula based on County population, unincorporated area population, and sales tax
9 collections. There are two parts to this revenue sharing; one which may be used for locally
10 determined uses and another which can be pledged for bond and related debt retirement.
11 Hendry County receives and utilizes funds for both. The amount budgeted for 1998-99 is
12 \$619,867, of which \$28,673 is pledged by the County against capital improvements
13 indebtedness for the 1992 bond issue.

14 **HALF-CENT SALES TAX**

15 Basically one-half cent on each dollar of retail sales is collected by the State and
16 distributed within the county in which the sales occurred. This distribution is carried out by
17 formula and divided among the unincorporated county and the incorporated cities. These are
18 general use funds budgeted to yield \$1,120,826 for Hendry County for the 1998-99 year.

19 **LOCAL OPTION SALES TAX**

20 Hendry County has adopted this surtax pursuant to the "Local Government
21 Infrastructure Commitment Act". The levy collected may be used only for infrastructure
22 which is defined by the Statute as "any fixed capital expenditure or fixed capital costs
23 associated with the construction, reconstruction, or improvement of public facilities which
24 have a life expectancy of five or more years and any land acquisition, land improvement,
25 design and engineering costs related thereto." The 1988 Capital Improvements Revenue
26 Bond has been paid off. The revenue amount for the 1992 bond series, which was used to
27 build the courthouse, is budgeted for the 1998-99 year at \$1,537,637.

28 **GASOLINE TAXES**

29 Another source of capital improvements funding includes the various gasoline taxes
30 Hendry County receives. These are both locally and State imposed taxes. Most of these funds
31 received by the County are appropriated to the County Road and Bridge Department, and are
32 important sources of revenue or the Department in the County. The State of Florida collects
33 and distributes these funds to counties according to several methods, as follows:

- 34 1) The constitutional gasoline tax (fifth and sixth cents of State gasoline tax) is
35 shared by the State with localities, and Hendry County is budgeted to receive
36 approximately \$241,337 for the 1998-99 year.

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- 1 2) The one-cent county gasoline tax levied by the State (formerly known as the
2 seventh cent) is distributed to counties in the same manner as the
3 constitutional gasoline tax. Hendry County is budgeted to receive \$515,717
4 in the 1998-99 year from this source.
- 5 3) The eighth cent of the State gasoline tax is included in the State Revenue
6 Sharing mentioned under "State Revenue Sharing" above.
- 7 4) A one-cent voted gasoline tax was approved in Hendry County in 1983, and
8 is budgeted to yield \$270,000 in the 1998-99 year.
- 9 5) The local option gasoline tax has been set by Hendry County ordinance at
10 four cents, and been budgeted to yield \$606,688 for the 1998-99 year.

11 PARI-MUTUEL (RACE TRACK) TAX

12 The amount of \$446,500 is distributed annually by the State to each of Florida's
13 counties. These funds are derived from a portion of pari-mutuel wagering at the various race
14 tracks located in Florida. The amount distributed is limited by State statute, and funds
15 remaining after the county distributions are transferred to the State's general revenue fund.
16 Within Hendry County a portion of these funds are allocated to the school district and the
17 hospital authority. The County government receives a balance of approximately \$180,525,
18 which is used for County jail bond debt service and the Construction I & S Fund.

19 OTHER STATE-SHARED REVENUES

20 The State of Florida also share revenues with counties from other sources, including
21 beverage taxes, insurance license and premium taxes, mobile home license taxes, the oil and
22 gas production taxes, and the solid mineral severance taxes. These funds are distributed to
23 the County based on various formula. The 1998-99 estimate for the total of these taxes is
24 \$28,673.

25 SPECIAL ASSESSMENTS/TAXING DISTRICTS

26 A county is authorized by State statute to impose special assessments and establish
27 special taxing districts for specific improvement projects. Revenue is produced for the
28 projects from special assessments or taxes paid by those benefitting from the projects.
29 Presently Hendry County has several Municipal Service Benefit Units (MSBU) which
30 function to provide capital improvements in this manner. These include projects for drainage,
31 fire protection, recreation, lighting, and some road work.

1 **OTHER COUNTY REVENUES**

2 The County collects funds from various other sources, such as franchise fees for solid
3 waste collection and cable television, licenses and permits, fines, and charges for services
4 (user fees). These funds may be pledged for various purposes. The County does not currently
5 have facilities impact fees in place, but may consider using them in the future.

6 **FEDERAL REVENUE**

7 Federal funds may come to the County in various ways. In part such funds are for
8 some federal mandates which cost the County money. Generally, federal funds are either 1)
9 allocated to state agencies which administer the funds in the form of grants to the County,
10 or 2) reserved at the federal agency level and disbursed to the local government. Basically
11 these funds are grants for various purposes for which the County must qualify. Some of these
12 are for infrastructure and may assist in the provision of capital improvements. The County
13 has utilized some federal grant funds for infrastructure in the Harlem area just south of
14 Clewiston.

15 For projects that qualify under federal guidelines, the County may be able to utilize
16 federal grant funds for purpose of providing additional or improved infrastructure.

17 **BONDS**

18 A county may raise funds through the sale of bonds. Bonds essentially come in two
19 forms: 1) general obligation bonds which are issued and backed by the "full faith and credit"
20 of the county and are often repaid by ad valorem and other taxes; and 2) revenue bonds for
21 which special arrangements are made for repayment (the project itself may be revenue
22 producing). Hendry County has outstanding approximately \$3 million in capital
23 improvements revenue bonds issued to finance improvements to the County Court and
24 administrative complex, and some miscellaneous capital expenditures.

25 **CAPITAL IMPROVEMENTS FINANCING ASSESSMENT**

26 **FIVE-YEAR PROJECTION OF REVENUES AND EXPENDITURES**

27 **1. PROJECTION OF AD VALOREM TAXES**

28 Table 2 is a projection of ad valorem taxes based on the projected tax base and
29 mileage rate from historic trends. The estimated tax base for the unincorporated area is
30 protected for the five years covered by the Capital Improvements Element.

IX. CAPITAL IMPROVEMENTS ELEMENT

TABLE 2

PROJECTED AD VALOREM TAXES

	1998-99	1999-2000	2000-2001	2001-2002	2002-2003
Tax Base ¹	\$1,211,642	\$1,235,874	\$1,260,592	\$1,285,804	\$1,311,520
Millage	10	10	10	10	10

NOTE: ¹Net assessed valuation, figures stated in millions of dollars. Tax base conservatively estimated to increase at two percent annually (1998-99 base year).

2. TOTAL PROJECTED REVENUES

Table 3 is a projection of the major revenues/expenditures over the next five years. Some of these funds are committed for debt service (refer to Projected Bonds Debt Service table), and it is probable that all ad valorem tax dollars will be needed for government operations and will not be available for capital improvements.

The projections in the table include revenues from special assessments; most of which are committed to existing projects or operations of the units.

It is presently anticipated that sufficient revenues from the recreation MSBUs will be available for funding needed park improvements in the years shown in the 5-Year Schedule of Capital Improvements. The timing of the recreation improvements is such that additional assessments can be established prior to needed improvements, if surpluses should need supplemented.

3. PROJECTED EXPENDITURES

Table 3 projects the major expenditures over the next five years. Hendry County does not currently utilize capital improvements planning or programming. Therefore projections of capital improvements expenditures have not been made, other than those included in the Schedule of Capital Improvements in the implementation section of this Element. Refer to that section for projected expenditures related to this Comprehensive Plan.

It would take a major study establishing overall capital improvements planning and programming to estimate the County's total capital expenditures for the next five years.

A small county with limited resources, Hendry County does not currently have plans to commit to overall capital improvements planning and/or programming, but it has carried out the appropriate capital improvements analysis for the Comprehensive Plan, and intends to continue this process as required in the future.

IX. CAPITAL IMPROVEMENTS ELEMENT

The Comprehensive Plan expenditures as presently known can be projected for the next five years. These total approximately \$30,000 for neighborhood park development and for road, bridge and related drainage projects. These are detailed in the Schedule of Capital Improvements in the Implementation section of this Element.

The County does not generally project overall total operating costs over a five year period, as it might in conjunction with a capital improvements program, and cannot currently expend the resources required for overall capital improvements programming. Only minor additional operating costs are foreseen in relation to the additional neighborhood park acreage to be developed. Some additional operating costs will accrue, however, for mowing grass, upkeep of equipment, repair, general maintenance, and some additional man hours. For the needed road, bridge and related drainage projects the operating costs may actually be reduced because the maintenance costs will be less after the projects are completed.

TABLE 3
REVENUE/EXPENDITURE PROJECTIONS
FISCAL YEARS 1998/1999-2002/2003
(Amount in 1,000's)

FUND	1998/ 1999	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003
REVENUES¹ (including cash balance forward)					
General	\$6,763,265	\$6,898,530	\$7,036,501	\$7,177,231	\$7,320,776
Fine/Forfeiture	\$5,478,157	\$5,587,720	\$5,699,475	\$5,813,464	\$5,929,733
Transportation ²	\$2,617,089	\$2,669,431	\$2,722,819	\$2,777,276	\$2,832,821
Various Improvement Districts/MSBU's	\$1,376,975	\$1,404,515	\$1,432,605	\$1,461,257	\$1,490,482
Bond Issues	\$1,330,024	\$1,356,624	\$1,383,756	\$1,411,432	\$1,439,661
TOTAL³	\$17,565,510	\$17,916,820	\$18,275,156	\$18,640,660	\$19,013,473
EXPENDITURES¹					
General	\$6,763,265	\$6,898,530	\$7,036,501	\$7,177,231	\$7,320,776
Fine/Forfeiture	\$5,478,157	\$5,587,720	\$5,699,475	\$5,813,464	\$5,929,733
Transportation ²	\$2,617,089	\$2,669,431	\$2,722,819	\$2,777,276	\$2,832,821
Various Improvement Districts/MSBU's	\$1,376,975	\$1,404,515	\$1,432,605	\$1,461,257	\$1,490,482
Bond Issues	\$1,330,024	\$1,356,624	\$1,383,756	\$1,411,432	\$1,439,661
TOTAL³	\$17,565,510	\$17,916,820	\$18,275,156	\$18,640,660	\$19,013,473

Notes:

1. Revenues/Expenditures generally projected at two percent annual rate.
2. Revenues/Expenditures for transportation projects in 5-Year Schedule of Improvements distributed throughout 5-year projection.
3. Includes all revenues/expenditures from all funds

PROJECTED DEBT SERVICE OBLIGATIONS FOR OUTSTANDING BOND ISSUES

The Table 4 provides a schedule of the annual debt service on outstanding bonds over

IX. CAPITAL IMPROVEMENTS ELEMENT

1 the 5-year Capital Improvements Element period. The bonds only included a 1992 Public
 2 Improvements Issue with a current principal balance of \$3,696,580, The 1965 and 1988 bond
 3 series have been paid in full.

4 **TABLE 4**
 5 **PROJECTED BONDS DEBT SERVICE**

6 BOND	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
7 1992 ¹	\$432,627	\$436,349	\$438,666	\$434,681	\$434,211
8 Total	\$432,627	\$436,349	\$438,666	\$434,681	\$434,211

9 Notes: ¹Payout 2005

10 **PROJECTION OF DEBT CAPACITY**

11 As projected in the previous section, Hendry County currently has approximately \$3
 12 million in outstanding bond debt which will be fully paid out on its projected schedule by
 13 end of the year 2005. The County's projected debt capacity is limited over the repayment
 14 period by the amount of surplus funds that may be available and/or on the revenue generated
 15 by a project that requires debt to complete. Of concern are the areas for which the County has
 16 fiscal responsibility in the Comprehensive Plan (roads, solid waste, drainage and
 17 recreation/open space).

18 The road, bridge and related drainage projects needed over the next five years (refer
 19 to the Schedule of Capital Improvements in the Implementation section) is projected to
 20 require . The basic source of revenue for these projects is the Gas Tax . Most of the balance
 21 of Gas Tax revenue not used for capital improvements will be required for Department
 22 operating for the period. Thus, as necessary, the County currently has the capacity to incur
 23 debt for the projected road, bridge and related drainage projects.

24 The MSBU funds for recreation is anticipated to have sufficient surplus to cover the
 25 costs for recreation improvements needed over the next five years (see the Schedule of
 26 Capital Improvements). Thus, the County has the capacity to incur debt if necessary to carry
 27 out these improvements.

28 No capital improvements costs are projected for solid waste and general drainage
 29 over the capital improvements planning period (five years).

30 The County also has two additional cents of local option Gas Tax that could be
 31 adopted as needed, further increasing the debt capacity of the County for capital
 32 improvements financing. For specific projects, the County could also establish additional
 33 MSBUs or increase assessments for existing ones to cover debt service in the amounts
 34 necessary. Neither of these options are currently considered necessary.

IX. CAPITAL IMPROVEMENTS ELEMENT**PART 3. GOALS, OBJECTIVES AND POLICIES**

GOAL: To develop a sound fiscal program for the timely and efficient provision of public facilities within Hendry County consistent with the financial resources of the County.

OBJECTIVE 9.1: Based on the identification of facility needs and Level of Service (LOS) standards contained in the other elements of this plan, Hendry County shall develop, annually review and revise a program of capital improvements designed to meet existing deficiencies, to meet the needs for future growth, and to provide for replacement of obsolete or worn out facilities.

Policy 9.1.1: The Capital Improvements Element shall be annually reviewed for adjustment, updating and/or amendment.

Policy 9.1.2: The Capital Improvements Elements shall address roads, sanitary sewer, potable water, drainage, solid waste, and recreation in so far as they are under the fiscal responsibility of the County.

Policy 9.1.3: Capital improvements for inclusion in the Capital Improvements Element shall be defined consistent with Chapter 9J-5 F.A.C. and shall mean physical assets constructed to provide, improve or replace public facilities and which are large in scale, high in cost, typically nonrecurring, and often requiring multi-year financing. For the purpose of inclusion in this element, capital improvements shall only include projects or programs with a total cost of more than \$25,000.

Policy 9.1.4: The County shall establish a program for replacement and/or renewal of capital facilities to ensure that the levels of service do not fall below the standards called for in the plan. Criteria for replacement and/or renewal of capital facilities under the County's fiscal responsibility, include such as historical and projected maintenance costs, number of accidents, number of users, changes in performance or regulatory standards, and other factors relating to the specific capital facility.

Policy 9.1.5: County sponsored projects which are under negotiation prior to adoption of the Comprehensive Plan shall be subject to the policies of the Capital Improvement Element. Potential impacts of the county sponsored projects on the available capacity of the infrastructure to serve the projects shall be considered in accordance with the provisions of Objective 9.2, Policy 9.2.2, Capital Improvements Element of this Plan.

- e) will the facility be available concurrent with the demands generated by existing permitted development and projected new development?
- f) will the financial impacts of the improvement (including both capital costs and recurring operating costs) be consistent with the County's ability to support the improvement?
- g) will the improvement meet the level of service standards identified in other elements of the plan?

OBJECTIVE 9.2:

The county shall coordinate land use decisions with its financial capability to meet level of service standards, manage the land development process so that facility needs created by permitted development do not exceed the financial ability of the county, and identify the extent to which future development will be required to contribute to its proportional cost of facilities necessary to meet LOS standards through the accomplishment of the following policies.

Policy 9.2.1:

The adequacy of the public facilities available shall be determined by using the adopted Level of Service Standards for roads, sanitary sewer, potable water, drainage, solid waste, and recreation. These Level of Service (LOS) Standards are those adopted in the other elements of this Comprehensive Plan, and are as follows:

- a) Road
 - 1. All segments of all State roads in Hendry County designated on the Future Traffic Circulation Map as Urban Arterials shall have the LOS Standard of "C" at peak hour, and these include SR 80, SR-29 and SR 25 (also numbered US 27). This shall specifically apply to the roadway segments in LaBelle and Clewiston.
 - 2. All segments of all State roads in Hendry County designated on the Future Traffic Circulation Map as Rural Arterials shall have the LOS Standard of "B" at peak hour. This applies to the unincorporated areas.
 - 3. All segments of all County roads in Hendry County shown on the Future Traffic Circulation Map within one (1) mile of any boundary line of the City of Clewiston or the City of LaBelle shall have the LOS Standard of "C" at peak hour.

IX. CAPITAL IMPROVEMENTS ELEMENT

1 4. All segments of all County roads in Hendry County
2 shown on the Future Traffic Circulation Map and not
3 described in c) above shall have the LOS Standard of
4 "C" at peak hour.

5 b) Sanitary Sewer

6 The LOS Standard for determining the availability of
7 adequate treatment capacity for proposed developments in
8 areas where a centralized sewer system is available shall be
9 115 gallons per person per day.

10 c) Potable Water

11 The LOS Standard for determining the availability of
12 adequate treatment capacity for proposed development in
13 areas where a centralized water system is available shall be
14 170 gallons per person per day.

15 d) Solid Waste

16 The LOS Standard for determining the availability of
17 adequate solid waste disposal capacity of sanitary landfill
18 shall be 6.5 pounds per person per day.

19 e) Stormwater Management

20 1. For agricultural uses, the LOS Standard shall be the
21 requirements of the South Florida Water Management
22 District and the standards of the local water
23 management district in which the proposed
24 agricultural use is located.

25 2. For all other land developments (exclusive of
26 individual sites for single family dwellings and
27 duplexes) the LOS Standard shall be a 25-year design
28 storm of 24-hour duration, and detention shall be such
29 that post development runoff mimics predevelopment
30 runoff.

31 On collector roads, culverts and cross-drains shall
32 convey the runoff from a 10-year, 24-hour storm.

- 1 On local roads and internal subdivision roads, culverts
2 and cross-drains shall be designed to convey the
3 runoff from a 10-year, 24-hour storm.
- 4 3. Stormwater Management Systems - for development
5 in commercial, urban residential, mixed-use urban
6 land uses districts. Stormwater management systems
7 shall be designed to either retain on-site the runoff
8 generated by a 25-year, 24-hour storm or detain and
9 discharge the runoff from a 25-year, 24-hour storm at
10 peak discharge rates which do not exceed pre-
11 development rates.
- 12 4. Stormwater Management Systems - for development
13 in all other land use districts. Stormwater management
14 systems shall be designed to either retain on-site the
15 runoff generated by a 5-year, 24-hour storm or detain
16 and discharge the runoff from a 5-year, 24-hour storm
17 at peak discharge rates which do not exceed pre-
18 development rates.
- 19 5. Water Quality - Water quality treatment shall be
20 provided for runoff from the first one-inch of rainfall;
21 or as an option, for projects or project sub-units with
22 drainage areas of less than 100 acres, from the first
23 one-half inch of runoff consistent with Chapters 62,
24 FAC.
- 25 f) Recreation
- 26 1. The LOS Standard for community park acreage shall
27 on a county wide basis be no less than 2.0 acres per
28 1,000 of the official Hendry County population count
29 or estimate.
- 30 2. The LOS Standard for neighborhood park acreage
31 shall be based on the urban population of Hendry
32 County. On an urban population, basis neighborhood
33 park acreage shall be no less than 1.75 acres per 1,000
34 of official urban population count, and no less than
35 2.0 acres per 1,000 of the official urban population
36 count or estimate by the end of the year 2000.
- 37 3. The LOS standard for regional park acreage shall be
38 based on a countywide basis and be no less than nine

IX. CAPITAL IMPROVEMENTS ELEMENT

1 provisions to ensure that such policy is continued with the zoning
2 map and regulations, and related land use decisions, such as in the
3 review of special exceptions and zoning changes.

4 **Policy 9.3.2:** The County shall adhere to the timing in the Schedule of Capital
5 Improvements, and any proposed developments requiring the
6 facilities programmed in the Schedule, prior to the completion of
7 projects therein, will not be permitted unless the facilities included in
8 the Schedule are provided by the developer.

9 **Policy 9.3.3:** Reserved.

10 **OBJECTIVE 9.4:** Compared to the coastal and other rapidly growing counties, Hendry
11 County is a small, rural county with basically an agricultural
12 economy. As such, typical urban growth has not placed undue strains
13 on facilities in the County, and growth is not seen as a major factor
14 is providing public facilities in the County. However, prior to the end
15 of 1995 Hendry County shall adopt policies related to the extent to
16 which future development will bear a pro rata or proportionate share
17 of the costs of facility improvements necessitated by the development
18 in order to adequately maintain adopted Level of Service Standards.

19 **Policy 9.4.1:** Hendry County shall cause a study to be conducted into the necessity
20 and effectiveness of, and the best methods for, requiring new
21 developments to pay pro rata or proportionate share of public
22 facilities costs generated by the new development.

23 **Policy 9.4.2:** Based upon the recommendations of the study planned in Policy
24 9.4.1, Hendry County shall adopt appropriate policies for provision
25 of pro-rata or proportionate share by new development, and shall
26 develop impact fees or related requirements as determined from
27 evaluation of the recommendations.

28 **OBJECTIVE 9.5:** Hendry County shall manage its fiscal resources and responsibilities
29 in order to ensure that the provision of capital improvements does not
30 exceed the County's fiscal capability, and to ensure that the provision
31 of facilities are prioritized in the most effective and efficient manner.

32 **Policy 9.5.1:** The County shall continue to prioritize each type of facility under its
33 fiscal responsibility as follows:

- 34 a) Projects which eliminate hazards or to protect the public
35 safety and health.
- 36 b) Projects needed eliminate existing deficiencies.

- 1 c) Projects which are rational extensions of existing facilities.
- 2 d) Projects which promote infill development in existing
3 development areas where other facilities are available.
- 4 e) Projects which accommodate redevelopment.
- 5 f) Projects for which outside sources of funding are available.
- 6 g) Projects which otherwise have lower budget impact.
- 7 h) Projects which include or further other projects of other
8 entities, such as State agencies, the South Florida Water
9 Management District, the Big Cypress Seminole Reservation,
10 and the Cities of Clewiston and LaBelle.

11 **Policy 9.5.2:** In conjunction with Policy 9.1.1 the County shall annually review the
12 Capital Improvements Element for possible modification,
13 reprioritizing, or other needed changes.

14 **Policy 9.5.3:** The County shall as part of its annual budget review adopt a capital
15 budget consistent with the Comprehensive Plan requirements, and
16 shall use its fiscal policies to direct capital expenditures for capital
17 improvements which recognize the policies of the other elements of
18 this Comprehensive Plan.

19 **Policy 9.5.4:** The County shall manage its debt by limiting outstanding capital debt
20 to a 1:10 ratio of total annual debts service to total annual County
21 revenues. The County's fiscal policies shall be consistent with this
22 plan.

23 **Policy 9.5.5:** A density or other bonus shall be given to proposed developments
24 that provide infill development, which directly eliminates or
25 significantly lessens facilities deficiencies, and/or which provides
26 new facilities that can accommodate other future development.
27 However, such densities and intensities of use shall not conflict with
28 those which are shown on the Future Land Use Map.

29 **Policy 9.5.6:** The County shall permit flexible or creative development techniques
30 that can demonstrate more efficient use of public facilities.

31 **OBJECTIVE 9.6:** Chapter 9J-5 requires that an Objective be included in a
32 comprehensive plan for the limitation of public facilities that
33 subsidize development in high-hazard coastal areas. Hendry County

1 is not a coastal county and does not have such areas, so this
2 requirement does not apply.

3 **PART 4. CAPITAL IMPROVEMENTS IMPLEMENTATION**

4 **5-YEAR SCHEDULE OF CAPITAL IMPROVEMENTS**

5 In several areas of this Plan, especially in the Goals, Objectives of the elements, part
6 of the Comprehensive Plan's proposed activities has been to develop the data and
7 information necessary to better analyze the existing conditions and future needs. These are
8 included because in the development of this Comprehensive Plan, numerous data and
9 information deficiencies were encountered. Because of the data and information problems
10 encountered, there may be deficiencies in existing facilities and some needs of facilities to
11 accommodate future growth that were not revealed in the various analyses conducted as a
12 part of the planning process.

13 As a result of the analyses for which sufficient data and information were available,
14 and which could be effectively and adequately carried out as part of this planning process,
15 the only capital improvements deficiencies and needs revealed in Hendry County are in the
16 areas of Recreation. Although adequate data are not available for a complete quantitative
17 analysis of County roads, the County is aware of deficiencies for which improvements must
18 be completed to meet current needs and future demands. In lieu of quantitative analysis the
19 County has relied on the expertise of the County Engineer to determine needed Traffic
20 Circulation improvements.

21 According to the FDEP standards, the County is currently sufficient in neighborhood
22 park acreage, but needs to add developed neighborhood park acreage in order to meet the
23 needs of projected future growth. The County presently owns land well located to meet these
24 needs, and the only requirements are to develop the proper facilities for the land.

25 The neighborhood park needs are those caused by the future growth to the end of
26 1995, with some additional acreage needed to meet continued growth through the year 2000.
27 As expressed in the Goals, Objectives and Policies in the Recreation and Open Space
28 Element and in this Capital Improvements Element, the County plans to meet these needs
29 as presented in the Schedule of Capital Improvements.

30 As discussed previously in this Element, there are various road, bridge and related
31 drainage projects needed for adequate traffic circulation in the County. These projects are
32 included in the 5-Year Schedule of Capital Improvements in Table 5.

IX. CAPITAL IMPROVEMENTS ELEMENT

Table 5
Proposed Five-Year Capital Improvements Plan

	Roadway	From/To	Description of Work	Cost
5	CR 78	From SR 29 western Hendry County line.	Approximately 9 curves to be widened, total length needs to be resurfaced. Resurface (10.5 miles) Width (24 ft.)	360,000
		Slaughterhouse Curve, West	Guardrail (0.7 miles (North Side Only)	115,000
		Lee County Line	Extend culvert.	150,000
			Construct new double barrel	350,000
			Rip rap slopes	50,000
		SR 29 Intersection	Obtain Right-of-Way	200,000
			Construct new roadway and intersection	350,000
6	CR 720	From US 27 to Glades C. Line	Needs leveling and resurfacing. Resurface (1.0 mile) Width (18 ft.)	55,000
7	CR 830	From SR 29 to East end of pavement	Needs to be resurfaced. Resurface (4.1 miles) Width (20 ft.).	185,000
8	CR 830A	From US 29, East to CR 830	Needs to be resurfaced. Resurface (2.1 miles) Width (20 ft.).	95,000
9	CR 832	From 13.1 miles East of SR 29 to CR 833	Extend culverts (19). Reconstruct to 24 ft. width. Needs to be widened and resurfaced. Resurface (7.1 miles) Width (24 ft.)	1,800,000
10	CR 833	From CR 835 to CR 846	Needs to be widened 3 ft. on each side and resurfaced. Resurface (5.4 miles) width (18 ft.)	535,000
		From CR 846 to SR 80.	Needs to be widened and resurfaced. Extend culverts. First 10.1 miles needs to be widened and resurfaced. 10.1 - 17.0 needs to be resurfaced. 17.0 - 20.2 needs to have the culverts extended, existing surfaced milled, re-subgrade 8 ft. and resurfaced. (20.2 miles) Width (varies).	2,100,000
		CR 846 Intersection	Purchase Right-of-way	30,000
			Reconstruct	90,000
11	CR 835	From U.S. 27 to Evercane Sugar Refinery.	Resurface (3.0 miles) Width (24 ft.).	600,000
		From Evercane Sugar Refinery to L-1 Canal.	Needs to be demucked and reconstructed. (8.7 miles) Width (24 ft.)	2,700,000
		From L-1 Canal to North end of new pavement.	Needs to be reconstructed, widened and have 20 culverts extended. (10.0 miles) Width (24 ft.)	1,500,000
		From South end of new payment to CR 833	Needs to be milled, widened, and surfaced. Culvert at CR 833 - CR 835 needs to be extended or moved back. (5.4 miles) Width (24 ft.)	900,000

EXHIBIT A
IX. CAPITAL IMPROVEMENTS ELEMENT

	Roadway	From/To	Description of Work	Cost
		From CR 833 to SW County Line	Northern 9 miles needs to be widened and resurfaced. The remaining 2.3 miles needs to be milled, re-mixed, a layer of rock added and repaved. (11.3 miles) width (24 ft.)	1,800,000
1	1 st Ave.	SR 29 to Luckey Street	Grade and improvement drainage. Resurface (0.1) miles width (18 ft.)	8,000
2	8 th St., Pioneer	From Tampa Ave. to Vero Ave.	Currently a graded rock road that needs to be asphalt surfaced. (0.2 miles) width (20 ft.)	45,000
3	10 th St., Harlem	From Georgia Ave. to Arkansas Ave.	Grade and improvement drainage. (0.62 miles) width (20 ft.)	10,000 30,000
4	11 th Ter.,	From Georgia Ave. to	Correct drainage . Reconstruct width (20 ft.)	30,000
5	Harlem	Harlem Academy Ave.		
6	12 th St., Harlem	From Georgia Ave. to Mississippi Ave.	Resurface (0.5 miles) width (20 ft.)	25,000
7	15 th St., Pioneer	From Lakeview Ave. to Homestead Ave.	Currently a graded Rock road that needs to be asphalt surfaced (0.4 miles) width (24 ft.)	115,000
8	16 th St., Pioneer	From Homestead Ave. to Tampa Ave.	Currently a graded rock road that needs to be asphalt surfaced (0.9 miles) width (24 ft.)	196,000
9	Alex Blvd.	From W hidden Rd. to dead end	Resurface (0.3 miles) width (20 ft.)	15,000
10	Apache Ave.	From Nobles Rd. to Roy Brown Ditch	Resurface (0.3 miles) width(20 ft.)	15,000
11	Art Lawrence Rd.	From Hooker's Point R. to Old US 27	Reconstruct (0.6 miles) width (20 ft.)	120,000
12				
13	Avalon	From Nobles Rd. CR 78	Acquire 60 ft. right-of-way (5 acres) Reconstruct (0.4 miles) width (20 ft.)	25,000 100,000
14	Barbara St.	From Cowboy Wy. to Mary St.	Reconstruct (0.5 miles) width (180 ft.)	10,000
15	Bee Branch	From CR 78 to dead end	Resurface (0.1 miles) width (20 ft.)	25,000
16	Lakes Dr.			
17	Bishel St.	From Elizabeth St. to Shadow Ln.	Resurface (0.1 miles) width (20 ft.)	5,000
18	Blumberg Rd.	From CR 835 to end of pavement	Needs leveling course and to be resurfaced. Resurface (9.6 miles) width (20 ft.) Replace culvert	790,000 65,000
19	Bonneville	From CR 78 to dead end	Needs to be resurfaced. Resurface (1.1 miles) width (20 ft.) Guardrail (0.5 miles (CR 78 to North River Rd.))	55,000 160,000
		Fort Denaud Ditch	Replace Tripe 48 ft, culverts Rip rap slope protection	115,000 30,000
20	Capt. Hendry Dr.	SR 80 to SR 80	Resurface (0.6 miles) width (20 ft.)	30,000
21				
22	Carlotta Ave.	From Thigpen Rod to dead end	Resurface (0.2 miles) width (18 ft.)	10,000

IX. CAPITAL IMPROVEMENTS ELEMENT

	Roadway	From/To	Description of Work	Cost
1	Carlyle St.	From Cowboy Wy. to Favor Ave.	Resurface (0.2 miles) width (18 ft.)	10,000
2	Carolina Ave., 3 Harlem	From 7 th St. to 10 th St.	Resurface (0.3 miles) width (20 ft.)	15,000
4	Carter St.	From Avalon Ave. to Kell Mill Blvd.	Resurface (0.1 miles) width (20 ft.)	5,000
5	Case Rd.	From SR 29 East to end	Resurface (2.9 miles) width (18 ft.)	135,000
6	Cherokee St.	From CR 78 to North end	Resurface (0.3 miles) width (20 ft.)	15,000
7	Chickasaw 8 Ave.	From Glades County Line to Roy Brown Ditch	Resurface (0.4 miles) width (20 ft.)	20,000
9	Choctaw Ave.	From Glades County Line to Roy Brown Ditch	Resurface (0.3 miles) width (18 ft.)	15,000
10	Church Rd.	From SR 29 to 1 mile West	Resurface (1.0 miles) width (20 ft.)	80,000
11	Cook Rd.	Thigpen to SR 80	Resurface (0.3 miles) width (20 ft.)	15,000
12	Cowboy Wy.	From Birchwood Pkwy. to SR 80 (CR 80A)	Needs to be resurfaced. Resurface (3.1 miles) width (24 ft.)	155,000
13	(CR 80A)	From City Ditch to Collingswood Pkwy.	Resurface (4.5 miles) width (24 ft.)	210,000
14	Creek Ave.	From Nobles Rd. to Glades County Line	Resurface (0.1 miles) width (18 ft.)	5,000
15	Davidson Rd.	From Evercane Rd. to Sonora St.	Needs leveling course and to be resurfaced. Resurface (1.1 miles) width (24 ft.)	110,000
16	Della Tobis, 17 Harlem	From 7 th St. to 13 th St.	Resurface (0.9 miles) width (20 ft.)	50,000
18	Double J Acres 19 Rd.	From SR 80 West	Resurface (.9 miles) width (18 ft.)	50,000
20	Elizabeth St., 21 North LaBelle	From Thigpen to Avalon Ave.	Resurface (0.2 miles) width (20 ft.)	10,000
22	Eucalyptus 23 Blvd.	From Collingswood Pkwy. to Cowboy Wy.	Resurface (3.0 miles) width (24 ft.)	15,000
24	Evans Rd.	From SR 29 East to end. Thigpen to SR 29	Resurface (2.9 miles) width (18 ft.)	145,000
25	Everhigh/ 26 LaDeca Rd.	From Canopy Ln. to Center St.	Currently a graded rock road that needs to be asphalt surfaced. Resurface (1.7 miles) width (24 ft.)	205,000
27	Favor Rd.	From SR 29 to Hall St.	Resurface (0.4 miles) width (20 ft.)	20,000
28	Flaghole Rd.	From US 27 to Taft Blvd.	Resurface (4.0 miles) width (24 ft.)	500,000
		From S. Curve to Taft Blvd.	Guardrail (0.2 miles (West Side Only))	35,000
		From Taft Blvd. to Seminole Ave.	Guardrail (1.0 miles (East & West Sides))	160,000

Adopted: March 5, 1991
Amended: November 9, 1999

EXHIBIT A
IX. CAPITAL IMPROVEMENTS ELEMENT

	Roadway	From/To	Description of Work	Cost
1	Fort Adams Rd.	From Trader Rd. to Bonneville Rd.	Needs to be resurfaced. Resurface (0.7 miles) width (20 ft.)	35,000
2	Fort Center	From Trader Rd. to Bonneville	Resurface (0.6 miles) width (20 ft.)	30,000
3	Fort Denaud		Replace and repair major components	250,000
4	Bridge			
5	Fort Denaud	From SR 80 to CR 78A	Needs to be widened, leveling course and to be resurfaced. Resurface (3.1 miles) width (24 ft.)	700,000
6	Rd.		Construct Concrete Box Culvert (0.9 miles West of Huggetts Rd.)	80,000
			Construct Concrete Box Culvert (1.4 miles West of Huggetts Rd.)	80,000
7	Fort Kies Rd.	From Trader Rd. to Bonneville Rd.	Needs to be resurfaced. Resurface (0.7 miles) width (20 ft.)	35,000
8	Fort Simmons	From Trader Rd. to Bonneville Rd.	Needs to be resurfaced. Resurface (0.7 miles) width (20 ft.)	35,000
9	Rd.			
10	Frances St.	From Avalon Ave. to cal de sac	Resurface (0.2 miles) width (20 ft.)	10,000
11	North LaBelle			
12	Garden St.	From Cowboy Wy. to Pine Ave.	Needs drainage construction.	50,000
			Resurface (0.7 miles) width (20 ft.)	35,000
13	Georgia Ave.	From CR 832 to Lewis	Needs drainage construction.	100,000
14	Harlem	Barn		
			Resurface (1.0 miles) width (20 ft.)	50,000
15	Hand Ave.	From SR 29 to cal de sac.	Resurface (0.5 miles) width (18 ft.)	25,000
16	Harlem	From 7 th St. to 13 th St.	Resurface (0.9 miles) width (20 ft.)	50,000
17	Academy Ave.,			
18	Harlem			
19	Hedges St.	From Marion Ave to County Line Rd.	Resurface (0.2 miles) width (18 ft.)	10,000
20	Hendry Isles	From SR 80 to Fire	Needs to be resurfaced Resurface (2.6 miles) width (20 ft.)	135,000
21	Blvd.	Station	From Everglades Ave. to Tampa Ave. Needs to be resurfaced. Resurface (1.8 miles) width (20 ft.)	
22	Holiday Isles	From US 27 to Redish	Resurface (0.2 miles) width (20 ft.)	10,000
23	Dr.	Rd.		
24	Hooker's Point	From Davidson Rd to Old US 27	Needs leveling course and to be resurfaced. Resurface (2.8 miles) width (24 ft.)	210,000
25	Rd.		Resurface (0.6 miles) width (18 ft.)	30,000
		From Art Lawrence Rd. to Old US 27		
26	John Rd.	From Hookers' Point R. to dead end	Resurface (0.3 miles) width (18 ft.)	15,000
27	Johnson Rd.	From Davidson Rd. to Hookers' Point Rd.	Resurface (0.2 miles) width (18 ft.)	10,000

IX. CAPITAL IMPROVEMENTS ELEMENT

	Roadway	From/To	Description of Work	Cost
1	Kell Mill Blvd.	From CR 78 to Elizabeth Ave.	Resurface (0.3 miles) width (20 ft.)	15,000
2	Kentucky Ave., Harlem	From 7 th Ct. to 13 th St.	Resurface (0.8 miles) width (20 ft.)	40,000
3				
4	Lillian St.	From Orange Ave. to Cowboy Wy.	Resurface (0.3 miles) width (18 ft.)	15,000
5	Luckey St.	From Favor St. to Cowboy Wy.	Resurface (0.2 miles) width (18 ft.)	10,000
6	Magnolia Ln	From Twin Lakes Dr. to Richmond Ave.	Resurface (0.3 miles) width (20 ft.)	15,000
7	Marion Ave.	From SR 29 to end of pavement	Resurface (0.4 miles) width (18 ft.)	20,000
8	Mary St.	From Barbara St. to Lillian St.	Resurface (0.1 miles) width (18 ft.)	5,000
9	Maryland Ave., Harlem	From 7 th St. to Mississippi Ave.	Resurface (0.2 miles) width (20 ft.)	10,000
10				
11	Mississippi Ave., Harlem	From 13 th St. to dead end	Resurface (1.0 miles) width (20 ft.)	50,000
12				
13	Mohawk Ave.	From Nobles Rd. to Roy Brown Ditch	Resurface (0.3 miles) width (20 ft.)	15,000
14	Navaho Ave.	From Nobles Rd. to Glades County Line	Resurface (0.1 miles) width (18 ft.)	5,000
15	Neely Davis Rd.	From West CR 830 to dead end	Acquire right-of-way	40,000
16			Construct (1.5 miles) width (24 ft.)	200,000
17	Niles Rd.	From North River Rd. to dead end	Resurface (0.4 miles) width (20 ft.)	20,000
18	Nobles Rd.	From CR 78 to SR 29	Needs to be resurfaced. Resurface (1.6 miles) width (20 ft.)	70,000
19	North River Rd.	From CR 78 to Bonneville	Resurface (1.2 miles) width (20 ft.)	60,000
20	Old US 27	From US 27 to Palm Beach County Line	Needs leveling course and to be resurfaced. Resurface (2.42 miles) width (20 ft.)	200,000
21	Orange Ave.	From SR 29 to Wallen St. and Hull St. to Lillian St.	Resurface (0.6 miles) width (18 ft.)	30,000
22	Palm Ave.	From Thigpen Rd. to Avalon Ave.	Resurface (0.2 miles) width (20 ft.)	10,000
23	Palmetto Ave.	From Pine Ave. to Hull St.	Resurface (0.1 miles) width (18 ft.)	5,000
24	Panama Ave.	From Hendry Isles Blvd. to Community Pk.	Construct (0.2 miles) width (20 ft.)	65,000
25	Pine Ave.	From Orange Ave. to Palmetto St.	Resurface (0.1 miles) width (18 ft.)	5,000
26	Pine St.	From Garden St. to dead end	Resurface (0.1 miles) width (18 ft.)	5,000

IX. CAPITAL IMPROVEMENTS ELEMENT

	Roadway	From/To	Description of Work	Cost
1	Shawnee Ave.	Commanche to Glades County Line	Resurface (0.4 miles) width (20 ft.)	20,000
2	Sioux Ave.	From Nobles Rd. to Glades County Line	Resurface (0.1 miles) width (18 ft.)	5,000
3	Surrency Rd.	From Flaghole Rd. to Riedtke Grove.	Resurface (0.6 miles) width (20 ft.)	30,000
4	Tampa, Pioneer	From 42' Canal to 23 rd St.	Currently graded rock road that needs to be asphalt surfaced.	250,000
			Concrete structure under the road for the 42' Canal (1.0 miles) width (20 ft.)	216,000
5	Tangerine	From SR 29 to Hull St.	Resurface (0.4 miles) width (20 ft.)	20,000
6	Tanner Rd.	From SR 29 West to dead end	Needs construction and drainage. Acquire 60 ft. right-of-way.	30,000
			Construct (0.4 miles) width (20 ft.)	150,000
7	Trader Rd.	From CR 78 to Cemetery Rd.	Needs to be constructed. Clear 60 ft. right-of-way.	50,000
			Resurface (0.4 miles) width (24 ft.)	125,000
		Fort Denaud Ditch	Replace Triple 48" Culverts	115,000
			Rip rap slope protection	30,000
8	Ute St.	From Cowboy Wy. to Orange Ave.	Resurface (0.6 miles) width (18 ft.)	30,000
9	Vero Ave., Pioneer	From 8 th St. to 4 th St.	Resurface (1.0 miles) width (24 ft.)	216,000
10				
11	Wallen St.	From Tangerine Ave. to Cowboy Wy.	Resurface (0.4 miles) width (18 ft.)	20,000
12	Willis Ranch Rd.	From CR 830A to dead end	Needs to be resurfaced. Resurface (1.6 miles) width (varies)	70,000
13				
14				22,276,000

Table 5a

Proposed Five-Year Capital Improvements Plan

	Project	Year	Description of Work (Justification)	Cost
17	Small County Courthouse Improvements	2000-2001	The recently renovated County Courthouse Complex is plagued with indoor air problems (mold and mildew) that are correctable, but at substantial costs. No funds exist in the county budget to accomplish this work.	125,000
18				
19				
20	Rodeo Grounds Improvements	2000-2001	To perform major repairs and renovations to the Hendry County (B.O.C.C. owned) Rodeo grounds on SR 29. The existing facilities are in very poor conditno and pose a hazard for all using the facilities. Florida Department of Agriculture has been requested to place in their budget.	154,800
21				

IX. CAPITAL IMPROVEMENTS ELEMENT

Table 5a

Proposed Five-Year Capital Improvements Plan

	Project	Year	Description of Work (Justification)	Cost
1 2	Clewiston Health Department Complex	2000-2001	To provide funding to build a health department complex in Clewiston on County owned land. The health department in Clewiston currently operates from a small cramped clinic building, WIC operates from a County-owned mobile home and environmental services are housed in a small residence. All three facilities are at scattered sites. A new facility is urgently needed. Florida Department of Health has this project in their capital funding plan.	2,000,000
3 4	Children: Day Care and Treatment Center	2000-2001	To establish two facilities, LaBelle and Clewiston, to provide much needed Day Care and Treatment Services. Operating funds are provided by other sources. A one-time capital cost of \$50,000 each or \$100,000 total is needed to begin this project	100,000
5 6	Fairgrounds Improvements	2000-2001	The Hendry County Fair & Livestock Association has major plans for much needed improvements; however they lack the capital resources to move forward. Florida Department of Agriculture has been requested to place in their budget	250,000
7 8	Harlem Community Civic Park	2000-2001	Pavilion, paved walking trail, tennis courts, restroom and picnic areas.	150,000
				2,779,800
9	MONITORING AND EVALUATION			
10 11	Annually this Capital Improvement Element will be monitored and, in conjunction with the County budgeting process, will be evaluated for possible updating, correction or other changes.			

X. Monitoring and Evaluation

INTRODUCTION

The "Local Government Comprehensive Planning and Land Development Regulation Act" (Chapter 163 F.S.) and the "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance" (Chapter 9J-5 F.A.C.) require that a comprehensive plan include a monitoring and evaluation section. The purpose of this section is to identify the monitoring, updating and evaluation procedures to be followed in the preparation of the required five-year evaluation and appraisal reports. The regulations require that this section address procedures for the following:

- 1) Citizen Participation in the process;
- 2) Updating appropriate baseline data and measurable objectives;
- 3) Accomplishments in the first five-year period;
- 4) Obstacles or problems which resulted in the under-achievement of goals, objectives, or policies;
- 5) New or modified goals, objectives, or policies;
- 6) Means of ensuring continuous monitoring and evaluation of the plan during the five-year period.

GENERAL

Comprehensive Plan amendments, funding constraints, changes in governmental policy direction, problems, and opportunities will of necessity alter the implementation of the Comprehensive Plan over time. Although an update of this Comprehensive Plan is required every five years, the state statutes permit amending the Plan as often as twice each year. Important alterations requiring immediate attention will be pursued through such process. For less immediate needs for alteration, appropriate data and information will be collected over time, and the Comprehensive Plan will be amended through the five-year evaluation and appraisal process.

ANNUAL REVIEW OF THE CAPITAL IMPROVEMENTS ELEMENT

Part of the monitoring and evaluation of the Comprehensive Plan will be accomplished with the required annual review and update of the Capital Improvements Element. This part will coincide with Hendry County's budget development and adoption process. Any policies of other Comprehensive Plan Elements, affecting or affected by possible changes in the Capital Improvements Element, will also be reviewed on this time frame. Based upon these reviews, an annual report will be prepared.

CITIZEN PARTICIPATION

The first five-year Evaluation and Appraisal Report (EAR) will be prepared five years after adoption of the 1990 update of the Hendry County Comprehensive plan by the Board of County Commissioners. During preparation of the EAR and prior to its adoption, citizens will be involved in its preparation process through a series of advertised workshops and public hearings, solicitation of written comments, and the publication of an executive summary. A system will be developed to accomplish the following:

- 1) Property owners in Hendry County will be notified of the EAR workshops, hearings, and actions of the County that will affect the use of property, through one or more newspapers of general circulation in the County.
- 2) In such notifications attendance at workshops and hearings will be solicited, as well as written comments.
- 3) All required public hearings will be held.
- 4) Comments and questions during the EAR process will be recorded in some manner, and will be carefully considered in the preparation of the EAR.
- 5) Newspaper representatives will be invited to meetings, workshops, and hearings held by the County, in order that the general public may be kept informed.

UPDATING APPROPRIATE BASELINE DATA AND MEASURABLE OBJECTIVES

The updating of Comprehensive Plan and Data Analysis baseline data will be accomplished by ongoing collection and review of pertinent available data. It is expected that pertinent data from the 1990 U.S.; Census should be available prior to completion of the five-year EAR, and should be particularly useful for updating the baseline data.

The measurable objectives of the Comprehensive Plan will be monitored, and the progress on the accomplishment of these objectives will be recorded.

ACCOMPLISHMENTS IN THE FIRST FIVE-YEAR PERIOD

The degree to which the Comprehensive Plan goals, objectives, and policies have been successfully reached will be described in the five-year EAR. In addition, such progress as may have been accomplished on an annual basis will be described in the report resulting from the annual review of the Capital Improvements Element. The progress on both capital and non-capital items will be reported. The timing of these reports will coincide with the County's annual budget process.

X. MONITORING AND EVALUATION

1 OBSTACLES OR PROBLEMS

2 Obstacles and problems which resulted in under-achievement of the Comprehensive
3 Plan goals, objectives, and policies will be evaluated on an ongoing basis. These will be
4 reported in the same manner as described above under "Accomplishments in the First
5 Five-Year Period". The EAR will include provisions for modifying the goals, objectives, and
6 policies because of obstacles and problems, and for altering the means by which to
7 accomplish them.

8 NEW OR MODIFIED GOALS, OBJECTIVES, AND POLICIES

9 As noted above, obstacles and problems will be monitored on an ongoing basis and,
10 as needed, proposals for surmounting them will be made. The County will attempt to alter
11 the means for accomplishing goals, objectives, and policies prior to changing them, if they
12 are still valid. If they are no longer valid, or are un-achievable, the goals, objectives, and
13 policies will be modified as necessary to accomplish similar ends.

14 New or modified goals, objectives, and policies will also be developed as new data,
15 information, circumstances and conditions arise to warrant them. The timing for such new
16 or modified goals, objectives, or policies will vary depending upon the time of occurrence
17 or discovery of obstacles and problems or new data, information, circumstances and
18 conditions. These could be proposed during the twice-annual amendment cycle, with the
19 annual report produced for the Capital Improvements Element, or with the five-year EAR.

20 MEANS OF ENSURING CONTINUOUS MONITORING AND EVALUATION

21 The annual review of the Capital Improvements Element will be one means by which
22 the Comprehensive Plan will be continuously monitored and evaluated. Another means will
23 be the Concurrency Management System, with which the levels of service standards and
24 conditions will be periodically monitored. New data, information, conditions, and
25 circumstances will be continuously monitored as a matter of ongoing planning in the County.
26 Finally, monitoring and evaluation of comprehensive Plan will be specifically carried out
27 with the five-year Evaluation and Appraisal Report. In these the accomplishments with the
28 Comprehensive Plan will be described, the amendments will be summarized, modified
29 budget allocations will be detailed, new projects and programs will be described, the
30 amendments will be summarized, modified budget allocations will be detailed, new projects
31 and programs will be described, and any deferrals or deletions will be explained.

XI. Concurrency Management System

Requirements for Concurrency

Upon adoption of the EAR-based Comprehensive Plan Amendments, Hendry County will require that all development meet the requirements of Concurrency, except for those developments that have been issued a development order or development permit by the County prior to adoption of this Comprehensive Plan, and have begun construction and are continuing construction in good faith. Development rights determined to be vested shall be subject to Concurrency as outlined in Section 9J-5.0055(2) F.A.C., and shall be as follows:

1. *Minimum Requirements for Concurrency*— The County's Concurrency Management System will ensure that public facilities and services needed to support development are available concurrent with the impacts of such developments.
 - a. For potable water, sewer, solid waste, and drainage, at a minimum, provisions in this Comprehensive Plan will ensure that the following standards are met and will satisfy the concurrency requirement:
 - i. The necessary facilities and services are in place at the time a development permit is issued; or
 - ii. A development permit is issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or
 - iii. The necessary facilities are under construction at the time a permit is issued; or
 - iv. The necessary facilities and services are guaranteed in an enforceable development agreement that includes the provisions of Rule 9J-5.0055 (2)(a) 2.-5. F.A.C. An enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, Florida Statutes, or an agreement must guarantee that the necessary facilities and services will be in place when the impacts of the development occur.
 - b. For parks and recreation, Hendry County may satisfy the concurrency requirement by complying with the standards in Rule 9J-5.0055(2)(a)6. F.A.C. or by complying with Comprehensive Plan provisions that ensure that the following standards will be met:
 - i. At the time the development permit is issued, the necessary facilities and services are the subject of a binding executed contract which provides for the commencement of the actual construction of the required facilities or the provision of services within one year of the issuance of the development

XI. CONCURRENCY MANAGEMENT SYSTEM

permit; or

- ii. The necessary facilities and services are guaranteed in an enforceable development agreement which requires the commencement of the actual construction of the facilities or the provision of services within one year of the issuance of the applicable development permit. An enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, Florida Statutes, or an agreement or development order issued pursuant to Chapter 380, Florida Statutes.
- c. For roads in the adopted plan, Hendry County may satisfy the concurrency requirement by complying with the standards in Rules 9J-5.0055 (2)(a)1. and (2)(c)1. and 3., F.A.C. In addition, in areas in which Hendry County has committed to provide the necessary public facilities and services in accordance with its Five-Year Schedule of Capital Improvements, the County may satisfy the concurrency requirements for implementing a Concurrency Management System based on an adequate capital improvements program and schedule which, at a minimum, include the following provisions:
- i. A Capital Improvements Element and a Five-Year Schedule of Capital Improvements which, in addition to meeting all of the other statutory and rule requirements, must be financially feasible. The Capital Improvements Element and schedule of capital improvements may recognize and include transportation projects included in the first three years of the applicable, adopted Florida Department of Transportation five-year work program.
 - ii. A Five-Year Schedule of Capital Improvements must include both necessary facilities to maintain the adopted level of service standards; serve the new permitted development; and eliminate those portions of existing deficiencies during the five-year period under the local governments plan's schedule of capital improvements pursuant to Rule 9J-5.016(4)(a) 1., F.A.C.
 - iii. A realistic, financially feasible funding system based on currently available revenue sources which must be adequate to fund the public facilities required to serve the development authorized by the development order and development permit and which public facilities are included in the Five-Year Schedule of Capital Improvements.
 - iv. A Five-Year Schedule of Capital Improvements which must include the estimated date of commencement of actual construction and the estimated date of project completion.
 - v. A Five-Year Schedule of Capital Improvements which must demonstrate that the actual construction of the road facilities and the provision of services are

XI. CONCURRENCY MANAGEMENT SYSTEM

- scheduled to commence in or before the third year of the Five-Year Schedule of Capital Improvements.
- vi. A provision that a plan amendment would be required to eliminate, defer or delay construction of any road facility which is needed to maintain the adopted level of service standard and which is listed in the five-year schedule of capital improvements.
 - vii. A requirement that Hendry County must adopt local development regulations which, in conjunction with the Capital Improvements Element, ensure that development orders and permits are issued in a manner that will assure that the necessary public facilities and services will be available to accommodate the impact of that development.
 - viii. A provision that a monitoring system shall be adopted which enables Hendry County to determine whether it is adhering to the adopted level of service standards and its schedule of capital improvements and that the County has demonstrated capability of monitoring the availability of public facilities and services.
 - ix. A clear designation within the Hendry County Comprehensive Plan of those areas within which facilities and services will be provided by the County with public funds in accordance with the five-year capital improvements schedule.
- d. In determining the availability of services or facilities, a developer may propose, and Hendry County may approve developments in stages or phases so that facilities and services needed for each phase will be available in accordance with the standards required by Rules 9J-5.0055(2)(a), (2)(b) and (2)(c) F.A.C.
 - e. For the requirements of Rules 9J-5.0055(2)(a), (2)(b), and (2)(c) F.A.C., Hendry County must develop guidelines for interpreting and applying level of service standards to applications for development orders and permits and determine when the test for concurrency must be met. The latest point in the application process for the determination of concurrency is prior to the approval of an application for a development order or permit which contains a specific plan for development, including the densities and intensities of development.

Issuance of Development Orders or Permits

The Concurrency Management System shall ensure that all development can meet the requirements for concurrency prior to the issuance of a local development order or permit. The determination that concurrency can be met shall occur after the submission of a satisfactorily sufficient application for development, within a specified timeframe to be established in the concurrency management system, but prior to the final approval of a proposed development. All

XI. CONCURRENCY MANAGEMENT SYSTEM

applicants for development orders or permits shall be required to provide all information deemed necessary by the County so that the impacts of the proposed development may be accurately assessed. Once the County has determined that a proposed development meets the requirements for concurrency, and has been issued a local development order or permit, the County shall not revoke that development order or permit because of a subsequent facility capacity deficiency, unless the proposed development would cause unhealthy or unsafe conditions, or unless the proposed development was issued a development order or permit under erroneous information supplied by the proposed developer, or unless the proposed developer fails to meet the conditions of approval of the development order or permit once construction has begun. In this latter situation, certificate of occupancy may also be denied.

The Concurrency Management System shall also establish a time limit by which construction must commence, and conditions for development to continue in good faith, in order to maintain the public facility capacity allocated to the approved development. Failure to commence construction within the designated timeframe, or failure to continue development in good faith, may result in the forfeiture of the public facility capacity allocated to the approved development.

Hendry County shall annually determine the available capacity for public facilities for which the County has operational or maintenance responsibility, and for state and federal roads. Owners or operators of public facilities not operated, maintained or owned by the County shall supply the County with available capacity information annually, or as otherwise reasonable depending on the development activity that requires the use of such a facility.

Goal, Objective and Policies

In addition to the basis for the County's Concurrency Management System as outlined in this Section, individual objectives and policies established to support and implement the concurrency doctrine are as follows.

OBJECTIVE 11.1: The County, through its staff members, will continue to review all development plans for concurrency as a means to ensure that proposed land development including building construction does not impose unacceptable demands on the existing and planned infrastructure of the County such that established levels of service standards are exceeded.

Policy 11.1.1: The concurrency test for facilities and services will be determined by comparing the available capacity of a facility or service to the demand created by the proposed project. Available capacity will be determined by adding any capacity demands committed and approved prior to, and subsequent to, the adoption of the Comprehensive Plan, then subtracting that total from the design capacity of the facility; the remaining is the capacity available to serve proposed development projects.

Policy 11.1.2: The public facility level of service standards are as follows:

XI. CONCURRENCY MANAGEMENT SYSTEM

1. Roadways:

Urban arterials - LOS C for County roads that intersect State Roads in LaBelle and Clewiston

Rural arterials and collectors - LOS B for FIHS designated roadway segments.

LOS for all County Roads with the exception of these mentioned above is "C"

2. Recreation and Parks:

Regional Parks - 20 acres/1000 population (250 acres minimum)

Community Parks - 2 acres/1000 population (20 acres minimum)

Neighborhood Parks - 2 acres/1000 population (5 acres minimum)

3. **Solid Waste:** 6.5 pounds per capita per day

4. **Potable Water:** 170 gallons per capita per day

5. **Sanitary Sewer:** 115 gallons per capita per day

Private, on-site disposal systems shall meet or exceed the requirements set by the Florida Department of Health, Chapter 62-4, F.A.C.

6. Stormwater Management:

a. For agricultural uses, the LOS Standard shall be the requirements of the South Florida Water Management District and the standards of the local water management district in which the proposed agricultural use is located.

b. Conveyance Systems - All drainage swales and ditches shall be designed to convey the runoff generated from a 25-year, 24-hour storm event.

On collector roads, culverts and cross-drains shall convey the runoff from a 10-year, 24-hour storm.

XI. CONCURRENCY MANAGEMENT SYSTEM

On local roads and internal subdivision roads, culverts and cross-drains shall be designed to convey the runoff from a 10-year, 24-hour storm.

- c. Stormwater Management Systems - for development in commercial, urban residential, mixed-use urban land uses districts. Stormwater management systems shall be designed to either retain on-site the runoff generated by a 25-year, 24-hour storm or detain and discharge the runoff from a 25-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates.
- d. Stormwater Management Systems - for development in all other land use districts. Stormwater management systems shall be designed to either retain on-site the runoff generated by a 5-year, 24-hour storm or detain and discharge the runoff from a 5-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates.
- e. Water Quality - Water quality treatment shall be provided for runoff from the first one-inch of rainfall; or as an option, for projects or project sub-units with drainage areas of less than 100 acres, from the first one-half inch of runoff consistent with Chapters 62, F.A.C. And shall be used as the basis for determined the availability of capacity and demand generated by a proposed development project.

Policy 11.1.3: All development and/or redevelopment activities shall be undertaken in a manner consistent with adopted level of service standards.

Policy 11.1.4: The County shall issue Development Orders only when there is enough capacity from all the facilities to serve the project at the adopted level of service standards.

Policy 11.1.5: Prohibit the installation of septic tanks or individual well systems where unsuitable soil exists and require all new developments that are located within an urban service area to be served by the central wastewater system and central potable water.

Policy 11.1.6: The County Engineer will inform applicants concerning the items necessary for an assessment of the proposed development to meet concurrency standards. Services that are within a municipality's jurisdiction will be coordinated with the County to ensure available services. In no way shall proposed developments be approved if capacity is insufficient.

XI. CONCURRENCY MANAGEMENT SYSTEM

Policy 11.1.7:

The County shall maintain an on-going summary of capacity and demand changes within the areas served by each facility when a facility has reached ninety percent (90%) of its capacity, engineering for the new facility shall be prepared.

The following standards shall apply to the use of the infrastructure deficiency map in reviewing development applications:

1. All applications for change in zoning, preliminary subdivision approval, preliminary site plan approval, or other preliminary approval (which does not approve specific uses or densities) of any development shall be reviewed to determine if the facilities serving the area in which the development is located meets the level of service standards shown herein. The results of this review shall be presented to the applicant, to the Planning Commission, and/or to the Board of County Commissioners at the time of their consideration of the application for preliminary approval. Where review of an application for preliminary approval by the Planning Commission or Board of County Commissioners is not required, the results of the concurrency review shall be presented to the applicant and to any other reviewing/approving authority.

The purpose of the concurrency review and report at the preliminary review stage shall be (1) to explicitly place the applicant and the reviewing/approving authority on notice as to the status of the proposed development vis-a-vis concurrency, and (2) to explicitly advise the applicant that no final approval may be issued if the concurrency requirement is not met. Failure of the proposed development to meet the concurrency requirement at the time of preliminary review or approval shall not prevent the submission of final plans for approval, but no preliminary approval shall be interpreted as creating any right to obtain final approval unless the application for final approval meets all requirements of this Plan, including the concurrency requirement.

2. All applications for final approval (including any applications for final subdivision approval, final site plan approval, change of zoning where a specific enforceable plan of development is included, and/or a final development order for a Development of Regional Impact or other final approval which constitutes specific approval of uses and densities) shall be reviewed to determine if the facilities serving the area in which the development is located meet the level of service standards herein. No such application may be approved unless the infrastructure is found to be adequate.

XI. CONCURRENCY MANAGEMENT SYSTEM

3. Where no change of zoning, subdivision approval, site plan approval, or other approval is required, the concurrency determination shall be made at the time of building permit review. No building permit shall be issued unless the facilities serving the area in which the development is located meet the level of service standards herein.

In the event that the property in question is within an area in which the infrastructure is inadequate to meet the established level of service standards, approval may be issued conditioned on the provision of adequate infrastructure prior to any occupancy of the development (such conditional approval shall identify the specific facilities which are deficient and the specific actions which must be taken before the development may be occupied).

Policy 11.1.8: Development orders or permits and building permits applied for prior to the adoption of the Concurrency Management System, but subsequent to the adoption of this Comprehensive Plan, shall be reviewed by the County for compliance with the provisions of Objective 11.1, Policy 11.1.2, of this Element.

Such orders or permits shall not be denied based on failure to meet Level of Service Standards, but the order or permit shall be conditioned such that the Standards are met prior to the impacts from the development on the public facilities.

Policy 11.1.9: Development orders or permits and building permits issued prior to the adoption of the Comprehensive Plan shall generally be exempt from the Level of Service Standards provisions of this Comprehensive Plan, provided that active development of the project is in accordance with the provisions of Objective 11.1, Policy 11.1.2, of this Element .

OBJECTIVE 11.2: Hendry County shall coordinate land use decisions with its financial capability to meet level of service standards, manage the land development process so that facility needs created by permitted development do not exceed the financial ability of the County, and identify the extent to which future development will be required to contribute to its proportional cost of facilities necessary to meet LOS standards through the accomplishment of the following policies:

Policy 11.2.1: The Future Land Use Map is developed to coincide with the availability of public facilities and/or natural resources such that new facilities are not necessarily required for new development. The Land Development Regulations, adopted September 1, 1991, include provisions to ensure that

XI. CONCURRENCY MANAGEMENT SYSTEM

such policy is continued with the zoning map and regulations, and related land use decisions, such as in the review of special exceptions and zoning changes.

Policy 11.2.2: The County shall adhere to the timing in the Schedule of Capital Improvements, and any proposed developments requiring the facilities programmed in the Schedule, prior to the completion of projects therein, will not be permitted unless the facilities included in the Schedule are provided by the developer.

Policy 11.2.3: The Land Development Regulations and the Concurrency Management System shall require that any proposed developments requiring public facilities not available concurrent with the impacts from the development, or which impacts would cause performance of a facility to fall below the Level of Service Standards, shall not be permitted unless facilities meeting the Level of Service Standards are provided by the developer.

Appendix A — Statutory Definitions

1 **STATUTORY DEFINITIONS**

2 The following definitions were taken verbatim from either the Florida Statutes (F.S.)
3 163.3164, Florida Administrative Code (F.A.C.) 9J-5.003, or the Code of Federal
4 Regulations (CFR), and should be applied as appropriate to the implementation, administra-
5 tion and enforcement of this Comprehensive Plan.

6 *Adjusted for family size* means adjusted in a manner which results in an income eligibility
7 level which is lower for households with fewer than four people, or higher for
8 households with more than four people, than the base income eligibility otherwise
9 determined, based upon a formula as established by the United States Department of
10 Housing and Urban Development.

11 *Adjusted gross income* means all wages, regular cash or non-cash contributions from persons
12 outside the household, and such other resources and benefits as may be determined
13 to be income by the United States Department of Housing and Urban Development,
14 adjusted for family size, less deductions allowable under s. 62 of the Internal
15 Revenue Code.

16 *Affordable housing* means housing for which monthly rents or monthly mortgage payments,
17 including taxes, insurance, and utilities, do not exceed 30% of that amount which
18 represents the percentage of the median adjusted gross annual income for households
19 or persons.

20 *Agricultural uses* means activities within land areas which are predominantly used for the
21 cultivation of crops and livestock including; cropland; pastureland; orchards;
22 vineyards; nurseries; ornamental horticulture areas; groves; confined feeding
23 operations; speciality farms; and silviculture areas.

24 *Amendment* means any action of the Board of County Commissioners which has the effect
25 of amending, adding, deleting from or changing an adopted comprehensive plan
26 element or map or map series, including an action affecting a prior plan or plan
27 amendment adoption ordinance, but shall not mean legislative act which only
28 codifies ordinances or make corrections, updates and modifications of the capital
29 improvements element concerning costs, revenue sources, acceptance of facilities or
30 facility construction dates consistent with the plan as provided in ss 163.3177(3)(b),
31 F.S., and corrections, updates, or modifications of current costs in other elements, as
32 provided in ss 163.3187(2), F.S.

33 *Arterial road* means a roadway providing service which is relatively continuous and of
34 relatively high traffic volume, long trip length, and high operating speed.

35 *Bicycle and pedestrian ways* means any road, path or way which is open to bicycle travel and
36 traffic afoot and from which motor vehicles are excluded.

1 *Capital improvement* means physical assets constructed or purchased to provide, improve
2 or replace a public facility and which are large scale and high in cost. The cost of a
3 capital improvement is generally nonrecurring and may require multi-year financing.
4 For the purposes of this definition, physical assets shall be identified as projects
5 costing \$25,000 or more, and is identified in the capital improvements element.

6 *Clustering* means the grouping together of structures and infrastructure on a portion of a
7 development site.

8 *Collector road* means a roadway providing service which is of relatively moderate traffic
9 volume, moderate trip length, and moderate operating speed. Collector roads collect
10 and distribute traffic between local roads or arterial roads.

11 *Commercial uses* means activities within land areas which are predominantly connected with
12 the sale, rental and distribution of products, or performance of services.

13 *Community park* means a park located near major roadways, and designed to serve the needs
14 of more than one neighborhood.

15 *Compatibility* means a condition in which land uses or conditions can coexist in relative
16 proximity to each other in a stable fashion over time such that no use or condition is
17 unduly negatively impacted directly or indirectly by another use or condition.

18 *Comprehensive Plan* (F.S. 163.3164) means a plan that meets the requirements of
19 ss.163.3177 and 163.3178.

20 *Concurrency* means that the necessary public facilities and services to maintain the adopted
21 level of service standards are available when the impacts of development occur.

22 *Concurrency Management System* means the procedures and/or process that the County uses
23 to assure that development orders and permits are not issued unless the necessary
24 facilities and services are available concurrent with the impacts of development.

25 *Cone of influence* means an area around one or more major waterwells, the boundary of
26 which is determined by the County having specific authority to make such a
27 determination, based on groundwater travel or drawdown depth.

28 *Conservation uses* means activities or conditions within land areas designated for the
29 purpose of conserving or protecting natural resources or environmental quality,
30 including areas designated for such purposes as flood control, protection of quality
31 or quantity of groundwater or surface water, floodplain management, commercially
32 or recreationally valuable fish and shellfish, or protection of vegetative communities
33 or wildlife habitats.

34 *Density* means an objective measurement of the number of people or residential units
35 allowed per unit of land, such as residents or employees per acre.

1 *Developer* (F.S. 163.3164) means any person, including a governmental agency, undertaking
2 any development.

3 *Development order* (F.S. 163.3164) means any order granting, denying, or granting with
4 conditions an application for a development permit.

5 *Development permit* (F.S. 163.3164) includes any building permit, zoning permit,
6 subdivision approval, rezoning, certification, special exception, variance, or any other
7 official action of local government having the effect of permitting the development of
8 land.

9 *Drainage basin or stormwater basin* means the area defined by topographic boundaries
10 which contributes stormwater to a watershed, drainage system, estuarine waters, or
11 oceanic waters, including all areas artificially added to the basin.

12 *Educational uses* means activities and facilities of public or private primary or secondary
13 schools, vocational and technical schools, and colleges and universities licensed by
14 the Florida Department of Education, including the areas of buildings, campus open
15 space, dormitories, recreational facilities or parking.

16 *Environmentally sensitive lands* means areas of land or water which are determined
17 necessary by the local government, based on locally determined criteria, to conserve
18 or protect natural habitats and ecological systems. Nothing in this definition shall be
19 construed to prohibit silvicultural operations which employ the Florida Department
20 of Agriculture and Consumer Affairs Best Management Practices as revised in 1993.

21 *Evaluation and appraisal report* means an evaluation and appraisal report as adopted by the
22 County Commission in accordance with the requirements of Chapter 163.3191, F.S.

23 *Floodprone areas* means areas inundated during a 100-year flood event or areas identified
24 by the National Flood Insurance Program as an A Zone on Flood Insurance Rate
25 Maps or Flood Hazard Boundary Maps.

26 *Foster care facility* means a facility which houses foster residents and provides a family
27 living environment for the residents, including such supervision and care as may be
28 necessary to meet the physical, emotional and social needs of the residents and
29 serving either children or adult foster residents.

30 *Goal* means the long-term end toward which programs or activities are ultimately directed.

31 *Group home* means a facility which provides a living environment for unrelated residents
32 who operate as the functional equivalent of a family, including such supervision and
33 care as may be necessary to meet the physical, emotional and social needs of the
34 residents. Adult Congregate Living Facilities comparable in size to group homes are
35 included in this definition. It shall not include rooming or boarding homes, clubs,

1 fraternities, sororities, monasteries or convents, hotels, residential treatment facilities,
2 nursing homes, or emergency shelters.

3 *Hazardous waste* means solid waste, or a combination of solid wastes, which, because of its
4 quantity, concentration, or physical, chemical, or infectious characteristics, may
5 cause, or significantly contribute to, an increase in mortality or an increase in serious
6 irreversible or incapacitating reversible illness or may pose a substantial present or
7 potential hazard to human health or the environment when improperly transported,
8 disposed of, stored, treated or otherwise managed.

9 *High recharge area* or *prime recharge area* means an area so designated by the South
10 Florida Water Management District governing board. High recharge and prime
11 recharge areas shall receive a level of protection commensurate with their signifi-
12 cance to natural systems or their status as current or future sources of potable water.

13 *Historic resources* means all areas, districts or sites containing properties listed on the
14 Florida Master Site File, the Natural Register of Historic Places, or designated by the
15 County Commissions as historically, architecturally, or archaeologically significant.

16 *Industrial uses* means the activities within land areas predominantly connected with
17 manufacturing, assembly, processing, or storage of products.

18 *Infrastructure* means those man-made structures which serve the common needs of the
19 population, such as: sewage disposal systems; potable water systems; potable water
20 wells serving a system; solid waste disposal sites or retention areas; stormwater
21 systems; utilities; piers; docks; wharves; breakwaters; bulkheads; seawalls; bulwarks;
22 revetments; causeways; marinas; navigation channels; bridges; and roadways.

23 *Interagency hazard mitigation report* means the recommendations of a team of federal, state,
24 regional, or local officials which address measures to reduce the potential for future
25 flood losses and which is prepared in response to a Presidential Disaster Declaration.

26 *Land* (F.S. 163.3164) means the earth, water, and air, above, below, or on the surface,
27 includes any improvements or structures customarily regarded as land.

28 *Land development regulations* (F.S. 163.3164) means ordinances enacted by the County
29 Commissioners for the regulations of any aspect of development and includes any
30 zoning, rezoning, subdivision, building construction, or sign regulations or any other
31 regulations controlling the development of land.

32 *Land use* (F.S. 163.3164) means the development that has occurred on the land, the
33 development that is proposed by a developer on the land, or the use that is permitted
34 or permissible on the land under an adopted comprehensive plan or element or
35 portion thereof, land development regulations, or a land development code, as the
36 context may indicate.

1 *Level of service* means an indicator of the extent or degree of service provided by, or
2 proposed to be provided by, a facility based on and related to the operational
3 characteristics of the facility. Level of service shall indicate the capacity per unit of
4 demand for each public facility.

5 *Local road* means a roadway providing service of which is relatively low traffic volume,
6 short average trip length or minimal through traffic movements, and high volume
7 land access for abutting property.

8 *Low income household* means one or more natural persons or a family, the total annual
9 adjusted gross household income of which does not exceed 80% of the median
10 annual adjusted gross income for households within the state, or 80% of the median
11 annual adjusted gross income for households within the metropolitan statistical area
12 or, if not within a metropolitan statistical area, within the County in which the person
13 or family resides, whichever is greater.

14 *Manufacture home* means a mobile home fabricated on or after June 15, 1976, in an offsite
15 manufacturing facility for installation or assembly at the building site, with each
16 section bearing a seal certifying that it is built in compliance with the federal
17 Manufactured Home Construction and Safety Standard Act.

18 *Minerals* means all solid minerals, including clay, gravel, phosphate rock, lime, shells
19 (excluding live shellfish), stone, sand, heavy minerals, and any rare earth, which are
20 contained in the soils or waters of the state.

21 *Mobile home* means a structure, transportable in one or more sections, which is eight body
22 feet or more in width and which is built on an integral chassis and designed to be
23 used as a dwelling when connected to the required utilities and includes the
24 plumbing, heating, air-conditioning, and electrical systems contained therein. For tax
25 purposes, the length of a mobile home is the distance from the exterior of the wall
26 nearest to the drawbar and coupling mechanism to the exterior of the wall at the
27 opposite end of the home where such walls enclose living or other interior space.
28 Such distance includes expandable rooms, but excludes bay windows, porches,
29 drawbars, couplings, hitches, wall and roof extensions, or other attachments that do
30 not enclose interior space. In the event that the mobile home owner has no proof of
31 the length of the drawbar, coupling, or hitch, then the tax collector may in his or her
32 discretion either inspect the home to determine the actual length or may assume four
33 feet to be the length of the drawbar, coupling, or hitch.

34 *Moderate income household* means one or more natural persons or a family, the total annual
35 adjusted gross household income of which is less than 120% of the median annual
36 adjusted gross income for households within the state, or 120% of the median annual
37 adjusted gross income for households within the metropolitan statistical area or, if
38 not within a metropolitan statistical area, within the County in which the person or
39 family resides, whichever is greater.

1 *Natural drainage features* means the naturally occurring features of an area which
2 accommodate the flow of significant amounts of stormwater, such as streams, rivers,
3 lakes, sloughs, floodplains and wetlands.

4 *Natural groundwater aquifer recharge areas or natural groundwater recharge areas or*
5 *groundwater recharge areas* means areas contributing to or providing volumes of
6 water which make a contribution to the storage or regional flow of an aquifer.

7 *Neighborhood park* means a park which serves the population of a neighborhood and is
8 generally accessible by bicycle or pedestrian ways.

9 *Non-point source pollution* means any source of water pollution that is not a point source.

10 *Objective* means a specific, measurable, intermediate end that is achievable and marks
11 progress toward a goal.

12 *Open spaces* mean undeveloped lands suitable for passive recreation or conservation uses.

13 *Parcel of land* (F.S. 163.3164) means any quantity of land capable of being described with
14 such definiteness that its locations and boundaries may be established, which is
15 designated by its owner or developer as land to be used, or developed as, a unit or
16 which has been used or developed as a unit.

17 *Park* means a neighborhood, community, or regional park.

18 *Person* (F.S. 163.3164) means an individual, corporation, governmental agency, business
19 trust, estate, trust, partnership, association, two or more persons having a joint or
20 common interest, or any other legal entity.

21 *Point source pollution* means any source of water pollution that constitutes a discernable,
22 confined, and discrete conveyance, including, but not limited to, any pipe, ditch,
23 channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concreted
24 animal feeding operation, or vessel or other floating craft, from which pollutants are
25 or may be discharged. This term does not include returns from irrigated agriculture.

26 *Policy* means the way in which programs and activities are conducted to achieve an
27 identified goal.

28 *Pollution* is the presence in the outdoor atmosphere, ground or water of any substances,
29 contaminants, noise, or manmade or man-induced alteration of the chemical,
30 physical, biological, or radiological integrity of air or water, in quantities or at levels
31 which are or may be potentially harmful or injurious to human health or welfare,
32 animal or plant life, or property, or unreasonable interfere with the enjoyment of life
33 or property.

1 *Potable water facilities* means a systems of structures designed to collect, treat, or distribute
2 potable water, and includes water wells, treatment plants, reservoirs, and distribution
3 mains.

4 *Potable water wellfield* means the site of one or more water wells which supply potable
5 water for human consumption to a water system which serves at least 15 service
6 connections used by year-round residents or regularly serves at least 25 year-round
7 residents.

8 *Private recreation sites* means sites owned by private, commercial or non-profit entities
9 available to the public for purposes of recreational use.

10 *Public access* means the ability of the public to physically reach, enter or use recreation sites
11 including beaches and shores.

12 *Public facilities* (F.S. 163.3164) means major capital improvements, including, but not
13 limited to, transportation, sanitary sewer, solid waste, drainage, potable water,
14 educational, parks and recreation, health systems and facilities, spoil disposal sites,
15 lands that are owned, leased, or operated by a government entity, such as civic and
16 community centers, libraries, police stations, fire stations, and government
17 administration buildings.

18 *Public recreation sites* means sites owned or leased on a long-term basis by a federal, state,
19 regional or local government agency for purposes of recreational use.

20 *Recreation* means the pursuit of leisure time activities occurring in an indoor or outdoor
21 setting.

22 *Regional park* means a park which is designed to serve two or more communities.

23 *Resident population* means inhabitants counted in the same manner utilized by the United
24 States Bureau of the Census, in the category of total population. Resident population
25 does not include seasonal population.

26 *Residential uses* means activities within land areas used predominantly for housing.

27 *Roadway function classification* means the assignment of roads into categories according to
28 the character of service they provide in relation to the total road network. Basic
29 functional categories include limited access facilities, arterial roads, and collector
30 roads, which may be sub-categorized into principal, major or minor levels. Those
31 levels may be further grouped into urban and rural categories.

32 *Rural areas* means low density areas characterized by social, economic and institutional
33 activities which may be largely based on agricultural uses or the extraction of natural
34 resources in unprocessed form, or areas containing large proportions of undeveloped,
35 unimproved, or low density property.

1 *Rural sprawl* means a piecemeal conversion of lands into small, marginally productive
2 parcels of an awkward and inefficient pattern, featuring narrow frontage, deep
3 irregular shaped parcels without consideration of natural system functions and
4 without consideration of needs for small tract agricultural production or for
5 residential development. Indicators:

- 6 1. Allows land use patterns or timing that disproportionately increase the cost
7 in time, money, and energy of providing rural services such as stormwater
8 management and fire and emergency response.
- 9 2. Constraints consistently sufficient setbacks between wellheads and septic
10 systems on the same or adjacent parcels for permanently safe on-site water
11 supply and sewage disposal.
- 12 3. Promotes, allows or designates frontage access that creates dangerous and
13 unnecessary turning movements on main public roads.
- 14 4. Promotes, allows or designates unnecessarily wasteful areas devoted to long,
15 substandard access to private roads or driveways.
- 16 5. Requires unnecessary use of main public roads for short neighborhood trips
17 which minimum subdivisions standards would route on internal local access
18 streets.
- 19 6. Promotes, allows or designates ribbon patterns of substandard rural parcels
20 along public roads.
- 21 7. Fails to adequately protect and conserve natural resources, such as wetlands,
22 flood plains, native vegetation, environmentally sensitive areas, natural
23 groundwater recharge areas, lakes, rivers, shorelines, and other significant
24 natural systems.
- 25 8. Functionally constrains raising livestock or crops for small tract agriculture.

26 *Sanitary sewer facilities* means structures or systems designed for the collection, transmis-
27 sion, treatment, or disposal of sewage and includes trunk mains, interceptors,
28 treatment plants and disposal systems.

29 *Seasonal population* means part-time inhabitants who utilize, or may be expected to utilize,
30 public facilities or services, but are not residents. Seasonal population shall include
31 tourists, migrant farmworkers, and other short term and long-term visitors.

32 *Solid waste* means sludge from a waste treatment works, water supply treatment plant, or air
33 pollution control facility or garbage, rubbish, refuse, or other discarded material,
34 including solid liquid, semisolid, or contained gaseous material resulting from
35 domestic, industrial, commercial, mining, agricultural, or governmental operations.

1 *Solid waste facilities* means structures or systems designed for the collection, processing or
2 disposal of solid wastes, including hazardous wastes, and includes transfer stations,
3 processing plants, recycling plants, and disposal systems.

4 *Stormwater* means the flow of water which results from a rainfall event.

5 *Stormwater facilities* means manmade structures that are part of stormwater management
6 system designed to collect, convey, hold, divert, or discharge stormwater, and may
7 include stormwater sewers, canals, detention facilities and retention facilities.

8 *Stormwater management system* has the meaning described in Rule 62, F.A.C. (1992).

9 *Transportation disadvantaged* means those individuals who because of physical or mental
10 disability, income status, or age are unable to transport themselves to or purchase
11 transportation and are, therefore dependent upon others to obtain access to health
12 care, employment, educations, shopping, social activities, or other life-sustaining
13 activities.

14 *Urban area* means an area of or for development characterized by social, economic and
15 institutional activities which are predominantly based on the manufacture,
16 production, distribution, or provision of goods and services in a setting which
17 typically includes residential and nonresidential development uses other than those
18 which are characteristic of rural areas.

19 *Urban infill* (F.S. 163.3164) means the development of vacant parcels in otherwise built-up
20 areas where public facilities such as sewer systems, roads, schools, and recreation
21 areas are already in place and the average residential density is at least five dwelling
22 units per acre, the average nonresidential intensity is at least a floor area ratio of 1.0
23 and vacant, developable land does not constitute more than 10% of the area.

24 *Urban sprawl* means urban development or uses which are located in predominantly rural
25 areas, or rural areas interspersed with generally low-intensity or low-density urban
26 uses, and which are characterized by one or more of the following conditions:

- 27 a. The premature or poorly planned conversion of rural land to other uses;
- 28 b. The creation of areas of urban development or uses which are not functionally
29 related to land uses which predominate the adjacent area; or,
- 30 c. The creation of areas of urban development or uses which fail to maximize
31 the use of existing public facilities or the use of areas within which public
32 services are currently provided.

33 Urban sprawl is typically manifested in one or more of the following land use or
34 development patterns:

- 1 a. Leapfrog or scattered development;
- 2 b. Ribbon or strip commercial or other development; or,
- 3 c. Large expanses of predominantly low- intensity, low-density, or single-use
- 4 development.

5 *Very-low income family* means one or more natural persons or a family, not including
6 students, the total annual adjusted gross household income of which does not exceed
7 50% of the median annual adjusted gross income for households within the
8 metropolitan statistical area or, if not within a metropolitan statistical area, within the
9 county in which the person or family resides, or whichever is greater.

10 *Very-low income household* means one or more natural persons or a family, not including
11 students, the total annual adjusted gross household income of which does not exceed
12 50% of the median annual adjusted gross income for households within the state, or
13 50% of the median annual adjusted gross income for households within the
14 metropolitan statistical area, or, if not within a metropolitan statistical area, within
15 the county in which the person of family resides, or whichever is greater.

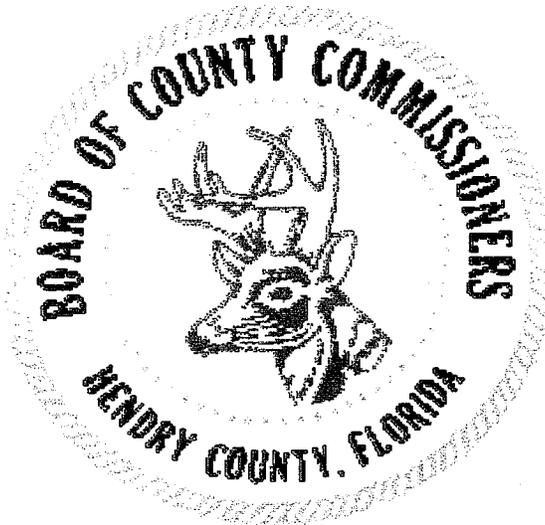
16 *Wellhead protection area* means an area designated by the County Commission to provide
17 land use protection for the groundwater source for a potable water wellfield, as
18 defined in this chapter, including the surface and subsurface area surrounding the
19 wellfield. Differing levels of protection may be established within the wellhead
20 protection area commensurate with the capacity of the well and an evaluation of the
21 risk to human health and the environment. Wellhead protection areas shall be
22 delineated using professionally accepted methodologies based on the best available
23 data and taking into account any zones of contribution described in existing data.

24 *Wetlands* means those areas that are inundated or saturated by surface water or groundwater
25 at a frequency and a duration sufficient to support, and under normal circumstances
26 do support, a prevalence of vegetation typically adapted for life in saturated soils.
27 Soils present in wetlands generally are classified as hydric or alluvial, or possess
28 characteristics that are associated with reducing soil conditions. The prevalent
29 vegetation in wetlands generally consists of facultative or obligate hydrophytic
30 macrophytes that are typically adapted to areas having soil conditions described
31 above. These species, due to morphological, physiological, or reproductive
32 adaptations, have the ability to grow, reproduce or persist in aquatic environments
33 or anaerobic soil conditions. Florida wetlands generally include swamps, marshes,
34 bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps
35 and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other
36 similar areas.

37 Florida wetlands generally do not include longleaf or slash pine flatwoods with an
38 understory dominated by saw palmetto. The delineation of actual wetland boundaries
39 may be made by any professionally accepted methodology consistent with the type

1 of wetlands being delineated but shall be consistent with any unified statewide
2 methodology for the delineation of the extent of wetlands ratified by the Legislature.

HENDRY COUNTY COMPREHENSIVE PLAN SUPPORT DOCUMENT



Adopted:
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Amended:
November 9, 1999

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None

IX. References — Data & Analysis Support

None

I. Introduction

Data & Analysis Support

1 **GENERAL**

2
3 The Hendry County Data Analysis is prepared as a data base and the necessary analyses to
4 revise the Hendry County Comprehensive Plan. The purpose of the revision of the Comprehensive
5 Plan is to analyze the County's development and to provide implementable and financially feasible
6 goals, objectives and policies for meeting Hendry County's existing deficiencies and projected needs.

7
8 The State requirements for revising Comprehensive Plans are presented in Chapter 163 F.S.
9 and Chapter 9J-5 F.A.C. Existing deficiencies are to be identified and programmed for solution, and
10 the means to meet projected needs for future growth are to be provided. Specific plans are to be
11 made to ensure that future growth will not deteriorate the level of service of existing facilities, and
12 that improvements to facilities will be met to keep pace with growth. Ultimately, the Plan must
13 provide that infrastructure, facilities and services will be in place at the time that impacts from
14 growth and development in Hendry County occur.

15
16 The specific elements required for Hendry County to include in the Comprehensive Plan
17 revision are:

- 18
19 - Future Land Use
20 - Traffic Circulation
21 - Housing
22 - Conservation
23 - Recreation and Open Space
24 - Intergovernmental Coordination
25 - Capital Improvements
26 - A Combined Element Including Sanitary Sewer, Solid Waste, Drainage, Potable
27 Water, and Natural Groundwater Aquifer Recharge (referred to as Environmental
28 Services in Hendry County Comprehensive Plan).

29
30 This Data Analysis includes a chapter for each of these elements, except the Capital
31 Improvements Element. The data, information, and analysis part of the Capital Improvements
32 Element is to be prepared after the data analyses of the other elements are completed, and will be
33 included within the 2010 Hendry County Comprehensive Plan document.

34
35 In the required revision of the Comprehensive Plan the establishment of data and its analyses
36 are important. The statute and administrative rule require that the Plan be based on data, and that
37 Plan conclusions be substantiated by the conclusions drawn from the data and the analyses.

38
39 The following section discusses the general data and analyses requirements for the Plan
40 revision. At the beginning of each chapter of this Data Analysis the specific data and analyses
41 requirements for each element are listed.

1 STATE REQUIREMENTS
2

3 The "Local Government Comprehensive Planning and Land Development Regulation Act"
4 (Chapter 163 F.S.) specifies the general data and analysis requirements for the Plan revision as
5 follows:
6

- 7 1) All elements of the Comprehensive Plan are to be based upon data appropriate to the
8 element involved.
9
- 10 2) Goals and policies shall be clearly based on appropriate data.
11
- 12 3) Existing available data can be used, and original data collection is not required or
13 prohibited.
14
- 15 4) Chapter 9J-5 F.A.C. is to provide compliance requirements for the Comprehensive
16 Plan.
17

18 Chapter 9J-5, titled "Minimum Criteria for Review of Local Government Comprehensive
19 Plans and Determination of Compliance", provides in 9J-5.005(2) for the following general data and
20 analyses requirements:
21

- 22 1) All goals, objectives, policies, standards, findings and conclusions within the
23 Comprehensive Plan and its support documents are to be based upon relevant and
24 appropriate data.
25
- 26 2) Each Comprehensive Plan will be reviewed to determine whether the plan is based
27 on the required data, and whether the data is collected and applied in a professionally
28 acceptable manner.
29
- 30 3) All tables, charts, graphs, maps, figures and data sources, and their limitations are to
31 be clearly described.
32
- 33 4) Original data collection is not required.
34
- 35 5) Data are to be taken from professionally accepted existing sources, such as the U.S.
36 Census, State Data Center, State University System of Florida, regional planning
37 council, water management district, or existing technical studies.
38
- 39 6) The data used are to be the best available existing data, but original data or special
40 studies may be used.
41
- 42 7) Primary sources (such as the U.S. Census reports) need not be printed in their entirety
43 in the Comprehensive Plan or support documents.

1
2 8) The Comprehensive Plan:
3

- 4 a) Is to be based on resident and seasonal population estimates and projections,
5 provided by the University of Florida's Bureau of Economic and Business
6 Research, the Executive Office of the Governor, or generated by the local
7 government.
8
9 b) If using University of Florida or Executive Office of Governor figures,
10 medium range projections are to be utilized, or if low or high range
11 projections are used, a detailed rationale for doing so must be provided.
12
13 c) If used, locally prepared estimates and projections must have methodology
14 reviewed and approved by the Florida Department of Community Affairs.
15

16 **STUDY AREA**
17

18 The primary area of responsibility for the Hendry County Comprehensive Plan is the
19 unincorporated area of the County. Although a county and the incorporated municipalities within its
20 overall boundaries may choose to prepare joint Comprehensive Plans, the plans for the County and
21 the cities of Clewiston and LaBelle are being prepared separately. The primary focus of this Data
22 Analysis, then, is on the unincorporated area.
23

24 There are exceptions to this, however, and occasions that include a countywide perspective,
25 or include one or both of the incorporated cities in all or part of various elements. This occurs for
26 several reasons: 1) much of the existing data and projections are available only on a countywide
27 basis, 2) the cities are vital parts of Hendry County for which intergovernmental coordination is
28 necessary and desirable, 3) several of the services and facilities are provided only by the County, or
29 by one or more of the cities, and are shared either formally or informally, and 4) with some topics
30 (such as solid waste) the County has the legal responsibility for countywide service.
31

32 With some data that are available only on a countywide basis, an attempt has been made to
33 separate them among the cities and the unincorporated County where solid methodology justifies
34 doing so. As feasible these allocations will be coordinated with the cities, although for the separate
35 and specific planning purposes of each jurisdiction it is not always necessary that all such data and
36 information be fully synchronized.
37

38 To avoid duplication and to provide for orderly growth and development in areas adjacent
39 to or nearby the unincorporated County, it is prudent to coordinate the County's intentions and plans
40 with those of the County's two incorporated cities and with the neighboring counties of Broward,
41 Collier, Glades, Lee, Palm Beach, and, to an extent, Charlotte County. Also, Hendry County as a part
42 of the Southwest Florida Regional Planning Council (SWFRPC), the County's intentions and plans
43 must be considered within the overall regional setting.

1 **TIMEFRAME**
2

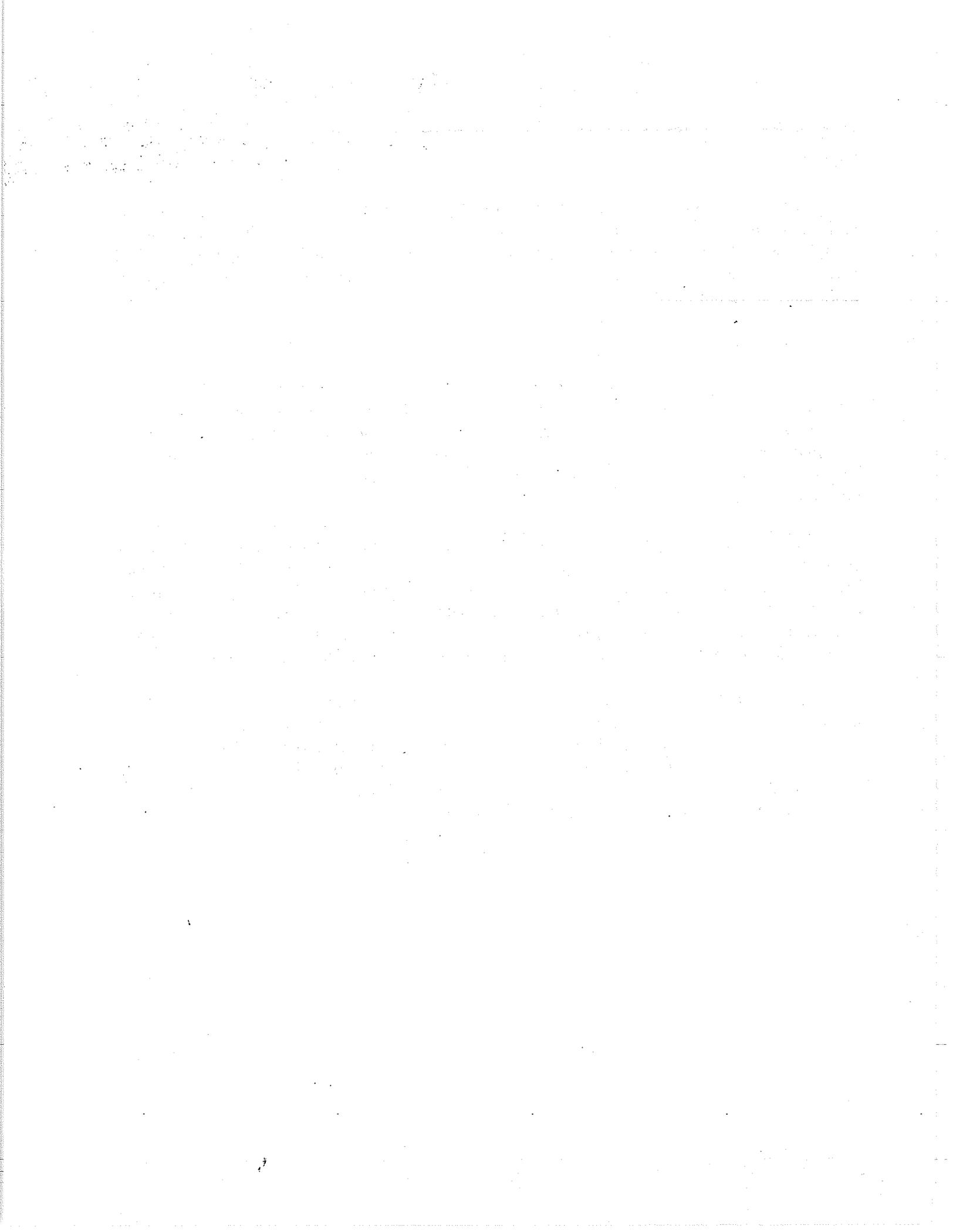
3 State requirements stipulate that this revised Comprehensive Plan cover at least two planning
4 periods: one for the first five years, and one for at least an overall ten year period. This Data Analysis
5 complies with these requirements and covers a ten year period up to and including the year 2010,
6 breaking down all projections into at least two 5-year segments. The two segments are the years
7 2000-2005 and 2006-2010.
8

9 **CONTEXT OF PLANNING**
10

11 The 1985 Florida Growth Management legislation (the previously mentioned Chapter 163
12 F.S.) essentially views planning as a process, an orderly and incremental one. The revised
13 Comprehensive Plan is to be fully evaluated by the local government in five years, and its contents
14 revisited. Annually, the Capital Improvements Element is required to be revisited. The goals,
15 objectives, and policies are to include the mechanisms, and the timing, for the means to plan
16 implementation.
17

18 The revised Comprehensive Plan is required to be followed by changes in the Land
19 Development Regulations to make them consistent with the revised Plan, and a Concurrency
20 Management System to ensure that facilities are in place concurrent with development impacts.
21 Clearly the Comprehensive Plan is to be a process requiring constant monitoring and incremental
22 evaluation. In addition, twice per year a local government is permitted to amend the Plan to make
23 changes deemed necessary by new information, conditions and/or circumstances.
24

25 The Data Analysis should be viewed in the same manner. It is part of a process, and itself
26 should be monitored, evaluated and amended as new data and information become available.
27 Significant new data should be available within two years, when the results of the 2000 U.S. Census
28 will be available. By considering the Data Analysis as a part of the planning process, as the need
29 arises to evaluate and amend the Comprehensive Plan, this valuable source of data and information
30 will be available to provide some of the basis for modifications.



II. Future Land Use Element Data & Analysis Support

II. FUTURE LAND USE ELEMENT**INTRODUCTION**

The purpose of the data analysis for the Future Land Use Element is to identify existing land uses, project future land uses, and relate the sufficiency of facilities and resources to serve both existing and projected future land uses. The data analysis for the Future Land Use Element is also to establish the base population data for the Comprehensive Plan.

STATE REQUIREMENTS

The "Local Government Comprehensive Planning and Land Development Regulation Act" (Chapter 163 F.S.) specifies that the Future Land Use Element be based upon surveys, studies, and data regarding the area, including the amount of land required to accommodate anticipated growth, the projected population, the character of the land, the availability of public services, and redevelopment needs.

The Act recognizes that Chapter 9J-5 F.A.C., the "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance", provides compliance requirements for the Comprehensive Plan. For the Future Land Use Element 9J-5.006 specifies the following data requirements:

1) The following generalized existing land uses are to be shown on a map or table:

- Residential
- Commercial
- Industrial
- Agricultural
- Recreational
- Vacant or Undeveloped Land
- Commercial Forest
- Citrus
- Extraction
- Institutional
- Utilities
- Wetlands
- Water
- Transitional

Educational facilities, public buildings and lands, hospitals, and other quasi-public facilities have been combined as one category under Institutional.

2) The following natural resources are to be shown on the generalized existing land use map:

- Existing and Planned Waterwells and Cones of Influence (where they are known)

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- Rivers, Bays, Lakes, Floodplains, and Harbors
 - Wetlands
 - Minerals and Soils
- 3) Existing land use categories are to be summarized in tabular form, indicating approximate acreage, and general range of density or intensity of use.
- 4) Generalized existing land use of areas adjacent to the county border is to be shown on the map.
- 5) Population projections.
- 6) Analysis of availability of facilities and services identified in the following elements for existing land uses and land for which development orders have been issued:
- Traffic Circulation
 - Sanitary Sewer
 - Solid Waste
 - Drainage
 - Potable Water
 - Natural Groundwater Aquifer Discharge
- 7) Analysis of character and magnitude of existing vacant or undeveloped land to determine its suitability for use, concerning the soils, topography, natural resources, and historic resources.
- 8) Analysis of the amount of land needed to accommodate the projected population, including:
- Land Use Categories, and Densities or Intensities of Use
 - Estimated Gross Acreage Needed by Category
 - Description of Methodology Used
- 9) Analysis of Need for Redevelopment.
- 10) Analysis of proposed development and redevelopment of flood prone areas based on suitability determination from Flood Insurance Rate Maps, Flood Hazard Boundary Maps, or other most accurate information available.

POPULATION DATA

Chapter 9J-5 F.A.C. requires that population projections be utilized for the analyses conducted for the Comprehensive Plan. These projections are provided by the Bureau of Economic and Business Research (BEBR) at the University of Florida, which annually estimates population

1 for counties and incorporated municipalities, and prepares projections for counties [R16]. The BEBR
2 data provide uniform statewide methodology and yield data comparable from county to county.

3
4 As useful as the BEBR data are, it is necessary to have further data breakdowns in order to
5 carry out all the necessary analyses for the Comprehensive Plan. For the specific situation in Hendry
6 County it is important to realized that a large percentage of the population is located near the cities,
7 and useful to know where the growth is occurring and is likely to occur in the future years of the
8 planning period. The location of development and growth is very important to the evaluation of
9 facilities and services for the existing population, and assumptions about the concentration of future
10 growth can direct attention for future demand and needs.

11
12 The following sections present the BEBR population estimates for Hendry County and the
13 incorporated cities of Clewiston and LaBelle. They also present BEBR's population projections not
14 only on a countywide basis, but estimated by municipality, by urban/rural location, and by planning
15 sector location, as well as estimating seasonal influences on the population. These additional
16 breakdowns in the following sections are necessary in the analyses to follow in this Data Analysis.
17 The methodology used for each statistical breakdown is described in the individual sections.

18 19 **RESIDENT POPULATION PROJECTIONS**

20
21 The resident population projections utilized for Hendry County (including the cities and the
22 unincorporated area) are the medium range projections provided by the University of Florida through
23 its Bureau of Economic and Business Research (BEBR) [R16] and the Shimberg Center for
24 Affordable Housing. These projections are for the years 2000, 2005, and 2010 to cover the planning
25 period of the Comprehensive Plan. Projections from these sources are not apportioned among the
26 cities and the unincorporated area of the County. These breakdowns are presented in Table II-1, and
27 have been estimated based on the past growth trends of each of the cities and the unincorporated
28 county related to the Shimberg Center projections for the entire County.

29
30 The unincorporated area of the County contained 16,985 persons in 1990 according to the
31 U.S. Census. BEBR estimates indicate a population of 20,683 in 1996 and is projected to be 23,657
32 in 2000. The annual growth rate over the 6-year period was 6.4%. Over the same period the percent
33 of the total County population made up by the unincorporated area was 68% in 1996.

34 35 **SEASONAL POPULATION**

36
37 The purpose of estimating the seasonal population is to establish the peak demands on public
38 facilities and services, and for other related Comprehensive Plan requirements. Hendry County is
39 not a major tourist area, but there are a significant number of persons spending only the winter
40 months in the County.

41
42 The "seasonal" period for winter residents is approximately the end of November through
43 mid-April, and roughly parallels with the harvesting season of citrus, sugar cane, and winter
44 vegetables.

1 Typically, seasonal population would be estimated based on utility connects-disconnects,
2 seasonal rental units, rental condominiums, hotel-motel occupancy, transient apartments, and related
3 indicators studied over a period of time.
4

5 Given the large area of the County outside of these cities and the extent of the agricultural
6 industry in Hendry County, the seasonal influences on the population must also include the migrant
7 labor factor.
8

9 Sugar cane agriculture uses seasonal migrant labor through a federal program that requires
10 specific housing and care for the workers, and these workers have little other effect on the
11 community. They need not be considered in the seasonal population figures.
12

13 However, both citrus and vegetable harvesting do utilize migrant farm workers that become
14 a part of the community while working in Hendry County. Based on the agricultural data, it can be
15 estimated that for 1990 a total of approximately 4,350 migrant workers served citrus and vegetable
16 agriculture during the winter peak season [R24].
17

18 Further, with the tremendous growth in citrus in Hendry County, it is projected that this
19 number will rise to 6,000 by 1995 and 8,600 by the year 2000 [R24]. The numbers of family
20 members accompanying migrant workers are not currently estimated, but it is known that some
21 families move into Hendry County in time to enroll children in school, and extend their stay until
22 the school year ends.
23

24 The 1990 migrant labor projection represents an increase of 26% over the estimated 1988
25 population for the unincorporated area of Hendry County, and a 25% increase over the projected
26 1990 resident population.
27

28 For 1995 the migrant labor projection represents 29% additional population over the
29 projected resident population, and the migrant labor projection for the year 2000 represents nearly
30 38% more population than the projected resident population.
31

32 Although these migrants work in Hendry County fields and groves, it is probable that a
33 number of them make their temporary residences in Lee County and Collier County (especially in
34 the Immokalee area). It is conservatively assumed that approximately 25% of these workers reside
35 outside Hendry County. Therefore, assuming the other additional seasonal population (those in RV
36 parks and other temporary housing) will remain constant at 12% over the planning period, the figures
37 used for additional seasonal population in this Data Analysis are 30.5% for 1990, 34% for 1995, and
38 40% for the year 2000.
39

40 These seasonal calculations must be considered tentative, but are the best currently available
41 for including the important migrant labor factor. It is the intention of the County in conjunction with
42 the Hendry County Area Housing Commission to further study the impacts of migrant labor on the
43 County, especially concerning the effects on housing. When such further studies are completed, a
44 better estimate of the seasonal population can be prepared.
45

PLANNING SECTORS

The Planning Sectors used in 1980 were changed in 1990. By inferring from the Enumeration District data, percentages and ratios, and extrapolating from the year the Census was taken (1990), important data and information can be derived on a Planning Sector basis.

Table II-2 provides general size, population, density and growth data for the Planning Sectors. This table provides the base description for the Planning Sectors and is useful to help verify population estimates, and for carrying out the housing analysis.

URBAN/RURAL POPULATION

Hendry County is primarily a rural and agricultural area. The cities are small towns with adjacent growth areas in the County's unincorporated area. The large Development of Regional Impact, Port LaBelle (unincorporated), lies just east of LaBelle on S.R. 80, and there are a few other small subdivided concentrations of development in other parts of the unincorporated area. It is primarily near the cities that the growth in the unincorporated area has been occurring.

To the south and east of the City of Clewiston is an urban area made up of two neighborhoods referred to as Harlem and Hooker Point. The population within the area according to the 1990 Census was 4,722. This area is in Planning Sectors 11 and 12. (See Figure II-1) the City of Clewiston is in Planning Sector 13, and had a 1990 population of 6,085. Combined with the urban fringe of the City of Clewiston, the total population was 10,807.

The LaBelle "urban" area includes North LaBelle which is in Planning Sector 2. Previously, this area included portions of Planning Sectors 5 and 6. The Planning Sectors were redrawn to parallel the 1990 Census Tracts. The combined urban area and City is approximately 4,134.

The total 1996 population for Hendry County based on the above estimates was 30,157 County population. The 1990 population for Hendry County was 25,791, so an estimated population of approximately 10,757 resided in the balance of the County, the "rural" area.

EXISTING LAND USES

Figure II-2 illustrates the generalized existing land uses in the unincorporated area of Hendry County. Table II-3 summarizes the categories by acreage and square miles. This inventory of existing land use is based on the 1994 land use work carried out by the SWFRPC.

RESIDENTIAL LAND USES

It was determined that existing residential land uses included residential structures and platted areas with streets in place, where they are actively being developed as residential property. This approach more accurately portrays residential patterns in the county, and it includes the areas which have facility and service demands even though not fully built-out with residential structures.

1 Residential development in the unincorporated area is taking place in a number of distinctive
2 forms, as also previously identified in the 1980 Comprehensive Plan. Generally these may be
3 categorized as follows:

- 4 1) Developments of relatively small lots in a confined pattern.
- 5 2) Mobile home parks and subdivisions.
- 6 3) Development of medium-to-large lots primarily as individual mobile home sites, but
7 also some conventional single family homes built on individual lots and in typical
8 subdivision patterns.
- 9 4) Developments of large lots or parcels in suburban or rural setting.

10
11
12
13
14
15 **PORT LABELLE**

16
17 Residential land uses also include much of the large unincorporated Port LaBelle area which
18 was approved as a Development of Regional Impact (commercial and related uses are also a part of
19 Port LaBelle). Port LaBelle has certain rights concerning at least land uses, and density and intensity
20 of uses, by virtue of approved development orders [R22].

21
22 Port LaBelle is a very large development consisting of approximately 31,530 acres, 23,650
23 acres of which are located within Hendry County. This development could conceivably
24 accommodate all the residential land use requirements to meet the demand of the projected
25 population through the year 2010. Refer to Tables II-4 and II-5.

26
27 Although a vast area of Port LaBelle in Hendry County is as yet undeveloped, it is not
28 reasonable to assume that this development alone could provide all the choice in living areas,
29 location, and other factors to satisfy the needs of all the future population during the planning period.
30 Also, if only Port LaBelle were mapped on the Future Land Use Map for future resident
31 development, this could unduly restrict the property use of others in the County.

32
33 Because of these factors, Port LaBelle should primarily be viewed as a residential (and other
34 permitted use) reserve area presently under only limited control of the County concerning land uses.
35 On the Existing Land Use map the most developed part of Port LaBelle is shown with the various
36 existing land uses, but large parts of Port LaBelle are shown as Agriculture (now in some citrus via
37 leases) and as Vacant (an area planned for residential and with many internal roads built; refer to the
38 Vacant and Undeveloped Land section).

39
40 It should be noted that Port LaBelle is responsible for providing infrastructure for the
41 development, and should also be viewed as a target for infill development in spite of its scale.
42 Hendry County maintains arterial and collector roads after dedication and acceptance by County. The
43 other streets and roads are maintained by the Port LaBelle Community Development District. Port
44 LaBelle has been slow to develop, but once SR 80 is four-laned to its vicinity, it will be more
45 desirable because of its accessibility to the Fort Myers area.

1 **AGRICULTURAL LAND USES**
2

3 Concerning agricultural land uses, it was determined that neither aerial photography nor most
4 methods of field survey reveal some of the agricultural uses of land. Crops, citrus, and improved
5 pasture can be rather obvious, but some areas may appear to be "vacant" or "inactive", when in fact
6 may be rangeland for cattle or being rotated for future planting of crops. In addition, agricultural use
7 includes areas under conversion to crops or citrus, forests, food production and processing, related
8 agricultural uses, and farm structures, lots and homes. Some public facilities are also a part of this
9 classification.

10
11 **COMMERCIAL LAND USES**
12

13 Commercial development (neighborhood and community retail) in Hendry County is
14 primarily in and around the cities of Clewiston and LaBelle. There are some scattered neighborhood
15 commercial uses, but most of them are not far from the "urban" centers. Commercial land in the
16 unincorporated area includes some rather large lot developments, such as mobile home sales.

17
18 **INDUSTRIAL LAND USES**
19

20 The industrial category includes the sugar and citrus processing plants, some small
21 fabricators, and some extractive uses.

22
23 **RECREATION LAND USES**
24

25 Recreation uses include the parks and other recreation areas identified for the unincorporated
26 area in Chapter VII. Refer to Table VII-4.

27
28 **CONSERVATION LAND USES**
29

30 No lands are presently classified as Conservation uses on the existing Hendry County Future
31 Land Use Map, and therefore no areas have been inventoried or acreages listed as existing
32 conservation uses in Table II-3. A joint category of Agricultural-Conservation is employed on the
33 existing Future Land Use Map, but no definitions or criteria are related to conservation.

34
35 Conservation land uses are those land areas designated for conserving, preserving, protecting,
36 or restricting and controlling use of natural resources and other environmentally sensitive lands.
37 Those primary areas that could be considered for such designations include Lake Okeechobee with
38 its man-made diked area and the Caloosahatche River. Some other areas could possibly be
39 considered to be environmentally sensitive lands on a case by case basis, including the various
40 man-made drainage canals and levees, some of the remaining viable wetlands, protected species
41 habitat, and some of the flood areas.
42
43
44
45

1 **PUBLIC LAND USES**

2
3 These uses include educational uses, public buildings and grounds, the sanitary landfill, and
4 other public facilities. Land for utilities (sewer & water plants), are included even if privately owned.

5
6 **BIG CYPRESS, SEMINOLE RESERVATION**

7
8 Because the Reservation is not under Hendry County's regulatory authority, the existing land
9 uses within the area have not been designated.

10
11 **VACANT OR UNDEVELOPED LAND**

12
13 As noted under Agricultural Land Uses above, very little land is considered as "vacant" in
14 Hendry County. It is probable that such is the case in most counties which are rural and agricultural.
15 Land could be perceived as vacant or undeveloped by the untrained observer when in fact the land
16 was actually in some agricultural use.

17
18 There are two areas in the County shown as "vacant" on the Existing Land Use Map (Figure
19 II-2). One of these areas is Lehigh Acres East, which lies on western boundary of Hendry County and
20 is a part of the large platted Lehigh Acres development, thousands of acres of which lies in Lee
21 County. This East portion in Hendry County is approximately one-quarter mile wide and nearly six
22 miles long, containing approximately 1,007 acres. This area is developed with some citrus, and
23 therefore some agriculture is the only actual existing use.

24
25 Lehigh Acres East has public road access only from Lee County, and from the perspective
26 of Hendry County is nearly impossible to provide with services. Because it is platted and many of
27 the lots are sold to potential homeowners, it is a problem area. However, this area may be
28 developable as residential should Hendry County access be provided or if arrangements are worked
29 out for Lee County to provide services.

30
31 The soils in Lehigh Acres are of the Oldsmar-Wabasso Association and are considered by
32 the Soil Conservation Service analysis to have relatively high potential for septic tank use. The
33 topography of the area is basically level running from just over 20 feet in elevation in the north part
34 to just over 25 feet in the south part. There are no known historic or archaeological resources in the
35 area, or any other significant natural resources.

36
37 A second "vacant" area shown on the Existing Land Use Map is the northeastern portion of
38 Port LaBelle with approximately two miles of frontage on SR 80. This area is platted and some of
39 the roads are built, but no houses are presently constructed. The area contains approximately 3,100
40 acres, and contains some citrus groves. This area is considered to have excellent residential
41 development potential but is considered unlikely to develop during the planning period.

42
43 The soils in this area of Port LaBelle are primarily the Oldsmar-Wabasso and
44 Hallandale-Riviera-Holopaw Associations considered by the Soil Conservation Service to have
45 medium to high potential for septic tank use. Because of the provisions in the Port LaBelle DRI, this

1 area would eventually be served by central sewer, but this area is quite distant from the existing Port
2 LaBelle sewer treatment plant. The topography of the area is rather level, varying between 15 and
3 20 feet in elevation. There are no known historic or archaeological resources in this area, or any other
4 significant natural resources.

5
6 **NATURAL RESOURCES**

7
8 The locations of public water wells are shown on Figure IV-1 in the "Potable Water"
9 sub-element. Cones of influence for the wells have not been determined and cannot be mapped.
10 100-year floodplains cover a vast area of Hendry County and are illustrated in Figure IV.D-3.

11
12 The Caloosahatchee River and Lake Okeechobee are shown on the Existing Land Use Map
13 (Figure II-2). This map is also available at the scale of one inch equals two miles. The soil
14 associations in Hendry County are shown on Figure IV.A-1. Wetlands (and other vegetative
15 communities) are illustrated in Figure VI-1.

16
17 **HISTORIC RESOURCES**

18
19 There are 38 archaeological sites in Hendry County listed in the Florida Master File,
20 including the sites of old forts (Fort Denaud, Fort Thompson, Fort Shackelford, Fort T.B. Adams,
21 and Fort Simmons), and Indian mounds. The locations of the fort sites are shown on Figure IV.D-3,
22 but the Indian mounds are not shown to avoid disclosure. The distribution of location information
23 on archaeological sites is limited by the Florida Master File, because of the vulnerability to looting
24 and vandalism.

25
26 **RELATIONSHIP OF LAND USE TO PUBLIC FACILITIES**

27
28 Chapter IV, Environmental Services, includes discussions of sanitary sewer, potable water,
29 solid waste, drainage, and natural groundwater aquifer recharge areas. Except for the aquifer
30 recharge area, which have not been identified in Hendry County, Chapter IV describes and locates
31 these facilities, and analyzes these facilities related to the growth centers in Hendry County.
32 Generally the sanitary sewer and potable water facilities are available only in and nearby the
33 incorporated Cities of Clewiston and LaBelle, and in parts of the Port LaBelle development. In 1995,
34 Hendry County took over the potable water facilities of Port LaBelle. The County believed they
35 could adequately provide this service to surrounding neighborhoods more efficiently. Concurrency
36 management, with regard to utilities, for the County really has not been an issue because until 1995,
37 the County had no public utilities. The Port LaBelle Utilities, which is now owned by the County
38 and is limited in space, only serves Port LaBelle. The City of LaBelle has its own utilities and
39 concurrency management is reviewed in-house. The City of Clewiston, as well as, US Sugar have
40 their own utilities and it appears that they are operating within their prescribed LOS. Concurrency
41 on major roads in the County is operating at LOS C and D at peak. Given the established LOS and
42 current operating levels, it would appear that major deficiencies on County roads do not exist.

1 The County has shared a solid waste disposal facility with Lee County. Hendry County has
2 32 years remaining on its 40 year contract with Lee County on the disposal of solid waste at the
3 shared facility.
4

5 Concerning drainage, the County has had much of its land area altered in order to better
6 accommodate surface water runoff and irrigation. Much of the northern half of the County is covered
7 by various types of local water management districts. The eastern part of the county has been
8 severely altered by the various State and Federal Lake Okeechobee projects over the years. Many
9 man-made canals in various areas of the County carry water to the Caloosahatchee River.
10

11 Chapter III gives an accounting of traffic circulation in the County, especially for State roads.
12 Very little data exists for County roads. The Traffic circulation system in the County well serves the
13 existing development and should be largely sufficient to meet the demand of the projected population
14 and other development through 2010, with the completion of various upgrading projects described
15 in the Traffic Circulation Element.
16

17 To relieve congestion along segments of SR 29 in the City of LaBelle, road improvements
18 were made around 1995 and completed in early 1997. Other road improvements included SR 80 in
19 the City. Additional work along SR 80 is currently underway for the County. These problem areas
20 are located wholly within the City of LaBelle, although part of their FDOT segments are located
21 within the unincorporated area.
22

23 **FUTURE LAND USE REQUIREMENTS**

24

25 Table II-5 presents the future land use requirements, and Figure II-3 is the Future Land Use
26 Map which corresponds to the table. As noted in Table II-5, standards were developed to project the
27 basic land uses. As noted previously under the "Existing Land Use section", data and information
28 from the previous survey by the SWFRPC were updated to as current a date as possible.
29

30 Utilizing the standards it is apparent from Table II-5 that approximately 5,790 acres of
31 residential land will be needed to accommodate the projected additional population by the year 2010.
32 Commercial uses will require 734 acres. For industrial uses 267 acres will be required. Additional
33 industrial acreage may be needed when the County completes its economic development analysis
34 for attracting new industries.
35

36 All of the land designated in a residential category on the Future Land Use Map are existing
37 residential areas. These will provide infill residential development. Some of the areas designated in
38 the Transitional category are partially made up of existing residential areas, but are under less
39 pressure to develop residentially. It is very improbable that any new subdivisions of more than a few
40 lots will be necessary or proposed over the planning period.
41

42 The Transitional category is included on the Future Land Use Map because these are land
43 areas rather near the cities where the public facilities are most readily available. Most of the
44 Transitional area does not have centralized sewer and/or potable water facilities available, but their
45 locations could be logical extensions for these facilities if overall development densities should

1 warrant them. The areas shown as Transitional are primarily in agricultural uses, but have scattered
2 residential uses and some commercial uses. It is premature to label these areas as residential, but the
3 trend within this category is becoming such.
4

5 With the tremendous growth being experienced in the intensity of agricultural production
6 (primarily citrus), there will be additional demand for a residential use somewhat different from the
7 traditional. There is a growing need for migrant housing not easily accommodated within typical
8 residential areas. There needs to be mechanisms available for developing resident and migrant
9 housing within agricultural areas.
10

11 As can be inferred from the discussions under "Seasonal Population" above in this chapter,
12 the land requirements for migrant labor housing demand could be significant. It is known that only
13 2,563 units of migrant labor housing capacity currently exists in HRS licensed migrant labor camps.
14 According to Table II-6, 1995 Demand and Need for Migrant Farmworker Housing, there were
15 10,270 total migrant workers in Hendry County, with a demand for 9,874 dwelling units. This figure
16 appeared rather high because only the Department of Health (DOH) permitted facilities were
17 introduced into the equation for capacity of migrant worker housing. As a result, facilities not
18 licensed by DOH were not included even though migrant workers may be residing someplace. DOH
19 requires facilities that house more than five migrant workers to obtain licencing. Since not all
20 facilities do this, the accurate capacity total for migrant worker housing is underestimated.
21

22 The Hendry County Area Housing Commission which represents the unincorporated area of
23 the County and the Cities of Clewiston and LaBelle, has selected migrant labor housing as its highest
24 priority. Through the assistance of the Area Housing Commission, the County was able to construct
25 a 114 unit facility for migrant workers known as Green Tree Village. Green Tree Village is primarily
26 concerned with providing seasonal housing for farmworkers during the harvest season. Nearly 200
27 farmworkers reside at this facility which also offers family accommodations. Voucher subsidies are
28 offered to those who have difficulty paying rent. To date, Green Tree Village is the only subsidized
29 facility located in unincorporated Hendry County. Furthermore, the Area Housing Commission has
30 projected that in the next seven to ten years approximately 100 to 120 units will be needed annually.
31 The current demand is between 40 to 50 units per year.
32

33 Recreational uses in Table II-5 are derived from the Chapter "VII. Recreation and Open
34 Space", and the assumption is made that the County and the cities will be jointly serving the needs
35 of the "urban" population. Public uses are assumed to remain constant, except for the planned
36 bi-county solid waste facility in the western part of Hendry County. As other uses of land increase,
37 it is assumed that agricultural land will decrease.
38

39 DENSITY AND INTENSITY OF USES 40

41 There is a range of residential densities in Hendry County from the higher densities in some
42 mobile home parks to very large lots in some suburban and rural settings. For the most part the
43 development has been very efficient. In some areas near the cities where public facilities are
44 available, single family and mobile homes have developed at densities of approximately six to seven
45 units per acre. Away from the cities are subdivisions where all public facilities are not available, the

1 development pattern has been in the range of approximately three units per acre up to one unit per
2 one or two acres.

3
4 Commercial development is very sparse in Hendry County, and the type and intensity of the
5 use varies widely. These uses vary from a lot as small as 5,000 square feet to very large lots for such
6 uses as shed sales.

7
8 Industrial uses are very rare in Hendry County. The industrial acreage in Table II-5 includes
9 small processing shops and an asphalt plant, but most of the acreage is extractive uses. Although two
10 citrus processing plants and a sugar refining plant are shown as industrial on the Existing Land Use
11 Map, these are not included on the Future Land Use Map or included in the industrial acreage in
12 Table II-5. They are included in the Agricultural areas and acreages because they primarily serve
13 agricultural functions. The Comprehensive Plan should include provisions permitting these and
14 related uses in the Agricultural category.

15
16 Given the development patterns and trends in Hendry County, the future land uses should
17 approximately parallel past development in general location, density and intensity. The Future Land
18 Use Map (Figure II-3) reflects this. Higher densities are located nearest the cities where the public
19 facilities are concentrated, medium densities are located where fewer public facilities are available,
20 and the lowest densities are in areas where on-site sewer and potable water are usually necessary.

21 22 **REDEVELOPMENT NEEDS AND NONCONFORMING USES**

23
24 There are few areas requiring redevelopment attention in Hendry County: The
25 Harlem-Hooker Point area (Planning Sectors 11 and 12), part of the South LaBelle area, and part
26 of North LaBelle (Planning Sector 2). Neighborhood revitalization programs have been used the
27 Harlem area.

28
29 There are various uses in scattered locations in the County that are not in conformance with
30 the existing Hendry County Comprehensive Plan. However, these are not numerous and most of
31 them have the proper zoning for their locations. This indicates some inconsistency between the
32 existing Comprehensive Plan and the zoning maps.

33
34 These nonconforming uses primarily take the form of a few small commercial uses in
35 residential areas. Some of these areas are given the proper land use category designations on the
36 Future Land Use Map, and some of them are not. Although these uses do not conform with the
37 Comprehensive Plan Future Land Use Map, most of these uses conform to the zoning map. Most of
38 them are not offensive to the point of requiring redevelopment, and they should be grandfathered as
39 acceptable uses in the Comprehensive Plan, but the zoning should be corrected with the updated
40 Land Development Regulations to prevent expansions or extensions of these uses.

41 42 **DEVELOPMENT AND REDEVELOPMENT IN FLOOD PRONE AREAS**

43
44 Much of the development in Hendry County occurs in flood prone areas, if the FEMA Flood
45 Insurance Rate Maps (FIRM) are used as the definition of flood prone. As discussed in the

II. FUTURE LAND USE ELEMENT

1 "Drainage" subelement in Chapter IV and the Conservation Analysis in Chapter VI, a large area of
 2 the County is designated as flood prone area on the FIRM maps.
 3
 4

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	1996	2000	2005	2010
Clewiston	6,349	6,641	6,938	7,272
LaBelle	3,125	3,544	4,058	4,038
Unincorporated	20,683	23,657	27,920	29,376
Total	30,157	33,842	38,916	40,686
Permanent Pop.	30,157	33,842	38,916	40,686
Seasonal Pop. ²	3,317	3,722	4,280	4,475
Peak Pop.³	33,474	37,564	43,196	45,161

¹Population projection prepared by Shimberg Center for Affordable Housing, University of Florida.
²Represents migrant farm workers.
³Based on Hendry County's Planning Department estimates.

20

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45

Planning Sector*	Name	Area (sq. mi.)	1990		1996	
			Pop.	PPSM** Density	Pop.	PPSM** Density
1	Caloosa Valley	23.63	1,800	76.10	2,286	96.70
2	North LaBelle	1.54	1,436	932.40	1,895	1230.50
3	City of LaBelle	3.54	2,703	763.50	3,125	882.70
4	Highway 29 South	30.54	1,485	48.60	1,838	60.10
5	Robert's Canal	114.65	1,581	13.70	1,751	15.20
6	Port LaBelle	14.03	1,586	113.00	1,766	125.80
7	Central County	337.32	849	2.50	985	2.90
8	Glades	513.45	1,387	2.70	2,519	4.90
9	Seminole Reserv.	68.30	484	7.00	622	9.10
10	Sugarland	40.57	732	18.00	756	18.60
11	Harlem	1.39	2,826	2.03	3,220	2316.50
12	Hooker Point	5.80	2,837	489.10	3,045	525.00
13	City of Clewiston	6.09	6,085	999.10	6,349	1042.50
	Total	1160.85	25,791	22.20	30,157	26.00

*See Figure II-1

**PPSM - Person Per Square Mile

Note: The total area of the planning sector is slightly different from Table II-1 Future Land Use because the portion of the County that lies in Lake Okeechobee was not calculated as part of the planning sector.

Source: Hendry County Building and Zoning Department; LaRue Planning and Management Services, Inc.; SWFRPC, 1997.

EXHIBIT A
II. FUTURE LAND USE ELEMENT

Table II-3	
Existing Land Use	
Land Use Category	Acres
Agriculture	340,343.14
Commercial Forest	4.98
Citrus	132,875.66
Commercial	218.48
Extraction	396.64
Industrial	768.09
Institutional	494.51
Residential	22,469.94
Transitional	3,057.52
Utilities	387.76
Vacant	66,350.95
Wetlands	175,457.85
Water	15,932.64
Total	758,758.16
Source: SWFRPC, 1994.	

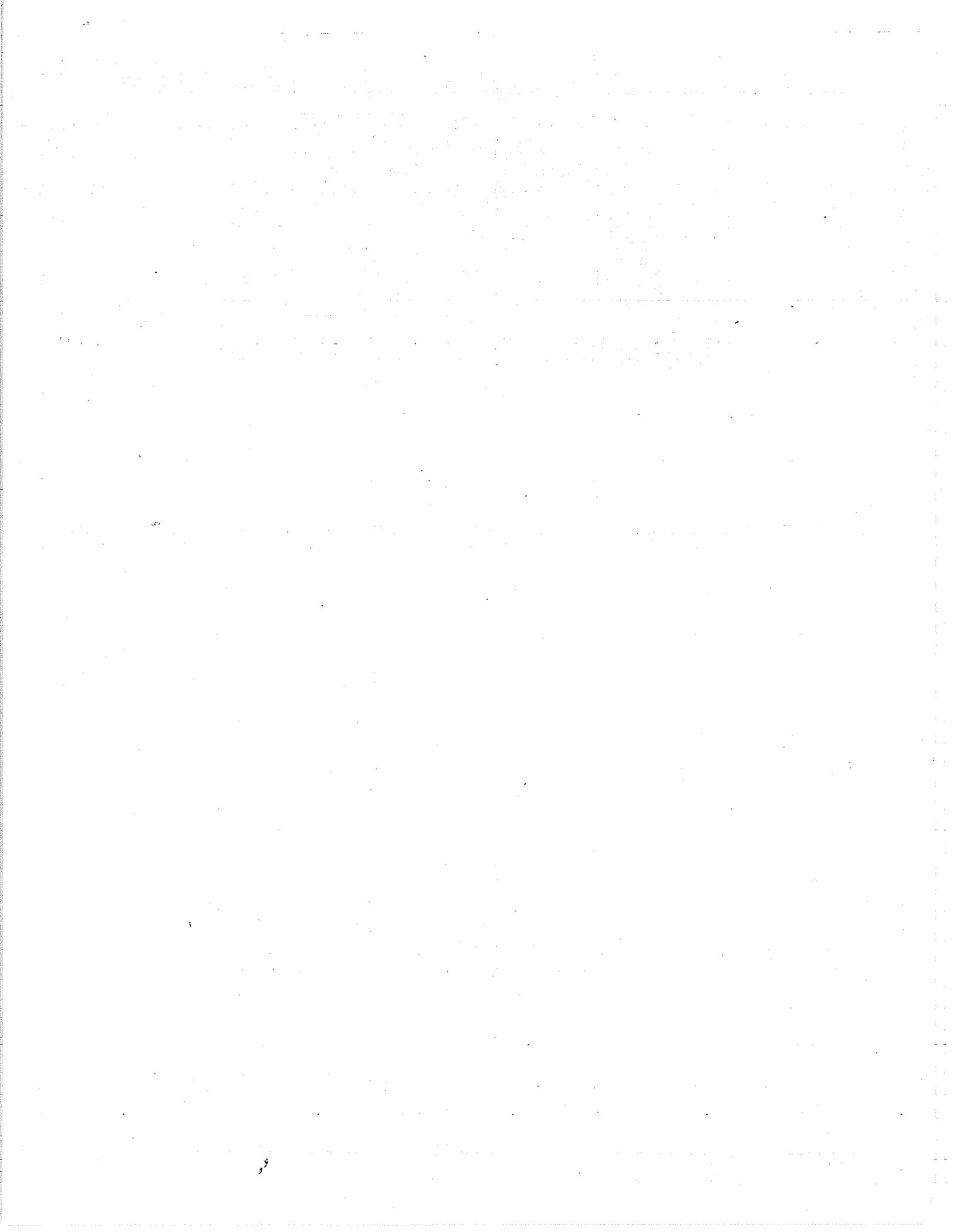
Table II-4		
Future Land Use		
Land Use Category	Acres	Square Miles
Agriculture	544,980	851.53
Agriculture Conservation	110,697	172.96
Big Cypress Seminole Indian Reservation	46,380	72.47
Commercial	1,011	1.58
Industrial	3,296	5.15
Public	6,484	10.13
Recreation	231	0.36
Leisure Recreation	931	1.45
Residential, High Density	1,811	2.83
Residential, Medium Density	3,938	6.15
Residential, Low Density	0	0.00
Residential, Special Use Density and Use	7,522	11.75
Residential, Rural Estates	2,217	3.46
Residential, Pre-Existing Rural Estates	15,608	24.39
Transitional	15,138	23.65
Total Unincorporated	760,244	1,187.88
Source: Southwest Florida Regional Planning Council, Hendry County Planning Department, February 1997. Refer to Figure II-2.		

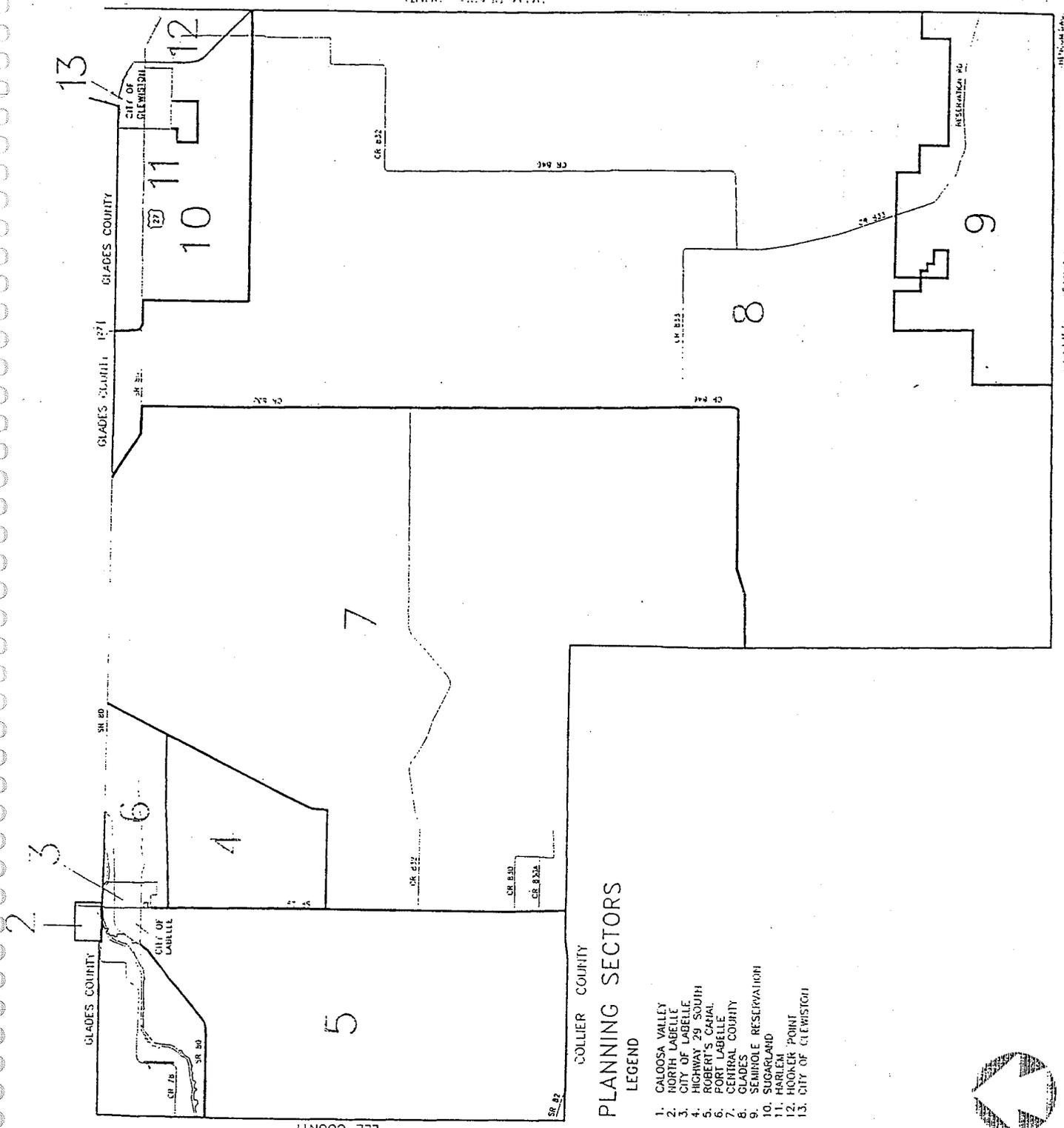
Table II-5 Future Land Use Requirements, 2010 Hendry County, Unincorporated Area		
Land Use Category	Acreage for Projected Additional Population	Future Land Use Map (Acres)
Residential	5,790	31,148
Transitional	----	,138
Commercial	734	1,745
Industrial	267	3,563
Agricultural	----	542,114
Recreational	1,813	2,044
Conservation	----	110,697
Public	----	7,415
Seminole Reservation	N/A	46,380
Total Unincorporated	-----	760,244
Standards (refer to text)		
Residential	- 550 Acres/1,000 Population	
Commercial	- 40 Acres/1,000 Population	
Industrial	- 110 Acres/1,000 Population	
Recreation/Open Space	- 16.2 Acres/1,000 Population	
Source: LaRue Planning & Management Services, Inc., 1997.		

Table II-6 Demand and Need for Migrant Farmworker Housing, 1995 Hendry County	
Number of Accompanied Migrant Workers	2,978
Number of Accompanied Migrant Worker Households	1,354
Total Accompanied Migrant Workers & Household Members	5,145
Number of Unaccompanied Migrant Workers	7,292
Total Migrant Workers	10,270
Demand: Migrant Workers & Household Members	12,437
Capacity: Migrant Worker Housing	2,563
Need (Capacity minus Demand)	2,563
Source: Shimberg Center for Affordable Housing, University of Florida, 1995.	

Table II-7
HRS Permitted Migrant Labor Camps and
Farm Labor Housing Facilities*, 1995
Hendry County

HRS Permitted Camps	2,363
Florida Farm Labor Housing Units	
Number of Units	50
Capacity**	200
Other MW Housing	0
Total Capacity	2,563
*(Section 514/516)	





PLANNING SECTORS

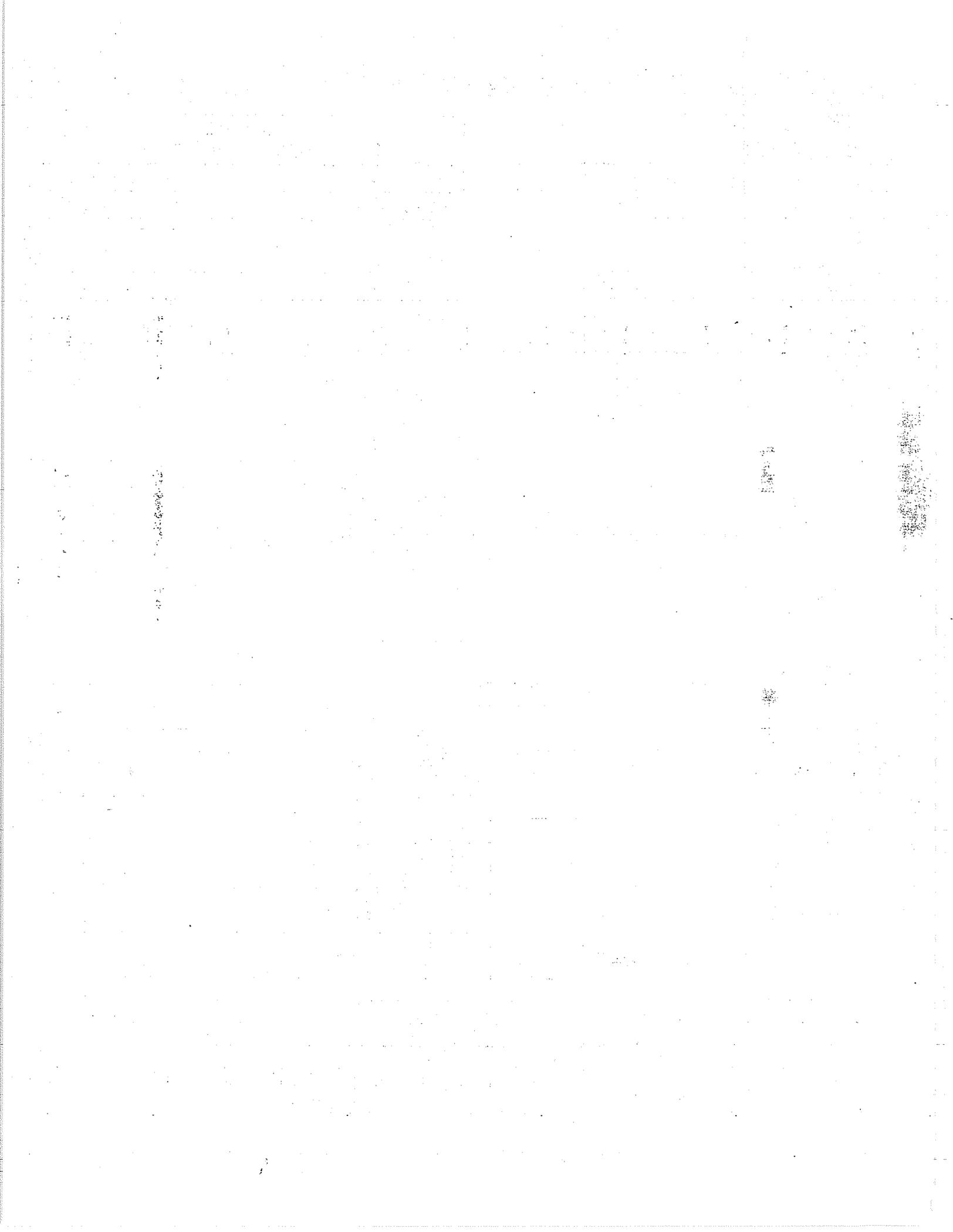
LEGEND

- 1. CALOOSA VALLEY
- 2. NORTH LABELLE
- 3. CITY OF LABELLE
- 4. HIGHWAY 29 SOUTH
- 5. ROBERT'S CANAL
- 6. FORT LABELLE
- 7. CENTRAL COUNTY
- 8. GLADES
- 9. SEMINOLE RESERVATION
- 10. SUGARLAND
- 11. HARLEM
- 12. HOOKER POINT
- 13. CITY OF CLEWISTON

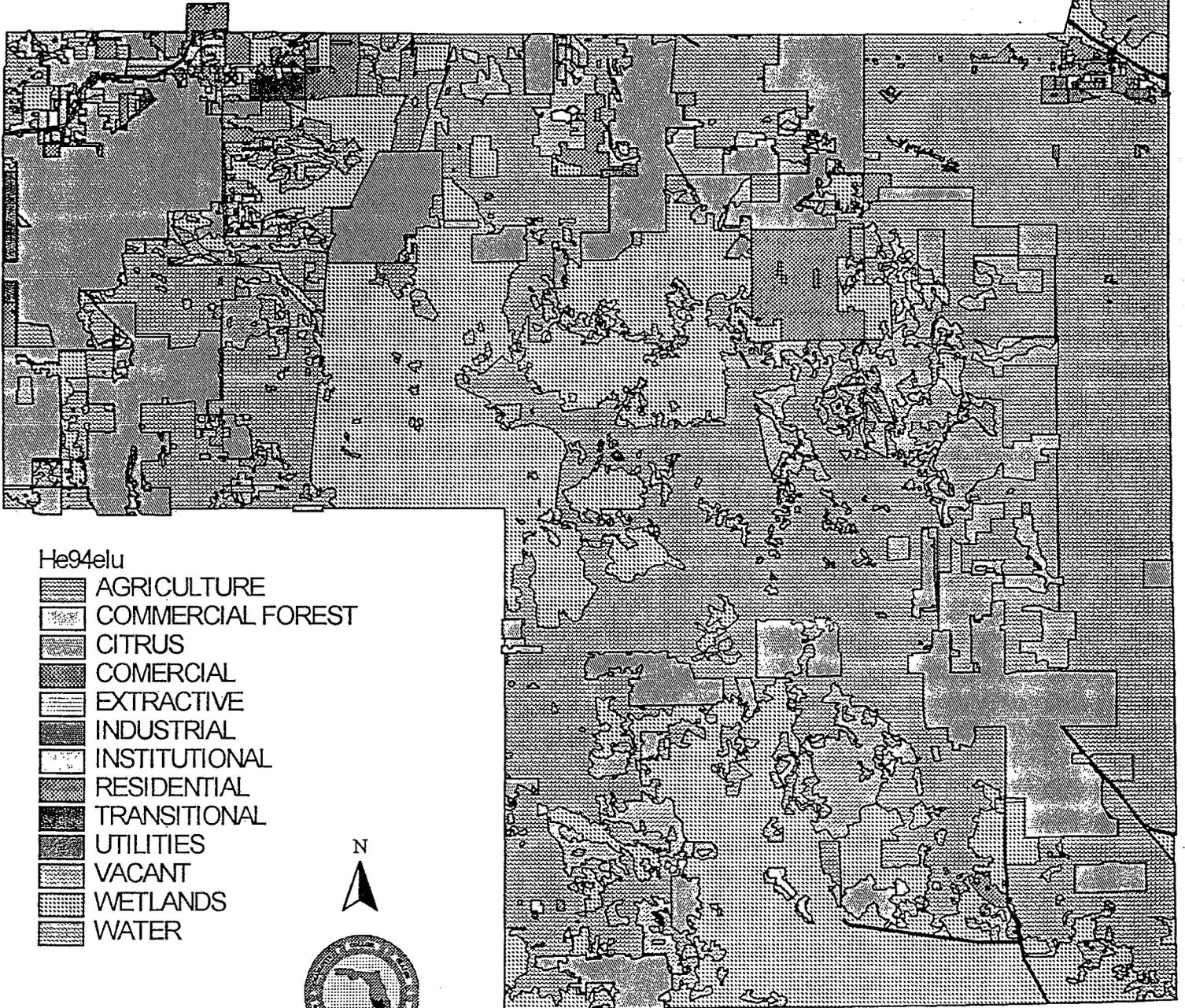


0 1 2 3 4 MILES
SWRPC, JUNE 92-RIC

FIGURE II-1
HENDRY COUNTY
BLOCK NUMBERING AREAS, BLOCK GROUP AREAS



HENDRY COUNTY EXISTING LAND USE - 1994

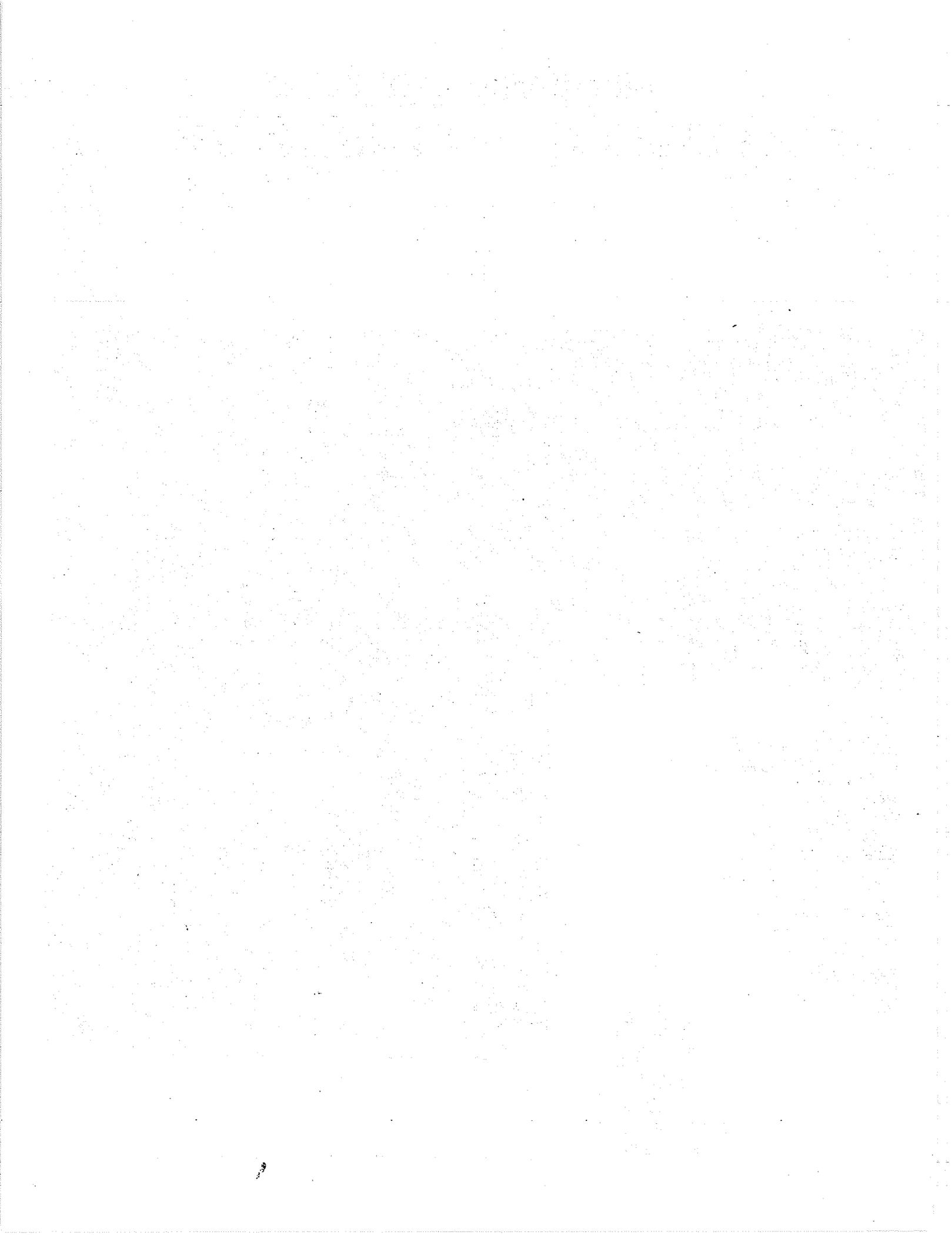


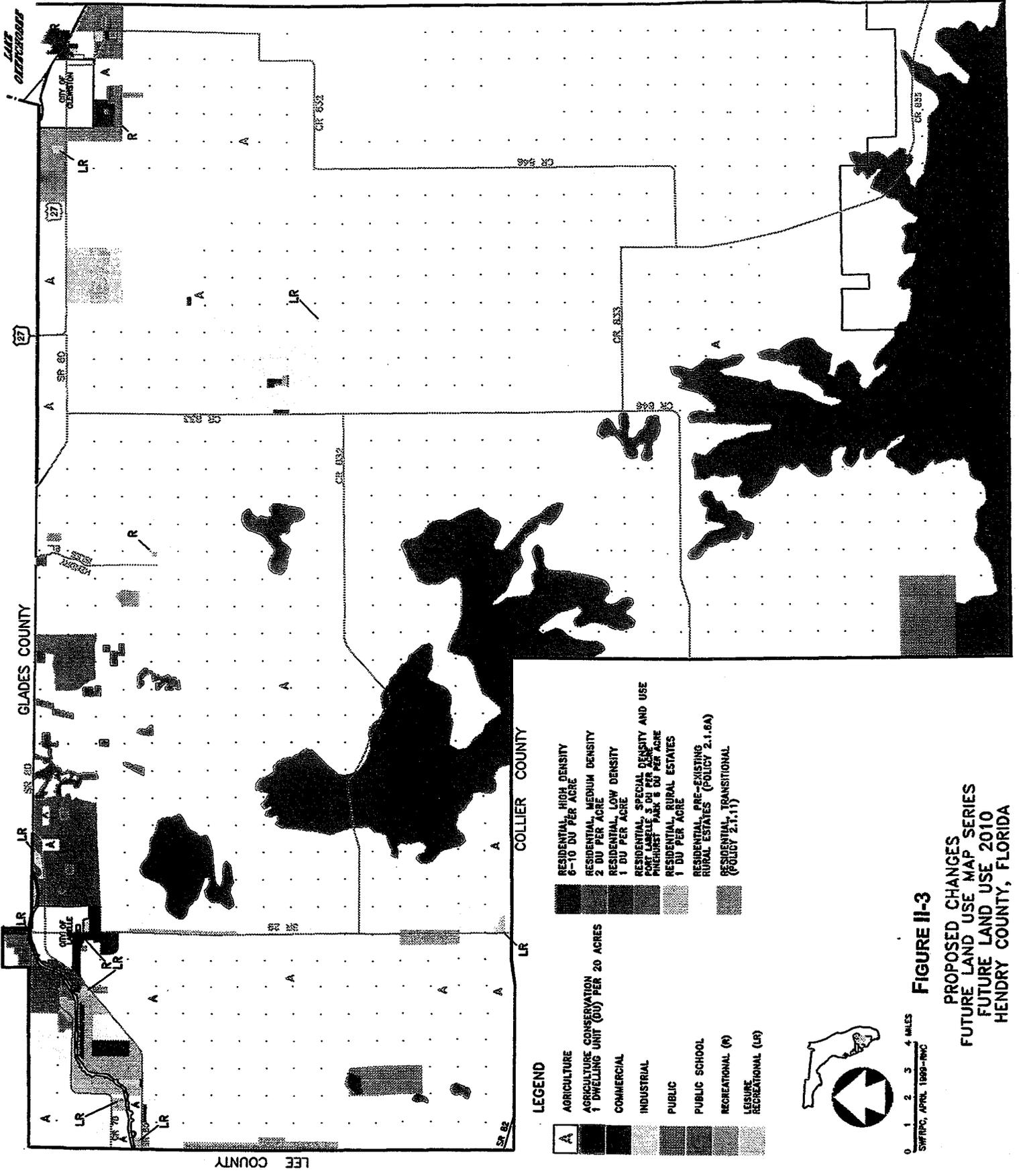
He94elu

-  AGRICULTURE
-  COMMERCIAL FOREST
-  CITRUS
-  COMERCIAL
-  EXTRACTIVE
-  INDUSTRIAL
-  INSTITUTIONAL
-  RESIDENTIAL
-  TRANSITIONAL
-  UTILITIES
-  VACANT
-  WETLANDS
-  WATER



Southwest Florida
Regional Planning Council
Mapping/GIS

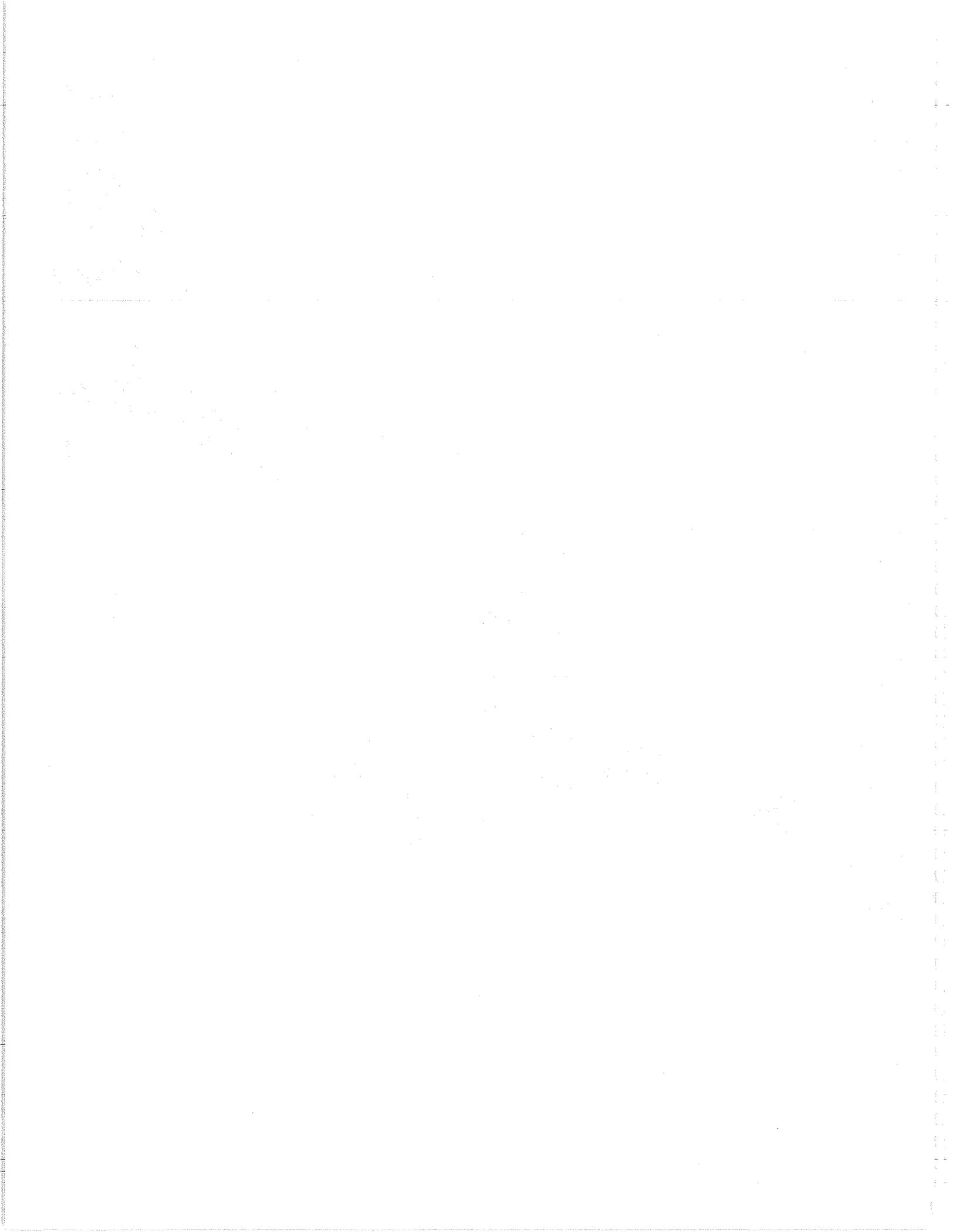




- LEGEND**
- A** AGRICULTURE
 - AGRICULTURE CONSERVATION
1 DWELLING UNIT (DU) PER 20 ACRES
 - COMMERCIAL
 - INDUSTRIAL
 - PUBLIC
 - PUBLIC SCHOOL
 - RECREATIONAL (R)
 - LEISURE RECREATIONAL (LR)
 - RESIDENTIAL, HIGH DENSITY
6-10 DU PER ACRE
 - RESIDENTIAL, MEDIUM DENSITY
2 DU PER ACRE
 - RESIDENTIAL, LOW DENSITY
1 DU PER ACRE
 - RESIDENTIAL, SPECIAL DENSITY AND USE
FOR LASELLE 3 DU PER ACRE
FOR GIBSON PARK 8 DU PER ACRE
 - RESIDENTIAL, RURAL ESTATES
1 DU PER ACRE
 - RESIDENTIAL, PRE-EXISTING RURAL ESTATES (POLICY 2.1.6A)
 - RESIDENTIAL, TRANSITIONAL (POLICY 2.1.11)



FIGURE II-3
 PROPOSED CHANGES
 FUTURE LAND USE MAP SERIES
 FUTURE LAND USE 2010
 HENDRY COUNTY, FLORIDA



III. Traffic Circulation Element Data & Analysis Support

1 INTRODUCTION
2

3 The unincorporated area of Hendry County is predominantly rural and agricultural. Urban
4 street patterns occur only in the Harlem-Hooker Point area, Port LaBelle, and in a few other platted
5 areas. Hendry County is not part of a sophisticated traffic study region, such as a Metropolitan
6 Planning Organization area. Traffic study responsibilities rest solely with the County, except for
7 State roads.
8

9 Being a rural, agricultural County with a small and moderately growing population, Hendry
10 County has not had the resources to devote to the more sophisticated traffic studies and analyses.
11 Given priorities that must be established for limited resources, Hendry County has not established
12 a traffic planning department and it is probable that such will not be established for many years to
13 come.
14

15 The primary roads for local and through traffic volumes are State roads, and it is only these
16 State roads for which traffic counts, road capacity analyses, historic accident data, and traffic
17 projections are available. Although Hendry County recognizes the requirements concerning traffic
18 circulation planning, it is only with very limited resources that the County can attempt to comply
19 with these requirements. It is within this context that this Data Analysis and subsequent
20 Comprehensive Plan revision must be viewed.
21

22 STATE REQUIREMENTS
23

24 Pursuant to Chapter 163 F.S., Chapter 9J-5. F.A.C. specifies the data analysis requirements
25 for the Traffic Circulation Element of the Comprehensive Plan. These requirements are as follows:
26

- 27 1) Analyze existing traffic circulation levels of service and system needs based on
28 existing design capacities, most recent average daily trips, and accident data, if
29 available.
30
- 31 2) Address the need for new facilities or expansions to provide safe and efficient
32 operating conditions on the roadway network.
33
- 34 3) Project traffic circulation levels of service and system needs based on future land use,
35 addressing the need for new facilities or expansions.
36
- 37 4) The analysis is to consider the levels of service standards, improvements, expansions
38 and new facilities planned for the Florida Department of Transportation 5-year
39 Transportation Plan.
40

41 EXISTING ROAD CLASSIFICATIONS
42

43 Figure III-1 illustrates the traffic circulation system in Hendry County. The Florida
44 Department of Transportation's (FDOT) Functional Classification System is illustrated, including
45 State highways (principal and minor arterials, and County roads (rural major and minor collectors).

1
2 “Principal arterial” roads are designed to carry large volumes of traffic long distances. “Minor
3 arterials” are designed to link traffic from one community to another. “Collector” roads are designed
4 to gather traffic from local roads and tie it to an arterial or urban center. Local roads (not classified
5 by FDOT) are the streets designed to carry traffic within neighborhoods.
6

7 Approximately 145.5 miles of County roads are not classified by FDOT. They are to be
8 considered as local roads.
9

10 **TRAFFIC TRENDS**

11
12 *State Roads*

13
14 Table III-1, provides the existing annual average daily traffic (AADT) and traffic projections
15 on all State roads in the County. SR 80 around LaBelle has shown an increase in traffic, with the
16 greatest percent of increase in volume occurring just east of the City limits near Port LaBelle. The
17 segment of SR 80 between LaBelle and the US 27 intersection has shown small, steady increased
18 traffic volumes.
19

20 SR 82 traverses only a small corner of Hendry County (approximately 1.3 miles), running
21 from Lee County across Hendry County to
22 Collier County. . The 1995 volumes on this road were 4,500 AADT. While counts are relatively low,
23 it is projected to reach 7,300 AADT by 2005.
24

25 *County Roads*

26
27 There have been no recent traffic counts and no capacity analyses for the County roads in
28 Hendry County. To establish Level of Service Standards using the 1995 Highway Capacity and
29 FDOT guidelines, it is necessary to have speed limits inventoried on all County road segments. The
30 speed limits for these roads have not been summarized or detailed on any reference maps, and a
31 special study would be necessary to determine them. The traffic counts, capacity analyses, and speed
32 limits for County roads need to be determined, but currently without them it is not possible to
33 determine the existing operating LOS for these roads (and will make concurrency determinations
34 nearly impossible to carry out).
35

36 Generally, however, traffic on County roads is not heavy, and the roads provide safe,
37 efficient, and convenient operating conditions given the current land uses and their distribution in
38 Hendry County. Evidence indicates that most traffic volumes in the County (for local and
39 through-traffic) are being carried on the State roads for which there are traffic counts, capacity
40 analyses, and operating LOS determinations. Although the County cannot presently conduct a
41 completed statistical analysis of traffic on County roads, it is important that Hendry County become
42 positioned to do so in the near future.
43

1 **ACCIDENTS**

2
3 *State Roads*

4
5 More than half of the accidents on US 27 occurred within the City of Clewiston. Also, a large
6 concentration of accidents occurred on US 27 at or near the intersection with SR 80. Accidents
7 involving fatalities follow a somewhat different trend, with half occurring within two miles of the
8 SR 80 intersection. Less than one-quarter of the fatalities occurred within the City limits of
9 Clewiston.

10
11 SR 29 accidents follow a pattern similar to US 27 in that approximately two-thirds occur
12 within or near the City limits of LaBelle. For the 12 miles from the Hendry-Collier County line to
13 approximately one mile south of Evans Road there is a fairly even distribution of accidents averaging
14 1.8 per mile each year. The occurrences of fatal accidents exhibit a very different pattern with 70%
15 of the fatalities occurring south of LaBelle at or near the intersections with CR 832 and Sears Road.

16
17 SR 80 is the longest State road in Hendry County. It has the least number of accidents with
18 the greatest incidence of fatalities. As with the other State roads, most accidents occurred in or near
19 the more urbanized area.

20
21 *County Roads*

22
23 Accident data for the County roads is not available. They are currently archived in such a
24 manner to make summarizing the data a major data collection effort. This accident data needs to be
25 researched and summarized for future use, so that any area of high accident incidence may be
26 analyzed.

27
28 **EVACUATION ROUTES**

29
30 Traffic Circulation for hurricane evacuation is determined mainly by the degrees of travel or
31 local roads. Whether an evacuee chooses to go to a public shelter, a hotel, a friend's or relative's
32 home, out of the County, or some other destination, it is likely that some degree of travel from the
33 evacuation area will be necessary. Therefore, a knowledge of Hendry County's arterial roadways is
34 essential for any hurricane evacuation effort. Hendry County's roadway system provides a good
35 choice of options for evacuees. (See Figure III-2). Identification of evacuation routes is the first step
36 in assessing the County's roadway system. The next step is assessment of route capacities. The
37 capacities of these roadways have been developed based on their characteristics, tied to the
38 assessment methodologies of the Highway Capacity Manual, 1985 using FDOT generalized level
39 of service tables. These capacities are listed in Table III-2 and show that County roadways (at the
40 50/50 split) vary from a high hourly capacity, at service level D, of 2,680 trips for US 27 to a low
41 of 380 trips for County Road 833.

42
43 An important consideration for any route is its condition during the evacuation. High winds
44 and rainfall flooding may affect the reliability of certain routes. For instance, portions of many routes

1 are low-lying. Propensity of these roadways to flood during heavy rains can cause their ability to
2 serve as evacuation routes to cease several hours before passage of the hurricane through the County.
3

4 Although gale force winds may precede a hurricane by five to eight hours, flooding may
5 constitute a greater "early" hazard to evacuation route operation than high winds. This is because
6 roadways may flood prior to, or during, the evacuation and become partially or totally impassable
7 to evacuation traffic. Roadways expected to flood during heavy rains have been mapped for various
8 storms, and are depicted on Figure III-3. These are areas that must be cleared by evacuees before the
9 onset of heavy rains, which can be as much as eight hours before hurricane arrival. This is relevant
10 for all categories of hurricanes.

11
12 **TRAFFIC LEVELS OF SERVICE AND PROJECTS**

13
14 *State Roads*

15
16 Table III-3 provides FDOT projections on state roads within Hendry County. These figures
17 are from the most recent FDOT Analysis of Traffic Conditions, 1995. The report suggests that there
18 have been major increases on several of the state roads within the County. However, it does not
19 suggest that one of these roads have reached capacity. To ensure sufficient road capacity, the state
20 has started four-laning SR 80 west of the City of LaBelle. Construction is expected to continue until
21 fiscal year 2000. The adopted FDOT Plan does not include any planning for the segment of SR 29
22 north of SR 80 in LaBelle, but Planning, Design and Engineering work is provided for the entire
23 Hendry County SR 29 corridor from the Collier County line to the Glades County line.

24
25 FDOT projects increases in traffic volumes on State roads ranging from ten percent to 100%;
26 averaging about 40%. Refer to Table III-3.

27
28 FDOT projections are based only on historic trends in traffic volumes. They do not account
29 for projected future land uses as they might occur within Hendry County as local trips, nor do they
30 account for any changes in traffic passing through Hendry County to outside destinations based on
31 developments outside the County.

32
33 The projected population and locations of future land uses in Hendry County should not
34 increase traffic volumes significantly and should not in themselves give rise to needs for new or
35 improved State road facilities. However, the citrus industry is one trend that could cause some
36 impact on State roads.

37
38 Hendry County is experiencing considerable growth in the citrus industry [R24]. The County
39 is currently among the top five counties in Florida in citrus production, and is one of the top counties
40 in new citrus planted. It is probable that the use of agricultural land in the County will increase in
41 intensity. The latter will cause some increase in traffic volumes, both of truck trips and in farm labor
42 trips.

43
44 Citrus planting in Hendry County has increased at the rate of approximately 8,808 acres per
45 year for the last four years. It is currently estimated that over 70,000 acres of citrus groves over the

1 age of one year is planted in Hendry County, with nearly 40,000 of these acres being less than five
2 years old. The growth is expected to continue over the next four to five years, but at a slightly slower
3 rate.
4

5 Although it is not currently possible to quantify the detailed traffic impacts from future citrus
6 production within specific timeframes, it is clear that some impact will occur on the State roads. The
7 most significant problem from this projected traffic would occur within the City limits of LaBelle
8 where the trucks must maneuver within the City and SR 80 traffic, and continue north across the
9 Caloosahatchee River bridge.
10

11 *County Roads*

12

13 It is necessary that the County develop a program to determine the LOS of all the segments
14 of County roads. With the assistance of FDOT guidelines and determining a peak hour percentage,
15 the County can determine operating LOS by applying the speed limits of the road segments. These
16 speed limits must also be inventoried in order that they may be applied to the formula. As soon as
17 feasible the County should arrange that traffic counts be taken for the roads, and develop a program
18 to periodically retake such counts. This will permit determining operating LOS and facilitate the
19 traffic portion of the concurrency management system in the future. FDOT has signaled willingness
20 to assist the County in taking traffic counts.
21

22 Furthermore, county roads have not been analyzed in terms of their capacities being affected
23 by their physical configurations and conditions. There is also no current inventory of the right-of-way
24 widths of County roads. There is no current inventory of configuration constraints requiring capital
25 improvements for mitigation. These condition and constraints surveys should also be completed for
26 inclusion in future traffic analyses.
27

28 **PLANNED ROAD IMPROVEMENTS**

29

30 *State Roads*

31

32 The FDOT has completed the purchase of right-of-ways for the four-laning of SR 80 in
33 Hendry County from the Lee County line to the east City boundary of LaBelle (10.4 miles), as well
34 as the preliminary engineering for 2.2 miles east of LaBelle to Birchwood Road. The R-O-W
35 acquisition was programmed for the 1990-91 year, and the design and engineering for the 2.2 mile
36 segment east of LaBelle was completed in 1996.
37

38 The current FDOT 5-Year Plan has programmed engineering for the widening and
39 resurfacing of SR 29 from the Collier County line to Keri Road (CR 832) for 2000-2005 year (11.4
40 miles).
41

42 *County Roads*

43

44 The Hendry County Engineer recently (March 1997) made a general survey of the County's
45 284 miles of roads, and made estimates of deficiencies that may require addressing within the

III. TRAFFIC CIRCULATION ELEMENT

1 timeframe of the Comprehensive Plan. Although sufficient data and information are not available
2 for quantitative analysis of County-maintained road segments, the County Road and Bridge
3 Department based on the County Engineer evaluation has made an interim inventory of deficiencies
4 in the County Road system. The estimated cost for road improvements is \$12.5 million.
5

6 These deficiencies are identified in Table III-4, and although these do not include the need
7 for any new road segments or any addition of lanes to roads, the nature of some of the deficiencies
8 are capacity inhibiting in varying degrees. The deficiencies identified include needs for some County
9 road resurfacing, some road widening, and some paving of roads not previously paved.
10

11 **FUTURE CONSIDERATIONS**

12
13 Hendry County needs to begin planning for alternative routes for State roads to assist in
14 maintaining adequate levels of service for through traffic and to accommodate local trips. Further,
15 as stated throughout this chapter, the County needs to plan monitoring traffic on County roads so that
16 changing volumes can be used to identify needs for future capacity-increasing projects in a more
17 quantitative way. This could be especially important for the rapidly growing citrus industry. Citrus
18 truck and farm labor trips on County roads will increase as more groves are established in the central
19 and southern parts of the County, an area where the South Florida Water Management District
20 indicates many thousands of acres are suitable for citrus development. The County also needs to
21 focus on funding sources for future road improvements, possibly including additional taxes and
22 impact fees.
23

24 A traffic analysis system should be developed for all County roads. Presently, there is no way
25 of providing counts on these roadways. While FDOT did provide the instruments needed to provide
26 counts on County roads, limited human resources has been the major reason why a system was never
27 developed.
28

29 The repeal of the existing Traffic Circulation Element may create a problem for the County
30 because the County does not meet the new Transportation Element criteria. Considering the County
31 is rural/agriculture many of the requirements are more applicable to urban communities particularly
32 those with a MPO. Hendry County has a population of less then 50,000, and furthermore, does not
33 have a MPO.
34

35 Approximately 1,100 residents in the Wheeler Road MSBU have petitioned the County to
36 extend Wheeler Road north to SR 80. The road runs seven miles long and is approximately half a
37 mile wide. The County budgeted \$140,000 for various improvements along Wheeler Road. The
38 major complaint by the residents is being "land locked" from the rest of the County. Three design
39 scenarios have been proposed for the road extension. While the County cannot financially improve
40 Wheeler Road, the suggestions have been to borrow the \$823,000 needed for the project and raise
41 the current MSBU assessment to \$30.00 annually to pay back the loan.
42

1 OTHER TRANSPORTATION
2

3 *Railroad*
4

5 The only railroads operating in Hendry County are the CSX which runs from Clewiston to
6 Sebring, and the private rails owned and operated by the U.S. Sugar Corporation to transport cane
7 from the field to the refinery just south of Clewiston. Until recently another branch of the CSX ran
8 from Palmdale in Glades County through northern Hendry County southeast of SR 29. That rail line
9 has been abandoned. If this rail line is not to be revived, the County should explore the possibility
10 of this railroad right-of-way for a future roadway or drainage purposes.
11

12 *Air Transportation*
13

14 Hendry County has three public airports and a number of private strips. The public airports
15 include the LaBelle Airport (just south of LaBelle), Airglades Airport (off US 27 west of Clewiston),
16 and the Clewiston Municipal Airport (in Clewiston). Airglades and Clewiston Municipal have
17 recently completed airport master plans, and the LaBelle master plan will be updated in the near
18 future. It is primarily these master plans that will determine the future development of these airports
19 and their grounds.
20

21 *Water*
22

23 The Caloosahatchee River transverses the northwest corner of Hendry County and part of
24 Lake Okeechobee's south shore is in Hendry County. Pleasure boating makes up the primary use of
25 these water bodies for transportation.
26

27 *Public Transit*
28

29 Hendry County is not served by public or mass transit.
30

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

Table III-1
Analysis of Traffic Conditions FDOT State Road Traffic Projections

Hwy Seg.	From	To	Dist.	Lanes	Current		Projected	
					1995/ LOS	2000/ LOS	2005/ LOS	2005/ LOS
SR 80	Lee County Line	CR 78A (Fort Denaud)	3.0	2	8,400	10,400	12,400	D
CR 78A (Fort Denaud)	Robert's Canal	Robert's Canal	3.6	2	8,000	11,100	13,000	D
Robert's Canal	CR 731	CR 731	2.0	2	8,000	11,100	13,000	D
CR 731 Gulf Gladeway	SR 29 (Main St. S.B.)	SR 29 (Main St. S.B.)	0.7	2	11,500	16,800	19,800	C
SR (Main St. S.B.)	SR 29 (Bridge St. N.B.)	SR 29 (Bridge St. N.B.)	0.1	2	10,000	13,900	15,800	C
SR 29 N.B. (Bridge St.)	Davis St./Thompson St.	Davis St./Thompson St.	0.8	2	7,800	12,300	14,500	C
Davis St./Thompson St.	Birchwood Dr.	Birchwood Dr.	2.1	2	6,600	9,800	11,500	D
Birchwood Dr.	Indian Hills Dr. E.	Indian Hills Dr. E.	10.2	2	6,600	9,800	11,500	D
Indian Hills Dr. E.	US 27	US 27	9.3	2	5,200	6,300	7,000	C
Lee County Line	Collier County Line	Collier County Line	1.3	2	4,500	6,400	7,300	C
Palm Beach County Line	CR 80A/Old 27	CR 80A/Old 27	1.6	4	12,300	12,800	14,000	A
CR 80A/Old 27	E. City Limit Clewiston	E. City Limit Clewiston	0.6	4	12,300	12,800	14,000	A

Adopted: March 1991
Amended: November 9, 1999

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

Table III-1
Analysis of Traffic Conditions FDOT State Road Traffic Projections

Hwy Seg.	From	To	Dist.	Lanes	Current		Projected	
					1995/LOS	1995/LOS	2000/LOS	2005/LOS
1	E. City Limit Clewiston	CR 832/W.C. Owen Av.	1.1	4	16,500	21,300	23,500	C
2	CR 832/W.C. Owen Av.	W. Clewiston City Limits	1.4	4	14,700	14,700	16,000	C
3	W. Clewiston City Limits	CR 720	1.1	4	14,700	14,700	16,000	C
4	CR 720	SR 80	6.5	4	12,100	13,400	14,700	A
5	SR 80	Glades County Line	1.0	4	14,700	14,700	16,000	A
6	SR 29	Collier County Line	5.5	2	4,000	5,900	6,800	B
7	CR 832 (Keri Dr.)	1st Ave.	10.3	2	7,900	9,200	10,400	C
8	1st Ave.	CR 80A/Devils Garden Ave.	0.1	2	4,600	11,300	12,500	C
9	SR 29 -	CR 80A/Devils Garden Av. Bryan Av.	0.7	2	5,800	7,100	8,300	B
10	North Bound							
11	(Bridge St.)							
12	Bryan Av.	SR 80 (Hickpochee Ave.)	0.3	2	6,900	8,100	9,000	B
13	SR 80 (Hickpochee Ave.)	CR 731 Glades County Line	1.5	2	8,200	10,700	12,000	C
14								

Adopted: March 1991
Amended: November 9, 1999

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

Table III-2
Existing Evacuation Route Capabilities - Hendry County

Link	# Lanes	Road Type/ Class*	Signal Roupin	Pk. Hr. Pk. Dir. Cap. (LOS D)**	Pk. Hr. 2-wy. Cap. (LOS D)**	Trffc. Flow Split (Evac. Dir./ Other Dir.)	
						50/50	50/50
US 27							
Hendry Co. to CR 720	4LD	Unint. Hwy	Rural	2,680		NA	NA
CR 720 to eastern Clewiston City limits	4LD	Arterial	B	1,770		NA	NA
Eastern Clewiston City limits to Palm Beach Co.	4LD	Unint. Hwy	Rural	2,680		NA	NA
SR 29							
Glades Co. To CR 78 (North River Rd.)	2LU	Arterial	Rural, B1	730	1,290	645	804
CR 78 (North River Rd.) To Devil's Garden Ave.	2LU	Arterial	Rural, B1	730	1,290	645	804
Devil's Garden Ave. To Collier Co.	2LU	Unint. Hwy	Rural, 55	770	1,360	680	847
SR 80							
Lee Co. To west of Roberts Canal	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
West of Roberts Canal to Devil's Garden Dr.	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
Devil's Garden Dr. to Ford Rd.	2LU	Arterial	Rural, B1	730	1,290	645	804
Ford Rd. to Longwood Pkwy	2LU	Arterial	Rural, B1	730	1,290	645	804
Longwood Pkwy. To US 27	2LU	Unint. Hwy	Rural, 55	770	1,360	680	847
SR 82							
Lee Co. to Collier Co.	2LU	Unint. Hwy	Rural, 55	770	1,360	680	847

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Adopted: March 1991
Amended: November 9, 1999

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

Table III-2

Existing Evacuation Route Capabilities - Hendry County

Link	# Lanes	Road Type/ Class*	Signal Roupin	Pk. Hr. Pk. Dir. Cap. (LOS D)**	Pk. Hr. 2-wy. Cap. (LOS D)**	Trffc. Flow Split (Evac. Dir./ Other Dir.)	
						50/50	50/50
CR 78 (North River Road)							
Lee Co. to SR 29	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
CR 832							
US 27 to Clewiston City limits	2LU	Arterial	Rural, B1	730	1,290	645	804
Clewiston City limits to CR 846	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
SR 29 to CR 833	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
CR 833							
SR 80 to CR 846	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698
CR 846 to Broward Co.	2LU	Collector	Rural	430	760	380	473
CR 846							
Collier Co. to CR 832	2LU	Unint. Hwy	Rural, 45	640	1,120	560	698

* Includes an indication of the type of median for the road segment. Divided facilities with a median or a continuous two-way left-turn lane are shown as 2LD, 4LD, or 6LD. Undivided arterials are shown as 2LU, 4LU, or 6LU.

** Service volumes are from the FDOT tables "Generalized Peak Hour and Peak Hour/Peak Direction Level of Service Maximum Volumes for Florida's Rural (<5,000) Areas." The volumes include adjustments for left turn bays as noted in the tables.

**Table III-3
FDOT State Road Traffic Projections¹**

Road ID	Segment From - To	Miles	1995 AADT	Projected		10 Year Increase
				2000	2005	
SR 80	Lee County line West side of LaBelle	8.6	24,400	32,600	38,400	57%
SR 80	West side of LaBelle Intersection SR 29	0.8	11,500	16,800	19,800	72%
SR 80	Intersection of SR 29 Birchwood Drive	2.9	24,400	36,000	41,800	71%
SR 80	Birchwood Drive Intersection with US 27	19.5	11,800	16,100	18,500	57%
SR 82	Collier County line Lee County line		4,500	6,400	7,300	62%
SR 29	Collier County line Devil's Garden Ave.	15.9	16,500	36,400	29,700	80%
SR 29	Devil's Garden Ave. Intersection w/SR 80	1.1	12,700	15,200	17,300	36%
SR 29	Intersection w/SR 80 Glades County line	1.5	8,200	10,700	12,000	46%
US 27	Palm Beach County line West limits of Clewiston	2.2	24,600	25,600	28,000	14%
US 27	Intersection w/SR 80 Glades County Line	1.0	14,700	14,700	16,000	9%

¹Road Segments, Traffic Counts, LOS and Projections from FDOT Analysis.

Source: FDOT Projections, 1995.

**Table III-4
Hendry County Estimated Road Improvements**

County Road 846

County Line East two miles

Reconstruct, widen 24 ft. and extend culverts \$400,000.00

Subtotal: \$400,000.00

Two miles East of County Line to CR 833

Widen to 24 ft. and resurface nine miles @ \$85,000.00/mile \$765,000.00

Reconstruct two culverts 50,000.00

Extend ten culverts @ \$5,000.00/each 50,000.00

Extend five culverts @ \$8,000.00/each 40,000.00

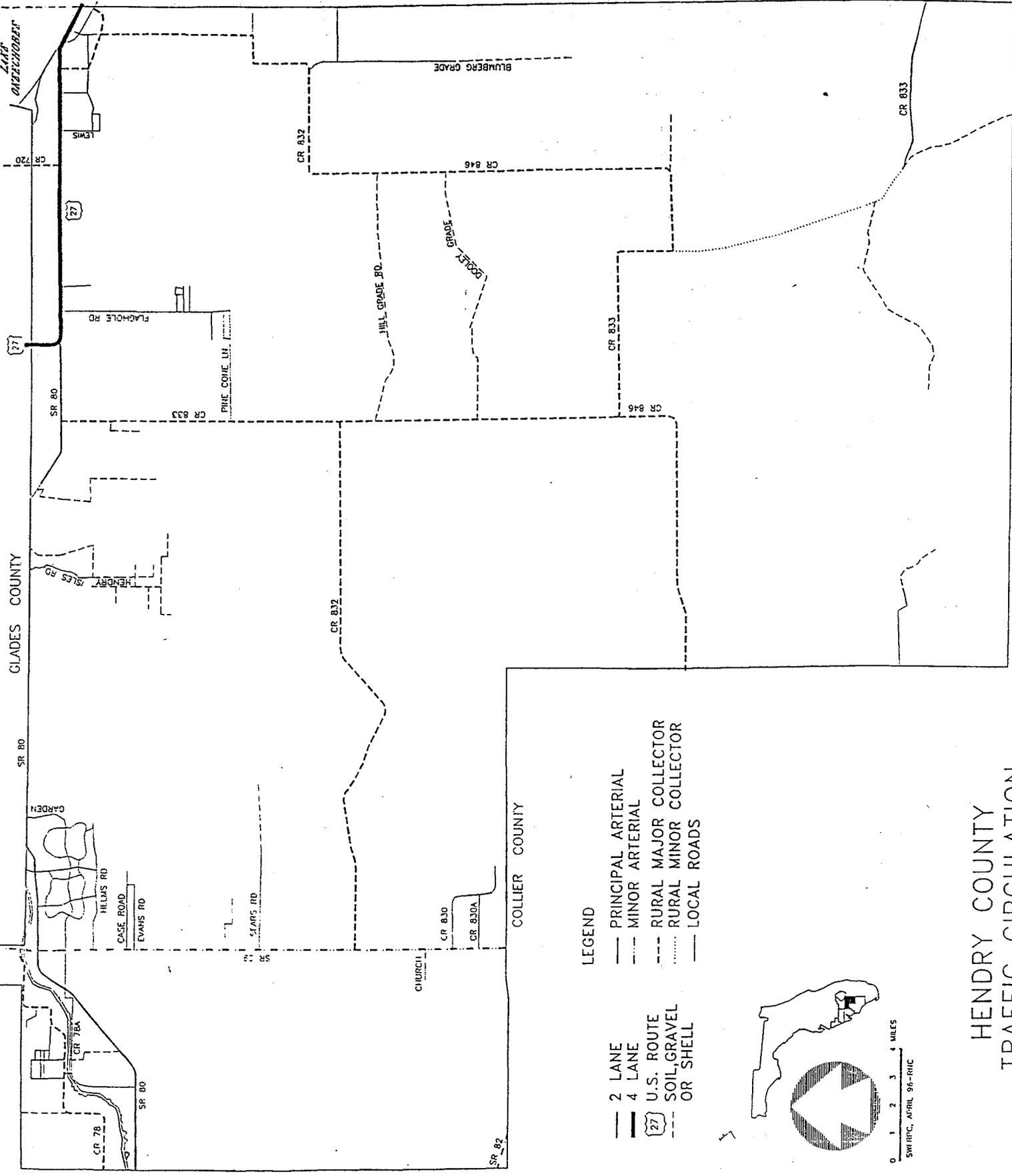
Subtotal: \$905,000.00

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

1	Hillgrade South to new pavement	
2	Reconstruct and extend culverts 5.5 miles @ \$200,000.00/mi	\$1,100,000.00
3	Extend seven culverts @ \$5,000.00	35,000.00
4	Extend seven culverts @ \$15,000.00	105,000.00
5	Extend one culvert @ \$70,000.00	70,000.00
6	<i>Subtotal:</i>	<i>\$1,310,000.00</i>
7		
8	New pavement South to CR 833	
9	Reconstruct and extend culverts 5.4 miles @ \$200,000.00/mile	\$1,080,000.00
10	Extend eight culverts @ \$5,000.00	40,000.00
11	Extend one culvert @ \$10,000.00	10,000.00
12	Extend one culvert @ \$80,000.00	80,000.00
13	<i>Subtotal:</i>	<i>\$1,210,000.00</i>
14		
15	County Road 832 (Keri)	
16	CR 833 West seven miles	
17	Reconstruct and extend culverts, seven miles @ \$200,000.00/mi	\$1,400,000.00
18	Extend six culverts @ \$5,000.00	30,000.00
19	<i>Subtotal:</i>	<i>\$1,430,000.00</i>
20		
21	Sears Road	
22	SR 29 East four miles	
23	Reconstruct and replace culverts two miles @ \$200,000.00/mile	\$400,000.00
24	Replace three culverts @ \$10,000.00	30,000.00
25	Resurface and replace culverts two miles @ \$40,000.00/mile	80,000.00
26	Replace three culverts @ \$10,000.00	30,000.00
27	<i>Subtotal:</i>	<i>\$540,000.00</i>
28		
29	County Road 830	
30	Resurface 4.5 miles @ \$35,500.00/mi	\$160,000.00
31	<i>Subtotal:</i>	<i>\$160,000.00</i>
32		
33	County Road 830A	
34	Resurface two miles @ \$35,500.00/mi	\$72,000.00
35	<i>Subtotal:</i>	<i>\$72,000.00</i>
36		
37	County Road 78A	
38	Resurface 2.5 miles @ \$35,000.00/mi	\$89,000.00
39	<i>Subtotal:</i>	<i>\$89,000.00</i>
40		
41	Collingswood Parkway (4 lane)	
42	Resurface 0.3 miles from SR 80 South @ \$35,000.00/mile	\$21,300.00
43	One intersection and one crossover	3,500.00
44	<i>Subtotal:</i>	<i>\$24,800.00</i>
45		

EXHIBIT A
III. TRAFFIC CIRCULATION ELEMENT

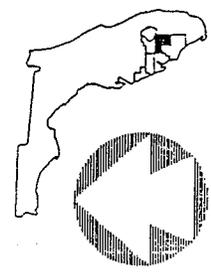
1	Eucalyptus Boulevard	
2	Resurface three miles @ \$35,500.00/mi	\$106,500.00
3	<i>Subtotal:</i>	<i>\$106,500.00</i>
4		
5	Blumberg Road	
6	Level & surface four miles @ \$45,000.00/mi	\$180,000.00
7	<i>Subtotal:</i>	<i>\$180,000.00</i>



LEE COUNTY

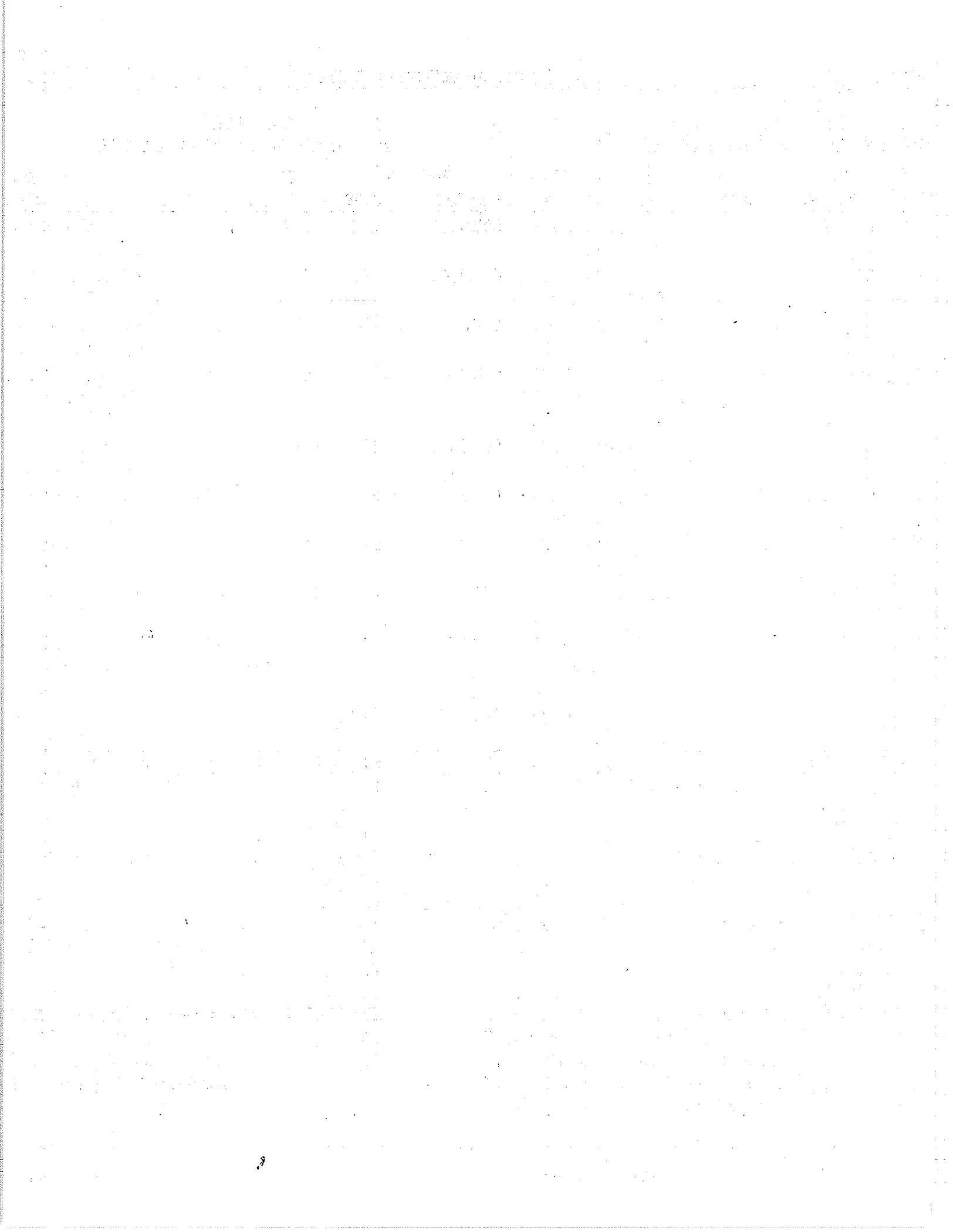
LEGEND

- 2 LANE
- 4 LANE
- U.S. ROUTE
- SOIL, GRAVEL OR SHELL
- PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- LOCAL ROADS



0 1 2 3 4 MILES
 SWIRPC, APRIL 96-ERIC

HENDRY COUNTY
 TRAFFIC CIRCULATION



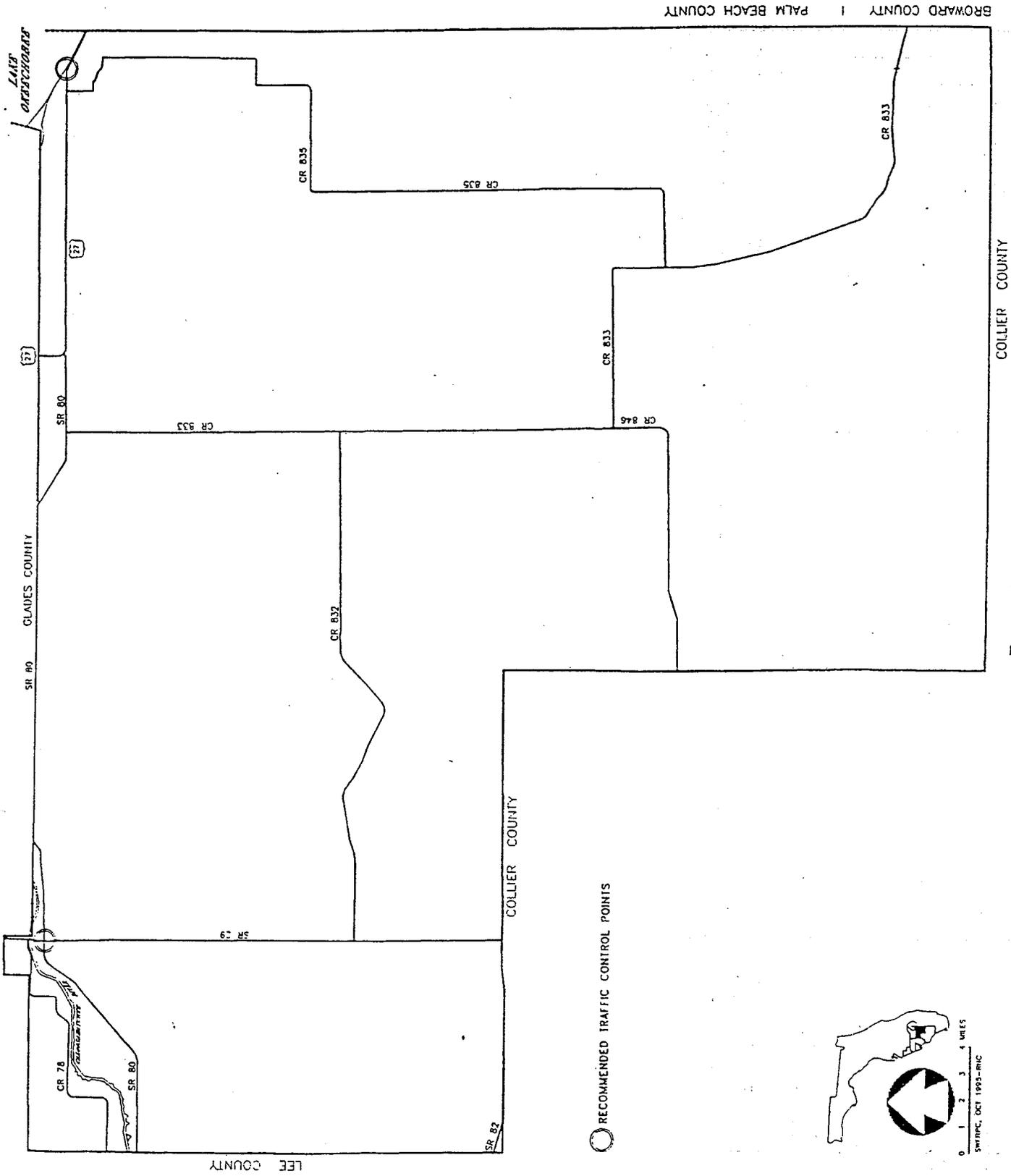
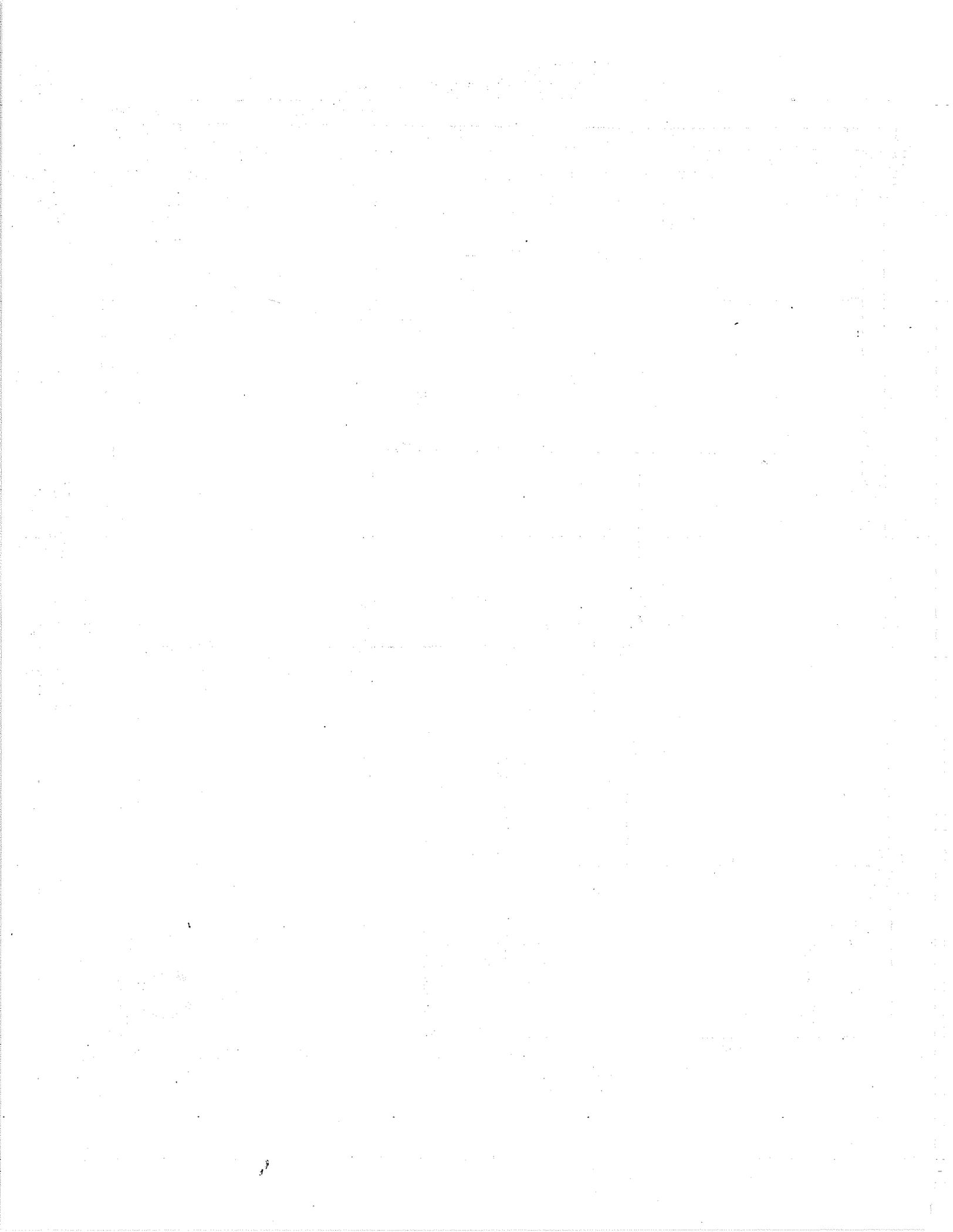


FIGURE III-2
EVACUATION ROUTES
HENDRY COUNTY



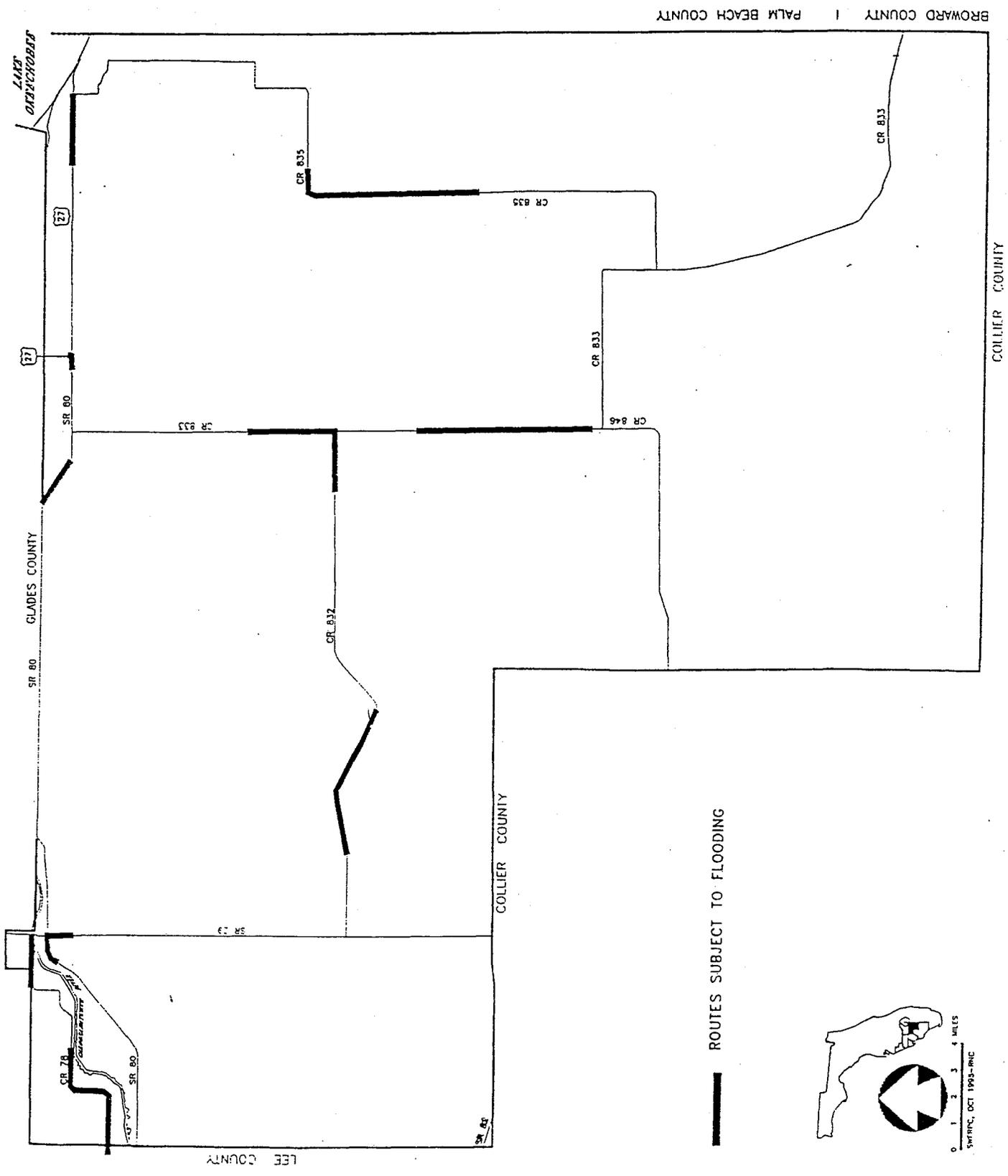
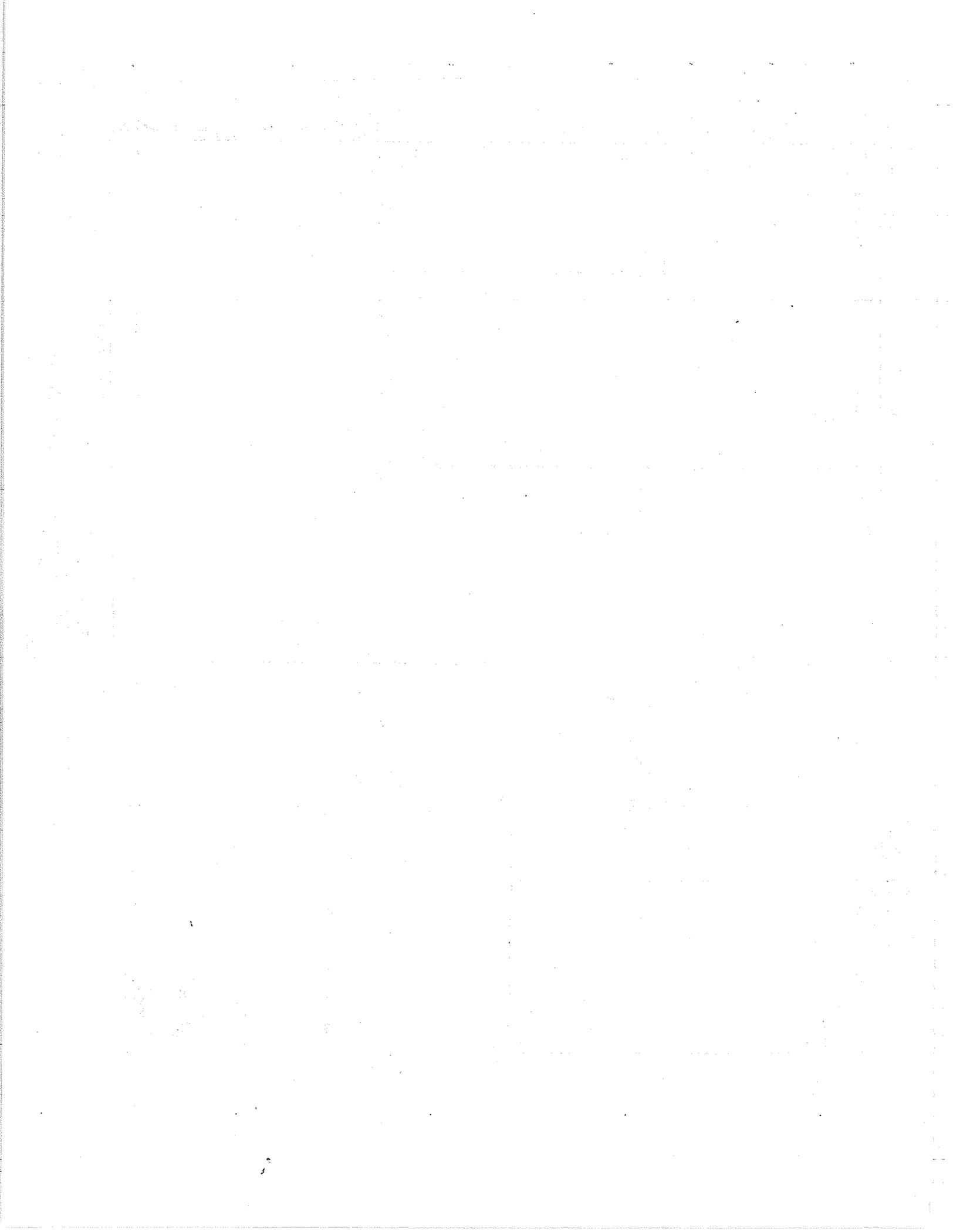


FIGURE III-3
 ROUTES SUBJECT TO RAINFALL FLOODING
 HENDRY COUNTY



IV. Environmental Services Data & Analysis Support

IV. ENVIRONMENTAL SERVICES ELEMENT

1 Introduction

2
3 Because of the wide divergence among the types of facilities included in this overall element,
4 the data analysis for this element handles each topic as a major sub-element. These sub-elements are
5 presented in separate sections broken down as follows:
6

- 7 A. Sanitary Sewer
- 8 B. Potable Water
- 9 C. Solid Waste
- 10 D. Drainage
- 11 E. Natural Groundwater Aquifer Recharge

12
13 State Requirements

14
15 The "Local Government Comprehensive Planning and Land Development Regulation Act"
16 (Chapter 163 F.S.) specifies that this element of the Comprehensive Plan is to:
17

- 18 1) Indicate ways to provide for future potable water, drainage, sanitary sewer, solid
19 waste, and aquifer recharge protection requirements for the area.
- 20
21 2) Describe the problems and needs and the general facilities required for solution of
22 problems and needs.
- 23
24 3) Include a topographic map depicting any areas adopted by a regional water
25 management district as prime groundwater recharge areas for the Floridan and
26 Biscayne Aquifers. These recharge areas are to be given special consideration when
27 the local government is considering future land use for the areas. (Note: the South
28 Florida Water Management District has jurisdiction in Hendry County.)
- 29
30 4) For areas served by septic tanks, soil surveys are to be provided, indicating the
31 suitability of soils for septic tanks.
32

33 The Act recognizes that Chapter 9J-5 F.A.C., the "Minimum Criteria for Review of Local
34 Government Comprehensive Plans and Determination of Compliance", provides the compliance
35 requirements for the Comprehensive Plan. For the sanitary sewer, solid waste, drainage, and potable
36 water topics of this Element 9J-5.011 specifies the following data requirements:
37

- 38 1) Data analysis requirements are for all these facilities which provide service within
39 the local government's jurisdiction.
- 40
41 2) Identification of public and private facilities as follows:
42
43 a) Entity having operational responsibility;

IV. ENVIRONMENTAL SERVICES ELEMENT

- 1 b) Service area and predominant types of land uses served;
2 c) Design capacity;
3 d) Current demand on capacity;
4 e) Level of service provided.
5
6 3) Identify existing and projected needs for these facilities, as follows:
7
8 a) Facility capacity analysis by geographic area indicating capacity surpluses
9 and deficiencies for:
10 (1) existing conditions,
11 (2) the initial 5-year plan increment, and
12 (3) the remaining plan increment beyond the initial 5 years;
13 b) Accomplish "a)" above by analyzing the current design capacity and current
14 demand, and projecting demand at current local level of service standards,
15 resulting from permitted development, projected population, future land use
16 distributions, and available surplus capacity identified in the capacity
17 analyses;
18 c) Assess the general performance of existing facilities, evaluating the adequacy
19 of current level of service, the general condition and expected life of the
20 facilities, and the impact of the facilities upon adjacent natural resources;
21 d) Analysis of problems and opportunities for the replacement and expansion of
22 these facilities, and new facility siting.
23
24 4) For areas served by septic tanks an analysis of soil surveys and explanation of
25 suitability of those soils for septic tanks, based on U.S. Department of Agriculture,
26 Soil Conservation Service data.
27

28 For the natural groundwater aquifer recharge topic of this Element, and to cover part of the
29 drainage topic, 9J-5.011 specifies the following requirements:
30

- 31 1) Identify major drainage features and natural groundwater aquifer recharge areas;
32
33 2) Include a topographic map depicting any areas adopted by the regional water
34 management district as prime groundwater recharge areas for the Floridan and
35 Biscayne Aquifers;
36
37 3) Identify existing programs and regulations governing land use and development of
38 natural drainage features and groundwater recharge areas, and assess the strengths
39 and deficiencies in those regulations and programs in maintaining the functions of
40 the natural drainage features and groundwater recharge areas.
41

1 **Location of Facilities**

2
3 The locations of the major public facilities in Hendry County are illustrated in Figure IV-1.

A. SANITARY SEWER

Introduction

The purpose of the data analysis for the Sanitary Sewer sub-element is to inventory and evaluate existing public and private facilities, and to project future needs.

The Hendry County government acquired the former General Development Utilities (GDU) centralized public sewer facilities in 1994. This facility mainly serves the Port LaBelle Communities. In addition to this facility, there are various small package treatment plants serving special purposes such as mobile home and RV parks, and agricultural labor camps. The Hendry Correctional Institute in the southern part of Hendry County has a facility sufficient to meet its needs. Although serving the purpose of treating and disposing of wastewater for their sites, these plants are confined to the specific uses and it is not probable that any of these will play a role in future development. The Hendry Correctional Institute has the design capacity of 0.3 MGD (300,000 gallons per day), but the other plants range to a maximum design capacity of 25,000 gallons per day. These facilities are not a part of this analysis. The focus is on the three major sanitary sewer systems in Hendry County: the City of Clewiston, the City of LaBelle, and Port LaBelle (large DRI east of LaBelle).

Existing Wastewater Facilities and Conditions

The sewer facilities of Clewiston, LaBelle, and Port LaBelle primarily serve their localized areas, with some exceptions, but have the potential to impact and/or serve future development in Hendry County, including some of the unincorporated area. Table IV.A-1 describes the treatment plants of these systems and the service provided.

The largest of these facilities is the one at Clewiston. It has the overall capacity of 1.5 MGD, and is currently permitted for 1.3 MGD. The plant is owned and operated by the City of Clewiston. Currently the facilities serve most of the City and the unincorporated area to the south and east of the City (Harlem and Hooker Point areas).

The Clewiston facility has an average daily flow of approximately 1.22 MGD, leaving an overall excess of 0.23 MGD. At the current average flow contribution of 114 gallons per capita per day (GPCD) the facility serves approximately 12,000 population, and has the gross capacity to serve approximately 13,000 population. The estimated population of the Clewiston "urban" area is approximately 17,000, and the area around the City has had the greatest absolute growth in Hendry County. Given the growth rate of the City of Clewiston (projected to reach 7,200 by the year 2005, sufficient capacity will be available to service this adjacent growth area. In fact, the City is in the process of expanding its facility by 1,000,000 GPD, which would increase the capacity to 2.5 MGD. Construction should begin by 2001. This facility would serve the projected population to 2020.

The sanitary sewer system in the City of LaBelle is considerably different from that in Clewiston. The City of LaBelle owns and operates the system, but service is provided to a number

1 of businesses and only a relatively small portion of the residents. The treatment facility has the
2 design capacity of 220,000 GPD, and the average daily flow is 180,000 GPD, leaving 40,000 GPD
3 excess. It is reported that only 24% of the population is served. This is a flow contribution rate of
4 300 GPCD. This rate is skewed to the high side because most of the flow is generated by commercial
5 users.

6
7 The City of LaBelle collection system is small in capacity, and is located mainly in the
8 interior of the city with one extension to the south boundary. Given these factors, the LaBelle system
9 should be able to serve the city residents growth needs, but there would be little capacity to serve
10 beyond the boundaries of the city. In 1998, the City was approved from the County to purchase 232
11 acres for a wastewater effluent disposal site. The site will eventually be annexed by the City of
12 LaBelle.

13
14 The Port LaBelle sewer system is owned and operated by Hendry County. Port LaBelle is a
15 large Development of Regional Impact (DRI), its master development plan encompassing
16 approximately 31,530 acres, of which 10,000 acres lie in Hendry County. The balance of the site is
17 in Glades County. The sanitary sewer facilities of Port LaBelle are primarily to serve this
18 development.

19
20 The current Port LaBelle treatment facility has a design capacity of 500,000 GPD, with an
21 average flow rate of 130,000 GPD serving 1,818 customers. The per capita contribution flow rate
22 is approximately 75 GPCD. The facility has sufficient capacity to serve an additional 823 persons
23 at the current estimated GPCD rate.

24
25 In accordance with the amended DRI Development Approval Resolutions, the County will
26 operate and maintain the wastewater facilities, and expand the collection and treatment system within
27 the development as Port LaBelle grows. It is improbable that the Port LaBelle system will serve any
28 significant amount of area outside of the development, but the planned program of the DRI should
29 effectively address the needs of wastewater collection, treatment and disposal for Port LaBelle as it
30 grows.

31 32 **Septic Tank Use and Soils Suitability**

33
34 Septic tank use in Hendry County is widespread, approximately 5,200 residents are served
35 by this type of disposal system. Most of the small plants serve RV parks and agricultural labor
36 camps, so the year round population having benefit of them is negligible. It could be estimated, then,
37 that around 16,000 persons may have been served by septic tanks. This represents just over 60% of
38 the population.

39
40 Figure IV.A-1 illustrates the major soils associations in Hendry County (this map is also
41 available at the scale of one inch equals two miles). Figure IV.A-2 represents the relative suitability
42 of the soils in the County for accommodating on-site septic tanks. This suitability rating system is

IV. ENVIRONMENTAL SERVICES ELEMENT

1 based on soils classified by seasonal high water table, impermeable soil layers and the occurrence
2 of limestone bedrock. Those areas with the fewest limitations to overcome were rated highest.
3

4 As may be interpreted from reviewing Figure IV.A-2, over half of Hendry County has either
5 high or medium level general potential for septic tank use, and over one-third of the County is rated
6 as having high potential. Much of the area around the cities has rather high potential for septic tank
7 use. This is also the case for the Felda area (south SR 29), the North and South LaBelle areas, most
8 of the Port LaBelle development, and most of the Montura Ranch (just east of CR 833, north of the
9 CR 832 intersection). Generally it is only the southeastern part of the County, and a few other
10 isolated areas, that exhibit rather low septic tank suitability based on soils.
11

12 **Projected Facility Needs**

13
14 Hendry County has very little of what could be defined as "urban sprawl". Most growth in
15 population and housing has concentrated around the incorporated cities, or Port LaBelle (adjacent
16 to LaBelle to the east). An estimated 80% of the total county population was in these areas in 1988.
17 An estimated 70% of the population of the unincorporated area of Hendry County was located in
18 these "urban" areas. It is assumed that this trend will continue over the next ten years.
19

20 Assuming the same "urban" trend, it is expected that 53% or 17,490 of the 1998 projected
21 population will reside in the Clewiston area. This represents an increase of 1,200 persons for the
22 area, and the Clewiston wastewater treatment facility has the gross capacity at its current 114 GPCD
23 rate to accommodate an additional population of 7,200 persons.
24

25 Between 1997 and 2000 it is estimated that another 900 persons will locate in the Clewiston
26 area. At this rate, the Clewiston facility could accommodate the increase in population, and have
27 excess capacity for another 400 persons. The Clewiston treatment facilities are not adequate for the
28 projected planning period. However, the City is in the process of expanding the existing facility to
29 2.5 MGD to ensure available capacity.
30

31 The LaBelle "urban" area includes both the city and its surrounds, and part of the Port
32 LaBelle DRI. According to projections, this urban area could grow by 2,300 persons by 2002,
33 beginning from a base "urban" population of 7,254.
34

35 At its 236 GPCD rate, the LaBelle treatment facility can accommodate an additional 823
36 persons on its wastewater system. The City of LaBelle is projected to grow by 800 persons by 2002.
37 Clearly LaBelle's system cannot handle this additional 1,123 persons on its limited sewer area and
38 insufficient treatment capacity. Therefore, the City is processing to acquire additional property for
39 wastewater expansion. Most of the growth for LaBelle will utilize septic tanks, and a large area of
40 the City has soils relatively suitable for such use. Nearly all the development outside and adjacent
41 to LaBelle will also utilize on-site septic tanks. The policy of the city is to primarily serve business
42 users. However, LaBelle may desire to expand its wastewater system.
43

IV. ENVIRONMENTAL SERVICES ELEMENT

1 Port LaBelle has adequate capacity to accommodate expected growth for the "urban" area.
2 At its 75 GPCD rate, the Port LaBelle facility can accommodate an additional 4,900 persons. It is
3 expected that much of the growth in the LaBelle "urban" area will be in the Port LaBelle
4 development.
5

EXHIBIT A
IV. ENVIRONMENTAL SERVICES ELEMENT

Table IV.A-1

	Map Facility (oper. responsibility)	Design Capacity (MGD)	Current Flow (MGD)	Excess Capacity (MGD)	Level of Treatment	Estimated No. of Customers Served	Current LOS	Service Area	Sources
1	City of Clewiston (City)	1.50	1.3	0.28	Contact stabilization/extended air to percolation pond and spray field	2,700	12,000	114 City, Hooker Point and Harlem (unincorp. area)	A, D
2	City of LaBelle (City)	0.22	0.18	0.04	Extended aeration to spray field	500	635	236 A portion of the City	B, D
3	Port LaBelle (Hendry County)	0.50	0.13	0.37	Extended aeration to percolation pond	1,818	2,641	75 Port LaBelle DRI	C, D
7	MGD - Million gallons per day								
8	GPCD - Gallons per capita per day								
9	N/A - Information not available								
10	Sources: A - City of Clewiston								
11	B - City of LaBelle								
12	C - Hendry County Public Works Department., 1997								

Note: The small private and special use facilities are excluded from this table. These include the Hendry Correctional Institute, mobile home and RV parks, and labor camps.

Adopted: March 1990

Amended: November 9, 1999

B. POTABLE WATER

Introduction

The purpose of the data analysis for the potable water sub-element is to inventory and assess the existing potable water facilities, and to project future needs.

Hendry County provides centralized public potable water to the community of Port LaBelle. Other systems that provide potable water are the City of Clewiston and the South Shore Water Association (both buy and resell water from the U.S. Sugar Corporation) and the City of LaBelle. As with sewer systems, there are various other small potable water systems in Hendry County serving special purposes, such as mobile home and RV parks and agricultural labor camps. Also, the Big Cypress Seminole Reservation has a potable water system, as does the Hendry Correctional Institute. These smaller and special facilities are not likely to impact or be impacted by future development in Hendry County. These facilities are not part of this analysis. The focus is on the three major systems in the county: the Clewiston area system, the LaBelle system, and the Port LaBelle system. (Refer to Figure IV-1.)

Existing Potable Water Facilities and Conditions

The potable water systems of Clewiston, LaBelle, and Port LaBelle have impacted development and have the potential to further impact it. Conversely, growth can impact these water systems and their sources of water. Table IV.B-1 lists the sources for these three systems, and further discussion of them can be found in the "Natural Groundwater Aquifer Recharge" sub-element of this Chapter, and in the "Conservation" Chapter (Chapter VI).

The largest potable water system in Hendry County is in the Clewiston area. Table IV.B-1 describes the source, treatment and storage facilities, and the service provided. The Clewiston area treatment facility is owned and operated by the U.S. Sugar Corporation which through capacity allocation contracts provides water to the City of Clewiston and the South Shore Water Association.

The City of Clewiston owns and operates the distribution facilities through which the potable water purchased from the U.S. Sugar Corporation is piped to customers. Clewiston contracts for 2.639 MGD of water capacity, and supplies the city and the unincorporated area to the south known as Harlem. The 1989 average usage for the City system was 1.4 MGD.

The South Shore Water Association distributes water to the unincorporated areas between Clewiston and Moore Haven in Glades County, and between Clewiston and South Bay in Palm Beach County. Hooker Point, one of Hendry County's fastest growing areas (east of Clewiston) is served by the South Shore Water Association. The South Shore Water Association contracts for 1.361 MGD capacity. The 1989 average usage for the system was 0.5 MGD.

IV. ENVIRONMENTAL SERVICES ELEMENT

1 The U.S. Sugar Corporation water treatment plant is located south of Clewiston in the
2 unincorporated area of Hendry County. The treatment plant has a design capacity of 6.0 MGD. The
3 City of Clewiston and the South Shore Water Association together contract for a total of 4.0 MGD
4 of this capacity, and in 1989 together consumed an average 1.999 MGD. The U.S. Sugar Corporation
5 private consumption averaged 0.655 MGD for 1989. Thus, the overall 1989 average water usage for
6 the system was 2.543 MGD, leaving a capacity balance of 3.457 MGD. The U.S. Sugar Corporation
7 system storage in a tank and reservoirs is 3.75 million gallons.
8

9 On a per capita basis the U.S. Sugar Corporation system has a daily flow of approximately
10 195 GPCD (gallons per capita per day), serving a population of approximately 13,000 (including
11 some customers in Hendry, Glades and Palm Beach Counties). At the 1989 GPCD, the capacity
12 balance of 3.457 could serve an additional population of approximately 17,700.
13

14 The City of LaBelle owns and operates its own potable water system. Table IV.B-1 described
15 the source, treatment and storage facilities, and the service provided. The treatment plant has a
16 design capacity of 1.5 MGD, and in 1989 the average consumption was 0.49 MGD with an excess
17 capacity of 1.01 MGD. The storage capacity for the LaBelle system is 500,000 gallons.
18

19 It is estimated the LaBelle system serves a population of 3,783, and a 129 GPCD rate. With
20 the excess capacity of 1.01 MGD, it is estimated that the system could serve an additional 7,800
21 population.
22

23 The LaBelle system is interconnected with the Port LaBelle system. The potable water in Port
24 LaBelle is provided by General Development Utilities. Table IV.B-1 describes the source, treatment
25 and storage facilities, and the service provided. The treatment plant has a design capacity of 0.5
26 MGD, and in 1989 had an average consumption rate of 0.2 MGD. The storage capacity of the system
27 is 1.5 million gallons. The system serves an estimated population of 2,297 with a rate of 87 GPCD.
28 With an excess capacity of 0.3 MGD, the General Development Utilities system could serve an
29 estimated additional population of 3,350.
30

Private Wells

31
32
33 Private well use in Hendry County is widespread, but there are no records documenting their
34 total use in the County. Assuming the public water system users to be those shown as population
35 served in Table IV.B-1, a 1989 population of 19,080 was being served by a public water system. It
36 is estimated that approximately 14,000 of these persons reside in Hendry County. Assuming the
37 estimated 1988 population of 25,457, a remaining population of 11,457 was either served by a
38 private well or had benefit of one of the small plants in the special developments mentioned in the
39 Introduction. Most of the small plants serve RV parks and agricultural labor camps, so the year round
40 population having benefit of them may be considered negligible. It could be estimated, then, that
41 approximately 11,450 persons may have been served by private wells in 1988-89. This represents
42 just approximately 45% of the population.
43

Projected Facilities Needs

As noted under "Projected Facilities Needs" for Sanitary Sewer, Hendry County has little "urban" sprawl. Most development and growth in population and housing has concentrated around the incorporated cities, and in Port LaBelle. It is estimated that 75.6% of the population was in these areas in 1988. An estimated 62.4% of the population of the unincorporated area of Hendry County was located in these "urban" areas. It is assumed that this trend will continue over the next ten years. If so, of the estimated population for 1995 (30,400), 22,982 will be in the "urban" areas. Of the 2000 population (33,000), 24,948 will be so located.

Assuming the same "urban" trend, it is projected that the Clewiston area will grow by 2,325 persons for 1995 (refer to Chapter II). During the 1996-2000 period it is projected that another 1,225 persons will located in the Clewiston area.

The LaBelle "urban" area includes both the City and its surrounds, and part of the Port LaBelle area. According to projections (refer to Chapter II), this urban area could grow by 1,410 persons by the end of 1995, and another 741 persons during the 1996-2000 period. Referring to the section "Existing Potable Water Facilities and Conditions" above, given the excess capacity of the existing potable water treatment systems in the "urban" areas of Hendry County, it is clear that the capacity will be available to serve the projected population through and beyond the planning period. The extension of distribution lines would be necessary to serve some areas.

It is estimated that 24.4% of the 1988 population resided in the rural part of Hendry County (refer to Chapter II). If extrapolated, this would mean an additional 940 persons for 1995 and another 520 for the year 2000. Of this 1,460 population, it can be assumed that it all will be served by private wells.

EXHIBIT A
IV. ENVIRONMENTAL SERVICES ELEMENT

Table IV.B-1

Map Ref.	Facility (oper. responsibility)	Source of Water	Design Capacity (MGD)	Current Flow (MGD)	Excess Capacity (MGD)	Storage Capacity (MG)	No. of Customers Served	Est. Pop. LOS	Current LOS	Service Area	Sources
1.	Clewiston (US Sugar Corp.)	Lake Okeechobee & Shallow Aquifer	6.0	2.54	3.46	3.75	4,460	13,000	195	City of Clewiston	A,E
2.	City of LaBelle	Shallow Aquifer	1.5	0.49	1.01	0.40	1,300	3,783	129	City and areas south & west of City	B,D,E
3.	Port LaBelle (GDU)	Sandstone	0.5	0.2	0.30	1.50	792	2,297	87	Port LaBelle DRI	C,E

MGD - Million gallons per day

GPCD - Gallons per capita per day

N/A - Information not available

Sources: A - City of Clewiston
B - City of LaBelle
C - Hendry County Public Works

Note: The small private and special use facilities are excluded from this table. These include the Hendry Correctional Institute, mobile home and RV parks, and labor camps.

1 C. SOLID WASTE

2
3 **Introduction**

4
5 The purpose of the data analysis for the Solid Waste sub-element is to identify and analyze
6 the existing facilities and to project future demands. The 9J-5.003 (88) definition of "solid waste"
7 includes garbage, rubbish, refuse, or other discarded material, as well as sludge from treatment
8 facilities, and includes all domestic, industrial, commercial, mining, agricultural, and governmental
9 wastes.

10
11 In addition to the requirements of Chapter 163 F.S. and 9J-5.011, the 1988 Solid Waste
12 Management Act (Chapter 403 F.S.) requires that landfill use be reduced by 30% of the amount that
13 might be expected regularly to be placed in the landfill by the end of 1994. The Act includes further
14 details about the types of wastes involved in this and related reductions. The main goal of the Act
15 is to reduce the amount of solid wastes going into landfills for disposal, and to encourage recycling
16 and related disposal techniques. This data analysis will generally address the requirements of this
17 Act, but is not intended to provide the comprehensive solid waste program required by the 1988 Act.

18
19 **Existing Facilities and Conditions**

20
21 Hendry County no longer operates a sanitary landfill. The County now shares facilities with
22 Lee County. The former landfill site, referred to as the Pioneer Plantation Landfill, included
23 approximately 315 acres of which 14 acres were permitted for use. The site is located near the
24 east-west midpoint of the county, off S.R. 80. Refer to Figure IV-1.

25
26 It was originally anticipated that this facility would accommodate the solid waste disposal
27 needs of Hendry County beyond the year 2000. More stringent State and Federal regulations have
28 made the cost of solid waste disposal much higher. Examples of some of these costly requirements
29 are disposal cells with impervious liners, leachate monitoring wells, and the reduction of solid waste
30 through recycling or related alternatives.

31
32 In an effort to find more cost effective methods for solid waste disposal, Hendry County and
33 Lee County signed an agreement in 1989 for a multi-county landfill and related disposal site and
34 facilities to be developed in Hendry County. The proposed site encompasses approximately 1,734
35 acres off S.R. 82 in the western part of the county. According to the bi-county agreement, the
36 development costs will be borne by Lee County with Hendry County paying fees for the facility's
37 use.

38
39 Because the Hendry County landfill reached the maximum permitted height prior to the new
40 facility being in operation, the bi-county agreement required that Hendry County use the existing Lee
41 County landfill until the new facility became operational. Lee County has provided loan funds for
42 closure costs of Hendry County landfill.

IV. ENVIRONMENTAL SERVICES ELEMENT

1 The multi-county arrangement includes various facilities for recycling, resource recovery,
2 composting, and tire and whitegoods (appliances, etc.) disposal, that will substantially assist the
3 County in meeting the landfill use reduction requirements. The facility is projected to have an
4 effective life span of 40 years.
5

Existing and Projected Solid Waste Disposal Demand

6
7
8 Table IV.C-1 includes estimated demand for solid waste generation in Hendry County, and
9 projections of solid waste generation and disposal through the year 2000. Annual disposal
10 calculations by Lee County showed that there was adequate capacity to serve the population until
11 the new facility is on line.
12

13 The figures in Table IV.C-1 suggest a tiered approach to developing level of service
14 standards for solid waste. Given statewide trends, it is probable that the PPCD rate will increase
15 similar to that projected in the Table, and will do so as the population also increases. However, the
16 PPCD rate for landfill purposes will decline through 1995, and then slightly increase thereafter.
17

Solid Waste Collection

18
19
20 The collection of solid wastes in Hendry County is by private, franchised haulers, and the
21 cities of Clewiston and LaBelle make their own arrangements. Clewiston provides collection for
22 residents, and LaBelle utilizes franchised services.

IV. ENVIRONMENTAL SERVICES ELEMENT

Table IV.C-1
 Projected Solid Waste Generation & Disposal
 Hendry County, Countywide
 9J-5.011(d) and (f)

Year	Population ¹	PPCD ²	Solid Waste Generated			Disposal				
			PPD	CYD ³	% Reduc.	Landfill		Recycling/Other		
						PPD	CYD ³	PPD	CYD ³	
1988	25,457	5.9	150,196	226	N/A	150,196	226	0	0	
1989	26,350	6.0	158,100	238	N/A	158,100	238	0	0	
1990	26,900	6.1	164,090	247	5%	155,886	234	8,204	13	
1991	27,570	6.2	170,934	257	10%	153,841	231	17,093	26	
1992	28,260	6.3	178,038	268	15%	151,332	228	26,706	40	
1993	28,970	6.4	185,408	279	20%	148,326	223	37,082	56	
1994	29,690	6.5	192,985	290	25%	144,739	217	48,246	73	
1995	30,400	6.6	200,640	302	30% ⁴	140,448	211	60,192	91	
1996	30,900	6.7	207,030	311	30%	144,921	218	62,109	93	
1997	31,410	6.8	213,588	321	30%	149,512	225	64,076	96	
1998	31,930	6.9	220,317	331	30%	154,222	232	66,095	99	
1999	32,460	7.0	227,220	342	30%	159,054	239	68,166	103	
2000	33,000	7.1	234,300	352	30%	164,010	246	70,290	106	

PPCD - Pound per Capita per day

PPD - Pound per day

CYD - cubic yards per day

¹Interpolated for all years except 1988, 199, 1995 and 2000. 1988 is BEBR estimate, 1990, 1995 and 2000 are BEBR projections.

²Projected to increase at 15 per year.

³Calculated at 665 pounds per yard.

⁴State required reduction.

Source: Division of Waste Management, "Solid Waste Management in Florida: 1989 Annual Report", Department of Environmental Regulation, October 1989; and Wilson, Miller, Barton, Soll & Peek, Inc.

IV. ENVIRONMENTAL SERVICES ELEMENT

D. DRAINAGE

Introduction

The purpose of the data analysis for the Drainage subelement is to inventory and analyze the major drainage features and facilities. Included in this sub-element are rainfall, soils, topography, drainage basins, drainage districts, flooding, and major man-made drainage facilities. Drainage relates generally to any form of water lying or moving on land surfaces and in water bodies. Its sources are primarily precipitation and stormwater.

Because drainage follows drainage basins not confined within Hendry County, the topic is one of countywide and even multi-county significance. Therefore, generally the discussion in this sub-element ignores municipal boundaries.

The requirements of Chapter 9J-5 F.A.C. for the Drainage sub-element are similar to those for sanitary sewer and potable water in that existing system capacities, flow, etc. are to be inventoried and analyzed. However, with drainage systems including miles of the Caloosahatchee River, Lake Okeechobee, natural sloughs, open canals, drainage and irrigation ditches, roadside swales, culverts, pipes, and other such features which are not metered or monitored like sewer and water facilities, it is not possible to provide the same type of inventory and analysis without extensive, time-consuming, and very costly studies.

There are not sufficient data and information available to make such a detailed inventory and analyses as is stipulated by Chapter 9J-5. The discussion which follows includes as much information as is available, and analyzes the overall drainage in Hendry County to the extent feasible.

Existing Conditions¹

Climate and Rainfall

The climate of Hendry County is subtropical and has a mean temperature of 73°F. The area has long, humid and warm summers, and mild winters with temperatures rarely falling below freezing. July and August are the warmest with an average temperature of 81°F, and January and February are usually the coldest with an average temperature of 64°F. The average annual rainfall in Hendry County is approximately 50 inches. Most (usually over 50%) rainfall occurs during a four-month period from June through September, usually in the form of showers or thunderstorms. Frontal systems and tropical depressions (storms and hurricanes) often contribute significantly to rainfall. There are years when the rainfall pattern does not produce the heavy summer rainfall, contributing to drought-like conditions.

¹Source of this section primarily from SFWMD, "Ground Water Resource Assessment of Hendry County, Florida" (Technical Publication 88-12), September 1988 [R12].

1
2 *Soils [R23]*
3

4 Most of the soils in Hendry County are nearly level and poorly drained. Although also poorly
5 drained, the better draining soils are in the flatwoods and some sloughs. Some other sloughs and the
6 fresh water marshes have the poorest drainage. In the past much land area of Hendry County was
7 utilized for pasture and rangeland, requiring little land preparation. More recently with the
8 considerable growth in crops (especially in citrus), extensive drainage practices must be applied for
9 agricultural use. This is also the case for urban type development, predominantly residential in
10 Hendry County.

11
12 Extensive development potential rating of soils in Hendry County has not been completed
13 by the Soil Conservation Service. A general rating system based on septic tank suitability based on
14 the preparation necessary is available. The Soils Map is Figure IV.A-1 and Figure IV.A-2 shows the
15 septic tank suitability. The soils map is also available at the scale of one inch equals two miles.
16

17 There are relatively low rates of soil erosion in Hendry County, due to the rather level
18 topography. Some erosion has occurred on the banks of Lake Okeechobee and along the
19 Caloosahatchee River. These are monitored by the SFWMD, and erosion control projects are being
20 carried out as needed.

21
22 *Topography, Drainage Basins, Canals [R4, R12]*
23

24 Figure IV.D-1 illustrates the general topography of Hendry County. Land surface elevations
25 vary from a low of 15 feet to a high of 40 feet. Most of the County lies between 20 feet and 30 feet².
26

27 Figure IV.D-2 shows the drainage basins in Hendry County, the general flow of surface
28 stormwater, and the major manmade levees and canals. As can be seen in Figure IV.D-2, much of
29 the natural drainage pattern has been altered by the system of levees and canals.
30

31 In the early 1880's the "Plan of Reclamation for South Florida" (PRSF) was developed and
32 implemented to help control the flooding of the eastern and southern shores of Lake Okeechobee.
33 The first part of the PRSF constructed was a canal between the Lake and the Caloosahatchee River
34 which helped control flow from the Lake and assisted navigation for larger craft.
35

36 The PRSF also built a series of canals from Lake Okeechobee to the east and south to
37 complete drainage outlets from the Lake. In 1947 the U.S. Army Corps of Engineers (COE)
38 organized the "Central and Southern Florida Flood Control Project" (CSFFCP) to further modify the
39 Lake with levees and canals for flood control and navigation, including modifying the flows of water
40 into the Lake and developing the Intercoastal Waterway through the Lake.
41

²Elevations stated are National Geodetic Vertical Datum (NGVD).

IV. ENVIRONMENTAL SERVICES ELEMENT

1 As a result of these major drainage projects Lake Okeechobee has had major modifications
2 through being levied and through changes of flows into and out of the Lake. Within Hendry County,
3 the eastern part has a major system of levees (L-1, L-2 and L-3) and canal (C-139) which drains east
4 and south to the Everglades Agricultural Area and the Miami Canal. The southern part has a system
5 of levees and canals (L-28). Various other canals feed into these canals. A system of canals in the
6 central, northern, and western parts of the County lead to the Caloosahatchee River. These canals
7 assist in flood control and irrigation.

8
9 These major drainage projects have acted to vastly change the water flows in Hendry County,
10 and have redefined the drainage basins to those illustrated in Figure IV.D-2.

11
12 *Flooding [R13]*

13
14 Due to the naturally poor drainage of the topography and soils, and a result of some of the
15 extensive drainage projects described above, there are some drainage problems in Hendry County.
16 Flooding occurs primarily in the wet season as a result of prolonged heavy rainfall, especially in
17 conjunction with tropical depressions, storms or hurricanes. It occurs most frequently as a result of
18 saturated ground conditions from prolonged previous rainfall when infiltration is minimal. Flooding
19 in Hendry County is primarily in the form of standing water, and not associated with rapidly moving
20 stormwater.

21
22 Prior to channelization of the Caloosahatchee River (called canal C-43), and the installation
23 of water control structures with the CSFFCP, there was some flooding of the river in Hendry County.
24 Since these changes, the primary area of periodic raised water levels in the river has been above the
25 Ortona Locks in Glades County. This has not been a frequent occurrence.

26
27 The CSFFCP project for Lake Okeechobee, by constructing the levee system (L-1, L-2, L-3)
28 in the eastern part of the county, created flooding problems on the west side of the levee system. This
29 primarily affects the Montura Ranch and Devil's Garden area. The SFWMD has corrected some of
30 this problem and is carrying out projects to further alleviate flooding in this area.

31
32 As discussed in the previous section, various localized canal systems have been constructed
33 in Hendry County. According to the Flood Insurance Study conducted in 1981 for Hendry County
34 by the Federal Emergency Management Agency (FEMA), these canals and their related culverts and
35 control structures do not afford a high degree of flood protection from a 100-year storm.

36
37 The CSFFCP project Design Flood was a 10-year storm (storm having ten percent chance
38 of occurring annually). A 10-year storm for Hendry County represents seven inches of rain falling
39 over a 24-hour period (FEMA, 1981). The 100-year flood (one percent chance annually) for which
40 the Hendry County Flood Prone Areas Map was prepared represents ten inches of rain within 24
41 hours. The FEMA study generalized the 100-year flood hazard area for the County, and it covers a
42 vast area of the County. (See Figure IV.D-3.)

1 Hendry County officials regard the 100-year floodplain shown on the FEMA flood insurance
2 maps as being grossly inaccurate. The Local Planning Agency has great difficulty in determining
3 what real flooding problems could be involved with various development proposals because the
4 maps which regulate flood areas in the County are those published by FEMA (by requirements for
5 the National Flood Insurance Program).

6
7 It has been proposed by the LPA (and other County officials) that FEMA undertake new,
8 more detailed studies of the potential 100-year floodplain in Hendry County. Unofficially FEMA has
9 indicated some willingness to conduct such studies, but has not programmed them or officially
10 contacted the County of its willingness to do them. Until these more detailed studies are completed,
11 and flood elevations established for the County, it will continue to be difficult for the County to
12 evaluate development proposals relative to flood hazards.

13
14 There are numerous localized areas of residential development around Hendry County with
15 varying degrees of drainage problems. Some of these areas are currently within local water
16 management districts (Flag Hole, Montura Ranch, Harlem, Hooker Point, Port LaBelle). The County
17 is presently conducting studies for some of the other areas (Pioneer Plantation, Everhigh, Ladeca,
18 North LaBelle, South LaBelle, East Lehigh Acres, Felda). See the discussion under "Local Water
19 Management Districts" below.

20
21 The City of LaBelle is on the Caloosahatchee River, and a substantial portion of the City lies
22 within the 100-year flood plain. Rainfall is accommodated primarily by soil absorption and
23 drainageways. Streets with swales carry much of the water, and a small area of the City has storm
24 sewer. Drainage essentially works well in the City, and there are no serious flooding problems. The
25 City government has operational responsibility for drainage within the City.

26
27 The City of Clewiston falls completely within the Clewiston Drainage District, originally
28 created in 1924. Situated on Lake Okeechobee, the City has had extensive drainage improvements
29 over the years, including swales, dikes, canals, pumps, and related works. Although the City has
30 some localized drainage problems during heavy rainfall, it is relatively free of serious flood hazards.
31 About one-fifth of Clewiston lies within the 100-year flood plain.

32 33 **Water Management Districts**

34 35 *South Florida Water Management District*

36
37 The South Florida Water Management District (SFWMD) has control of certain water
38 management programs and projects in Hendry County. SFWMD also has permitting authority over
39 consumptive use of groundwater, except for single family residences, duplexes or fire fighting.
40 Because of groundwater shortage and withdrawal problems, a large area in the northwest corner of
41 Hendry County is considered a Reduced Threshold Area for which even small quantity applicants
42 must undergo special review by SFWMD. SFWMD also has permitting authority over surface water
43 management (drainage) projects.

IV. ENVIRONMENTAL SERVICES ELEMENT

1
2 SFWMD operates and maintains the major drainage facilities of the CSFFCP and related
3 projects. In Hendry County these include the levee at Lake Okeechobee, the Caloosahatchee River,
4 and the levees in the eastern and southern part of the County (L-1, L-2, L-3 and L-28). These latter
5 levees were constructed as the west boundary for the Everglades Agricultural Area, and they
6 interrupt historical drainage flows to the east. SFWMD is currently undertaking a project to help
7 alleviate the flooding problems on the west side of this levee system, which was caused by the
8 construction of these levees.

9
10 *Local Water Management Districts*

11
12 A number of local water management districts have been established in Hendry County to
13 help drain land and provide irrigation. Figure IV.D-4 shows the location of these districts. The
14 operational responsibility for the districts is the a district board of each.

15
16 The districts were variously established as drainage districts, conservancy districts or water
17 control districts. These districts have been established over the years since the 1920's. They have the
18 authority to establish, maintain and operate drainage projects, and levy assessments for funding.

19
20 Some of these local districts are multi-county in scope (such as East County, Disston, South
21 Florida) and some stand alone within the County (such as Central County, Gerber Groves). The
22 purposes of a number of these districts is to provide drainage and/or irrigation features for
23 agricultural purposes (such as Devil's Garden, Collins Slough). Some of these districts provide for
24 more urban drainage (Clewiston, Barron). They have all had an impact on drainage features in
25 Hendry County, and have made significant improvements.

26
27 *Local Service Areas*

28
29 In recent years the County has established a number of Municipal Services Benefit Units
30 (MSBUs). Part of the purpose of all of these is drainage improvement. The operational responsibility
31 of these MSBUs lies with the Board of County Commissioners. The drainage operations of most of
32 these currently include studies for improvements to be carried out. The major purpose of the studies
33 will be to find solutions for alleviating drainage problems in the residential areas. Table IV.D-1 is
34 a list of these MSBUs and their general locations.

35
36 *Capacity of Facilities*

37
38 Hendry County does not have a master drainage plan for the entire county. This plan will be
39 needed to coordinate the activities of the various local water management districts and MSBUs.
40 However, the County is considering preparing a master plan by the end of the next planning period.
41 A capacity assessment of the individual drainage facilities has not been conducted, and there is no
42 data available concerning demand on capacity.

E. NATURAL GROUNDWATER AQUIFER RECHARGE

Introduction

As mentioned in the "Potable Water" sub-element, there are three major potable water systems serving Hendry County: the U.S. Sugar Corporation system (Clewiston), the City of LaBelle system, and the Port LaBelle system. LaBelle and Port LaBelle utilize groundwater resources exclusively for their sources, and the U.S. Sugar Corporation utilizes Lake Okeechobee and groundwater. In addition, large quantities of groundwater are utilized for agricultural irrigation (refer to Conservation sub-element). The groundwater is drawn via wells from aquifers.

The purpose of this sub-element is to examine the recharge of these aquifers. The emphasis of Chapter 9J-5.011(1)(g) concerning aquifer recharge is on the Floridan and Biscayne Aquifers, especially related to their prime groundwater recharge areas identified by the South Florida Water Management District (SFWMD). The Biscayne Aquifer does not occur in Hendry County, and SFWMD has not identified any prime groundwater recharge areas for the Floridan Aquifer. SFWMD indicates that the Floridan Aquifer is recharged in northern and central Florida, and not in or around Hendry County.

Specific groundwater aquifer recharge areas and cones of influence have not yet been identified within Hendry County [R5, R12]. The SFWMD has conducted studies of the groundwater in Hendry County and has published some of its data and information. However, the SFWMD has not yet delineated these areas. SFWMD is continuing studies and, as further data and information concerning groundwater recharge and cones of influence become available, the County will evaluate it for inclusion in the Comprehensive Plan.

The brief discussion that follows identifies the aquifers occurring in Hendry County, and their general means of recharge. Information in this sub-element is derived from two publications: Hydrology Division, Resource Planning Department "Ground Water Resource Assessment of Hendry County, Florida" (Technical Publication 88-12) [R12], South Florida Water Management District, 1988, and SFWMD, "Data Documentation for Hendry County", 1989 [R5].

Hendry County Aquifers and Recharge

Figure IV.E-1 (chart) identifies the aquifers in Hendry County (refer to "Aquifer System" and "Hydrogeological Unit" columns). There are three aquifer systems: the Surficial Aquifer System, the Intermediate Aquifer System, and the Floridan Aquifer System. The Surficial Aquifer System is made up of the Water Table Aquifer (also referred to as "Shallow Aquifer") and the Lower Tamiami Aquifer. It is from this aquifer system (via the Water Table Aquifer) that LaBelle and the U.S. Sugar Corporation (in part) draw their water. The Water Table Aquifer recharge comes from 1) direct infiltration from precipitation (main source of recharge); 2) inflow from surface water bodies (a minimal recharge source from lakes, river, and canals); 3) upward leakage from semi-confined aquifers (mainly in eastern part of county); and 4) infiltration from free-flowing artesian wells at the

1 surface. The Water Table Aquifer is highly susceptible to contamination from surface pollutants, but
2 the water quality in Hendry County is generally acceptable for all uses.
3

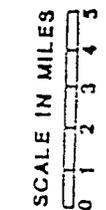
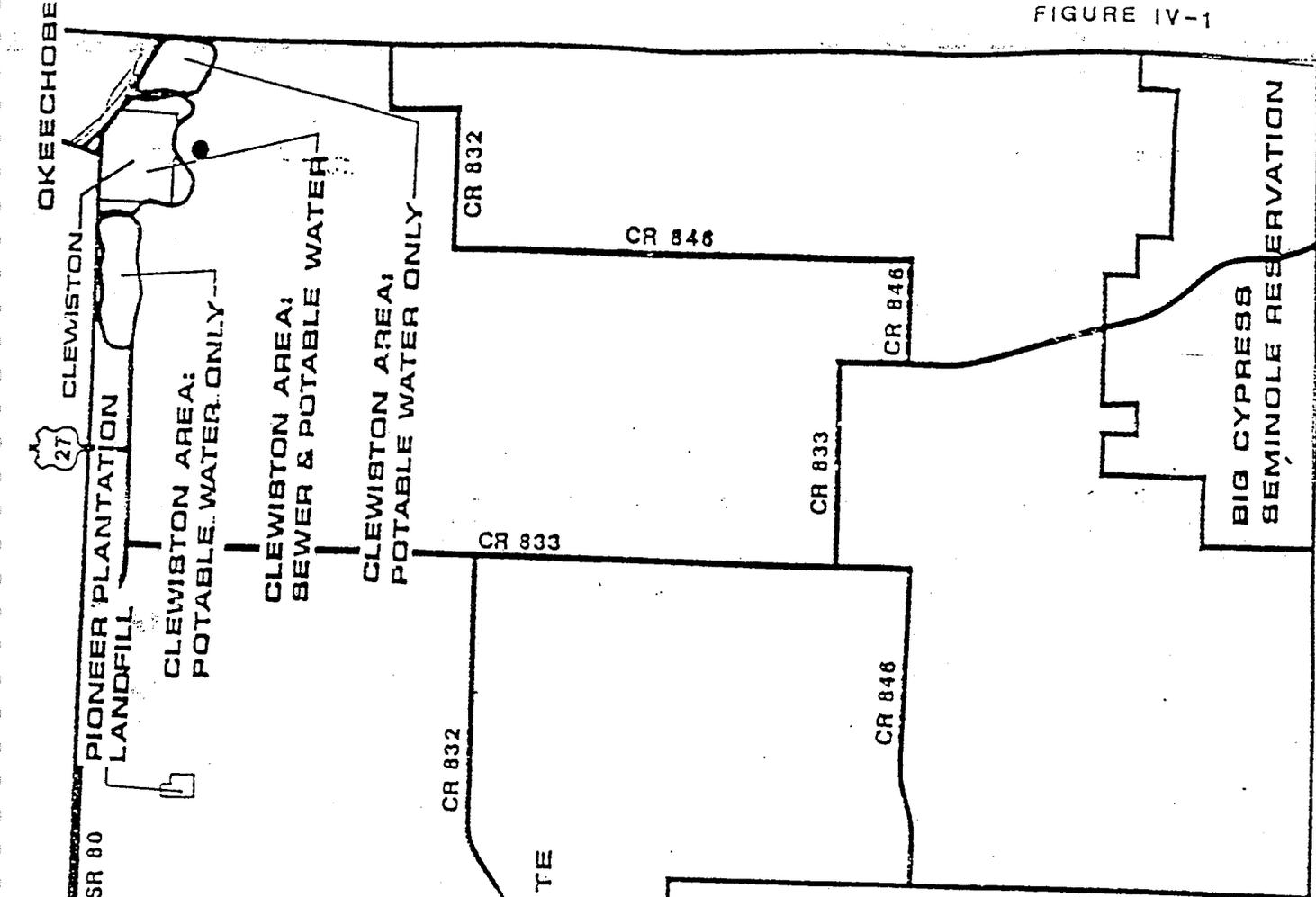
4 The Lower Tamiami Aquifer (part of the Surficial Aquifer System) is not currently used as
5 a source by the major potable water supply systems. The quality is similar to the Water Table
6 Aquifer, with somewhat higher chloride levels. Recharge for the Lower Tamiami Aquifer is received
7 from 1) leakage from overlying or underlying aquifers; 2) direct recharge by rainfall; and 3) inflow
8 from interconnecting surface water bodies.
9

10 The source of water for the Port LaBelle water system is the Sandstone Aquifer, which lies
11 within the Intermediate Aquifer System. This aquifer generally does not have much potential as a
12 water source, except in the area of Port LaBelle where the water quality is very good. Recharge to
13 the Sandstone Aquifer occurs principally through vertical leakage from adjacent aquifers and rainfall.
14

15 The Mid-Hawthorne Aquifer (also in the Intermediate Aquifer System) has poor quality and
16 quantity yields, and is not considered as a potential source of groundwater.
17

18 The Floridan Aquifer System is not used as a source of water in Hendry County because of
19 high salinity. As noted previously, the Floridan Aquifer System is considered not to be recharged
20 within Hendry County.
21

22 Further discussion of groundwater resources is found in Chapter VI, "Conservation
23 Analysis".

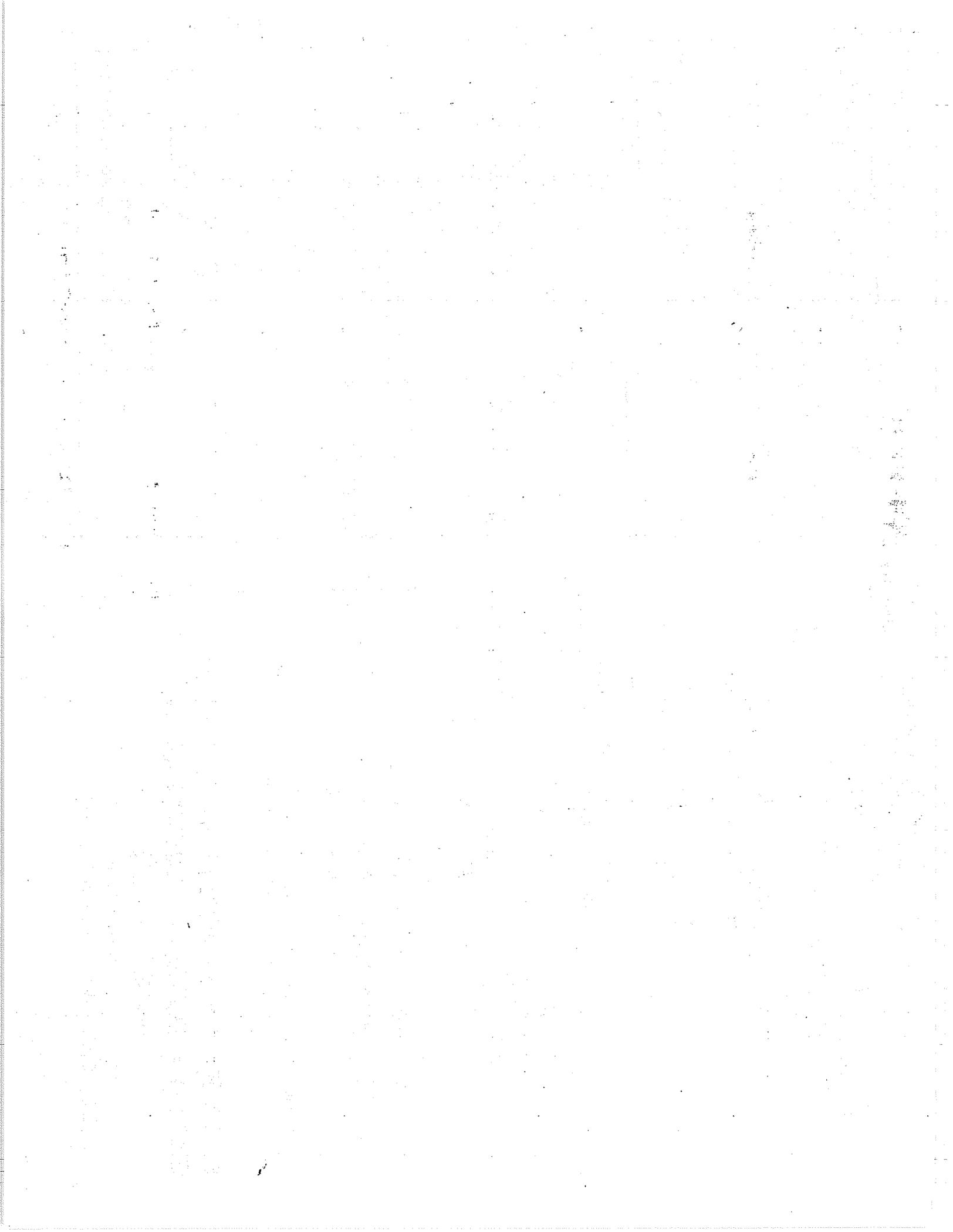


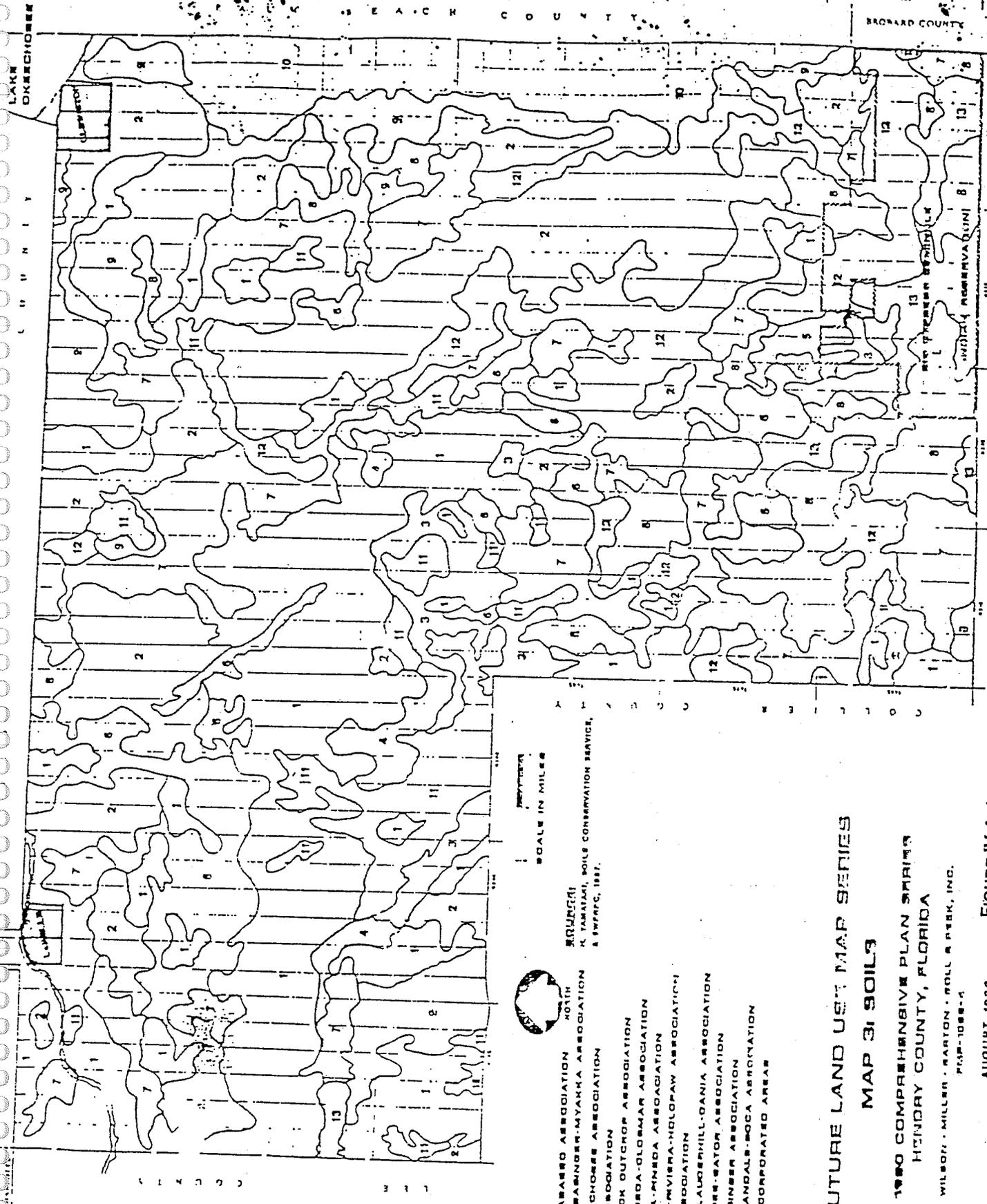
- WATER BYSTEMS SOURCES:**
- WATER TABLE AQUIFER
 - ▲ SANDSTONE AQUIFER

SOURCE: 1980 HENDRY COUNTY COMPREHENSIVE PLAN & WILSON, MILLER, BARTON, SOLL & PEEK, INC.

SEWER, POTABLE WATER & SOLID WASTE DISPOSAL FACILITIES

HENDRY COUNTY, FLORIDA
1990 COMPREHENSIVE PLAN





LAKELAND
OKECHONER

BEACH COUNTY

BROWARD COUNTY

C U N I T Y

26 00 26 15 26 30 26 45

SCALE IN MILES

SOURCE:
K. TAKAHASHI, SOILS CONSERVATION SERVICE,
& SWPRC, 1987.



- 1 GLOMAR-WABASSO ASSOCIATION
- 2 IMMOKALEE-SABINER-MYAKKA ASSOCIATION
- 3 TUSCALOOLA-CHOSSE ASSOCIATION
- 4 WABASSO ASSOCIATION
- 5 OCHOPEE ROCK OUTCROP ASSOCIATION
- 6 MALABAR-PINEDA-GLOMAR ASSOCIATION
- 7 BOCA-MVIERA-PINEDA ASSOCIATION
- 8 HALLANDALE-MVIERA-HOLOPAW ASSOCIATION
- 9 MARBATE ASSOCIATION
- 10 PLANTATION-LAUDERHILL-DANIA ASSOCIATION
- 11 WINDER-CHOSSE-SATOR ASSOCIATION
- 12 HOLOPAW-SABINER ASSOCIATION
- 13 MVIERA-HALLANDALE-BOCA ASSOCIATION

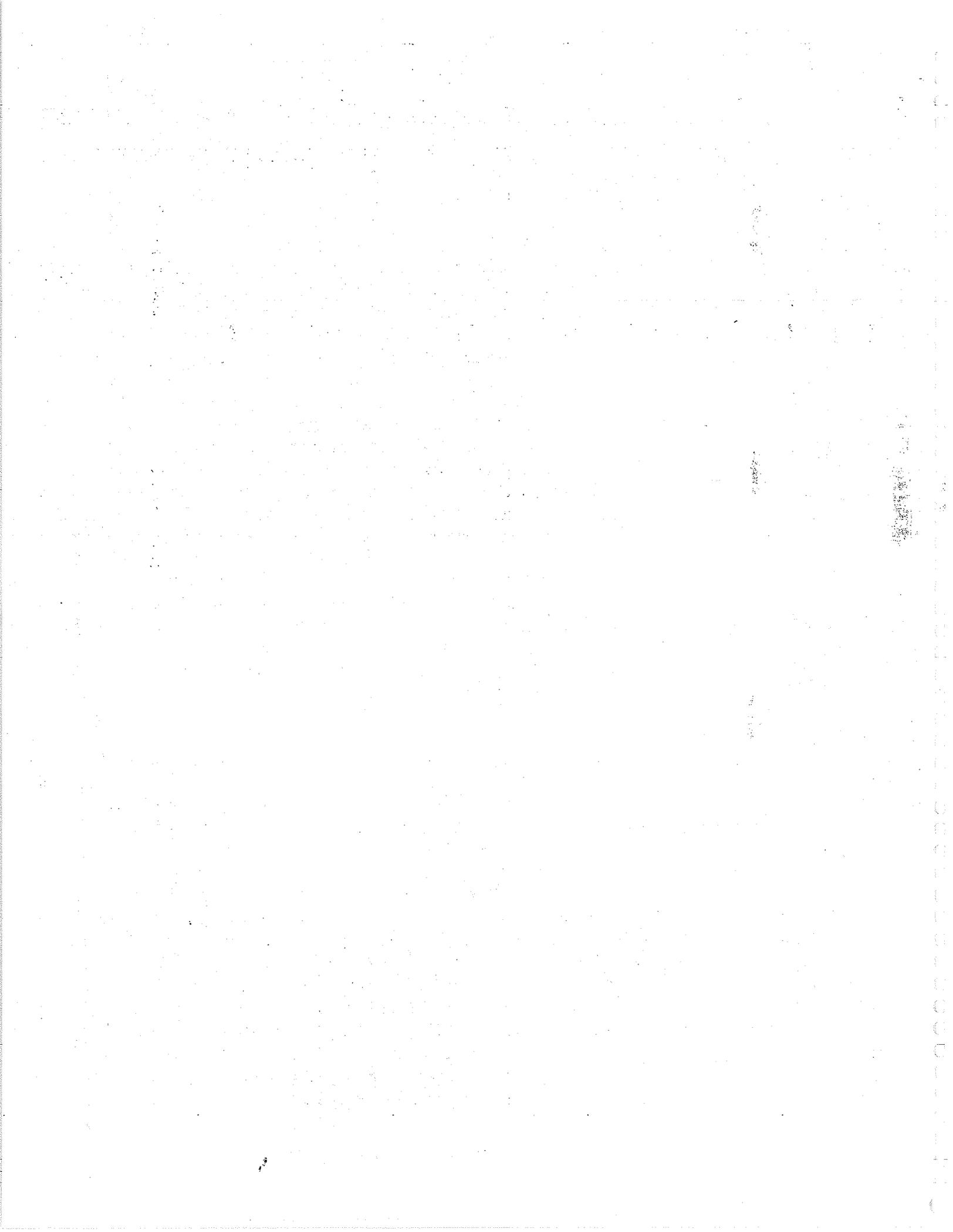
EXCLUDED, INCORPORATED AREAS

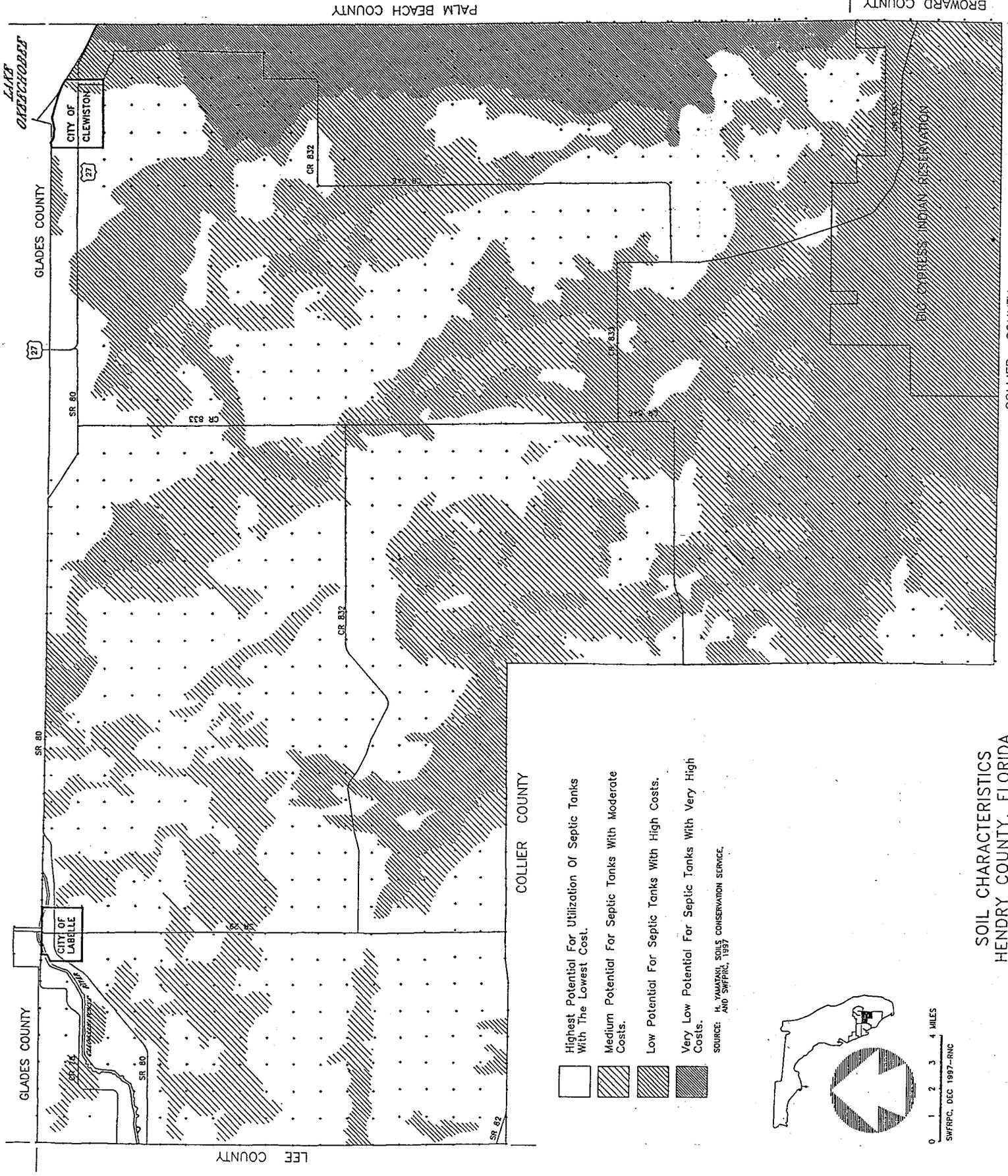
FUTURE LAND USE MAP SERIES
MAP 31 SOILS

1980 COMPREHENSIVE PLAN SERIES
HENDRY COUNTY, FLORIDA

WILSON · MILLER · MARTON · ROLL & REEK, INC.
PMP-1088-4

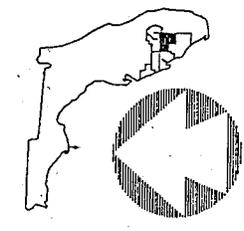
AUGUST 1990
FIGURE IV.A-1





-  Highest Potential For Utilization Of Septic Tanks With The Lowest Cost.
-  Medium Potential For Septic Tanks With Moderate Costs.
-  Low Potential For Septic Tanks With High Costs.
-  Very Low Potential For Septic Tanks With Very High Costs.

SOURCE: H. YAMATAKI, SOILS CONSERVATION SERVICE, AND SWFREC, 1987-1997



0 1 2 3 4 MILES
SWFREC, DEC 1987-RNC

SOIL CHARACTERISTICS
HENDRY COUNTY, FLORIDA

FIGURE IV.A-2

BROWARD COUNTY | PALM BEACH COUNTY

GLADES COUNTY
CITY OF CLEWISTON

SR 80
SR 27

SR 83

SR 83A

SR 83B

SR 82

COLLIER COUNTY

BIG CYPRESS INDIAN RESERVATION

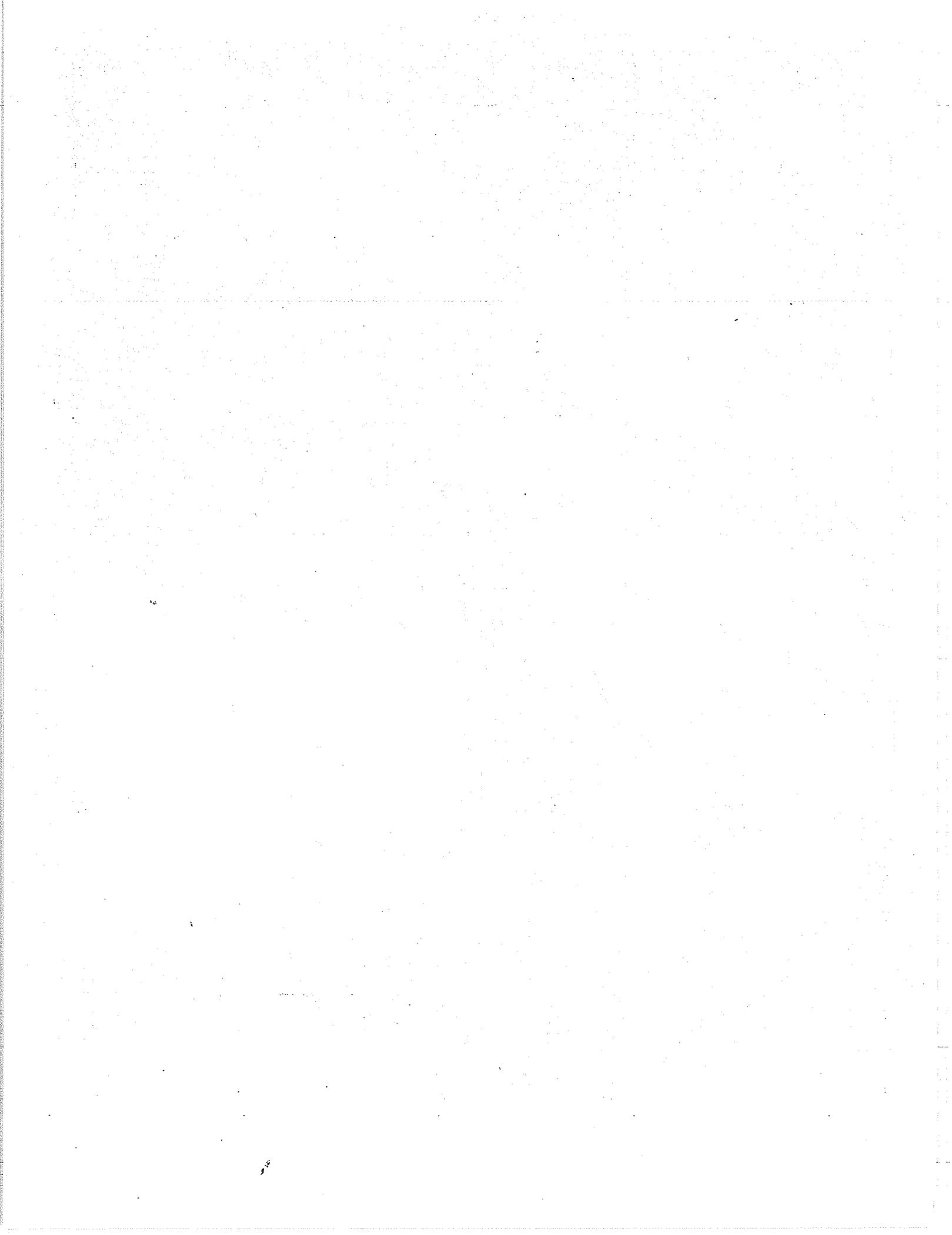
COLLIER COUNTY

GLADES COUNTY

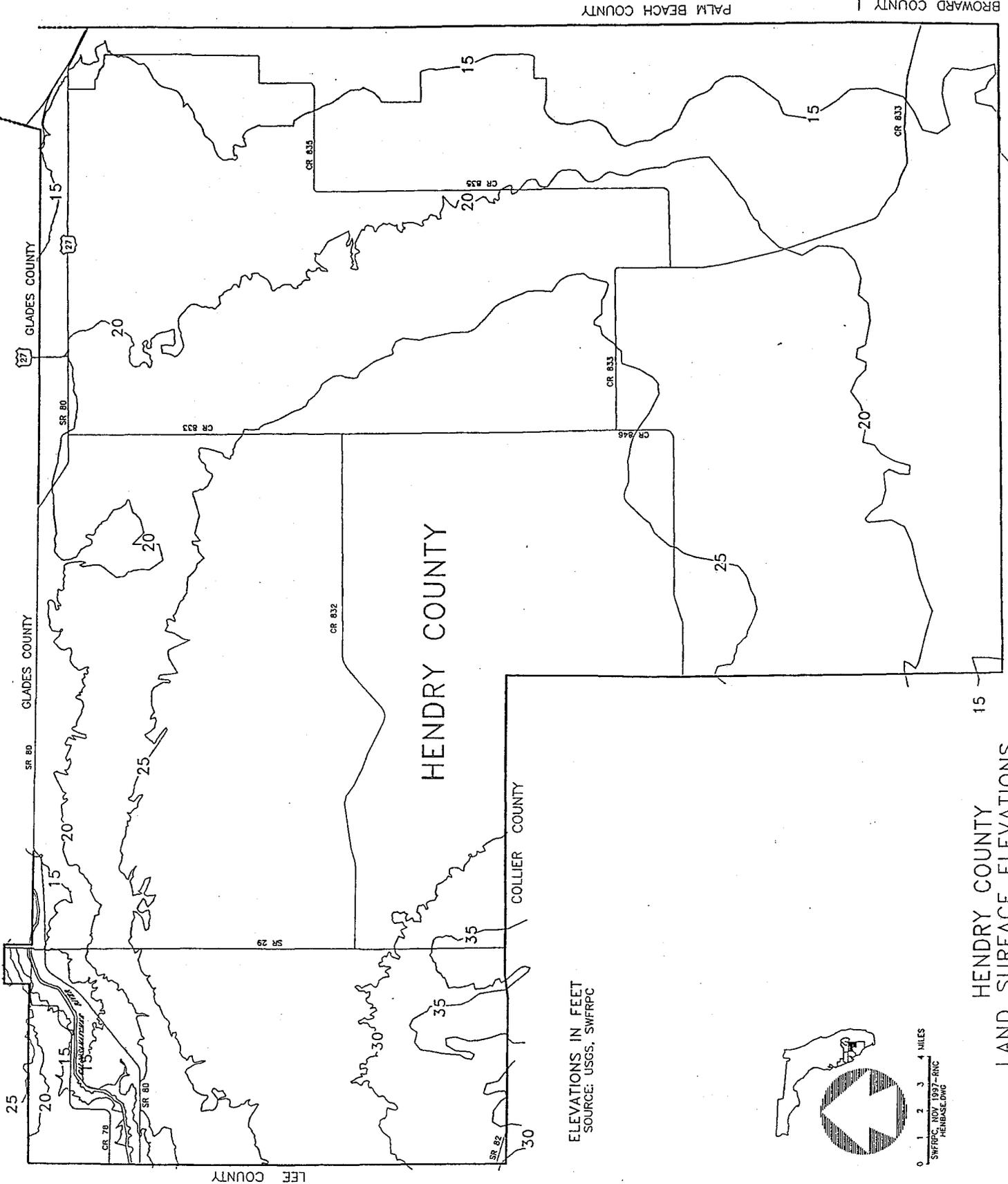
CITY OF LABELLE

SR 80

LEE COUNTY



Lake Okechobee



ELEVATIONS IN FEET
SOURCE: USGS, SWFRPC



0 1 2 3 4 MILES
SWFRPC NOV 1997-RNC
PARADE.DWG

HENDRY COUNTY
LAND SURFACE ELEVATIONS

COLLIER COUNTY

FLORIDA MAP 4

BROWARD COUNTY | PALM BEACH COUNTY

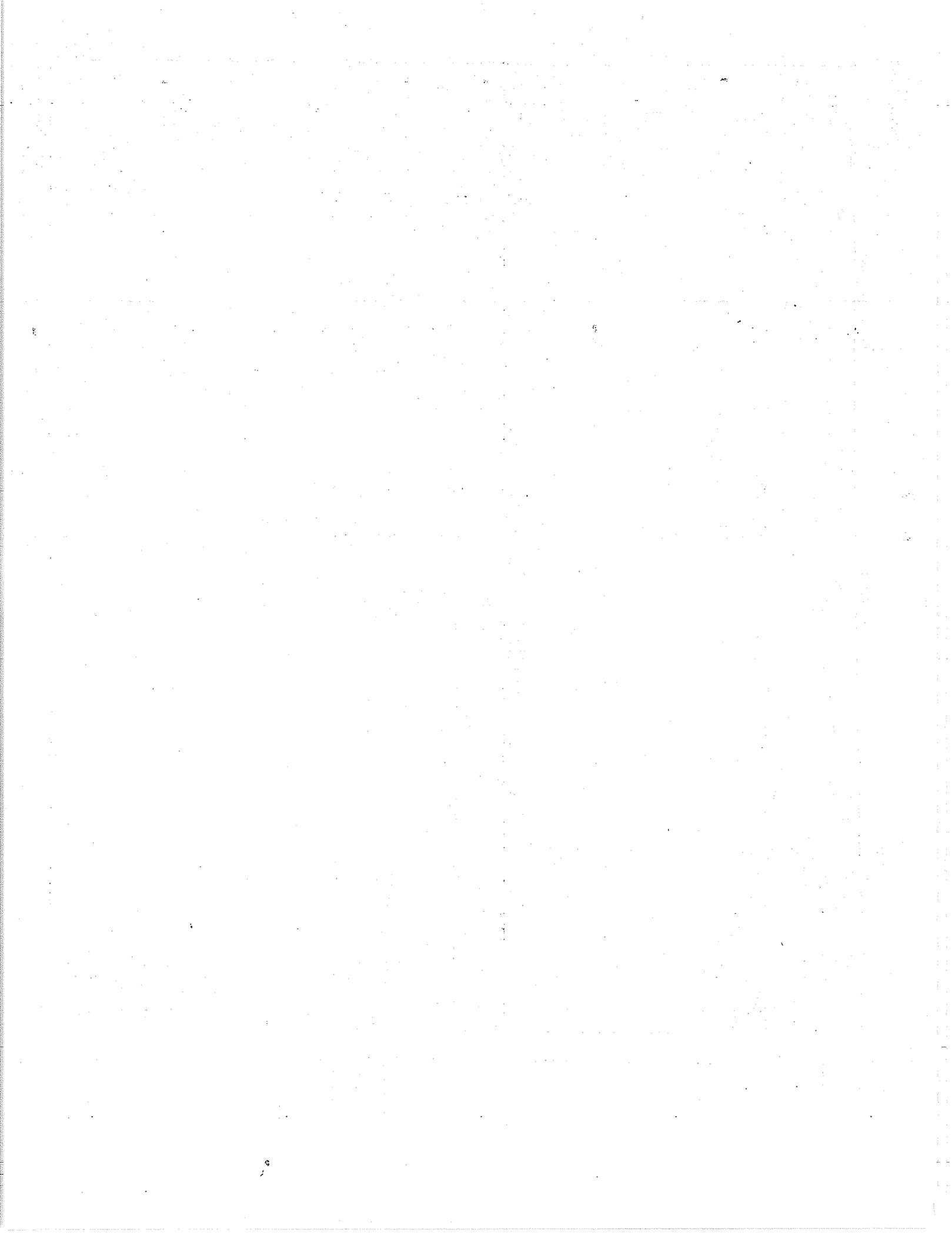
GLADES COUNTY

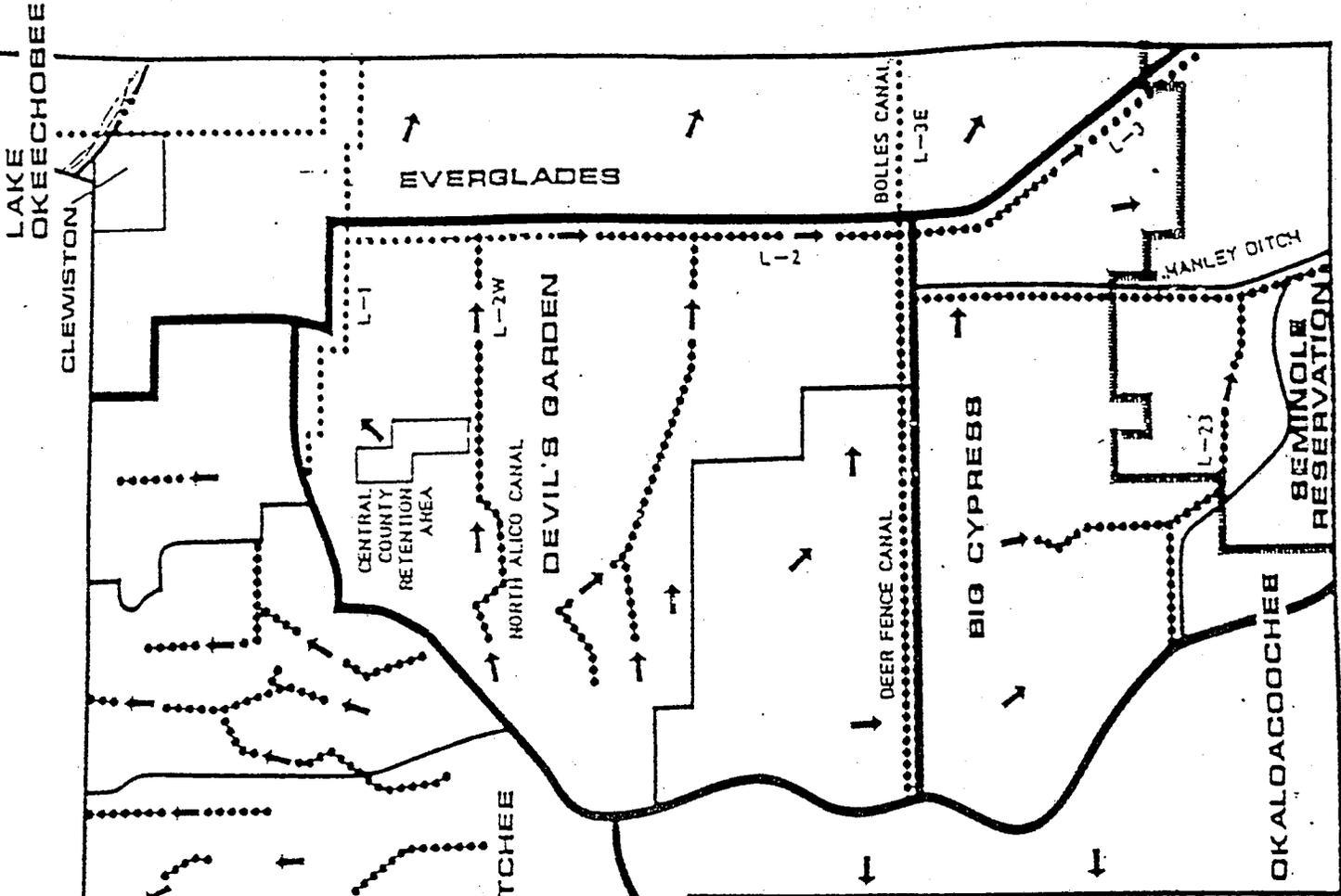
GLADES COUNTY

LEEF COUNTY

HENDRY COUNTY

COLLIER COUNTY





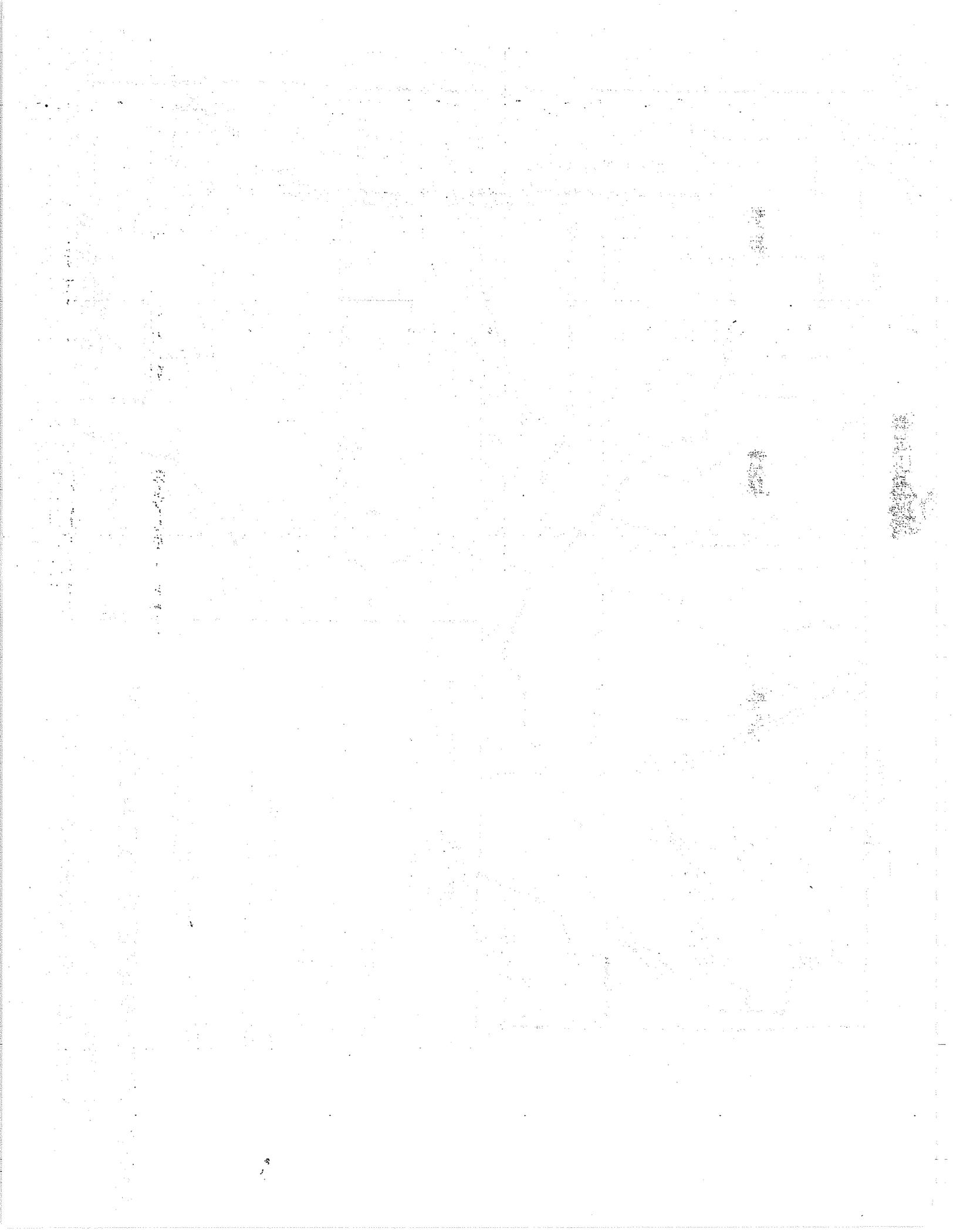
LEGEND

- DIRECTION OF FLOW
- DRAINAGE BASIN DIVIDE
- - - SUB-BASIN DIVIDE
- MAJOR CANALS

SOURCE: SWFRPC (1986), SFWMD (1980),
D. BELLEVUE (1976).

SURFACE WATER DRAINAGE
 HENDRY COUNTY, FLORIDA
 1990 COMPREHENSIVE PLAN

HENDRY COUNTY PLANNING DEPARTMENT
 WILSON • MILLER • BARTON • SOLL & PEEK, INC.



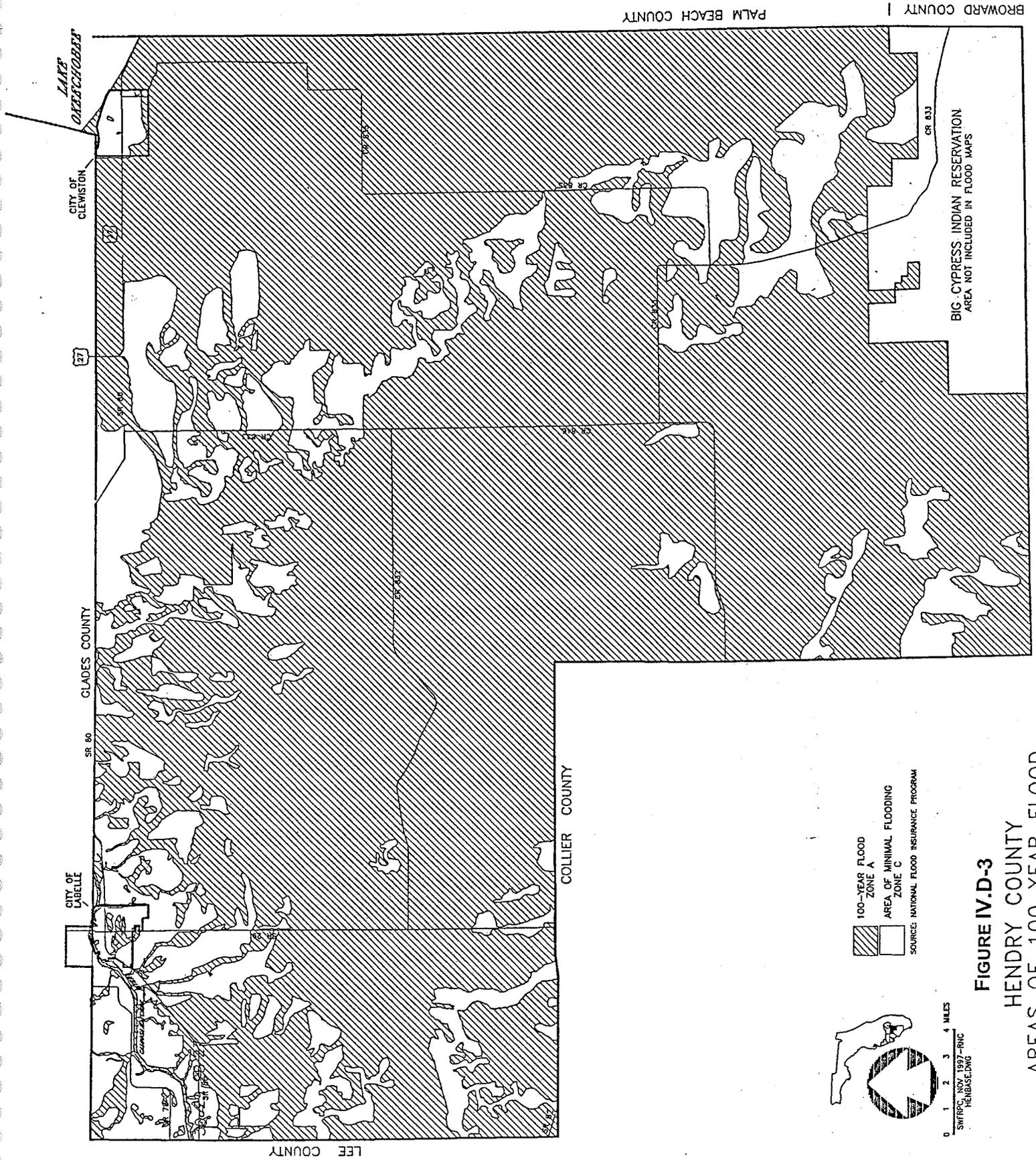


FIGURE IV.D-3
HENDRY COUNTY
AREAS OF 100 YEAR FLOOD

100-YEAR FLOOD
 ZONE A
 AREA OF MINIMAL FLOODING
 ZONE B
 SOURCE: NATIONAL FLOOD INSURANCE PROGRAM

0 1 2 3 4 MILES
 SWFRPC, NOV. 1997-RNC
 HENBASE.DWG



BROWARD COUNTY | PALM BEACH COUNTY

COLLIER COUNTY

COLLIER COUNTY

LEE COUNTY

LAKE OKECHOBEE

CITY OF CLEWISTON

SR 27

GLADES COUNTY

SR 80

CITY OF LABELLE

SR 20

SR 10

SR 15

SR 25

SR 30

SR 35

SR 40

SR 45

SR 50

SR 55

SR 60

SR 65

SR 70

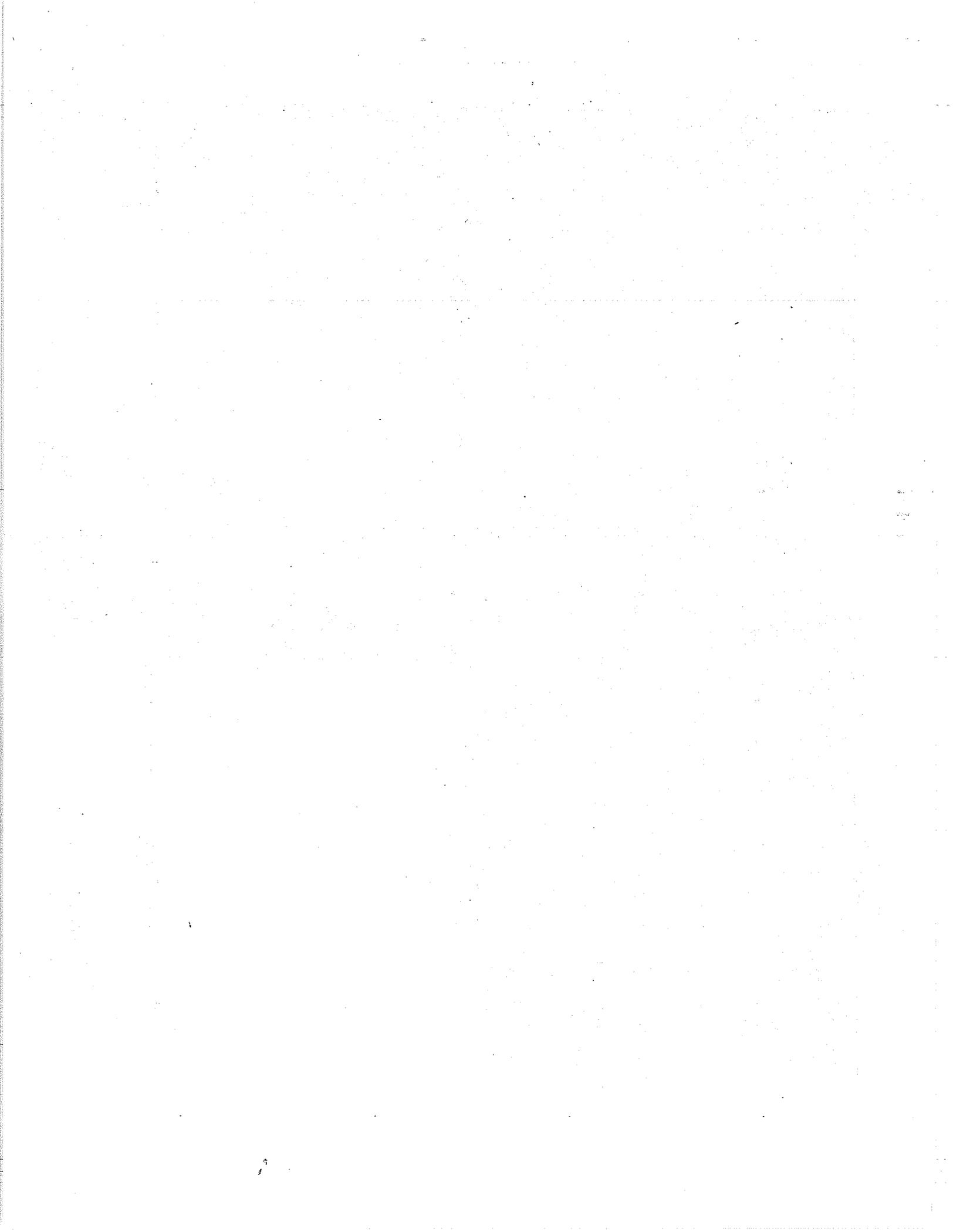
SR 75

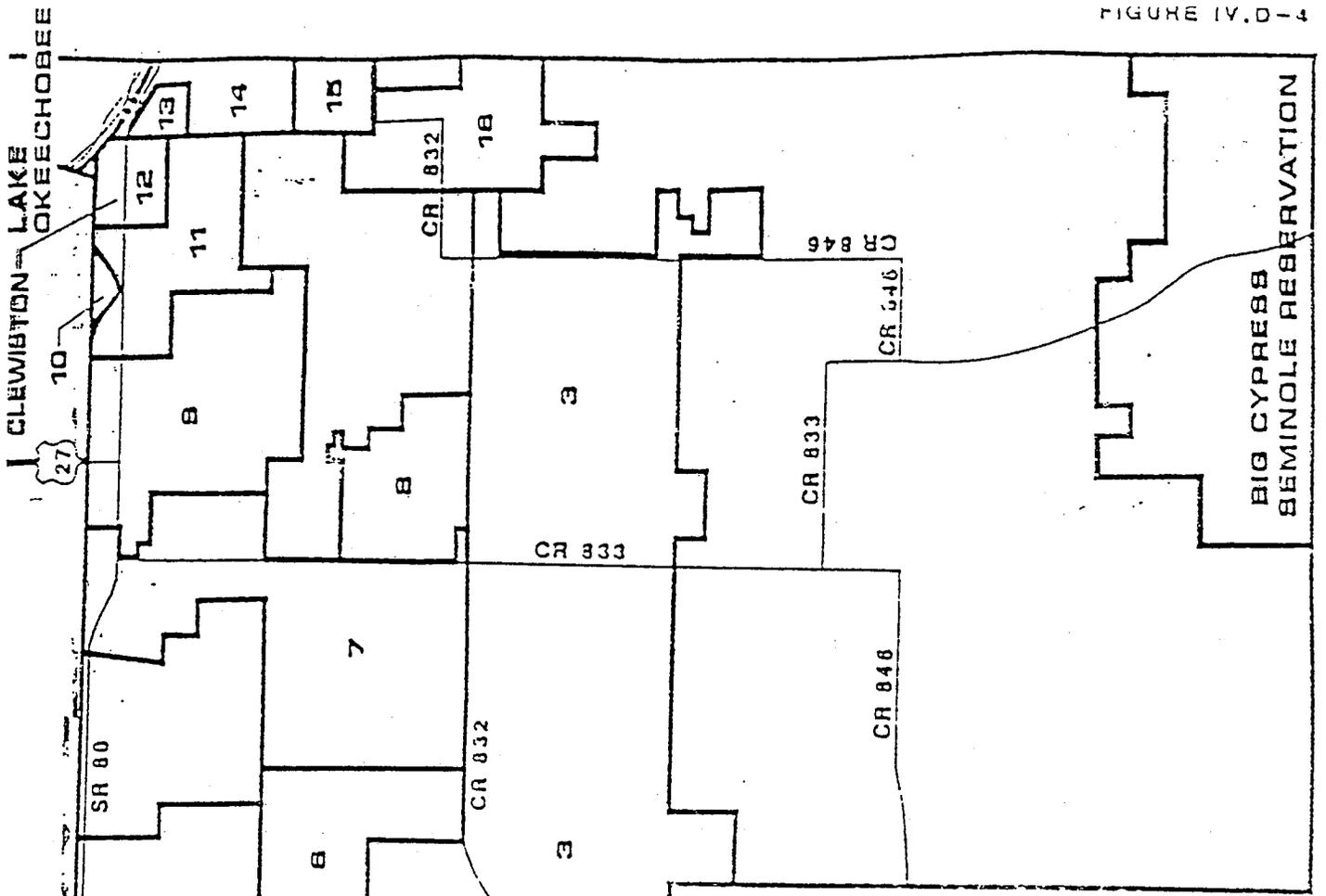
SR 85

SR 90

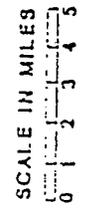
SR 95

SR 100





- 1 EAST COUNTY
- 2 COOPERATIVE PRODUCERS
- 3 DEVIL'S GARDEN
- 4 GERBER GROVES
- 5 BARRON & PLOUGH
- 6 COLLIN'S BLOUGH
- 7 HENDRY/HILLIARD
- 8 CENTRAL COUNTY
- 9 FLAGHOLE
- 10 DIBBTON ISLAND
- 11 SUGARLAND
- 12 CLEWISTON CITY
- 13 EAST HENDRY COUNTY
- 14 S. FLORIDA CONSERVANCY
- 15 RITTA
- 16 BOLLER



SOURCE: HENDRY COUNTY SPECIAL DISTRICTS MAP, 1989.

LOCAL WATER MANAGEMENT DISTRICTS

HENDRY COUNTY, FLORIDA

1990 COMPREHENSIVE PLAN

HENDRY COUNTY PLANNING DEPARTMENT
WILSON - MILLER - BARTON - SULL & PECK, INC.

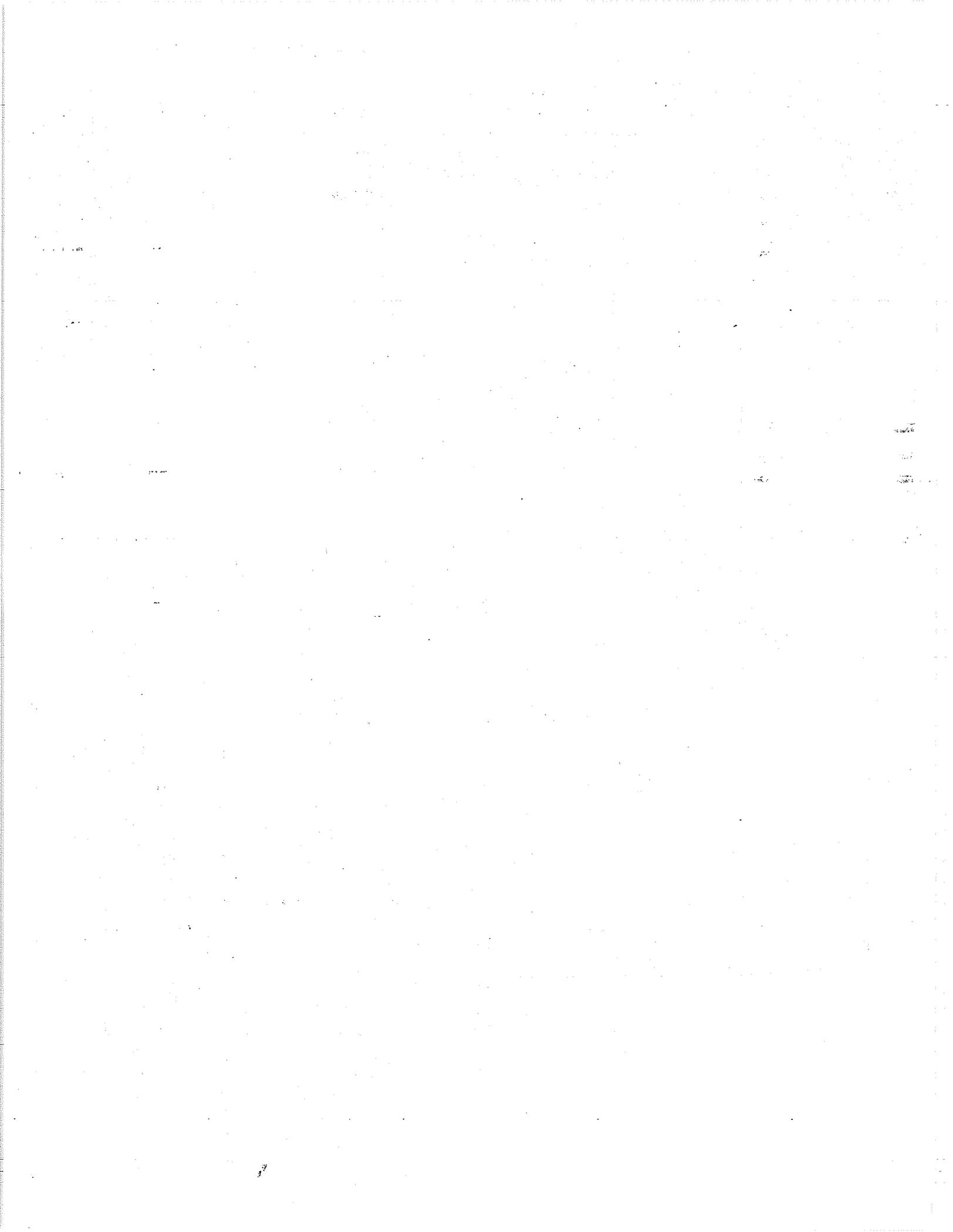
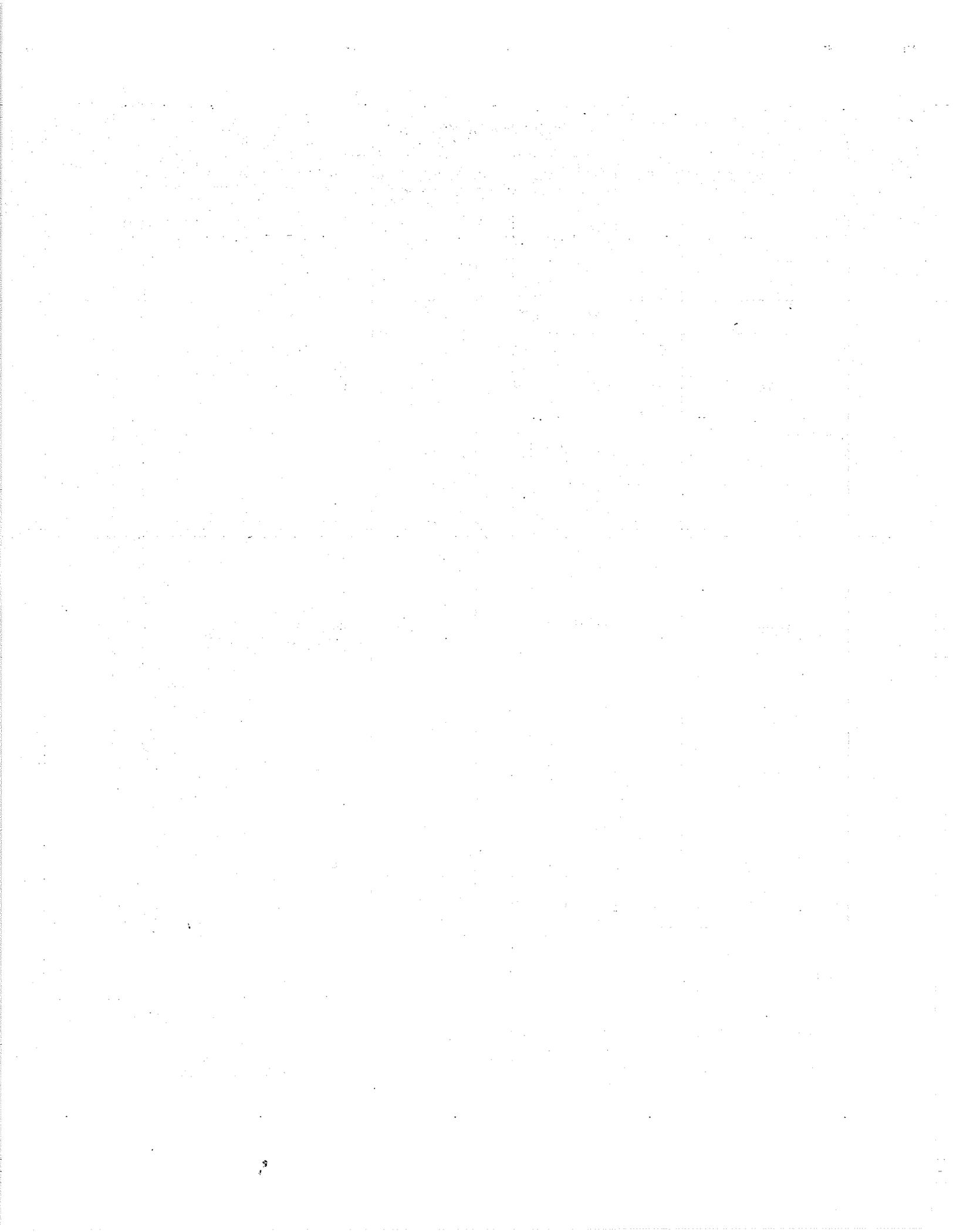


FIGURE IV.E-1

GROUNDWATER AQUIFERS

GENERALIZED STRATIGRAPHIC AND HYDROGEOLOGIC COLUMN FOR HENDRY COUNTY					
AGE	FORMATION OR GROUP		RANGE OF THICKNESS (feet)	AQUIFER SYSTEM	HYDROGEOLOGIC UNIT
RECENT	UNDIFFERENTIATED	PAMLICO SAND	0-8	SURFICIAL AQUIFER SYSTEM	WATER TABLE AQUIFER
		LAKE FLIRT MARL			
PLEISTOCENE		FT. THOMPSON FORMATION	0-15		
		CALOOSAHATCHEE MARL	0-15		TAMIAMI CONFINING BEDS
PLIOCENE	TAMIAMI FORMATION	30-110	LOWER TAMIAMI AQUIFER		
MIOCENE	HAWTHORN GROUP	300-500	INTERMEDIATE AQUIFER SYSTEM	UPPER HAWTHORN CONFINING ZONE	
				SANDSTONE AQUIFER	
				MID-HAWTHORN CONFINING ZONE	
				MID-HAWTHORN AQUIFER	
				LOWER HAWTHORN CONFINING ZONE	
OLIGOCENE	TAMPA LIMESTONE	150-200	FLORIDAN AQUIFER SYSTEM	LOWER HAWTHORN/TAMPA PRODUCING ZONE	
	SUWANNEE LIMESTONE	50-150		SUWANNEE LIMESTONE	



V. Housing Element Data & Analysis Support

1 INTRODUCTION
2

3 The purpose of the data analysis for the Housing Element is to inventory the existing housing
4 stock, analyze its make-up and adequacy, and project future demand for housing units.
5

6 The U.S. Census provides a wealth of data on housing. The 1990 Census data was used to
7 update the housing analysis of the Comprehensive Plan and its related policies. The University of
8 Florida's Bureau of Economic and Business Research (BEBR) annually provides certain updates of
9 housing and households, but this information is limited [R16]. BEBR also annually estimates
10 population changes which are useful to housing analyses. BEBR utilizes U.S. Census figures for its
11 base data.
12

13 Certain data and information, such as HRS licensed facilities or historically significant
14 housing, can be obtained directly from state agencies. Local building records can be used for
15 updating housing construction. Information from the University of Florida, Institute of Food and
16 Agricultural Services was used to determine the need for farmworker housing within the County.
17 Also incorporated within the housing analysis is the Affordable Housing Needs Assessment Study
18 prepared by the Shimberg Center for Affordable Housing which essentially provides information in
19 projected housing needs for low, moderate, and very low income household.
20

21 It becomes evident, then, that housing data and analyses must from necessity be a mixture
22 of data and information from different time periods, and estimates and projections must attempt to
23 make calculations comparable and relevant.
24

25 STATE REQUIREMENTS
26

27 The "Local Government Comprehensive Planning and Land Development Regulation Act"
28 (Chapter 163 F.S.) specifies that the Housing Element of the Comprehensive Plan shall consist of
29 standards, plans, and principles in the following:
30

- 31 1) The provision of housing for existing residents and the anticipated population growth
32 of the area.
- 33
- 34 2) The elimination of substandard dwelling conditions.
- 35
- 36 3) The structural and aesthetic improvement of existing housing.
- 37
- 38 4) The provision of adequate sites for future housing, including housing for low-income
39 and moderate-income families, migrant farmworkers, mobile homes, and group home
40 facilities and foster care facilities with supporting infrastructure and public facilities.
41
- 42 5) Provision for relocation housing and identification of historically significant and
43 other housing for purposes of conservation, rehabilitation, or replacement.
44
- 45 6) The formulation of housing implementation programs.

1
2 The Act recognizes that Chapter 9J-5 F.A.C., the "Minimum Criteria for Review of Local
3 Government Comprehensive Plans and Determination of Compliance", will serve the purpose its
4 title implies. It is Chapter 9J-5 F.A.C. that specifies the data analysis requirements for a
5 Comprehensive Plan. For the Housing Element 9J-5.010 specifies the element be based on the
6 following data requirements:
7

- 8 1) Housing inventory to include the number of dwelling units by type, tenure
9 (owner/renter breakdown), age, rent, value, monthly cost of owner-occupied units,
10 and rent or cost to income ratio.
11
- 12 2) Inventory to include number of dwelling units in each of the following categories:
13 lacking complete plumbing, lacking complete kitchen facilities, lacking central
14 heating, and overcrowded. (Local definitions of "standard" and "substandard"
15 housing conditions are to be determined, and number and general location of
16 dwelling units in these categories are to be included.)
17
- 18 3) Inventory of renter-occupied housing developments using federal, state or local
19 subsidies; indicating program and number of units.
20
- 21 4) Inventory of group homes licensed by the Florida Department of Health and
22 Rehabilitative Services (HRS), by type, number, capacity, and general location.
23
- 24 5) Inventory of existing mobile home parks licensed by HRS, and mobile home
25 subdivisions, condominium, and cooperatives, by capacity and general location.
26
- 27 6) Inventory of historically significant housing listed on Florida Master Site File,
28 National Register of Historic Places, or designated locally by ordinance. General
29 location to be indicated.
30
- 31 7) Inventory of housing construction activity.
32
- 33 8) Inventory of migrant labor camps licensed by the Florida Department of Health
34 (DOH).
35
- 36 9) Study of Farmworkers in Southwest Florida prepared by the Institute of Food and
37 Agricultural Sciences (IFAS).
38
- 39 10) Projection of anticipated number of households by size and income range.
40
- 41 11) Projected housing needs by number, type, cost or rent, tenure, and any other special
42 needs.
43
- 44 12) Projection of land requirements.
45

13) Projected means for accomplishing the following:

- a) Supporting infrastructure;
- b) Elimination of substandard housing;
- c) Adequate sites for housing for low, very low, and moderate income manufactured homes;
- d) Adequate site for group homes and foster homes licensed and/or-funded by DOH;
- e) Identification of conservation, rehabilitation or demolition activities, and historically significant housing or neighborhoods;
- f) Streamlining the permitting process;
- g) Utilize job training/job creation to meet affordable housing needs; and
- h) Sufficient sites at sufficient densities to accommodate the need for affordable housing.

The following discussion addresses these required items. The tables of this housing analysis are a major and significant part in presenting the required data. The notes in the tables are important parts of the analysis, and many explain the methodology utilized for the particular table notated.

EXISTING INVENTORY AND CONDITIONS

General Inventory and Characteristics

Table V-1 presents an estimated summary of existing housing by number, type, and tenure. This data is based on the 1990 U.S. Census, updated from local building records. Because over half of the housing in the County was constructed in the 1980's it is reasonable to expect that most of this newer housing is occupied (not vacant), is owner-occupied, and is in better structural condition than the housing constructed prior to 1980. Table V-2 presents the estimated existing housing by Planning Sector. Refer to Figure II-1 for Planning Sectors. Over half of these units lie within the incorporated areas of Planning Sectors

**Table V-1
1990-1996 Estimated Housing by Type and Total Housing Demand**

	Single-Family	Multi-Family	Mobile Home*	Total	Housing Demand		
					2000	2005	2010
Clewiston	1,406	578	468	2,452	6,575	6,869	7,200
LaBelle	693	102	474	1,269	2,362	2,705	2,692
Unincorporated	3,516	153	5,132	8,801	8,129	9,594	10,094
County Total	5,615	833	6,074	12,522	17,066	19,168	19,986

*Notes: Household estimates were based on 1990 U.S. Census and updated with Building Department records. For the City of Clewiston, we assume 1.01 persons per household. For the City of LaBelle, an average of 1.50 persons per occupied unit is assumed. For unincorporated areas, 2.91 persons per household is assumed.

Source: Prepared by the Shimberg Center for Affordable Housing, at the University of Florida, 1997

**Table V-2, Summary of Total Housing Units by Planing Sector
Hendry County Unincorporated Area 1990-1996**

Planning Sector	1990 Estimated Housing Units ¹	1991-96 Units ²	Total Estimated Housing Units	% Total
1	766	90	856	7.87%
2	595	0	595	5.47%
3	1,158	0	1,158	10.65%
4	499	62	561	5.16%
5	502	47	549	5.05%
6	693	68	761	7.00%
7	391	63	454	4.18%
8	486	386	872	8.02%
9 ³	161	0	161	1.48%
10	280	10	290	2.67%
11	904	121	1,025	9.43%
12	1,067	78	1,145	10.53%
13	2,443	0	2,443	22.47%
Total	9,945	925	10,870	100.00%

¹Estimated from adjusted U.S. Census Enumeration Districts.

²From Hendry County building permit records.

³Big Cypress Seminole Reservation not under Hendry County permitting jurisdiction.

Source: 1990 U.S. Census, Hendry County Building Department, LaRue Planning & Management Services, Inc., 1998.

Table V-3 indicates the relative age of the housing on a countywide basis. Only 15% of housing countywide has been built since 1991. Over 75% was constructed since 1970. Approximately 52% have been mobile homes, and very few multiple-family units have been built.

**Table V-3
Housing by Construction Date**

	Units Constructed	Percent of Total
Pre 1939	285	2.44%
1940-49	357	3.05%
1950-59	584	5.00%
1960-69	1,550	13.26%
1970-79	3,497	29.92%
1980-89	3,672	31.41%
1990-96	1,744	14.92%
Total	11,689	100.00%

Amounts include the incorporated areas of LaBelle and Clewiston. Also, 1991-1996 units are based on building permits, a few of which may not have been constructed. There is no data on demolitions.

Sources: 1990 Census of Population and Housing, Summary Tape File 3A, Table H25, Hendry County Building Department, Building Permit Data Summaries.

Housing Density

Estimated housing density by Planning Sector is presented in Table V-4, giving a general indication of density. The table does not give density indications on a per development basis, but are good indicators of general development locations within Hendry County.

Table V-4
Estimated Housing Density by Planning Sector - 1996

Planing Sector	Area in Acres	1996	
		Estimated Housing Units	Density: Acres per 1 unit
1	15,123	1,256	12
2	986	703	1
3	2,266	1,167	2
4	19,546	691	28
5	73,376	584	126
6	10,624	814	13
7	215,885	393	549
8	328,608	496	663
9*	43,712	814	54
10	25,965	518	50
11	890	934	1
12	3,712	1,445	3
13	3,898	1,874	2
Total	744,591	11,689	1,504

*Hendry County does not have permitting jurisdiction over the Big Cypress Seminole Reservation.

Source: Housing units were estimated from 1990 Census and Building permits from 1991-1996. Hendry County Building and Zoning Department, 1997; LaRue Planning & Management Services, Inc., 1998.

Housing Value and Affordability

The 1990 value of owner-occupied housing units in Hendry County (countywide) is presented in Table V-5. The median value of a house in Hendry County was between \$50,000 to \$60,000 in 1990. As the table indicates, housing in Hendry County had a comparable range with the Cities of LaBelle and Clewiston. The low-end housing (under \$25,000) was greater in Hendry County than LaBelle or Clewiston.

Table V-5
Specified Owner-occupied Units by Value Ranges, 1990 - Hendry County

	Clewiston	LaBelle	Unincorporated	County Total	Place Total
< \$15,000	10	13	23	46	23
\$15,000 - \$19,999	0	13	4	17	13
\$20,000 - \$24,999	9	34	70	113	43
\$25,000 - \$29,999	15	25	67	107	40
\$30,000 - \$34,999	39	20	119	178	59

	Clewiston	LaBelle	Unincorporated	County Total	Place Total	
1	\$35,000 - \$39,999	47	12	111	170	59
2	\$40,000 - \$44,999	47	7	135	189	54
3	\$45,000 - \$49,999	85	60	79	224	156
4	\$50,000 - \$59,999	131	107	269	507	238
5	\$60,000 - \$74,999	181	93	231	505	274
6	\$75,000 - \$99,999	274	53	218	545	327
7	\$100,000 - \$124,999	85	22	93	200	107
8	\$125,000 - \$149,999	92	15	38	145	107
9	\$150,000 - \$174,999	9	5	36	50	14
10	\$175,000 - \$199,999	22	4	24	50	26
11	\$200,000 - \$249,999	0	5	17	22	5
12	\$250,000 - \$299,999	0	0	7	7	0
13	\$300,000 - \$399,999	0	0	0	9	0
14	\$400,000 - \$499,999	0	0	0	0	0
15	\$500,000 >	0	3	18	21	3
16	Total	1,046	491	1,559	3,105	1,548

Source: Shimberg Center for Affordable Housing, at the University of Florida, 1996

As Table V-6 indicates, the same percentage ratios tend to hold true for rents paid as well. There was a higher percentage of renters in the County paying low-end rent than in both of the incorporated areas combined. The median monthly rent was between \$350.00 and \$400.00 in the County.

Table V-6
Gross Rent: Specified Renter-Occupied Housing Units,
1990 - Hendry County

	Clewiston	LaBelle	Unincorporated	County Total	Place Total
28	\$100	0	0	69	0
29	\$100 - \$149	0	0	64	0
30	\$150 - \$199	11	0	32	11
31	\$200 - \$249	9	0	83	9
32	\$250 - \$299	82	30	123	112
33	\$300 - \$349	64	16	98	80
34	\$350 - \$399	79	21	288	100
35	\$400 - \$499	164	0	175	164
36	\$450 - \$499	61	42	126	103
37	\$500 - \$549	108	18	157	126
38	\$550 - \$599	50	0	73	50
39	\$600 - \$649	41	10	37	51
40	\$650 - \$699	0	7	14	7
41	\$700 - \$749	13	0	0	13
42	\$750 - \$999	16	0	0	16

	Clewiston	LaBelle	Unincorporated	County Total	Place Total
\$1,000>	0	0	0	0	0
NO CASH RENT	18	22	166	206	40
Total	716	166	1,505	2,387	882

Source: Shimberg Center for Affordable Housing, at the University of Florida, 1996

As shown in Table V-8, approximately 85% of households with income less than \$10,000 paid more than 30% of their income for housing. Fifty-two percent of households with income between \$10,000 to \$20,000 paid more than 30% of their income for housing.

Table V-7
Hendry County
Household Need by Income Categories

Income Categories	Owner-Occupied Units				Renter-Occupied Units			
	1995	2000	2005	2010	1995	2000	2005	2010
30% of median = \$7,471	513	437	335	226	-279	-324	-373	-421
50% of median = \$12,452	1,402	1,263	1,077	882	-258	-334	-421	-503
80% of median = \$19,923	2,613	2,380	2,087	1,757	601	478	343	210
120% of median = \$29,885	2,502	2,140	1,697	1,228	556	361	166	-19
200% of median = \$49,808	1,251	718	84	-558	0	-236	-463	-678

Source: Shimberg Center for Affordable Housing at the University of Florida, 1998.

Table V-8
Percent of Households Paying More Than 30% of Their Income
for Rent by Levels of Income in 1989 Specified Renter-Occupied Housing Units

Income	Clewiston	LaBelle	Unincorporated	County Total	Place Total
<\$10,000	100.0%	100.0%	85.0%	89.0%	100.0%
\$10,000 - 19,999	66.0%	100.0%	52.0%	59.5%	71.3%
\$20,000 - 34,999	5.6%	0.0%	10.2%	7.6%	4.3%
\$35,000 - 49,999	0.0%	0.0%	0.0%	0.0%	0.0%
>\$50,000	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Shimberg Center for Affordable Housing, at the University of Florida, 1996

Housing Conditions

A recent survey of housing structural conditions that would be relevant for the entire unincorporated area of the County has not been conducted. The relative age of housing, as presented in Table V-3 can give one indication of housing conditions. Housing value, as presented in the previous section, also provides an indicator.

A more useful indication of housing conditions can be determined by examining certain housing condition characteristics surveyed in the 1990 U.S. Census. These include lack of complete

plumbing, lack of complete kitchen facilities, lack of heating, and overcrowding. Table V-9 identifies the number of units in Hendry County possessing these characteristics (1990 U.S. Census). For the purposes of this analysis, substandard housing is defined as housing possessing one or more of the above characteristics, except lack of heating. All other housing units are defined as standard. It should be understood that the characteristics in Table V-9 are not mutually exclusive, and the same house could be listed under more than one category. Therefore, no total of all units is presented in the table.

Table V-9
Housing Units Lacking Complete Plumbing Facilities

Hendry County	Lacking Complete Plumbing Facilities	Complete Plumbing Facilities	Share of Total Units	Total Housing Units (STF3A)
Clewiston	19	2,394	0.8%	2,413
LaBelle	0	1,151	0.0%	1,151
Unincorporated	61	6,320	1.0%	6,381
County Total	80	9,865	0.8%	9,945

Source: Shimberg Center for Affordable Housing at the University of Florida, 1996

Licensed Mobile Home Parks

Table V-10 lists the mobile home and recreation vehicle parks and subdivisions (and one condominium) in Hendry County that are licensed by the Florida Department of Health (DOH). The capacities and general locations are included in Table V-10. Most of these spaces and lots are located near the cities of Clewiston and LaBelle. The others are located in the Felda area.

Table V-10
Mobile Home/RV Parks in Hendry County - 1998

Permit No.	Location	Name	Type	MH Spaces	RV Spaces
26-54-00012	Clewiston	Hendry County's RV Wayside	02	0	40
26-54-00013	Clewiston	Royal Palm Trailer Park	01	51	0
26-54-00014	Clewiston	Sugarland Mobile Home Court	01	55	0
26-54-00015	Clewiston	Roland Martin RV Park	02	0	57
26-54-00016	Clewiston	Thomas Produce Company	01	6	0
26-54-00017	Clewiston	Kite's Nest Mobile Home Park	01	31	0
26-54-00018	Clewiston	Foxbriar Mobile Home Park	01	81	0
26-54-00019	Clewiston	Fairgrounds Mobile Home Park	01	49	0
26-54-00020	Clewiston	Everglades Mobile Home Park	01	55	3
26-54-00021	Clewiston	Aztec Mobile Home Park	01	21	0
26-54-00022	Clewiston	Twin Lakes Mobile Home Estates	01	50	0
26-54-00023	Clewiston	Ventura Mobile Home Park	01	6	0
26-54-00024	Clewiston	Rudd's Mobile Home Park	01	6	0
26-54-00025	Clewiston	Pacific Trailer Park	01	17	0

V. HOUSING ELEMENT

	Permit No.	Location	Name	Type	Spaces	Spaces
1	26-54-00026	Clewiston	Okeechobee Landings RV Resort	02	0	270
2	26-54-00027	Clewiston	Oaklane Mobile Home Park	01	21	0
3	26-54-00028	Clewiston	Lake Okeechobee of Clew.-KOA	02	3	124
4	26-54-00029	Clewiston	Clewiston Trailer Park	01	41	0
5	26-54-00030	Clewiston	Belcher's Mobile Home Park	01	13	0
6	26-54-00031	Clewiston	Tropical Mobile Home Village	01	272	0
7	26-54-00034	Clewiston	Camp Nocatee	04	0	0
8	26-54-00035	Clewiston	Camp E-Tu-Makee	04	0	0
9	26-54-00000	LaBelle	Aqua Isles Mobile Home Park	01	225	140
10	26-54-00001	LaBelle	County Line Trailer Park	01	20	9
11	26-54-00002	LaBelle	Gaulding's Trailer Park	01	13	0
12	26-54-00003	LaBelle	Grandma's Grove RV Park	02	0	189
13	26-54-00005	LaBelle	Kelly's City Park - M. Frierson	01	8	0
14	26-54-00006	LaBelle	Hand Avenue Trailer Park #1	01	8	0
15	26-54-00007	LaBelle	Cook Avenue Trailer Park #3	02	8	0
16	6-54-00010	LaBelle	LaBelle Woods RV Resort	02	0	112
17	26-54-00011	LaBelle	Palm & Pine Trailer Park	01	51	67
18	26-54-00032	LaBelle	South FL Methodist Camp	04	0	0
19	26-54-00033	LaBelle	Strickland Trailer Park	01	8	0
20	26-54-00036	LaBelle	South FL United Methodist Camp-RV	02	0	30
21	Total Spaces				1,119	1,041

Types: 01=Mobile Home Park; 02=Recreational Vehicle Park; 04=Camps

Source: Hendry County Public Health Unit, May 1998.

Licensed Migrant Labor Camps

Through the assistance of the Area Housing Commission, the County was able to construct a 114 unit facility for migrant workers known as Green Tree Village. Green Tree Village is primarily concerned with providing seasonal housing for farmworkers during the harvest season. Nearly 200 farmworkers reside at this facility which also offers family accommodations. Voucher subsidies are offered to those who have difficulty paying rent. To date, Green Tree Village is the only subsidized facility located in unincorporated Hendry County. Furthermore, the Area Housing Commission has projected that in the next seven to ten years approximately 100 to 120 units will be needed annually. The current demand is between 40 to 50 units per year.

Table V- 11

DOH Permitted Migrant Labor camps and Farm Labor Housing Facilities*, 1995 Hendry County

DOH Permitted Camps	2,363
Florida Farm Labor Housing Units	
Number of Units	50
Capacity**	200
Other MW Housing	0
Total Capacity	2,563

*(Section 514/516)

**Assumes 4 persons per unit.

Source: Shimberg Center for Affordable Housing, University of Florida, 1995.

Mira Verde is another facility that began construction in 1998 and provides housing to agricultural workers. When completed, the facility will include 140 dwelling units with a carrying capacity of 560 with four workers per unit.

According to Table V-12, 1995 Demand and Need for Migrant Farmworker Housing, there were 10,270 total migrant workers in Hendry County, with a demand for 2,468 dwelling units. This figure appeared rather high because only DOH permitted facilities were introduced into the equation for capacity of migrant worker housing. As a result, facilities not licensed by DOH were not included even though migrant workers may be residing someplace. DOH requires facilities that house more than five (5) migrant workers to obtain licensing. Since not all facilities do this, the accurate capacity total for migrant worker housing is underestimated.

Table V-12
Demand and Need for Migrant Farmworker Housing, 1995
Hendry County

Number of Accompanied Migrant Workers	2,978
Number of Accompanied Migrant Worker Households	1,354
Total Accompanied Migrant Workers & Household Members	5,145
Number of Unaccompanied Migrant Workers	7,292
Total Migrant Workers	10,270
Demand: Migrant Workers & Household Members	12,437
Capacity: Migrant Worker Housing	2,563
Need (Capacity minus Demand)	2,468

Source: Shimberg Center for Affordable Housing, University of Florida, 1995.

In January 1998, the Southwest Florida Regional Planing Council along with the Institute of Food and Agricultural Science (IFAS) at the University of Florida, conducted a study to determine farmworker housing and social infrastructure needs to support agricultural growth in Southwest Florida. Data collected from this study determined that roughly 34,000 farmworkers reside in Southwest Florida, particularly in Collier, Hendry, Lee, Charlotte, and Glades County¹. The study should provide a basis to make projections on future agricultural production patterns through 2010, labor requirements for projected agricultural output, and an assessment of the impact of increased labor requirements upon housing, educational, and health and social infrastructure investments. Based on the findings, Hendry County accounted for 22% or 7,500 farmworkers that reside in the County. The IFAS study concluded that approximately 960 housing units would be needed to accommodate the growing farmworker population in Hendry County.

¹Farmworkers in Southwest Florida, Sept. 1998, University of Florida, Southwest Florida Research and Education Center; Southwest Florida Regional Planning Council.

1 *Licensed Group Homes and Foster Care Facilities*

2
3 "Group homes" are facilities which provide a living environment for unrelated residents who
4 operate as the functional equivalent of a family. These homes may include such supervision and care
5 as necessary to meet the physical, emotional and social needs of the residents. Group homes are not
6 nursing homes, but may serve broader needs. Adult congregate living facilities (ACLF) are
7 considered group homes. There are no DOH licensed group homes in the unincorporated area of
8 Hendry County. There are two DOH licensed ACLFs in the City of LaBelle.

9
10 "Foster care facilities" are facilities which house foster residents and provide a family living
11 environment for residents. These may include children or adult residents. There are 18 DOH licensed
12 foster care facilities within Hendry County

13
14 **Table V-13**
15 **Group Homes, Day Cares, and Foster Homes**
16 **Hendry County, Florida - 1998**

17	Permit	Location	Name	Type
18	26-51-00011	Clewiston	Harlem Academy Day Care	04
19	26-51-00012	Clewiston	First Baptist church Pre-School	04
20	26-51-00013	Clewiston	Beginning Steps Learning Center	04
21	26-51-00014	Clewiston	Rainbow Preschool	04
22	26-51-00015	Clewiston	Noah's Ark Preschool	04
23	26-51-00016	Clewiston	Mother goose Day Care Center	04
24	26-51-00017	Clewiston	Little Rascals Day Care Center	04
25	26-51-00018	Clewiston	The Learning Tree	04
26	26-51-00019	Clewiston	Little Angels Pre-School	04
27	26-51-00020	Clewiston	ABC - 123	04
28	26-51-00021	Clewiston	Sunrise Comm of H/Glades	02
29	26-51-00022	Clewiston	Kid's Town USA	04
30	26-51-00041	Clewiston	Clewiston Health Care Center	10
31	26-51-00043	Clewiston	Dolly Sue Hester	14
32	26-51-00044	Clewiston	Sharon Lawrence	14
33	26-51-00045	Clewiston	Pricella Ghans	14
34	26-51-00048	Clewiston	Carmen & Charles Brown	14
35	26-51-00049	Clewiston	Cynthia & Berisford Campbell	14
36	26-51-00050	Clewiston	Linda & Robert Lyvers	14
37	26-51-00051	Clewiston	Addie Sneed	14
38	26-51-00052	Clewiston	Judy Vann	14
39	26-51-00053	Clewiston	Sylvia Watson	14
40	26-51-00054	Clewiston	Uriah & Arthuriene Watson	14
41	26-51-00055	Clewiston	Clewiston Youth Dev. Academy	12
42	26-51-00060	Clewiston	Saganaw Group Home	01
43	26-51-00063	Clewiston	Deborah Castleberry	14
44	26-51-00000	LaBelle	Aunt June's Day Care	04
45	26-51-00001	LaBelle	Caloosa Baptist Pre-School	04

Permit	Location	Name	Type
26-51-00002	LaBelle	Children's Garden of LaBelle	04
26-51-00003	LaBelle	Community Christian School	12
26-51-00004	LaBelle	East Coast Migrant Headstart	04
26-51-00005	LaBelle	Mattice Day Care	04
26-51-00006	LaBelle	Mom's Place Day Care	04
26-51-00007	LaBelle	Granny Beck's Day Care	04
26-51-00008	LaBelle	LaBelle Child Dev. Cen. I	04
26-51-00009	LaBelle	LaBelle Child Dev. Cen. II	04
26-51-00010	LaBelle	LaBelle Program Center	04
26-51-00023	LaBelle	Craig & Tonya Edgerton	14
26-51-00024	LaBelle	Knott Group Home	01
26-51-00025	LaBelle	Johnson Group Home	01
26-51-00026	LaBelle	Jerry and Rachel Curtis	14
26-51-00035	LaBelle	Oakbrook of LaBelle	10
26-51-00037	LaBelle	Kingshouse Retirement Home	01
26-51-00056	LaBelle	Thomas & Friends	04
26-51-00057	LaBelle	Thompson, Tim & Katherine	14
26-51-00058	LaBelle	McLain, Tracy & Tammy	14
26-51-00059	LaBelle	Kersey, William & Dorothy	14
26-51-00061	LaBelle	Stanton, John & Mary	14
26-51-00064	LaBelle	Boland, Erik & Sharon	14
26-51-00066	LaBelle	Cedena, Anibal & Carmen	14

Type: 01 = ALF; 02 = Adult Day Care Facility; 04 = Day Cares; 10 = Nursing Homes; 09 = Hospitals; 12 = Private Schools; 14 = Foster Care.

Source: Hendry County Public Health Unit, May 1998.

Historically Significant Housing

There is no housing in Hendry County which is listed on the National Register of Historic Places. There is one house, referred to as the "Hendry-Goodno House" listed in the Florida Master File as historically significant in Hendry County. However, this house is located in Glades County.

GOVERNMENT ASSISTED HOUSING

Table V-14 lists the federally assisted housing in Hendry County. The "Section 8 Existing" program subsidizes part of the rent for qualifying lower-income families living in existing housing units determined to be safe, sanitary and decent according to federal criteria. Twenty-five units countywide are listed in this program. "Public Housing" is government-owned housing rented to qualifying low income families. There are thirty-five units listed in this program. Through the USDA program, 114 farmworker housing units were constructed and completed in 1992. These units are available to individuals who work in the agricultural industry that qualify for assistance.

Table V-14
Renter-Occupied Assisted Housing
Hendry County, Unincorporated Area

Location	Program	Number of Units
Countywide	Section 8	20
	Existing	5
Big Cypress Reservation	Public Housing	50
	(HUD)	25
Fifth Street, Harlem (Clewiston Area)	Rent Supplement	23
	Section 221d3	63
Greentree Village	USDA	40
		114

Source: Hendry County Public Health Unit, May 1998.

PROJECTED HOUSING DEMAND

Total Demand

Housing projections made by the County are higher with approximately 17,066 housing units required by 2010. The County assumes farmworkers housing will be included in the demand for housing especially with the increase of agricultural production. While these projections may be somewhat liberal, it is accurate to say that the County has been growing steadily by four percent annually.

Table V-15
Projected Demand and Need for Housing

	Est. 1995		Projected Demand						Projected Need					
	Total Units		2000		2005		2010		2000		2005		2010	
Hendry County	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF
Clewiston	1,616	578	1,840	657	1,899	677	1,955	698	224	79	283	99	339	120
LaBelle	1,324	102	1,216	94	1,339	104	1,467	114	(108)	(8)	15	2	143	12
Unincorporated	6,168	153	7,471	184	8,288	204	9,099	224	1,303	31	2,120	51	2,931	71
County Total	9,108	833	10,527	935	11,526	985	12,521	1,036	1,419	102	2,418	152	3,413	203

Note: Household estimates and projections for 'All Households' are estimated separately, therefore owner and renter households do not add up to total households; the differences are due to rounding and are minor. The 'County Total' of households is a sum of jurisdictions.

Key: SF = Single Family
MF = Multi-Family

Source: Shimberg Center for Affordable Housing at the University of Florida, 1998.

Rural and Migrant Farm Labor Housing

Hendry County is a rural and agricultural county. As such, rural and farmworker households and families are typical. In Chapter II, Future Land Use, the "Seasonal Population" was estimated to include a significant migrant farm labor component. This was based on the known capacity of the

1 DOH licensed labor camps (2,563)². Seasonal workers are utilized extensively to harvest citrus,
2 vegetables and sugar cane, and many of these workers are migrants.
3

4 It was mentioned in Chapter II that sugar cane agriculture uses seasonal migrant labor
5 through a federal program that requires specific housing and care for the workers, and these workers
6 have little other effect on the community. The impact of these seasonal workers was considered
7 negligible.
8

9 However, both citrus and vegetable harvesting do utilize migrant farmworkers that become
10 a part of the community while working in Hendry County. Based on the agricultural data, it can be
11 estimated that for 1998 a total of approximately 7,500 migrant workers served citrus and vegetable
12 agriculture during the winter peak season.
13

14 Further, it is known that some additional family members not serving as farm labor
15 accompany the migrant workers, but sufficient information is currently lacking to estimate their
16 numbers. (Some families have more than one farmworker). However, it is known that some families
17 move into Hendry County in time to enroll children in school, and extend their stay the school year
18 ends.
19

20 Although these migrants work in the Hendry County fields and groves, it is probable that a
21 number of them make their temporary residences outside of Hendry County (most probably in Lee
22 County and Collier County, especially in the Immokalee area). It is conservatively estimated that
23 approximately 22% of these workers reside outside Hendry County.
24

25 Many of these represent married couples, and some might even represent the adult children
26 of some of the couples. Also, as pointed out above, these figures do not include the spouses or other
27 children not among the workers. Therefore, it is difficult to determine housing units needed based
28 on these migrant population projections. The magnitude of the demand, however, is sufficiently clear
29 that special housing consideration must be given to the migrant farm labor issue, and special housing
30 for these workers should be sought. The Hendry County Area Housing Commission has established
31 this issue as its highest priority. Listed below, in Table V-16, are the Migrant Housing Facilities
32 licensed by the Department of Health in Hendry County.
33

Table V-16
Migrant Housing Listing - 1998

Permit No.	Location	Name	Type	Capacity
26-52-00001	LaBelle	A & M Martinez Labor Camp	01	24
26-52-00003	LaBelle	Alvarado, Romana Rentals	01	6
26-52-00004	LaBelle	Aguilar, Pedro Rentals	01	6
26-52-00005	LaBelle	Alvar R. G. Rentals	01	10
26-52-00006	LaBelle	Alvar R. G. Rentals II	01	6

²The data and information from the agricultural community is one of the series of unpublished agriculture reports of Hendry County Extension Agency (May 1990). The capacity of the DOH licensed camps is as reported by the Department of Health, May 1998..

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	Permit No.	Location	Name	Type	Capacity
1	26-52-00008	LaBelle	Bedoya, Rosario Harvesting I	02	10
2	26-52-00009	LaBelle	Bhagwandin Rental	01	12
3	26-52-00010	LaBelle	Carmona, Eliberto Rentals	01	10
4	26-52-00011	LaBelle	Cisnero, Joe Rentals	01	5
5	26-52-00013	LaBelle	City Ditch Rentals - F. Powers	01	10
6	26-52-00014	LaBelle	C & M Rentals - M. Ayala	01	14
7	26-52-00015	LaBelle	Cornejo/Munoz Rentals	01	5
8	26-52-00016	Clewiston	Country Side Real Estate #1	01	20
9	26-52-00017	LaBelle	A. Duda & Sons Labor Village	02	506
10	26-52-00018	LaBelle	Elizondo's Trailer Park	01	79
11	26-52-00019	LaBelle	Escamilla, Tomasa Rentals	01	5
12	26-52-00020	LaBelle	Espinoza, M. Rentals	01	20
13	26-52-00021	LaBelle	Espinoza, M.#2	01	10
14	26-52-00022	LaBelle	Espinoza, M. - Collins	01	10
15	26-52-00023	LaBelle	Evelyn White - Court I	01	68
16	26-52-00024	LaBelle	Evelyn White - Court II	01	18
17	26-52-00025	LaBelle	Evelyn White - North	01	5
18	26-52-00026	LaBelle	Gallegos, Guillermo I	01	10
19	26-52-00027	LaBelle	Gallegos, John & Helen	01	27
20	26-52-00031	LaBelle	Gonzalez, Isidora LC #1	02	19
21	26-52-00032	LaBelle	Granados, Aurello Rentals	01	11
22	26-52-00033	LaBelle	Hendry St. Rentals - P. Premdas	01	12
23	26-52-00034	LaBelle	Hernandez, Gilbert Rentals	01	16
24	26-52-00036	LaBelle	Lancy Gayle Rentals #1	01	44
25	26-52-00037	LaBelle	Lancy Gayle Rentals #2	01	18
26	26-52-00038	LaBelle	Madrid, Antonio Rentals	01	5
27	26-52-00039	LaBelle	Madrid, Felix Rental #1	02	11
28	26-52-00040	LaBelle	Martinez, Tracy Rentals	01	33
29	26-52-00042	LaBelle	Maldonado, Maria Rental	01	21
30	26-52-00043	LaBelle	Montanez, Eliodoro Rentals	01	5
31	26-52-00044	LaBelle	Morales, Alicia Rentals	01	7
32	26-52-00045	LaBelle	Nipper, Ray Rentals #1	01	20
33	26-52-00046	LaBelle	Nipper, Ray Rentals #2	01	6
34	26-52-00047	LaBelle	Vicki T. P. - J. Barrientez	01	69
35	26-52-00050	LaBelle	Bedoya, Rosario Harvesting II	02	6
36	26-52-00051	LaBelle	Powers, Eric #1	01	36
37	26-52-00052	LaBelle	Powers, Eric #2	01	15
38	26-52-00053	LaBelle	Ramirez, Angel Rental	01	6
39	26-52-00055	LaBelle	Reyes, J. Martin Rentals	02	18
40	26-52-00058	LaBelle	Rodrguez Labor Camp	02	6
41	26-52-00060	LaBelle	Shawnee Rentals - F. Powers	01	7
42	26-52-00061	LaBelle	Spencer K - Larry Spencer	01	41
43	26-52-00063	LaBelle	Spencer N - Larry Spencer	01	0
44	26-52-00064	LaBelle	Spencer South - Larry Spencer	01	101

Adopted: March 1991
Amended: November 9, 1999

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	Permit No.	Location	Name	Type	Capacity
1	26-52-00065	Clewiston	Sugarland Harvesting Co., Inc.	02	12
2	26-52-00066	LaBelle	Hermanos Luna, Inc. I	02	90
3	26-52-00067	LaBelle	Hermanoz Luna, Inc., II	02	90
4	26-52-00068	LaBelle	Hermanoz Luna, Inc. III	02	90
5	26-52-00070	Clewiston	United States Sugar Corp	02	50
6	26-52-00071	LaBelle	Wison Court - Larry Spencer	01	30
7	26-52-00073	Clewiston	Zipperer Farms I	02	24
8	26-52-00074	Clewiston	Zipperer Farms II	02	12
9	26-52-00076	LaBelle	Sanchez, T & I Rentals	01	7
10	26-52-00077	LaBelle	Persaud, Seranie Rentals	01	10
11	26-52-00078	LaBelle	Madrid, Guillermo Rental	01	6
12	26-52-00079	LaBelle	Leyva, Paula Rentals	01	7
13	26-52-00080	LaBelle	Tropicana Rentals - F. Powers	01	10
14	26-52-00081	LaBelle	Madrid, Felix Rental #2	02	5
15	26-52-00082	Clewiston	Country Side Real Estate #2	01	17
16	26-52-00084	Clewiston	Palm Parc West - Darren Smith	01	48
17	26-52-00086	LaBelle	Gonzalez, Alicia Rentals	01	6
18	26-52-00087	LaBelle	Nipper, Ray Rentals #3	01	5
19	26-52-00088	LaBelle	Vargas, Jose Rental #1	01	5
20	26-52-00089	LaBelle	Rimes, Bruce Rentals #1	01	22
21	26-52-00090	LaBelle	Marroquin, Ted Rentals	01	5
22	26-52-00092	LaBelle	Arriola, Norma Rental	01	6
23	26-52-00095	LaBelle	Powers, Danny Rental	01	5
24	26-52-00097	LaBelle	Bustamante, Sergio & Audelia	02	16
25	26-52-00099	LaBelle	Garza, Luis Rental	01	6
26	26-52-00101	LaBelle	Gonzalez, Isidora LC #2	02	12
27	26-52-00102	LaBelle	Olivares, Romulo Rentals	02	5
28	26-52-00103	LaBelle	Powers, Eric #2	01	6
29	26-52-00106	Clewiston	Hill, William Apartments	01	19
30	26-52-00107	LaBelle	Calzada, Porfilio Rental	02	12
31	26-52-00108	LaBelle	Carmona, Ernesto Jr. Rental #1	02	6
32	26-52-00109	LaBelle	Carmona, Ernesto Jr. Rental #2	02	5
33	26-52-00115	LaBelle	Castro, Angel Rental	01	5
34	26-52-00116	LaBelle	Vargas, Jose Rental #2	01	6
35	26-52-00118	LaBelle	Choctaw Rental - F. Powers	01	5
36	26-52-00119	Clewiston	Oquendo, Larzao Rentals	01	7
37	26-52-00125	LaBelle	Bryant's, Eva Rentals	01	11
38	26-52-00127	LaBelle	Escobedo M. Rental	01	8
39	26-52-00128	LaBelle	Grimaldo, Carmela Rentals	01	18
40	26-52-00129	LaBelle	Montanez, Eliodoro #2	01	6
41	26-52-00130	LaBelle	Miners, Greg Rentals #2	01	5
42	26-52-00131	LaBelle	Rios, Elizabeth Rentals	01	5
43	26-52-00132	LaBelle	J&A Rental - Lina Avila	01	5
44	26-52-00134	LaBelle	Luna, Samuel Rental #1	01	5

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	Permit No.	Location	Name	Type	Capacity
1	26-52-00135	LaBelle	Madrid, Felix Rental #3	02	5
2	26-52-00137	LaBelle	Moreno, Leandro Rentals	01	6
3	26-52-00138	LaBelle	Morales, Raul Rentals	01	5
4	26-52-00139	LaBelle	Moreno, Tiburcio Rental #1	01	6
5	26-52-00140	LaBelle	Nunez, Migue's Rentals	01	5
6	26-52-00141	LaBelle	Luna, Samuel Rental #2	01	5
7	26-52-00142	Clewiston	N. Villa Rentals	01	7
8	26-52-00144	LaBelle	Fuentes, Antonia Rentals	01	5
9	26-52-00147	LaBelle	Vasquez, Margarita Rentals	01	5
10	26-52-00149	LaBelle	Dunaway, Lois Rentals	01	11
11	26-52-00150	LaBelle	Rodriguez, Jamie Rentals	02	5
12	26-52-00152	LaBelle	Powers, Eric #4	01	5
13	26-52-00154	LaBelle	Sullivan, L. Rental	01	10
14	26-52-00156	LaBelle	Madird, Irieno Rentals	02	5
15	26-52-00157	LaBelle	Martinez, Isabel Rental	01	6
16	26-52-00158	LaBelle	Marcotte Rental #2	01	7
17	26-52-00159	LaBelle	Marcotte Rental #1	01	5
18	26-52-00160	LaBelle	Raya, Jose Luis Rentals	02	5
19	26-52-00161	LaBelle	Cantu, Noe A. Rental	02	8
20	26-52-00163	Clewiston	Martinez, Tito Rooms	01	5
21	26-52-00165	LaBelle	Moreno, Alfonso Rental	01	5
22	26-52-00166	LaBelle	Delgado Rental 31	02	11
23	26-52-00168	LaBelle	Heuer, Clark Rentals	01	16
24	26-52-00169	LaBelle	Moreno, Manuel Rentals	02	6
25	26-52-00170	LaBelle	Martin-Stephenson Park	01	9
26	26-52-00171	LaBelle	A. Barrios Rental	01	5
27	26-52-00173	LaBelle	Delgado Rental 32	02	6
28	26-52-00174	LaBelle	Lopez, Hector Rental	01	12
29	26-52-00175	LaBelle	Bedoya, Rosario Harvesting III	02	6
30	26-52-00176	Clewiston	Hernandez Rooms	01	8
31	26-52-00177	LaBelle	Bedoya, Rosario Harvesting IV	01	12
32	26-52-00178	LaBelle	Lozano, M. Rental	01	5
33	26-52-00179	LaBelle	Marines Rental - J. Marines	01	5
34	26-52-00180	Clewiston	Smith, Darren	01	16
35	26-52-00181	LaBelle	Marquez Rental	01	7
36	26-52-00182	LaBelle	Ellis Apartment	01	5
37	26-52-00183	LaBelle	L&D Rentals	01	12
38	26-52-00184	Clewiston	Wildes Apts.	01	14
39	26-52-00185	LaBelle	Marcotte Rental #2	01	5
40	26-52-00186	LaBelle	Marcotte Rental #4	01	6
41	26-52-00187	LaBelle	Gatch Mobile Home	01	5
42	26-52-00188	Clewiston	The Gatherings	01	18
43	26-52-00190	Clewiston	Aragon Rentals	01	6
44	26-52-00191	Clewiston	Acosta Rentals	01	6

Adopted: March 1991
Amended: November 9, 1999

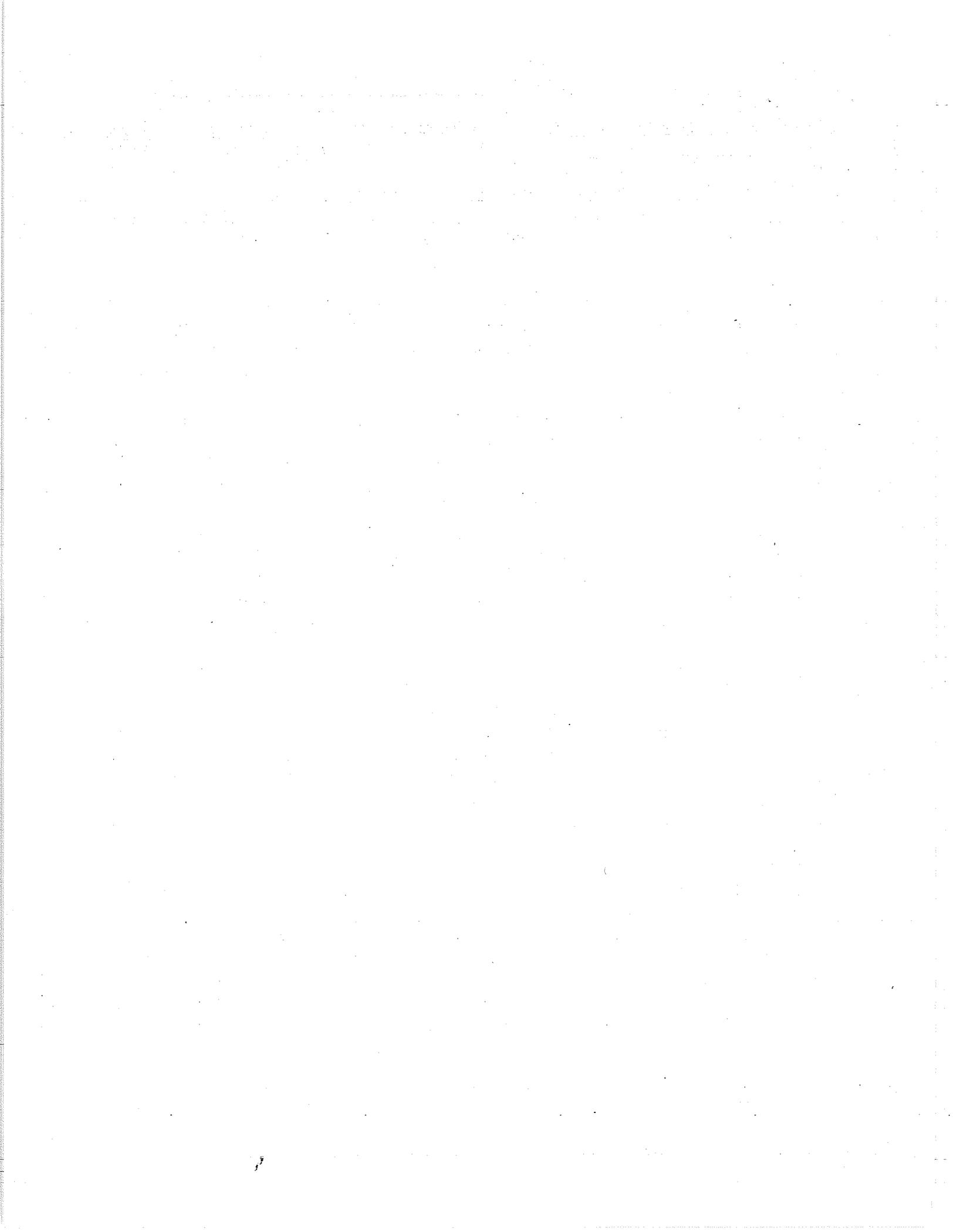
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Permit No.	Location	Name	Type	Capacity
------------	----------	------	------	----------

			Total	2,491
--	--	--	-------	-------

Types: 01 = Migrant Residential Housing; 02 = Migrant Labor Camp
Source: Hendry County Public Health Unit, May 1998.

1
2
3
4



**VI. Conservation Element
Data & Analysis Support**

1 **Introduction**

2
3 The purpose of the data analysis for the Conservation Element is to identify and analyze
4 various natural resources, and to project their potential for conservation, use or protection. Part of
5 the analyses for this chapter has been completed in the Potable Water, Drainage and Natural
6 Groundwater Aquifer Recharge sub-elements. Reference in this chapter to these sub-elements is
7 made as applicable.

8
9 **State Requirements**

10
11 The "Local Government Comprehensive Planning and Land Development Regulation Act"
12 (Chapter 163 F.S.) specifies that the Conservation Element of the Comprehensive Plan is for:

- 13
14 1) The conservation, use and protection of natural resources, including water, air, water
15 recharge areas, wetlands, waterwells, estuarine marshes, soils, beaches, shores,
16 floodplains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, and other
17 natural and environmental resources. (Note that estuarine marshes, beaches, bays, and
18 harbors are coastal, and not applicable for Hendry County.)
19
20 2) Mapping of the following:
21
22 – Existing and planned waterwells and cones of influence where applicable
23 – Rivers, bays, lakes, floodplains, and harbors
24 – Wetlands
25 – Minerals and soils
26

27 The Act recognizes that Chapter 9J-5 F.A.C., the "Minimum Criteria for Review of Local
28 Government Comprehensive Plans and Determination of Compliance", will provide compliance
29 requirements for the Comprehensive Plan. For the Conservation Element 9J-5.013 specified the
30 following data requirements:

- 31
32 1) To identify and analyze following natural resources where present within the local
33 government's boundaries (including only those applicable to Hendry County):
34
35 – Rivers
36 – Lakes
37 – Wetlands
38 – Air (quality information from FDEP)
39 – Floodplains
40 – Commercially Valuable Minerals
41 – Soil Erosion Problems
42 – Wildlife Habitats
43 – Vegetative Communities
44

- 1 2) To identify dominant wildlife and plant species present and species listed by federal,
2 state and local government agencies as endangered, threatened or species of special
3 concern.
4
5 3) For each of the natural resources, to identify existing commercial, recreational or
6 conservation use, to identify the known pollution problems (including hazardous
7 wastes), and to identify the potential for conservation, use or protection.
8
9 4) To identify current and projected water needs for a 10-year period based on demands
10 for industrial, agricultural, and potable water use.
11
12 5) To identify existing levels of water conservation, use and protection, and applicable
13 policies of the South Florida Water Management District.
14

General

15
16
17 Some of the requirements for the data analysis as specified above have been met in other
18 sections of this Data Analysis. These include the "Potable Water", "Drainage", and "Natural
19 Groundwater Aquifer Recharge" sub-elements of Chapter IV. The following discussion is redundant
20 in part but generally references the appropriate sections for specific topics. Since the primary purpose
21 of the Conservation Element is to identify natural resource potentials for conservation, use and
22 protection, the focus in this Chapter is on these potentials as they occur in Hendry County.
23

Caloosahatchee River¹

24
25
26 The Caloosahatchee River runs approximately 9.5 miles within Hendry County. The River
27 is part of the Intracoastal Waterway System which traverses from the Gulf of Mexico to the Atlantic
28 Ocean. The headwaters of the River were once in Hendry County, but through channelization of the
29 River, and the addition of canals, the existing River now flows westward from Lake Okeechobee.
30

31 Spoil material from the channelization of the Caloosahatchee River forms a nearly
32 continuous levee along the banks. Water levels are controlled by a series of dams and lock gates.
33 None of these are located within Hendry County. The average daily discharge over a 17-year
34 recording period is 1,540 CFS (cubic feet per second).
35

36 The South Florida Water Management District (SFWMD) monitors the water quality of the
37 Caloosahatchee River. There are no water quality monitoring stations for the Caloosahatchee River
38 within Hendry County. There is one upstream station in Glades County at the Ortona Lock, and one
39 downstream station in Lee County where the River enters the estuary system (saltwater). The
40 Caloosahatchee River is a Class III river according to the surface water quality classification system

¹Sources of Caloosahatchee River description are SFWMD, Data Documentation for Hendry County, 1989 [R5]; SWFRPC, Southwest Florida: A Description of the Region, 1987 [R1]; and Florida State University, Water Resources Atlas of Florida, 1984 [R18].

1 of the Florida Department of Environmental Protection (FDEP). The FDEP system sets quality
2 standards. For surface water bodies, if not met a water quality problem is determined to exist. They
3 are set according to the beneficial uses of the water body. Class III represents benefits as "recreation,
4 fish and wildlife". The scale runs from Class I (potable water) to Class V (industrial).
5

6 The Caloosahatchee River is under the management and coordination of the SFWMD.
7 Hendry County has land use development control in conjunction with the SFWMD permitting of
8 water withdrawals and drainage works affecting the River. The Florida Department of Environmental
9 Protection (FDEP) and the U.S. Environmental Protection Agency (EPA) establish standards of
10 water quality. FDEP also has authority over wetlands connected to State waters, as does the U.S.
11 Army Corp of Engineers (COE).
12

13 The primary role of Hendry County concerning the Caloosahatchee River's conservation, use
14 and protection is cooperation and coordination with these agencies, especially SFWMD.
15

16 Current uses of the Caloosahatchee River include recreational boating, fishing, and some
17 swimming, and it also serves as wildlife habitat. These uses will probably continue in the future.
18

19 **Everglades Agricultural Area (EAA)**

20
21 The Everglades Agricultural Area would serve as a barrier to reduce the impacts of
22 development to the Everglades, reduce levee seepage from the Everglades, increase groundwater
23 recharge, enhance drinking water supplies, improve the Everglades' water supply, and enhance
24 thousands of acres of wetlands that once comprised the Everglades. The project involves using
25 excess stormwater to reduce the seepage loss from the East Coast Protective Levee. Management
26 activities proposed for the marshes propose hydroperiod restoration and the removal of exotic
27 vegetation for the enhancement, preservation and maintenance of the wetlands.
28

29 **Lake Okeechobee²**

30
31 Approximately four miles of the south shore of Lake Okeechobee lies in Hendry County. The
32 shape of Hendry County in this area forms a triangle extending to the center of the Lake. Lake
33 Okeechobee is diked along this shoreline with the Herbert Hoover Dike. (Refer to the "Drainage"
34 sub-element for a description of the Lake and projects related to it.)
35

36 Lake Okeechobee is approximately 681 square miles in size. It is quite shallow, but the
37 volume is enormous given its overall size and its capacity is approximately 932 billion gallons. The
38 Lake is a significant regional source for potable water (treated) and irrigation. Most of the supply for
39 the U.S. Sugar Corporation's water treatment system for the Clewiston area is Lake Okeechobee.

²Sources of description are SFWMD, Data Documentation for Hendry County, 1989 [R5]; SWFRPC, Southwest Florida: A Description of the Region, 1987 [R1]; and Florida State University, Water Resources Atlas of Florida, 1984 [R18]; Edward DeBelleuve, Hendry County: An Agricultural District in a Wetland Region, Center for the Wetlands, University of Florida, 1976 [R9].

1
2 Nearly 40% of water source for Lake Okeechobee is rainfall. The Kissimmee River is the
3 second largest source with approximately 30%. Various creeks, sloughs, and canals make up the
4 balance. The Lake has acted as both a source of water for irrigation during the dry months, and as
5 an overflow for draining land during the wet season.
6

7 Lake Okeechobee is under the management and coordination of the SFWMD. Hendry County
8 has land use development control in conjunction with SFWMD permitting of water withdrawals and
9 drainage works affecting the Lake. The Florida Department of Environmental Protection (FDEP) and
10 the U.S. Environmental Protection Agency (EPA) establish standards of quality. FDEP also has
11 wetland authority over connected wetlands, as does the U.S. Army Corp of Engineers (COE).
12

13 The primary role of Hendry County concerning Lake Okeechobee's conservation, use and
14 protection is cooperation and coordination with these agencies, especially SFWMD.
15

16 Current uses of Lake Okeechobee include recreational boating and fishing, and it also serves
17 as wildlife habitat. These uses will probably continue in the future.
18

19 Wetlands³

20
21 It was estimated that by the mid-1980's Hendry County had approximately 268.5 square miles
22 of freshwater wetlands. This represented 23% of the County's total land area. Figure VI-1 shows
23 generalized wetlands (wetland map available at scale of one inch equals two and one-half miles).
24 These wetlands are made up primarily of sloughs, many shallow ponds, marshes, and wet prairies.
25 The major wetlands are located in the Okaloacoochee Slough, the Big Cypress Swamp, and various
26 remnants of these and isolated marshes that have been impacted over the years. Most impacts have
27 come in the form of flood control, drainage for agricultural purposes, and other forms of land
28 development. These impacts were previously described in the "Drainage" sub-element.
29

30 Proposed developments for wetland areas are variously regulated by the SFWMD, the FDEP,
31 and the U.S. Army Corps of Engineers (COE). With such developments wetlands are either required
32 to be preserved or some form of mitigation utilized, so that the functioning of existing wetlands is
33 not lost. Wetlands serve a function as wildlife habitat. Wetlands also serve as drainage and retention
34 for surface water from rainfall and for drainage channeled from development. Wetlands are not
35 normally groundwater recharge areas, but the Big Cypress Swamp is an exception. Wetlands also
36 provide scenic benefits.
37

38 It has been estimated that around the year 1900, when the wetland systems of Hendry County
39 were still in relatively primitive states, approximately 63% of the land area was some type of

³Sources of description are SFWMD, Data Documentation for Hendry County, 1989 [R5]; SWFRPC, Southwest Florida: A Description of the Region, 1987 [R1]; and Florida State University, Water Resources Atlas of Florida, 1984 [R18]; Edward DeBellevue, Hendry County: An Agricultural District in a Wetland Region, Center for the Wetlands, University of Florida, 1976 [R9].

1 wetland. Some of these systems were drained or their patterns disrupted with the Lake Okeechobee
2 projects (refer to the "Drainage" sub-element), and drainage works (primarily canals) in the County
3 also altered some of the wetland systems. It was estimated that by the early 1950's half of the County
4 had been placed into intensive agricultural use. By the mid 1980's the land area of the County
5 devoted to intensive agriculture was still around 50%.

6
7 Agriculture is the dominant land use in Hendry County, and has rapidly been converting to
8 citrus production in recent years. Some improved pasture, rangelands, forested uplands, vegetable
9 crop areas, and sugar cane lands are being converted to citrus. Given the regulatory climate, and the
10 less suitable nature of wetlands for citrus production, agriculture in Hendry County may not currently
11 be a significant threat to wetlands.

12
13 The relatively slow population growth of Hendry County indicated little serious threat to
14 wetlands from residential development. Large areas have already been primed for development with
15 clearing, drainage work, and roads. Many of them still need some drainage work, but this is not
16 necessarily a threat to the existing wetland systems.

17
18 Because the functioning of the wetland systems in Hendry County is important to preserve,
19 protection must be afforded them. Serving much of this function are the SFWMD, FDEP, and COE.
20 As long as these agencies are effective in conserving the wetland systems, they should be supported
21 by the County. Hendry County efforts toward wetland protection should be tied to their efforts.

22 23 **Other Wetlands or Protective Areas**

24 25 *McDaniel Ranch*

26
27 McDaniel Ranch lies in District's L-3/L-4 Basin and drains south onto lands owned by the
28 Seminole Tribe of Florida and onto the Big Cypress National Preserve. Protecting the quality of the
29 water leaving McDaniel Ranch is vitally important to the health of the adjacent ecosystems. Much
30 of the ranch has been converted to improved pasture, and over the next 15 to 20 years, most of the
31 pasture will be converted to sugar cane. In spite of agricultural use, the preserve areas within the
32 easement consist of deep cypress swamps, hydric hammocks, and large expanses of broadleaf marsh
33 and wet prairie.

34
35 Restrictions in the conservation easement will prevent the owners from clearing additional
36 land for pasture or silviculture, excavation, or fertilization of areas other than existing improved
37 pastures. The greatest expanses of natural area are concentrated along the western and southern edges
38 of the ranch. The Florida Fish and Wildlife Conservation Commission, has identified this area as
39 critical habitat for the Florida panther and black bear. Incorporation of the preserve areas into the
40 diked detention areas for the surface water management system will enable some over-drained
41 wetlands to be inundated again.

42
43 Since the property will be sold as conservation easement rather than fee title, the landowners
44 will retain management responsibility. The ranch has been family-owned and managed for more than

1 60 years, and the natural areas are in very good condition. The landowner will be responsible for
2 continued treatment of exotic vegetation and prescribed burning. The District will conduct a baseline
3 environmental assessment to establish current environmental conditions so the agency can evaluate
4 the management program.

5
6 *Okaloacoochee Slough*

7
8 In 1996, the District purchased 21,000 contiguous acres in the project. It is anticipated that
9 CARL will acquire the remaining 8,000 acres.

10
11 In 1997, the District amended the Save Our Rivers (SOR) project boundary to include 1,920
12 acres that are the primary flowway for water moving from District-owned land in Okaloacoochee
13 Slough to other private land in Collier County. Sawgrass slough in the deep water areas, with a fringe
14 of hydric hammocks and wet flatwoods dominate the three sections.

15
16 The property is used as native range pasture and is very well managed. These lands would
17 be acquired only as conservation easement. Under the proposed conditions of the lease, the
18 landowners would be allowed to continue native range grazing, with no pasture improvement or
19 fertilization. They would be permitted to continue leasing the property for hunting. Continued
20 prescribed burning and exotic treatment programs will be requirements of the lease.

21
22 The vision for Okaloacoochee Slough is that it continues to be managed for its important and
23 natural resource values. Okaloacoochee Slough is a major headwater for Fakahatchee Strand and Big
24 Cypress National Preserve. Its extensive network of sloughs and isolated wetlands store wet-season
25 runoff from the surrounding uplands and provide year-round base flow to downstream natural areas.
26 The entire project contains more than 12,000 acres of largely undisturbed wetlands, which are
27 surrounded by oak and cabbage palm-dominated hydric hammocks.

28
29 The District anticipates that the Florida Division of Forestry will be the lead manager of the
30 site. Preliminary discussions have been held with the Division of Forestry and preparation of a
31 management plan will take place over the next one to two years.

32
33 Public access is very limited because of the deep sloughs that dominate the property. There
34 are still 8,000 acres remaining to be acquired through the CARL program. If that occurs, much more
35 upland acreage will become available for public use. See Figures VI-2 and VI-3.

36
37 **Floodplains**

38
39 Floodplains and flooding features of Hendry County are described in the "Drainage" sub-
40 element, and a generalized illustration of the 100-year floodplain is provided in Figure IV.D-3. Also
41 refer to the Future Land Use Analysis.

42
43 Hendry County is in the national flood insurance program administered by the Federal
44 Emergency Management Agency (FEMA). In accordance with FEMA requirements, the County

1 adopted special flood area regulations to cover the area designated as 100-year floodplain by FEMA
2 (Flood Insurance Rate Maps, 1982). A vast area of Hendry County falls within this area.
3

4 As previously discussed under the "Drainage" sub-element much of the County's area is
5 covered by local water management districts. In addition the County has established several
6 Municipal Service Benefit Units which, in part, will address localized drainage problems.
7

8 **Soils**

9
10 Refer to the "Drainage" sub-element and Figure IV.A-1.
11

12 **Air Quality**

13
14 The quality of the air in Hendry County is very good. The County is a nonattainment status
15 for no air quality categories. Hendry County has none of the air pollution generators associated with
16 coastal urban areas. FDEP continues to monitor the air quality in Hendry County and a
17 monitoring station is located at the Florida Sugar League, Inc. There are no point-sources of air
18 pollution, although sugar cane harvesting (during burns) is one non-point source increasing pollutant
19 levels. No 24-hour period has been monitored to be nonattainment.
20

21 **Vegetative Communities**

22
23 The generalized vegetative (plant) communities of Hendry County are shown in Figure VI-4
24 Land Cover. The predominant communities include grasslands and dry prairies. The less dominant
25 systems include the pinelands, the cypress swamps, freshwater marshes, wet prairies and areas
26 substantially disturbed by human activity.
27

28 Over a period of many years pines have been harvested for timber and pulpwood.
29

30 Although considerable land has been modified for crops, citrus, improved pasture, drainage
31 projects, and urban development, most of the major natural systems still function within the County.
32 Wetland systems still provide water storage, some aquifer recharge and drainage. The wetlands,
33 pinelands and cypress systems provide wildlife habitat. Also refer to the "Wetlands" discussion
34 above.
35

36 Plants of possible occurrence in Hendry County which are currently considered by federal
37 and state agencies to be endangered, threatened, or species of special concern are listed in Table
38 VI-1.
39

40 **Wildlife Habitat**

41
42 Although much of the vegetation, wetlands and historic drainage has been disturbed in
43 Hendry County, the County provides a variety of wildlife habitat. Within the major vegetative
44 communities, there are pinelands, oaks, wet and dry prairies, marshes, lakes and ponds. The

1 Caloosahatchee River and its banks and tributaries, and Lake Okeechobee and its shores, provide
2 water body habitat for wildlife. There is no current inventory of dominant wildlife species in Hendry
3 County. Mammals, reptiles, and birds of possible occurrence in Hendry County which are currently
4 considered by federal and state agencies as endangered (E), threatened (T) or species of special
5 concern (SSC) are listed in Table VI-2. There is no inventory of the occurrence of such species in
6 Hendry County, although the Florida Fish and Wildlife Conservation Commission (FFWCC) does
7 monitoring of some of these species. The spotting of a Little Blue Heron (SSC) is on the (FFWCC)
8 wading bird list.

9
10 Maps VI-5, VI-6, and VI-7 provide a general view of protected and significant natural
11 resources in the County. Maps VI-5 and VI-6 present an update from original habitat maps. It is to
12 be cautioned that these maps are not at a scale to be property specific, and should be viewed as a
13 regional view only.

14 15 **Commercially Valuable Minerals**

16
17 The most productive oil field in the South Florida Basin (generally south of the Tampa area)
18 lies in Hendry County. It has an estimated reserve of 50 million barrels, (SWFRPC, Southwest
19 Florida: A Description of the Region, 1987) [R1]. Hendry County may also have commercial
20 potential for natural gas production. Other commercially useful mineral resources include sand, sand
21 shell and marl. There may also be some limited limestone deposits [R1].

22 23 **Hazardous Wastes**

24
25 There are 13 hazardous waste generating sources within Hendry County, with U.S.
26 Environmental Protection Agency identification numbers (FDEP, July 1989). Four of these are in
27 the LaBelle area, six are in the Clewiston area, and the oil operations in the Felda area have three
28 identification numbers. The LaBelle area generators are the Florida Department of Transportation,
29 Florida Power and Light, a gasoline bulk plant, and a citrus operation. In the Clewiston area
30 generators are service stations, an automobile dealer, and an agricultural machinery dealer. Most of
31 the wastes are pesticide containers, waste paints, used solvents, batteries, and used motor oil. There
32 are no known significant pollution problems from hazardous wastes in the county.

33 34 **Water Use and Availability⁴**

35
36 According to the South Florida Water Management District (SFWMD), Hendry County's
37 population has increased by 32% from 22,393 in 1985 to 29,587 in 1995 (U.S. Bureau of the Census,
38 1990), and is projected to grow to 42,700 by 2020 (BEBR, 1998). Hendry County is one of the
39 fastest growing counties in agricultural production in Florida, especially in citrus. It is anticipated
40 that future growth in citrus acreage will take place, but at a much slower rate than was experienced

⁴Sources of water information: Refer to Chapter IV, "Potable Water" sub-element. Also, SWFRPC, Southwest Florida: A Description of the Region, 1987 [R1]; and SFWMD, Groundwater Resource Assessment of Hendry County, Florida (Technical Publication 88-12), 1988 [R12].

1 during the 1984 to 1992 period. The SFWMD is planning to carry out a study of possible future
2 water use, and the impact of such use on water resources in Hendry County. This study will be more
3 definitive of future impacts, and should allow more complete projections of future groundwater and
4 surface water use.

5
6 Chapter 163 F.S., the local comprehensive planning and land development legislation,
7 specifies that the land development regulations to follow the revised Comprehensive Plan must
8 provide protection criteria for potable water wellfields and locally designated environmentally
9 sensitive lands as designated in the Comprehensive Plan. The SFWMD is the basic source for data
10 and information detailing which lands need protection for groundwater resources. The SFWMD has
11 completed important steps toward these ends but has not yet specified such areas with enough detail
12 to support overall land development regulations for them. SFWMD is preparing a flow model which,
13 when completed, will allow locating the best source areas of groundwater quality and quantity.

14
15 The studies which have been conducted by SFWMD indicate that for irrigation purposes
16 (most of the water use in Hendry County) the Surficial Aquifer System has good quality throughout
17 the County. The southern and central areas of the County have the greatest potential for water
18 quantities for all uses. The northcentral and northeast areas of the County have lesser quantities, but
19 sufficient for moderate agricultural development and small public water supplies.

20
21 The Surficial Aquifer System in the northwest area of the County has poor development
22 potential due to poorer quality and limited water producing units within the aquifer system in the
23 area. The area does have sufficient quality and quantities for small scale withdrawals.

24
25 The Intermediate Aquifer System has a small area just east of LaBelle (in Port LaBelle area)
26 with the greatest potential for water quantities. The extent of potential in the area is not presently
27 known due to limited testing in the area. Most of the western area of Hendry County is considered
28 to have moderate development potential utilizing the Intermediate Aquifer system. Small to medium
29 sized developments could be supported. However, most citrus production in this area utilizes the
30 Intermediate Aquifer System (Sandstone Aquifer), so in the western portion of the County this
31 aquifer system may be approaching its allocation limits.

32
33 As with the Surficial Aquifer System, in the northwest area of the County the Intermediate
34 Aquifer System also has low development potential. Only small scale and individual use can be
35 supported. Chloride concentrations are also somewhat high in the area south of the Caloosahatchee
36 River, further limiting potential. The Sandstone Aquifer is the most productive of the Intermediate
37 Aquifer System, and it disappears in the eastern area of the County. Therefore, the Intermediate
38 Aquifer System has little potential in the eastern area. There is also little potential use of this system
39 in the central and southern areas of the County.

40
41 Hendry County is under the authority of the South Florida Water Management District for
42 restrictions of water use and conservation measures.

Table VI-1
Flora: Possible Occurrence of Endangered, Threatened, or Special Concern Species
Hendry County

Common Name	FDA Classification	Habitat	Scientific Name
Climbing Dayflower	T	Swamps/Wet Hammocks	Commelina gigas
Okeechobee Gourd	E	Disturbed Lands	Cucurbita Okeechobeensis
Edison's Ascyrum (Edison St. John's Wort)	T	Marshes/Low Prairies	Hypericum Edisonsian
Twisted Airplant	T	Scrub/Hammocks	Tillandsia Flexuosa

Legend:

FDA - Florida Department of Agriculture and Consumer Services.
E - Endangered
T - Threatened

Source: SWFRPC, Hendry County.

Table VI-2
Fauna: Possible Occurrence of Endangered, Threatened and Special Concern Species
Hendry County

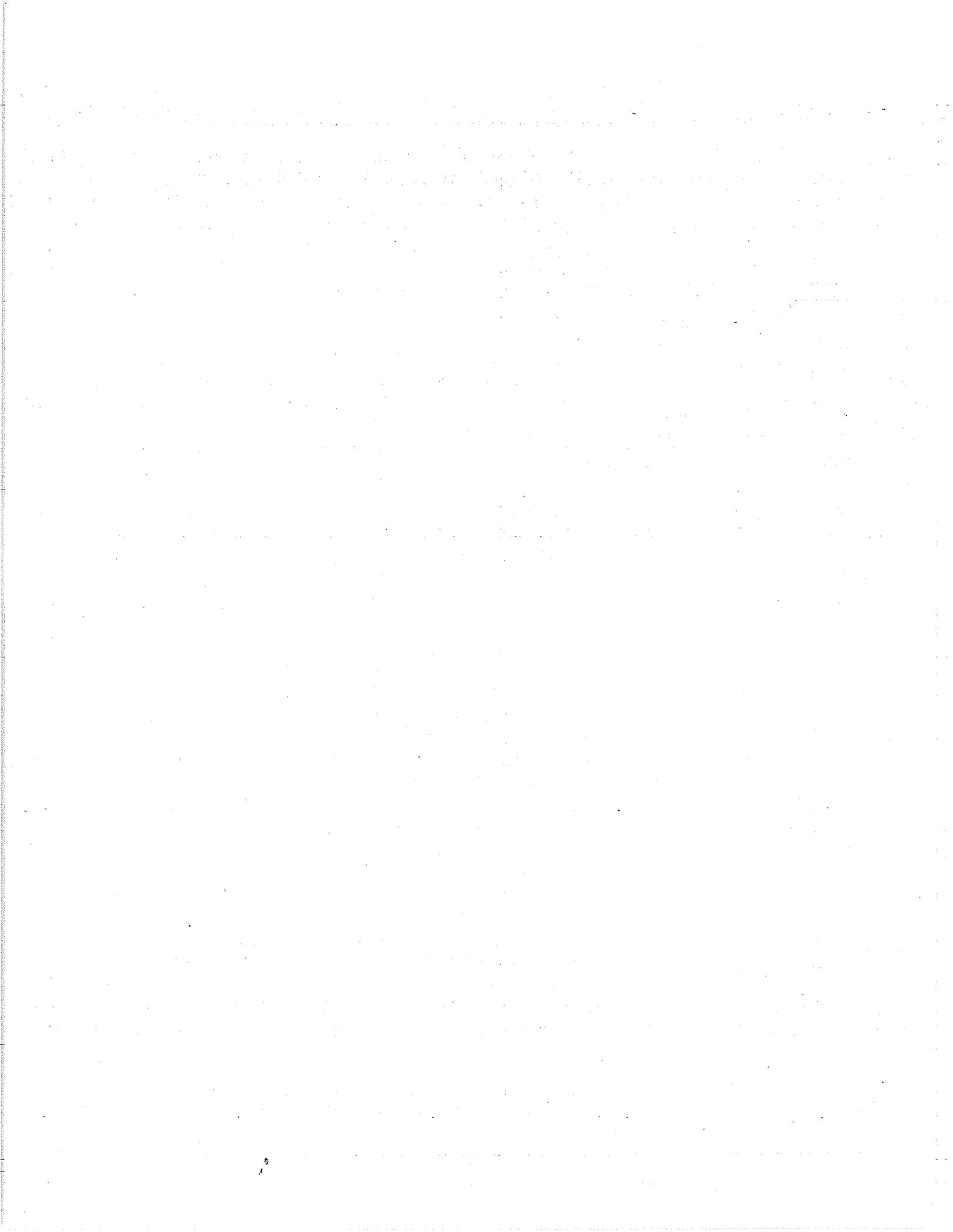
Common Name	Classification FGFWFC/ USFWS	Habitat	Scientific Name
Mammals			
Mangrove Big Cypress Fox Squirrel	T/NL	Mature Pine	Sciurus niger avicennia
Florida Panther	E/E	Follow Deer	Felis concolor coryi
Sherman's Fox Squirrel	SSC/NL	Oak/Pine	Sciurus niger shermani
Florida Black Bear	T/NL	Dense cover	Ursus americanus floridanus
Everglades Mink	T/NL	Wetlands	Mustala vison evergladensis
West Indian Manatee	E/E	Rivers/Estuaries	Trichechus manatus latirostris
Reptiles			
Florida Gopher Frog	SSC/NL	Pine/Scrub	Rana areolata

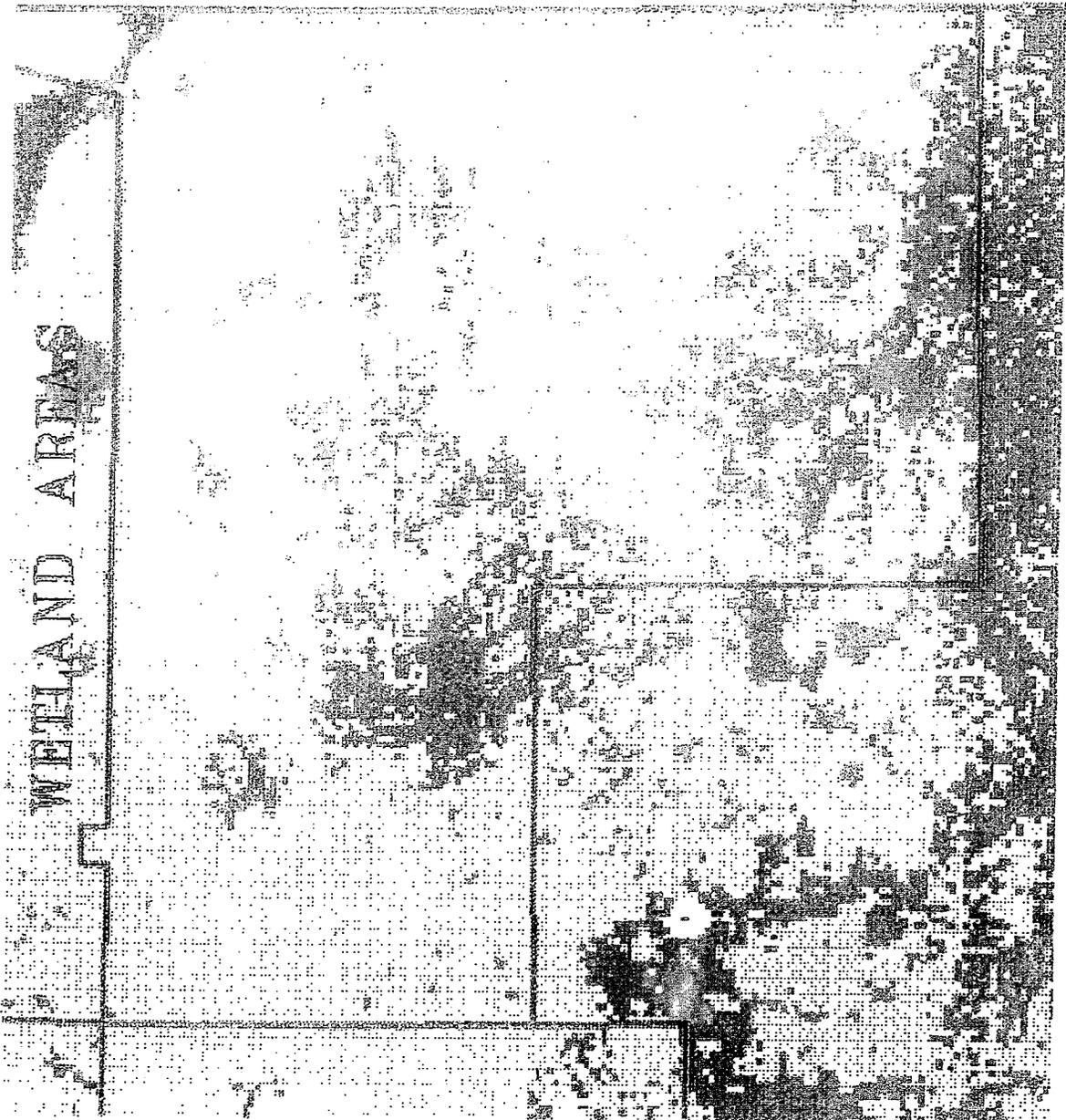
**Table VI-2
Fauna: Possible Occurrence of Endangered, Threatened and Special Concern Species
Hendry County**

Common Name	Classification FGFWFC/ USFWS	Habitat	Scientific Name
1 Gopher Tortoise	SSC/NL	Pine/Scrub	Gopherus polyphemus
2 American Alligator	SSC/T	Lake/Swamp	Alligator Mississippiensis
3 Eastern Indigo Snake	T/T	Prairie/Pine Oak	Cymarchon corais couperi
4 Florida Pine Snake	SSC/NL	Pine	Pituphis melanoleucus mugitus
5			
6 Birds			
7 Wood Stork	E/E	Wetlands	Mycteria americana
8 Snail (Everglades) Kite	E/E	Marsh	Rostrhamus sociabilis
9 Ivory-billed Woodpecker	E/E	Oak/Pine/Cypress	Campephilus principalis
10 Red-cockaded Woodpecker	T/E	Pine	Picoides borealis
11 Florida Grasshopper Sparrow	E/E	Dry Prairie	Ammodramus savannarum floridanus
12 Bald Eagle	T/E	Pine	Haliaeetus leucocephalus
13 Southeastern American 14 Kestrel	T/NL	Dry Prairie/Pine	Falco sparverius paulus
15 Audubon's Crested Caracara	T/T	Prairie	Polyborus plancus audubonii
16 Florida Scrub Jay	T/T	Scrub/Pine	Aphelocoma coerulescens coerulescens (bose)
17 Little Blue Heron	SSC/NL	Lake/Marsh	Egretta caerulea
18 Snowy Egret	SSC/NL	Lake/Marsh	Egretta thula
19 Louisiana Heron	SSC/NL	Lake/Marsh	Egretta tricolor
20 Limpkin	SSC/NL	Cypress Swamp	Aramus guarauna
21 Burrowing Owl	SSC/NL	Prairie/Pasture	Athene cunicularia
22 Kirtland's Warbler	E/E	Pine/Oak	Dendroica kirtlandii
23 Arctic Penegrine Falcon	E/T	Lake/River/ Marsh	Falco peregrinus tundrius
24 Southeastern American 25 Kestrel	T/NL	Pine	Falco sparverius paulus
26 Florida Sandhill Crane	T/NL	Prairie/Marsh	Grus canadensis pratensis

Table VI-2
Fauna: Possible Occurrence of Endangered, Threatened and Special Concern Species
Hendry County

Common Name	Classification FGFWFC/ USFWS	Habitat	Scientific Name
<hr/>			
1	Legend:		
2	FGFWFC - Florida Game and Freshwater Fish Commission (State)		
3	USFWS - United States Fish and Wildlife Service (Federal)		
4	E - Endangered		
5	T - Threatened		
6	SSC - Species of Special Concern		
7	NL - Not listed as Endangered, Threatened or Species of Special Concern		
8	Source: SWFRPC, Hendry County.		
9			





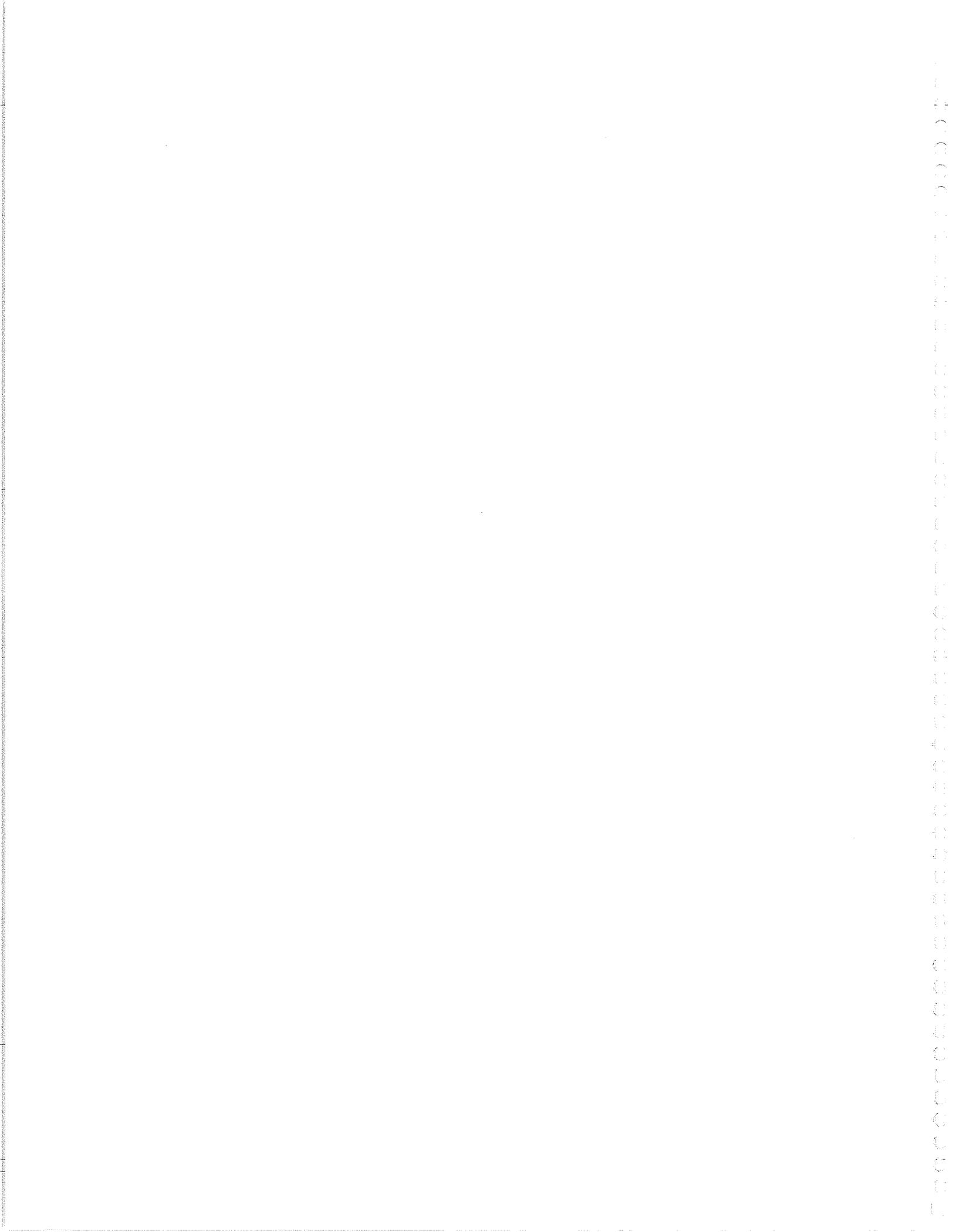


FIGURE VI-2

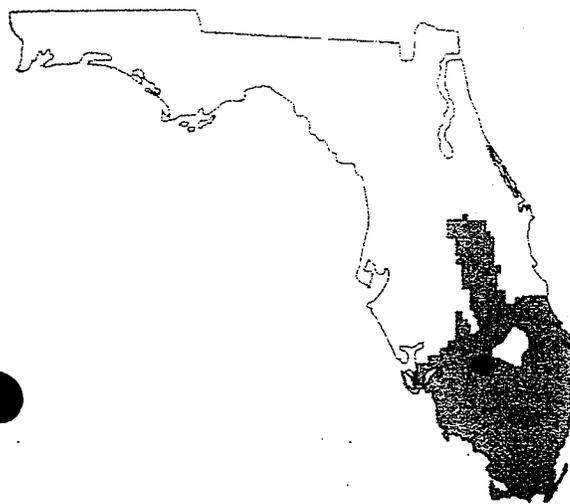
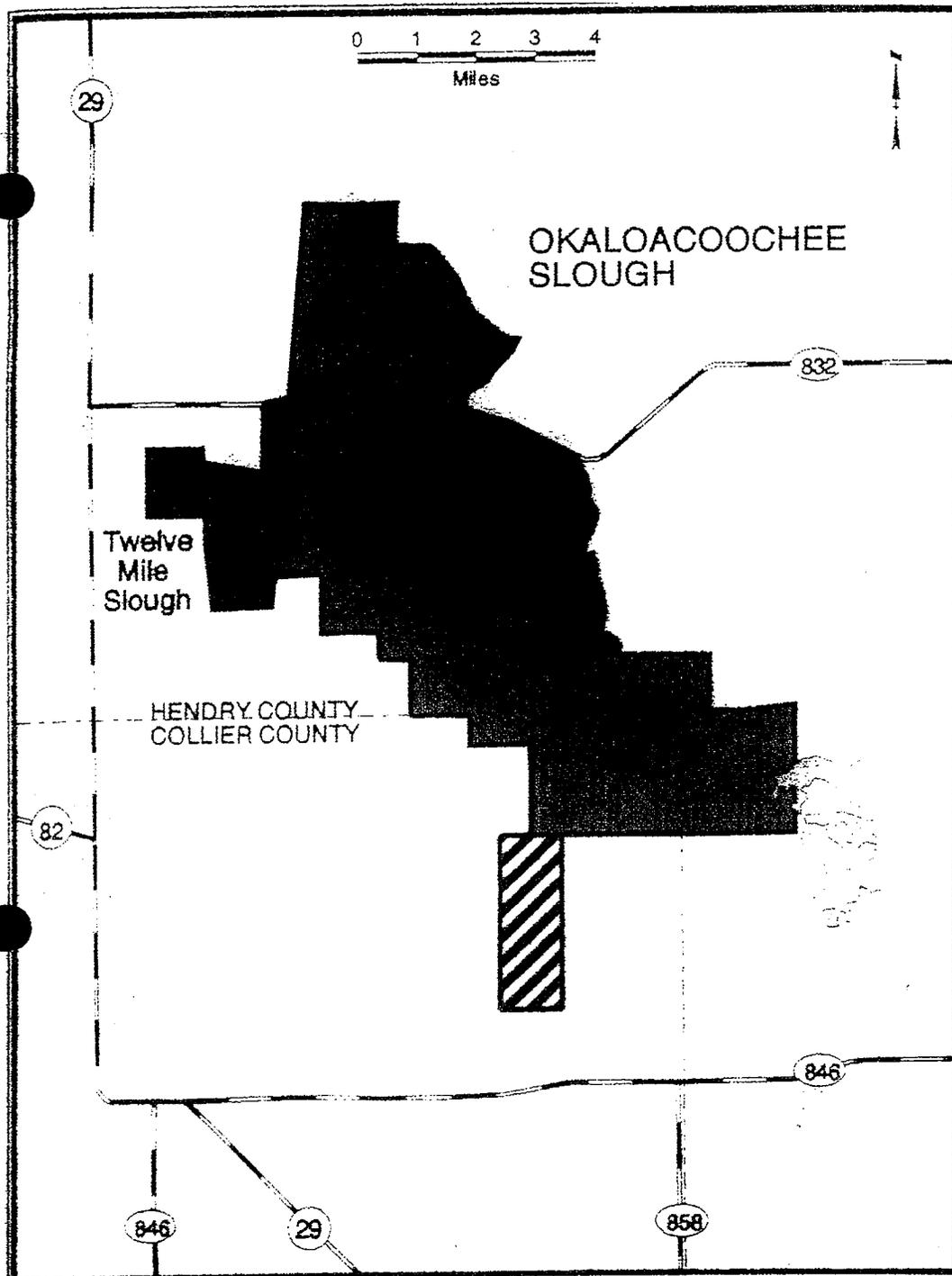
County:
Hendry

Total Projected Area:
31,720 acres

Total Acres Acquired:
21,702 acres

Acres Remaining:
10,018 acres

Number of Owners:
One



-  SOR Lands Acquired to Date
-  Potential Acquisition Areas
-  Other Conservation Areas
-  Other SOR Projects
-  1997 Project Additions
-  SOR Project Boundary



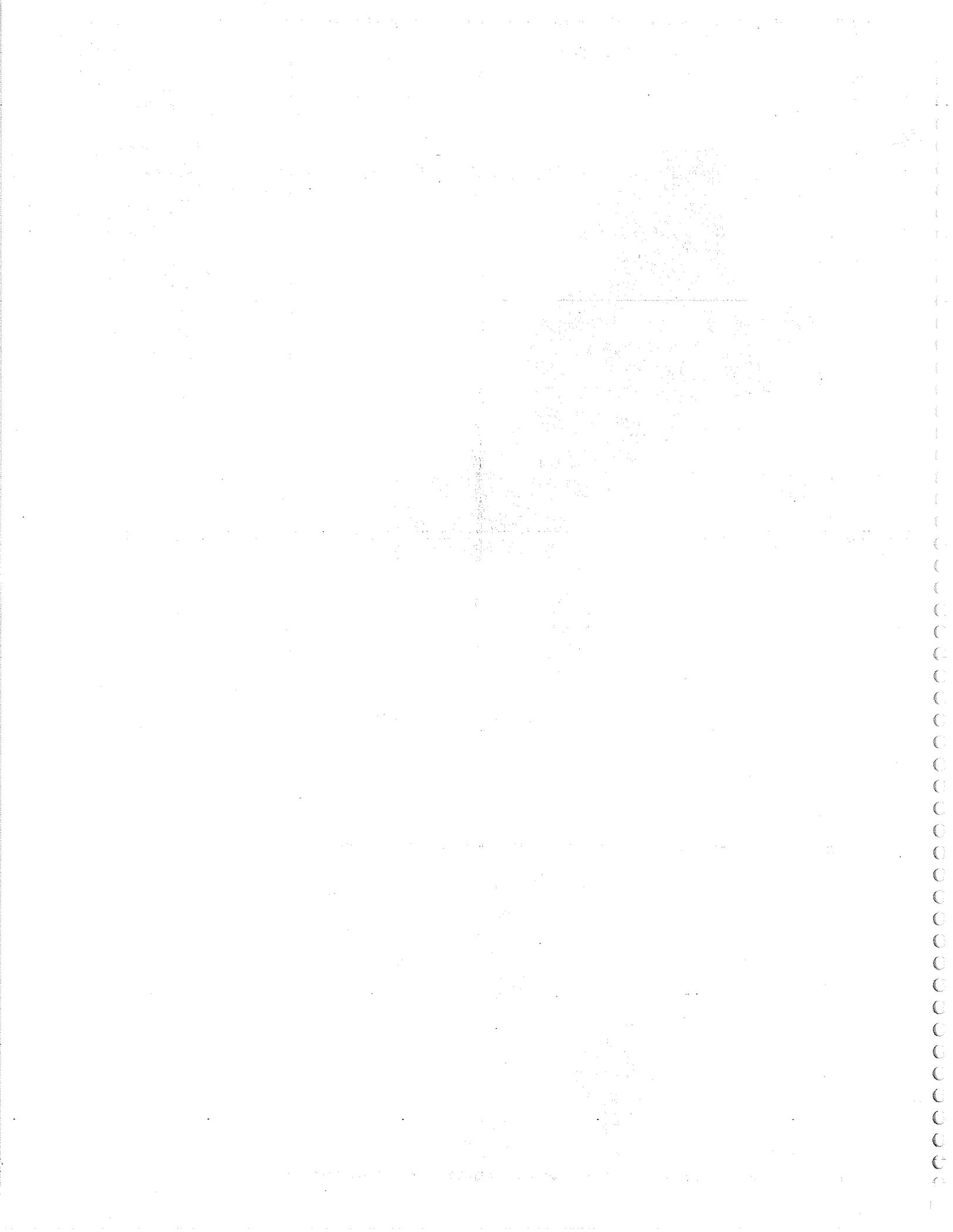
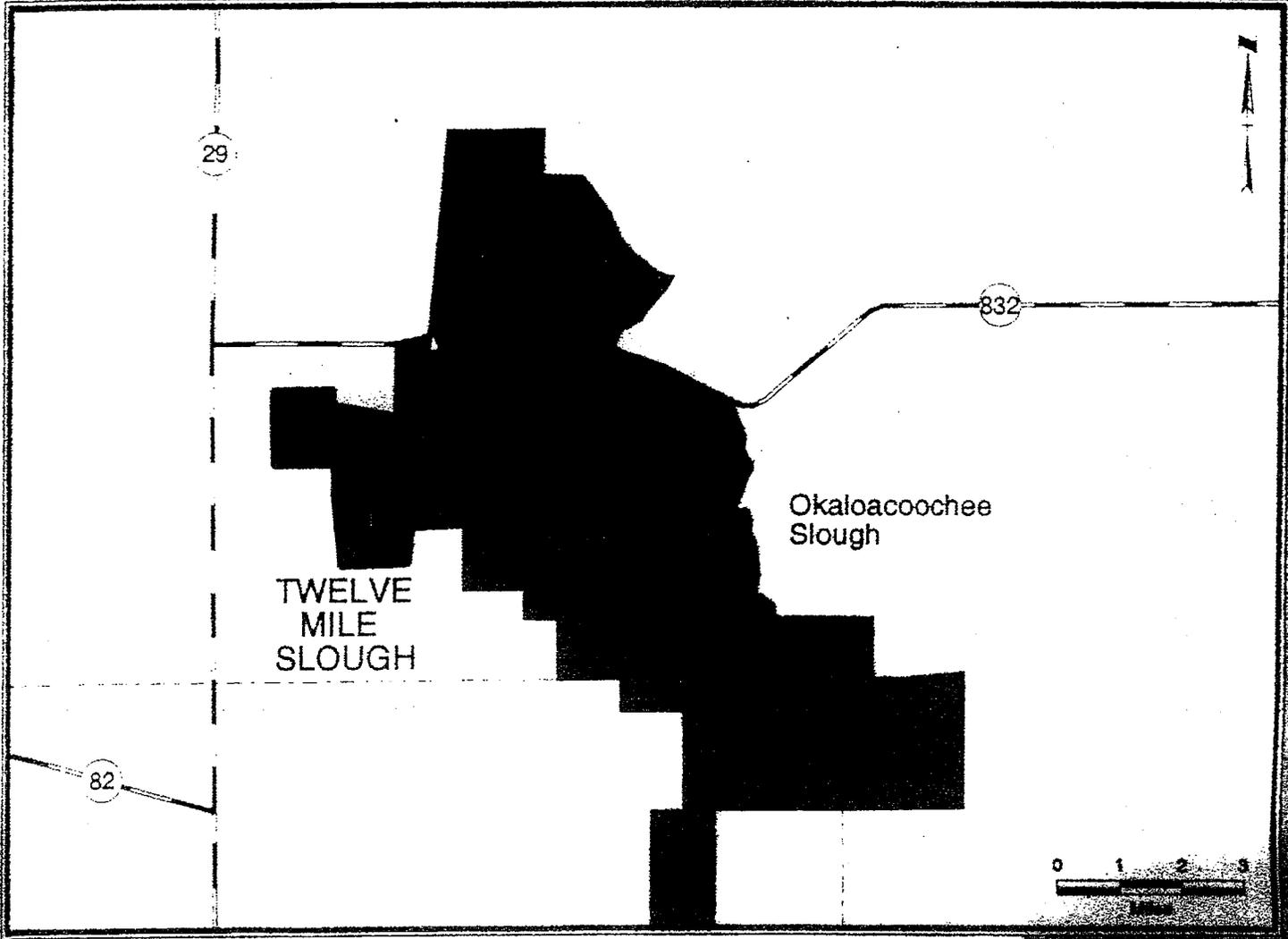


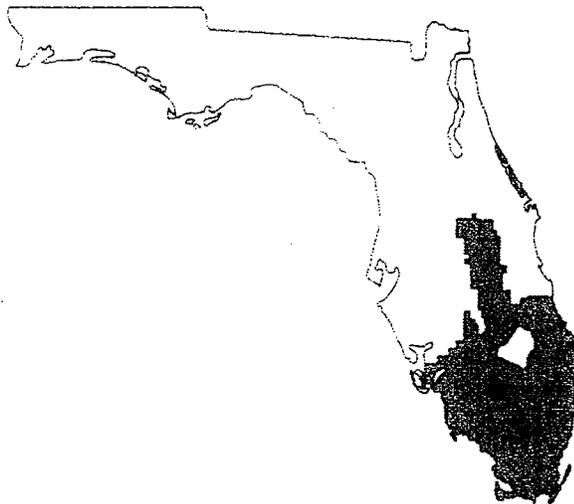
FIGURE VI-3



County:
Hendry

Total Project Area:
3,300 acres

Number of Owners:
One



-  SOR
-  Poten
-  Othe
-  Othe
-  1997
-  SOR

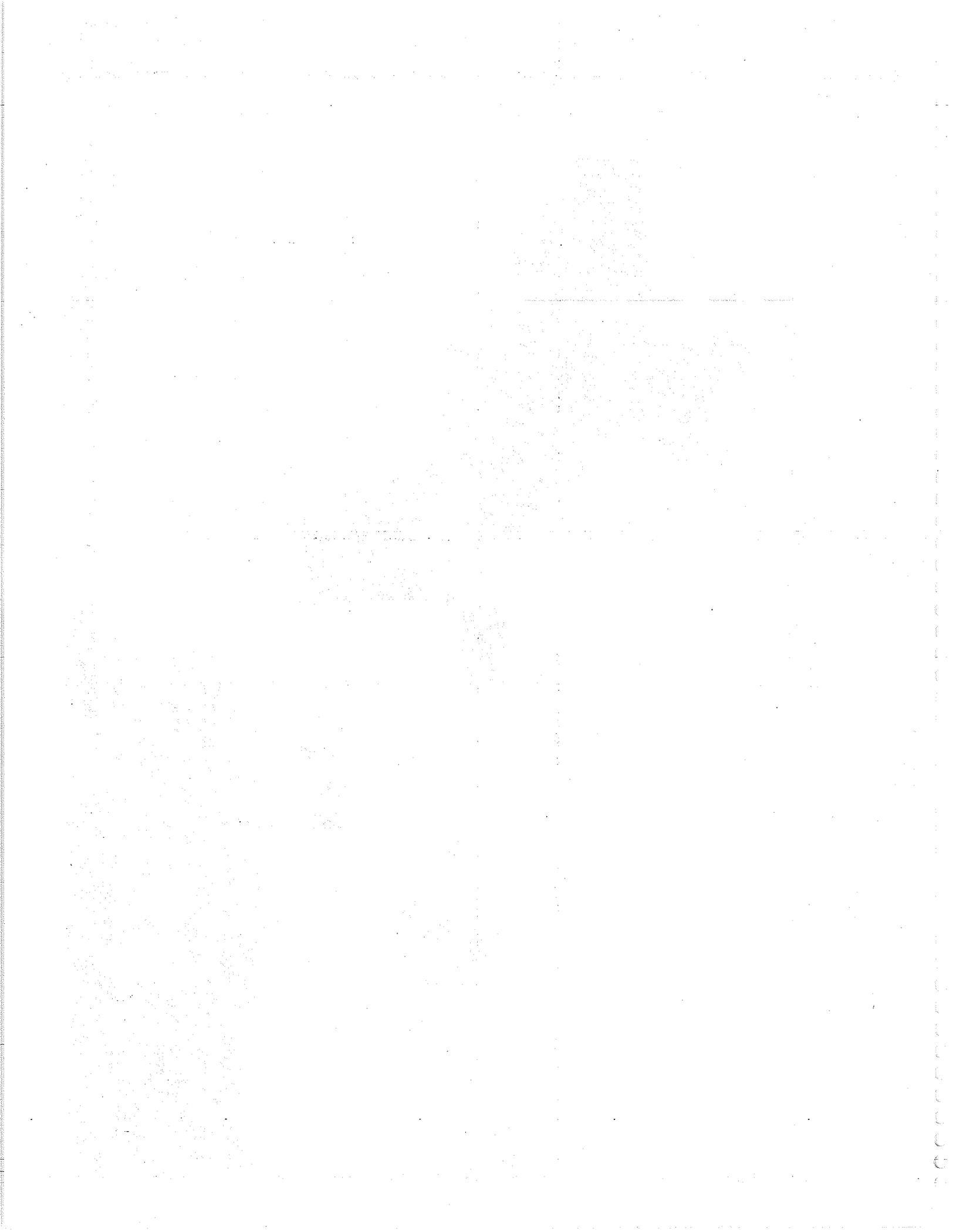
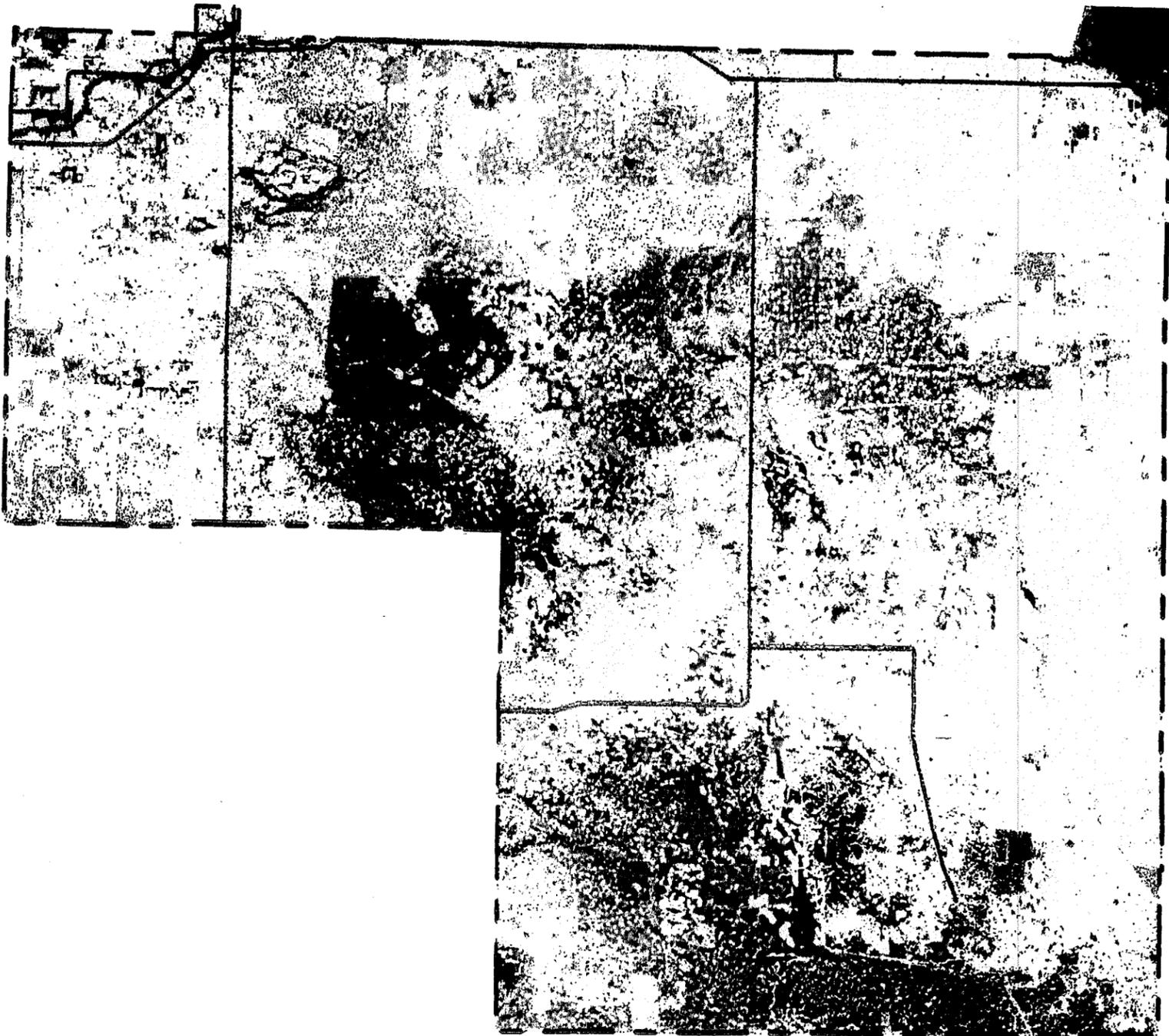


FIGURE VI-4

Hendry County, Florida

Land Cover

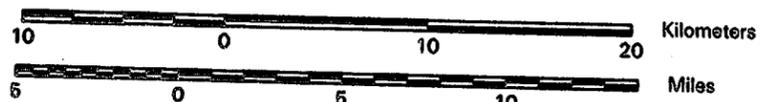


Legend

Class_Names	Hectares
Coastal strand	0.0
Dry prairie	30,523.0
Pinelands	12,417.5
Sand pine scrub	0.0
Sandhill	0.0
Xeric oak scrub	0.0
Mixed hardwood-pine forests	3,481.2
Hardwood hammocks and forests	13,328.6
Tropical hardwood hammock	0.0
Coastal salt marsh	0.0
Freshwater marsh & wet prairie	23,426.3
Cypress swamp	19,531.9
Hardwood swamp	1,432.9
Bay swamp	0.0
Shrub swamp	2,392.1
Mangrove swamp	0.0
Bottomland hardwoods	0.0
Open water	7,776.6
Grassland (agriculture)	141,042.6
Shrub and brushland	22,695.9
Exotic plant communities	0.0
Barren	30,072.0
Major roads	
County boundary	



Scale



1 : 350000

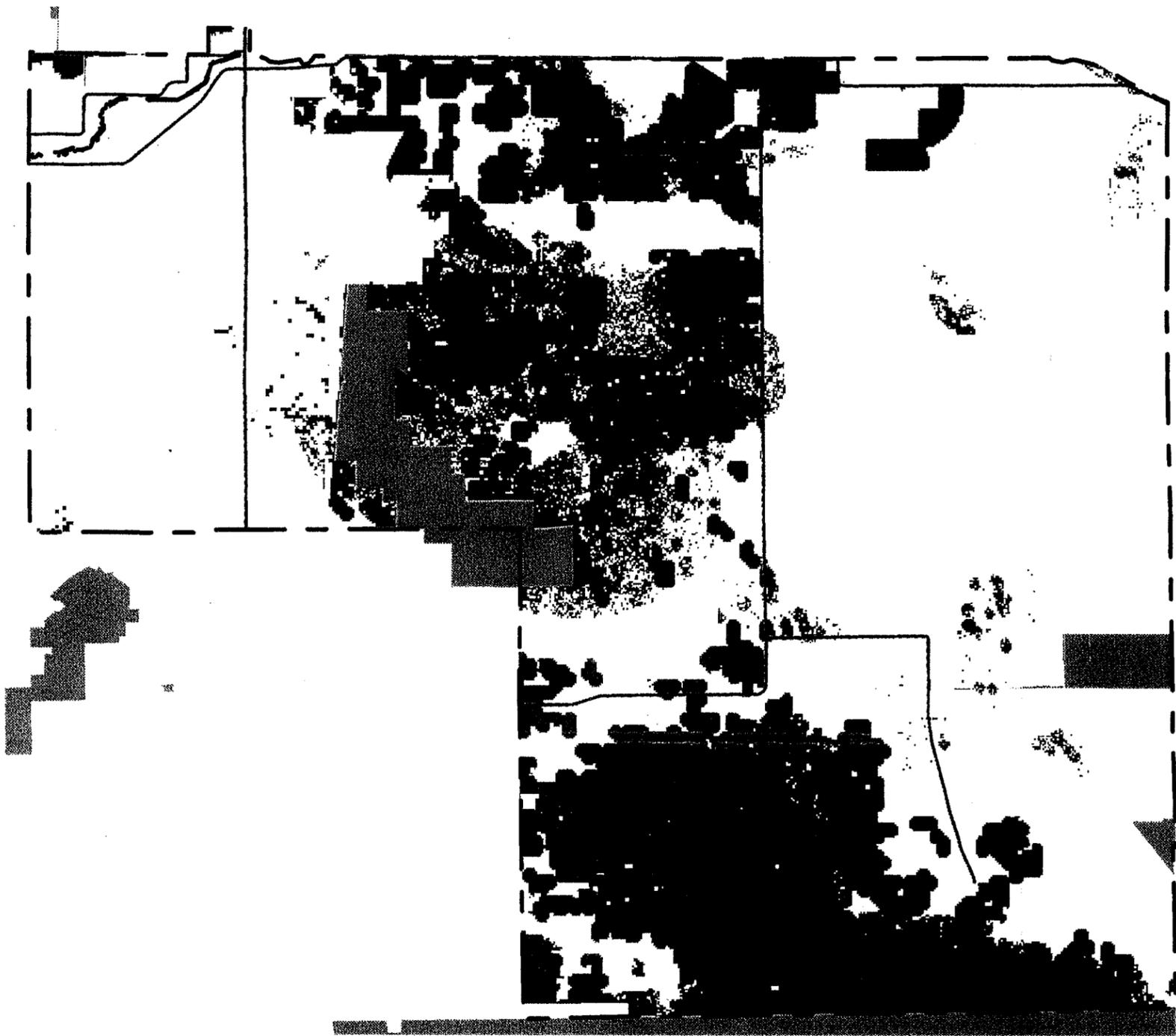
SOURCE DATA
Landsat Thematic Mapper Satellite Imagery
April 3, 1986

Map prepared by FGFWFC
03/10/99

FIGURE VI-5

Hendry County, Florida

Strategic Habitat Conservation Areas

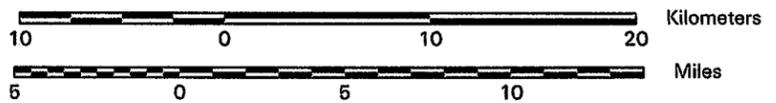


Strategic Habitat Conservation Areas (SHCA) represent areas important to flora, fauna, and natural communities based on known occurrences information and recent land use/land cover maps.

SHCA data were generated by:
Florida Game & Fresh Water Fish Commission
Office of Environmental Services



Scale



1 : 350000

Legend

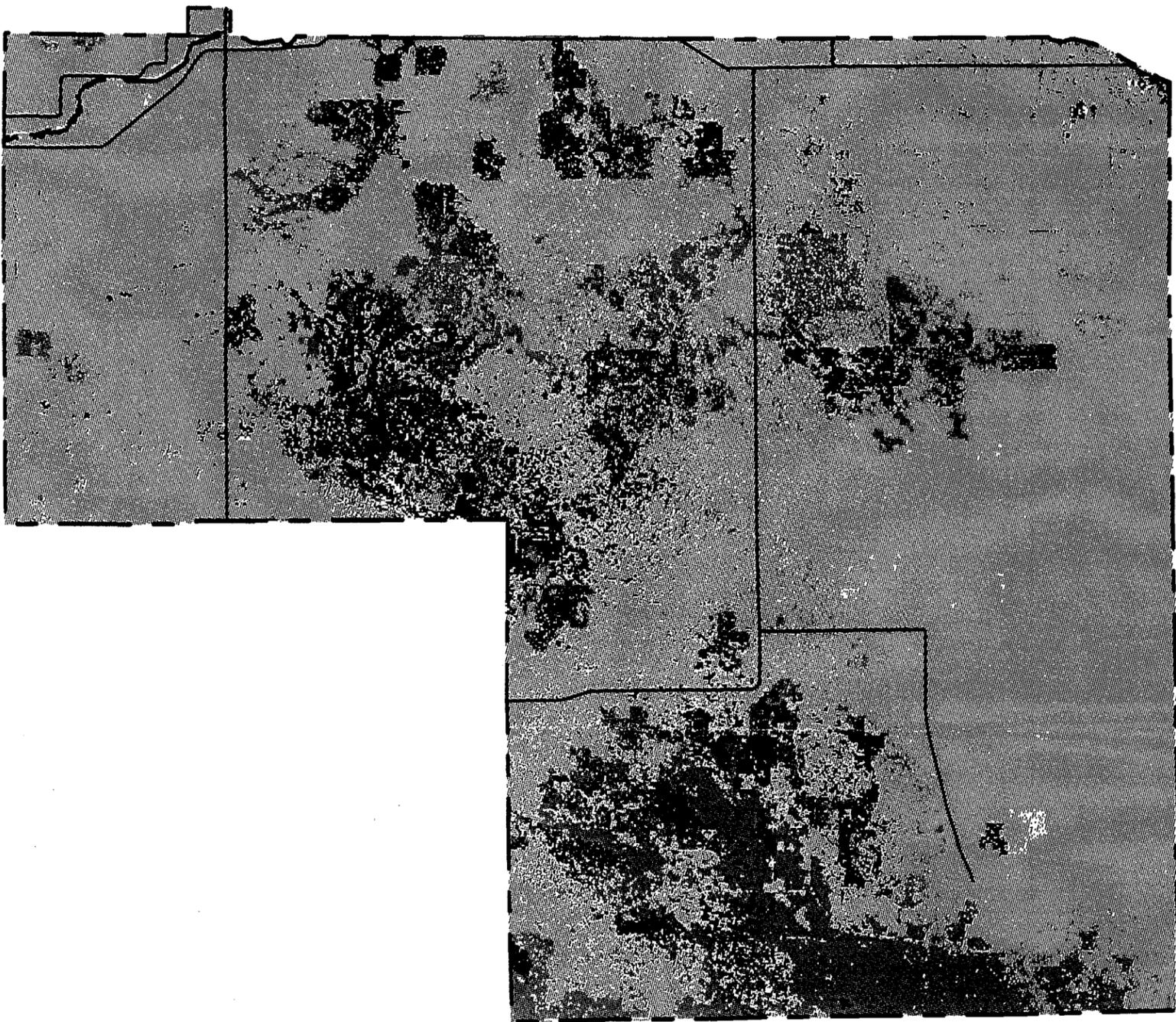
- Class_Names
-  Existing Public Lands
 -  Strategic Habitat Conservation Areas
 -  Major roads
 -  County boundary

Map prepared by FGFWFC
03/10/99

FIGURE VI-6

Hendry County, Florida

Biodiversity Hot Spots



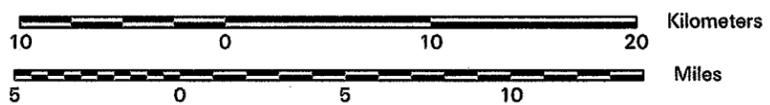
Regional biodiversity hot spots represent areas with a high degree of overlap for 54 declining species of wildlife plus known occurrences of flora, fauna and natural communities.

Regional biodiversity hot spots data were generated by:

Florida Game & Fresh Water Fish Commission
Office of Environmental Services



Scale



1 : 350000

Map prepared by FGFWFC
03/10/99

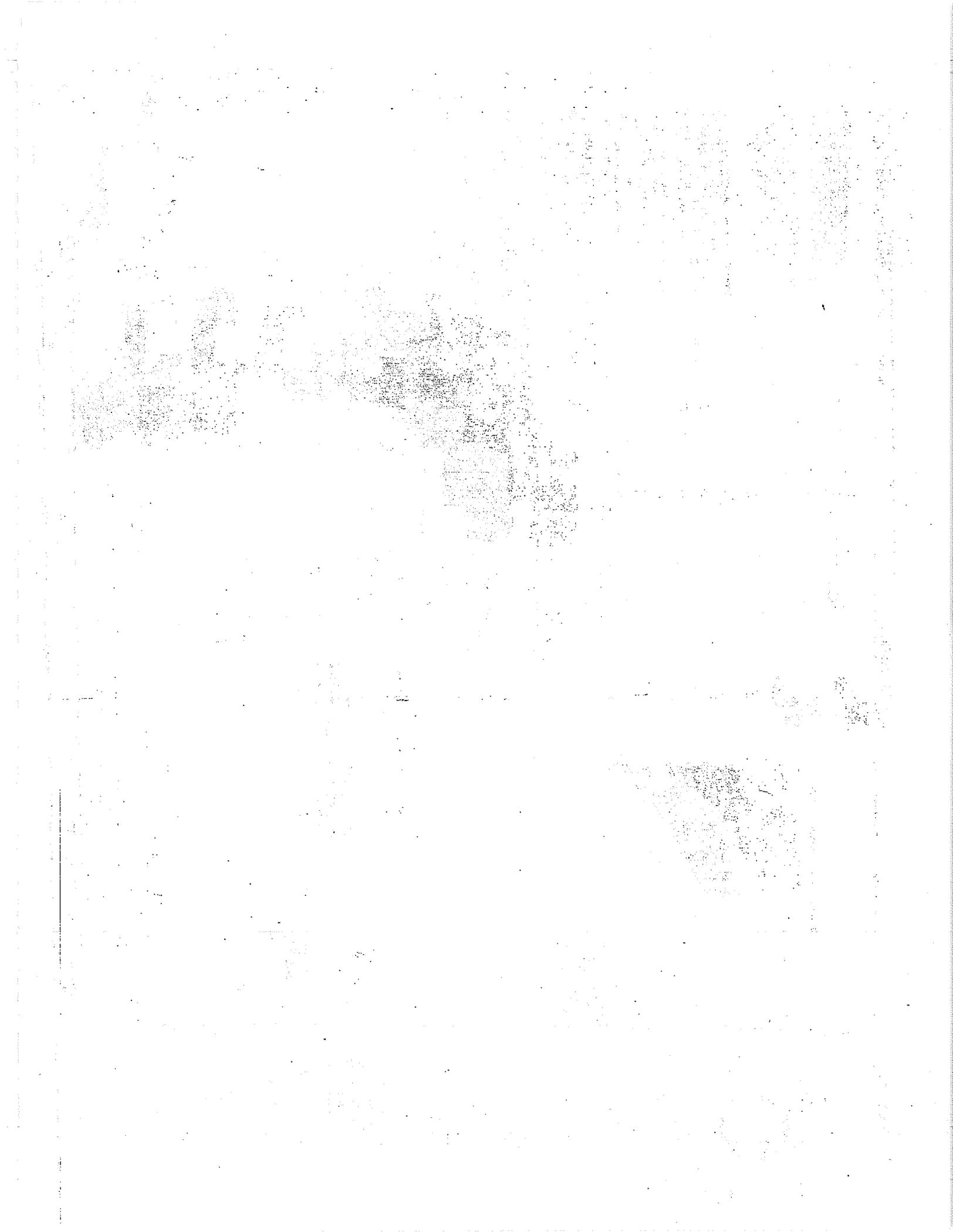
Legend

Class_Names

-  Background
-  3 - 4 Focal species overlap
-  5 - 6 Focal species overlap
-  7+ Focal species overlap
-  Major roads
-  County boundary

Potential/Suitable habitat in this county for:

big cypress fox squirrel, burrowing owl, caracara, sandhill crane, limpkin, swallow-tailed kite and wood stork.



VII. Recreation and Open Space Element Data & Analysis Support

1 **INTRODUCTION**

2
3 The purpose of the data analysis for the Recreation and Open Space Element is twofold: 1)
4 to inventory existing public and private recreation sites, facilities and open spaces available to the
5 public; and, 2) analyze current adequacy and project future needs. The inventory is to identify
6 existing parks, playgrounds, and other sites, and the facilities provided by each.

7
8 The Hendry County government has the unincorporated area as its primary jurisdiction for
9 parks, recreation and related sites and facilities, but in part these need to be considered on a
10 countywide basis, including the incorporated areas of Clewiston and LaBelle. As discussed in
11 Chapter II, most of the population resides in the "urban" areas in and around the incorporated cities.
12 Most of the recreation facilities in Hendry County are also located within and nearby the cities, to
13 serve this more urban population. The provision of recreation sites and facilities, has become a joint
14 effort among the cities and the county, as well as private and institutional entities. The analysis of
15 the recreation acreages, sites and facilities is focused on the more densely populated and populating
16 areas. In other areas of the County there are areas with some small concentrations of population.
17 These are addressed separately.

18
19 In the following sections there are discussions referring to these "urban" populations of the
20 Clewiston and LaBelle areas. In the following analysis, the urban-rural breakdowns are considered,
21 as are the Planning Sectors. Both the urban-rural split and the Planning Sectors makeup are described
22 and defined in Chapter II.

23
24 **STATE REQUIREMENTS**

25
26 The "Local Government Comprehensive and Land Development Regulation Act" (Chapter
27 163 F.S.) specifies that the Recreation and Open Space Element of the Comprehensive Plan is to
28 indicate "a comprehensive system of public and private sites for recreation, including, but not limited
29 to, natural reservations, parks and playgrounds, parkways, beaches and public access to beaches,
30 open spaces, and other recreational facilities."

31
32 The Act recognizes that Chapter 9J-5 F.A.C., the "Minimum Criteria for Review of Local
33 Government Comprehensive Plans and Determination of Compliance", will provide compliance
34 requirements for the Comprehensive Plan. For the Recreation and Open Space Element 9J-5.014
35 specifies the element be based on the following data requirements:

- 36
37 1) Inventory of existing public and private recreation sites and open spaces available to
38 the public, including natural reservations, parks, playgrounds, parkways, and beaches
39 are to be identified.
- 40
41 2) For each site, types of use such as user-oriented or resource-based and types of
42 recreation facilities provided, are to be indicated.
- 43

EXHIBIT A
VII. RECREATION AND OPEN SPACE ELEMENT

- 3) Current needs for recreation sites based on estimated recreation demand and the availability to public and adequacy of existing recreation sites and facilities.
- 4) Projected future needs for recreation sites, open space, and recreation facilities based on recreation demands and availability to the public.

The discussion that follows is guided by these State requirements.

EXISTING INVENTORY

An inventory of Hendry County's parks, recreation, and open space areas was originally prepared by the Southwest Florida Regional Planning Council [R11], and has subsequently been updated by the Hendry County Planning Department. These areas, their locations, facilities, types, and ages of population served are listed in Table VII-1 and located on Figure VII-1. Note that facilities are identified for the entire county, including the unincorporated area and the incorporated cities of Clewiston and LaBelle.

Parks have been classified in Table VII-1 as neighborhood, community, and regional parks. The neighborhood parks are usually the smallest parks, designed as "walk-to" parks, serving the immediate area. In Hendry County they range in size from one acre to ten acres. Park facilities include playground equipment, picnic tables, and multipurpose playing fields. All of these parks are located in or near the cities of Clewiston and LaBelle.

The parks classified as community parks are generally larger than neighborhood parks and serve a number of neighborhoods. A few small acreage parks have been included in this category because of their unique characteristics. These include the city boat dock in LaBelle and the Felda Community Center, among others. Community parks typically serve as active, sports-oriented facilities. In Hendry County, these facilities include tennis courts, baseball fields, basketball courts, playground equipment, swimming pools, and multi-purpose fields.

Regional parks generally serve several communities and are within a one hour driving time. The desired size is at least 100 acres or more and should be located adjacent to natural resource areas. Standards for these parks vary depending on the opportunities and characteristics of the area. In Hendry County, only one park qualified as a regional park, the Port LaBelle Golf Course, formerly part of the Port LaBelle DRI development, because of its multi-purpose use and size.

Recreational facilities which have been classified as "other" include the LaBelle Rodeo Grounds, the Clewiston Golf Course, and a number of private recreation areas.

The existing Hendry County parks have also been classified according to the age groups they serve. Many of the larger parks provide facilities for all age groups, but a number of the neighborhood parks are primarily only for children and youths.

Regionally significant parks outside of Hendry County are depicted on Figure VII-2.

1 **STANDARDS**

2
3 For standards relating to possible current acreage deficiencies and future acreage needs for
4 Hendry County recreation sites, the Florida Department of Environmental Protection (FDEP) has
5 compiled park standards that can be useful (Table VII-2) [R33]. These standards are not specific to
6 rural areas or small cities, and may be somewhat excessive for such settings. However, these
7 standards may be utilized as a measure of existing parks adequacy and future needs. The size
8 standards are presented in Table VII-2. Table VII-2 also lists certain suggested facilities which could
9 reasonably be located in the various types of parks. Table VII-3 presents FDEP standards related to
10 facilities' needs within the various park types.

11
12 Neither of these standards are fully applicable to the county as a whole, but some of them can
13 be applied to the "urban" areas (as defined in the Appendix). Tot Lots are primarily applicable to the
14 incorporated cities of Clewiston and LaBelle, and the Harlem-Hooker Point area adjacent to
15 Clewiston. Neighborhood parks are serving the "Tot Lot" function in the Harlem-Hooker Point area,
16 and the provision of Tot Lots within the cities is primarily the function of the local city governments.
17 Therefore, the most directly applicable standards for this analysis are for neighborhood and
18 community parks. These will be used to analyze existing sites and facilities, and to project future
19 needs.

20
21 *Analysis of Existing Recreation Acreage*

22
23 Table VII-1 identifies recreation areas as "neighborhood parks", "community parks"
24 "regional parks" and "other". From the scope of a small, moderately growing county, these
25 classifications cover the basic recreational needs, and fairly represent the nature of existing recreation
26 areas. "Open space" is discussed as a separate topic. Recreation areas from Table VII-1 are
27 summarized in Table VII-4. The following discussion analyzes recreation by park types.

28
29 *Neighborhood Parks*

30
31 Within Hendry County there are approximately 58.8 acres of neighborhood parks. Refer to
32 Table VII-1 for a listing of these parks, and to Table VII-4 for a summary of their acreages and
33 locations. All of these parks are located within or nearby the incorporated cities of Clewiston and
34 LaBelle in the designated "urban" area.

35
36 Approximately 20.3 acres of the neighborhood parks are located in Clewiston. The estimated
37 1996 population of Clewiston totals approximately 6,349. With 20.3 acres of neighborhood parks
38 located in Clewiston approximately 3.2 acres per 1,000 population of park is provided for this area.

39
40 The estimated 1996 LaBelle population was 3,125. Only the parks within LaBelle serve as
41 neighborhood parks for this area. With the 10.0 acres of neighborhood park in LaBelle, 3.2 acres per
42 1,000 of the "urban" population is provided. The Port LaBelle area has a large regional park, much
43 of which serves the function of both the community and neighborhood parks.

Outside the "urban" areas in other parts of the county there are some locations with small population concentrations. The Felde area (in Planning Sector 5) is served by a community center. There is also the Pioneer Plantation subdivision (in Planning Sector 7) which currently has a 10-acre neighborhood park. The Montura Ranch subdivision (in Planning Sector 8) has a private association community center for residents. The Big Cypress Seminole Reservation (Planning Sector 9) has a five acre community center.

Given the FDEP standards (see Table VII-2), the populated areas of Hendry County are adequately served with neighborhood parks (or facilities serving as such). The 58.8 acres of neighborhood parks are serving an approximate population of 30,157, providing approximately 1.9 acres per 1,000 population.

Community Parks

There are approximately 299.7 acres of recreation areas within Hendry County which can be classified as community parks. Given the FDEP standards in Table VII-2, this acreage should be easily adequate for the planning period (2010). Also, this park acreage is located in various areas around the county where it is accessible to the population (see Table VII-4 and Figure VII-2). With the 1996 estimated population of 30,157 for Hendry County, 9.9 acres per 1,000 population is provided. This is well in excess of the two acres per 1,000 FDEP standard.

Regional Parks

Countywide, there is approximately 289 acres that has been redesignated to regional parks because of its size and complexity of uses. The area redesignated is primarily located in Port LaBelle and was formally known as the Port LaBelle Golf Course. Types of activities at the golf course include an equestrian trail, bike and pedestrian trails, camping facilities, picnicking facilities, swimming, and other uses. With 289 acres and an estimated 1996 population of 30,157, this yields 9.6 acres per 1,000 population. The maximum acreage for regional parks are 20 acres per 1,000 population. Although the Port LaBelle Golf Course does not meet the acreage standard established by FDEP, the County is confident in designating the use. To meet FDEP standard, approximately 314 additional acres would be needed.

Existing Open Space

In addition to the recreation facilities just described, Hendry County has an abundance of open space. Open spaces are public or private areas, predominantly free of intensive urban usage, which may be land areas used for parks, recreation, agriculture, environmental or scenic resources or non-intensive uses.

Given the predominance of agriculture in Hendry County, the wetland areas, the existing drainage facilities, and recreation areas, as well as the current sparse development, some 98% of the county is in areas which could be classified as open space (refer to the Future Land Use element).

VII. RECREATION AND OPEN SPACE ELEMENT

1 Given the solid foundation of most of these land uses, most of this Open Space is unthreatened by
2 urban development.

3
4 ANALYSIS OF EXISTING RECREATION FACILITIES
5

6 The recreation facilities listed in Table VII-1 are varied and represent the needs of most
7 county residents. Table VII-5 presents the FDEP facilities standards list compared to current facilities
8 in Hendry County. With some facility categories there is no quantifiable way to measure existing
9 facilities, except to indicate they are available. In each of these cases, where the standards are
10 applicable, Hendry County has such an abundance as to be obviously adequate.

11
12 In the applicable categories where it is possible to quantify existing facilities, Hendry County
13 has adequate playing fields, basketball courts, boat ramps, golf courses, swimming pools, tennis
14 courts, and handball/racquetball courts. In some categories, the facilities are abundant, but in the
15 future there will be a need for additional swimming pools, handball/racquetball courts, and tennis
16 courts.

17
18 FUTURE NEEDS
19**20** *Resident Population*
21

22 The preceding analysis indicated that Hendry County has only a marginal existing deficit in
23 neighborhood parks, no deficiencies in community parks, and a considerable deficit for regional
24 parks. However, with neighborhood parks, the County is just barely adequate. Looking to the future,
25 Hendry County approaches with an abundant community park and open space excess, but no excess
26 of neighborhood parks.

27
28 Table VII-6 presents the acreage that should be added for each of the categories in order to
29 be meeting the FDEP Standards for each projected 5-year period.

30
31 By the end of year 2010 three more tennis courts need to be added. Although the standards
32 do not indicate the need for more swimming pools through the year 2010, evidence indicates a pool
33 may be desirable in the LaBelle area. By 2010 another handball/racquetball court will be needed.

34
35 *Seasonal Population*
36

37 It is projected that for 1995 the total seasonal population will include an additional 29%,
38 representing the winter visitors and migrant workers. For the year 2010, an additional 38% is
39 projected. Most of these are migrant farm workers. It is known that these persons are light users of
40 local recreation sites, and a probably high usage rate of 50% is assumed. Recreation site acreage for
41 these users is included in Table VII-7.

EXHIBIT A
VII. RECREATION AND OPEN SPACE ELEMENT

Table VII-1
Existing Recreation Areas
Hendry County, Countywide
9J-5.014(1)

Name	Planning Sector	Map Ref.	Size (ac.)	Type	Age Group	Rec. Cent.	Pool	Hand ball/Racquet ball	Play ball grnd	Bskt ball Crts.	Tnis Crts.	Ball Field	Boat Ramp	Multi Purpose	Golf Course	Other
ARC Park	13	0	1.1	N/A	2,3				X							X
Basilian Crescent Park	13	1	3.5	N/A	2,3				X							X
Candy Cane Park	13	2	1.0	N/A	2,3,4				X							
Central Parks	13	3	4.1	C/A	1	X			X		X			X		X
Esperanza Triangle Park	13	6	3.5	N/A	2,3,4				X							X
Ponce de Leon/ Osceola Park	13	7	1.5	N/A	2,3				X							
Ridgewood Estates Parks	13	8	2.7	N/A	2,3				X							
Ridgewood Addition Parks	13	9	5.7	C/A	2,3				X							X
Royal Palm/ Osceola Park	13	10	1.5	N/A	1				X					X		
Sugarland Park	13	13	56.0	C/A	1	X	X	X	X			X		X		X
Sugarland Estates Park	13	12	2.0	N/A	2,3				X					X		
Trinidad Park	13	14	3.5	N/A	2,3,4				X			X				X
CS Mott Pool	13	5	1.6	C/A	1		X									
Clewiston Golf Course	13	11	163.0	O/A	3,4,5										X	
Canal 21 Boat Docks	C	-	-	O/A	4,5								X			
Clewiston Schools	C	-	-	C/A	1				X	X	X	X		X		
Barron Park	3	20	2.5	N/A	1				X					X		X
Euclid Avenue Playground	3	21	4.0	N/A	2,3				X		X					X
Ford Park Rec. Center	3	22	2.5	N/A	1				X			X				
Frazier Avenue (Nature Park)	3	23	10.3	C/A/R	1				X							
LaBelle City Boat Dock	3	24	0.2	C/A	4,5								X	X		X
Old Daniels School Park	3	25	1.0	N/A	2,3				X							
LaBelle Schools	L	-	-	C/A	1				X	X	X	X				

Adopted: March 1991
Amended: November 9, 1999

EXHIBIT A
VII. RECREATION AND OPEN SPACE ELEMENT

Name	Planning Sector	Map Ref.	Size (ac.)	Type	Age Group	Rec. Cent.	Pool	Hand ball/Racquet ball Crts.	Play ball grnd	Bskt ball Crts.	Tnis Crts.	Ball Field	Boat Ramp	Multi Purpose	Golf Course	Other
Bob Mason or LaBelle Lions Club Park	2	30	5.0	C/A	1				X				X			X
Clewiston Rec. Area	12	32	31.3	C/A	1								X			
David Pratt Park	5	33	28.0	C/A	3,4							X				
Felda Community Center	5	34	2.0	N/A	1	X			X			X				
Harlem Playground (Carolina Av & 5th St.)	11	35	2.0	N/A	1				X	X						X
Harlem Playpark (Block M off Della Tobia Ave)	11	36	2.5	N/A	2,3				X							
Harlem Rec. Center	11	37	10.2	C/A	2,3,4		X		X			X				
Hookers Point Playground	12	38	1.0	N/A	2,3				X							
L-1 canal Park	9	40	.5	C/A	1				X				X			X
Big Cypress Reservation Recreation Area	9	16	5.0	N/A	1	X						X				
LaBelle-Rodeo Grounds	3	41	10.0	O/A	1											X
Port LaBelle - DRI-Golf Course	5	6	289.0	RP/A	1	X	X		X	X	X	X			X	X
Pioneer Plantation Park	6	7	10.0	N/A	1				X							X

Type
 N - Neighborhood
 C - Community
 RP - Regional
 A - User-oriented
 R - Resource Based
 O - Other

Age Group
 1 - All
 2 - Children
 3 - Youth
 4 - Adults
 5 - Seniors

Legend:
 Plan District
 L - Located within the City of LaBelle
 C - Located within the City of Clewiston

Notes:
 Tot Lots in Clewiston and LaBelle are not included.
 Schools open daily to public only on limited basis.
 Port LaBelle Facilities open to public only on limited basis.

Source: SWFRPC, Hendry County LGCPA Data, 1987. Updated by Wilson, Miller, Barton, Soll & Peek, Inc. Updated June 1998.

VII. RECREATION AND OPEN SPACE ELEMENT

**Table VII-2
FDEP Park Standards**

Type	Size	Population	Distance	Suggested Facilities
Regional Park	20 Acres/1,000 Pop. (At least 250 acres)	Over 100,000	30 minutes to 1 hour driving time	Camping, picnicking, riding, nature trails and other facilities
Urban District Park	5 Acres/1,000 Pop. (100 acres minimum)	1 for each 50,000	30 to 40 minutes driving time	Play equipment, boating, swimming, picnicking, sports, riding, nature trails
Community Park	2 Acres/1,000 Pop. (20 Acres minimum)	Up to 5,000	½ to 3 miles	Play equipment, sports, passive recreation, picnicking, recreation buildings, swimming, pool, open fields
Neighborhood Park	2 Acres/1,000 Pop. (5 Acres minimum)	Up to 5,000	1/4 to ½ mile	Play equipment, recreation buildings, sports fields and courts, picnicking
Tot Lot (Play Area)	½ Acre/1,000 Pop. (1 Acre minimum)	Up to 2,500	2 to 3 block area	Play equipment, landscaping, benches

Source: FDEP. Outdoor Recreation in Florida, 1994. Table 6-4 "Population Guideline for User-oriented Outdoor Recreation Activities. Florida Department of Environmental Protection, 1994.

**Table VII-3
FDEP Recreation Facilities Standards**

Facility	Population Served	Park Type
Baseball/Softball/Multi-Basketball Courts	5,000/Diamond 5,000/Court	Community Neighborhood and Community
Boat Ramps	5,000/Ramp	N/A*

VII. RECREATION AND OPEN SPACE ELEMENT

	Facility	Population Served	Park Type
1	Camping & RV Areas	6,750/Acre	Large parks, nature areas, regional
2	Golf Course (9-hole)	25,000/Course	Large parks, special, private, regional
3	Handball/Racquetball Courts	10,000/Court	Community, Urban/District
4	Jogging	15,000/Mile	Neighborhood and Community
5	Nature Study Areas	6,750/Mile	Regional
6	Swimming Pools	8,700/Pool	Community
7	Tennis Courts	2,000/Court	Neighborhood and Community
8	Multipurpose Court	3,500/Court	Community and Regional
9	Horseback/bicycle Riding	5,000/mile	Community and Regional
10	*Not applicable. Not necessarily located in a park.		

11
 12 **Source:** FDEP. Outdoor Recreation in Florida, 1994. Table 6-4 "Population Guideline for
 13 User-oriented Outdoor Recreation Activities. Florida Department of Environmental
 14 Protection, 1994.
 15
 16

17 **Table VII-4**
 18 **Parks and Recreation Sites**

	Planning Sector	Neighborhood Park	Community Park	Regional Park	Total
19	1	-			
20	2	-			5.0
21	3	9	10.5		19.5
22	4	-			0.0
23	5	2	28.0		30.0
24	6			289	289.0
25	7	10			10.0
26	8	-	3		3.0
27	9	5			5
28	10				
29	11	5.5	10.2		15.7
30	12	1	31.3		32.3
31	13	20.3	230.4		250.7

32 **Source:** Refer to Figure V-1.
 33
 34
 35
 36

VII. RECREATION AND OPEN SPACE ELEMENT

Table VII-5
Adequacy of Existing Countywide Recreation Facilities

Facility	Existing	FDNR	
		Standard Applied	Deficiency
Baseball/Softball/ Multi-Purpose Fields	12 Fields	8.5 Fields	-0-
Basketball Courts	12 Courts	5.0 Courts	-0-
Boat Ramps	11 Ramps	5.44 Ramps	-0-
Camping & RV Areas	Available	4.5 Acres	N/A
Golf Course	2 18-Hole	1 9-Hole	-0-
Handball/Racquetball Courts	2 Courts	2.5 Courts	-0-
Jogging	Available	5-10 Trails	N/A
Nature Study Areas	1 Area	4.1 Miles Trail/ Regulation.	N/A
Swimming Pools	4 Pools	2 Pools	-0-
Tennis Courts	13 Courts	13 Courts	-0-
N/A - Not Applicable			

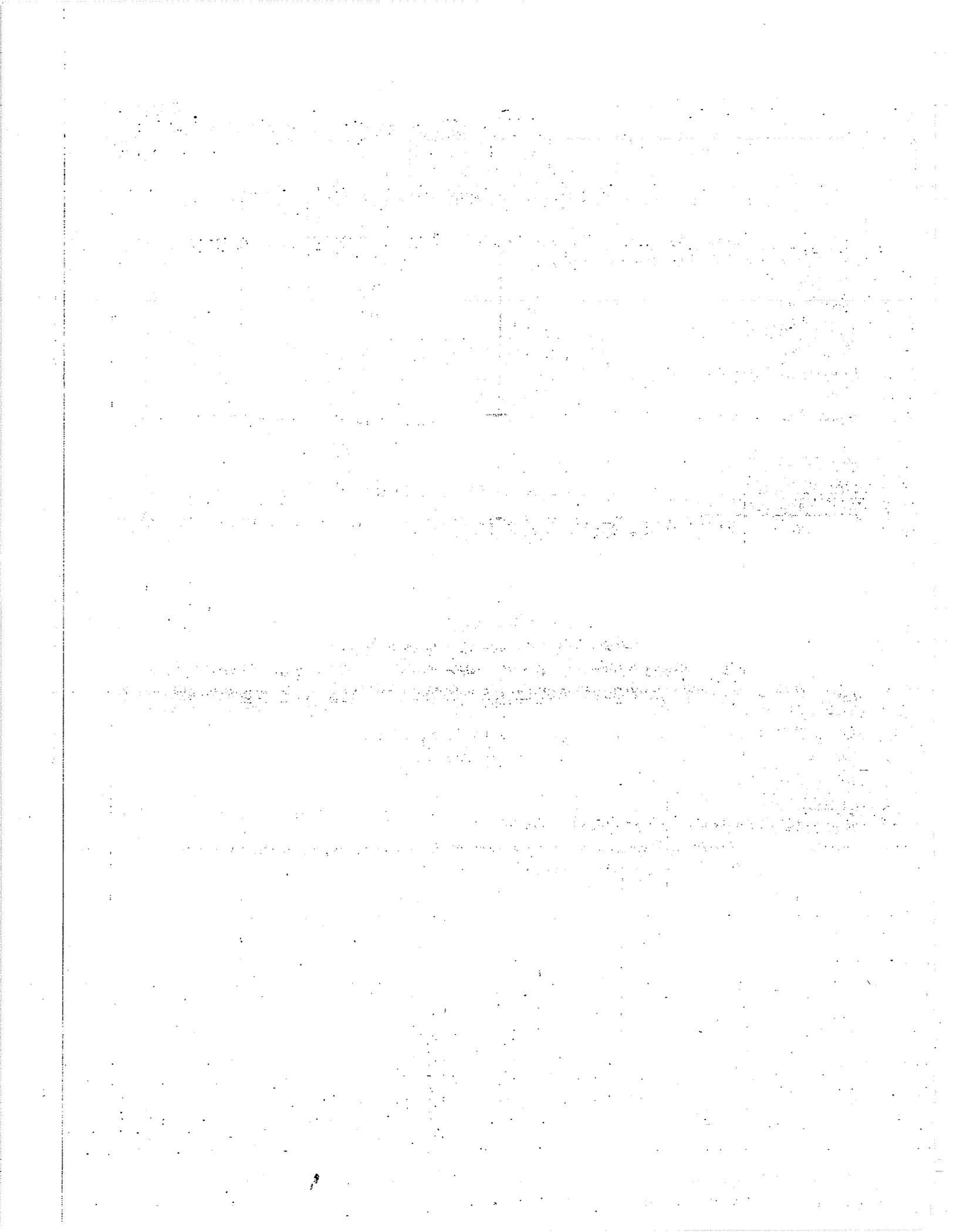
Source: Wilson, Miller, Barton, Soll & Peek, Inc.

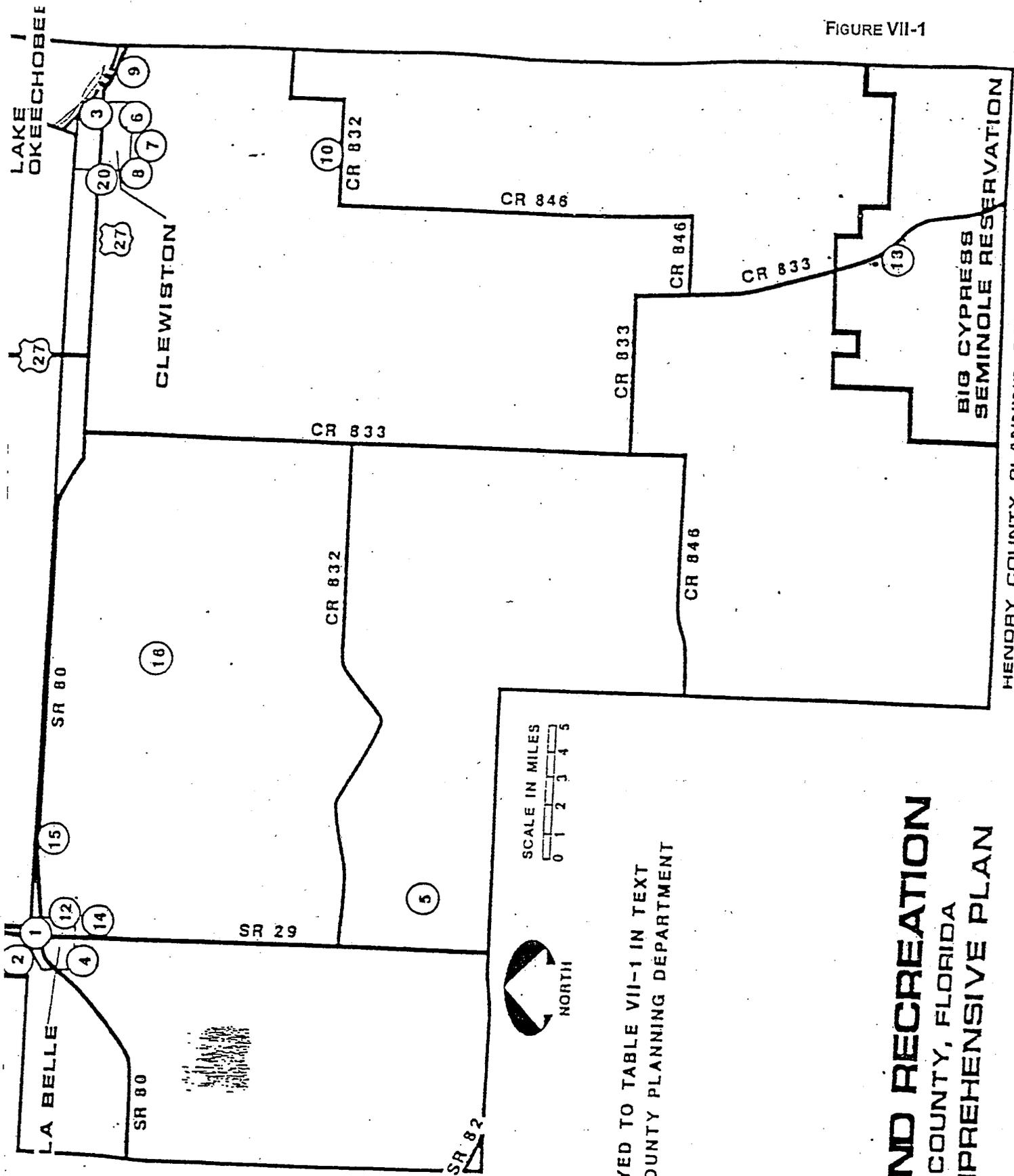
Table VII-6
Additional Recreation Acreage Needs*

Area	Neighborhood Parks		Community Parks		Regional Park	
	2000-2005	2006-2010	2000-2005	2006-2010	2000-2005	2006-2010
Countywide	8.9	3.1	10.1	3.5	479	35.32
Unincorporated County	20.7	2.9	None needed During Planning Period			
Urban Area	11.6	4.4				
Seasonal Total	1.0					

*Assumes appropriate acreage added in each period.

Source: Department of Environmental Protection, Division of Recreation and Parks
Outdoor Recreation in Florida, 1994.

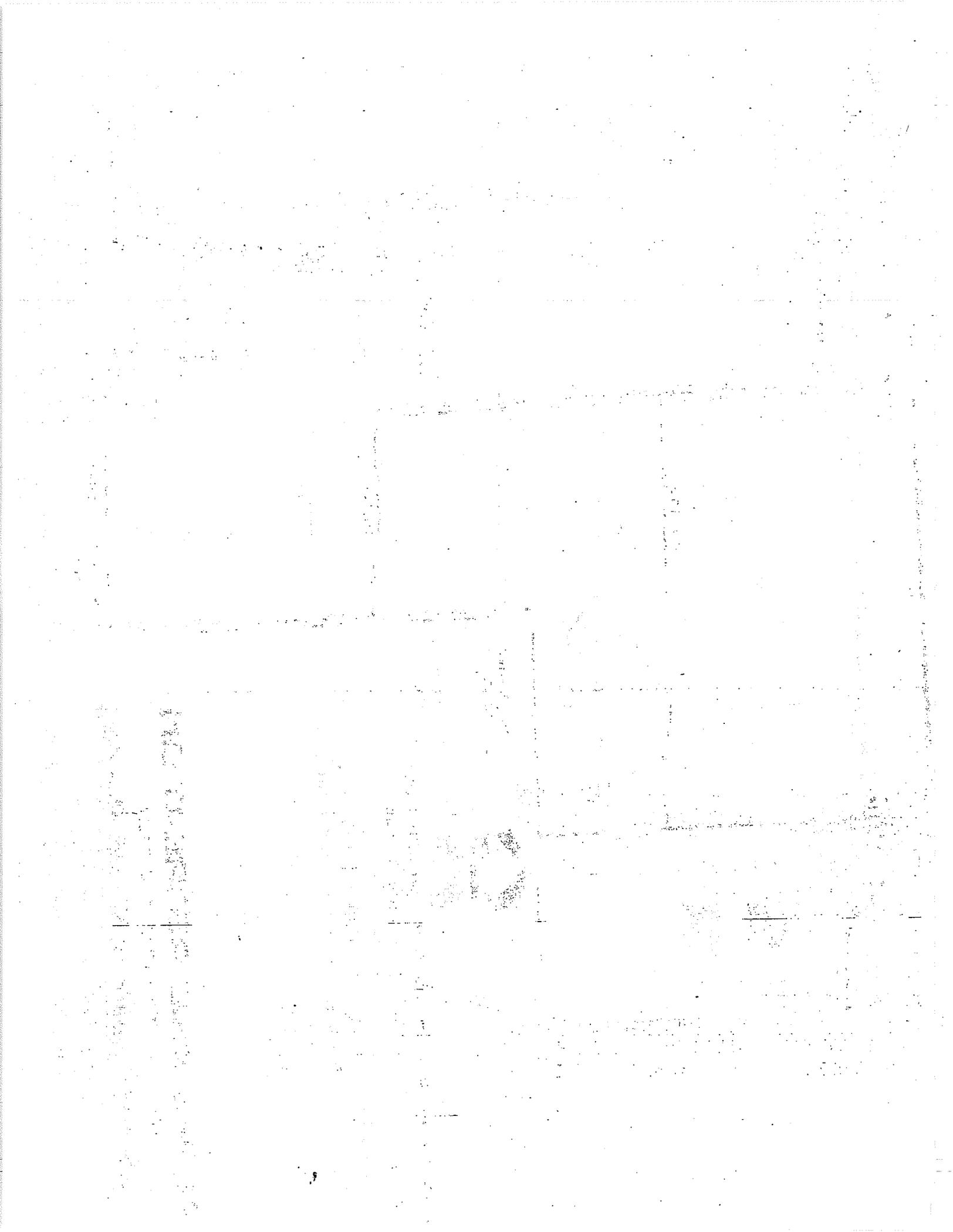


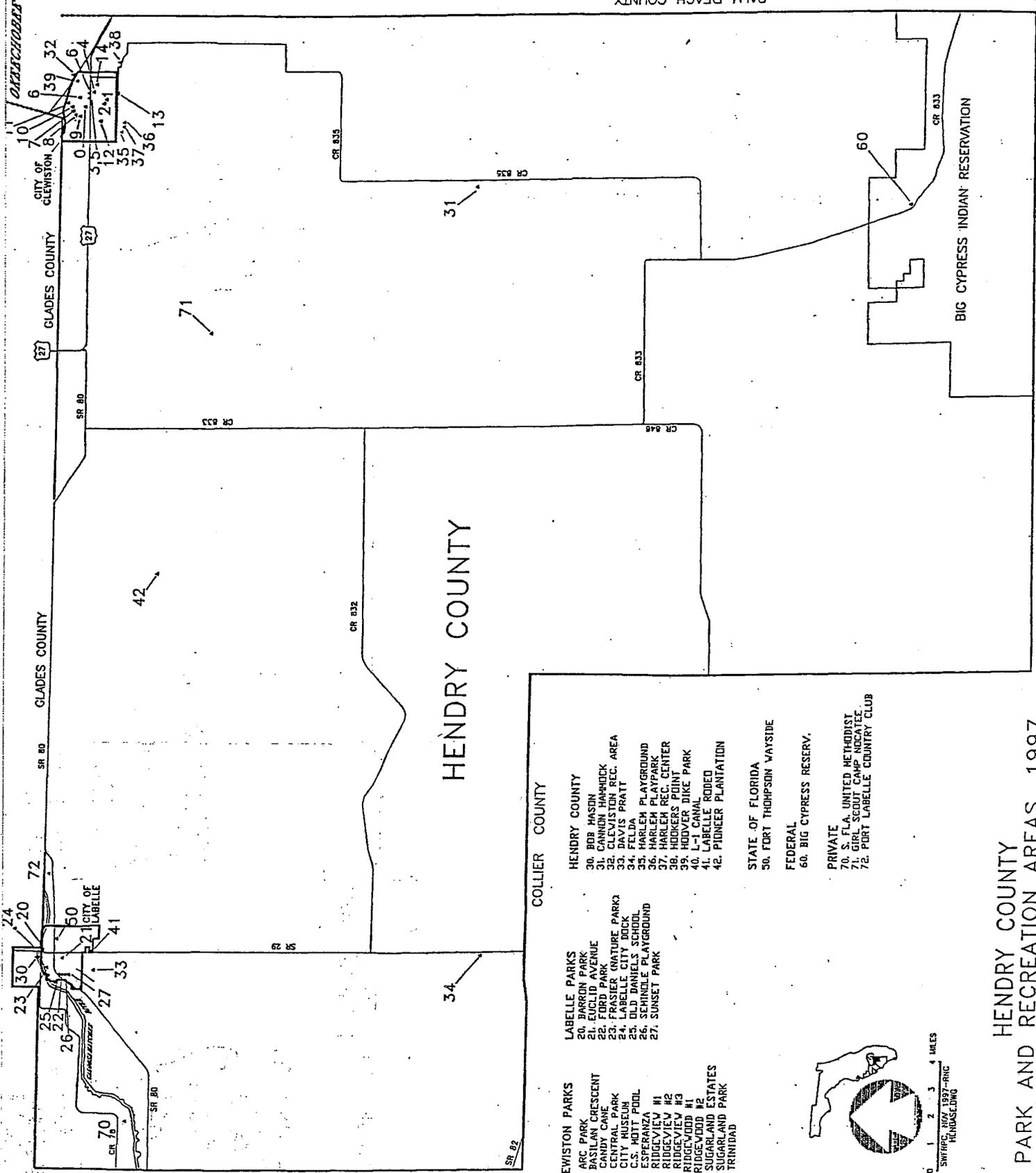


NOTE: NUMBERS KEYED TO TABLE VII-1 IN TEXT
 SOURCE: HENDRY COUNTY PLANNING DEPARTMENT

PARKS AND RECREATION

HENDRY COUNTY, FLORIDA
 1990 COMPREHENSIVE PLAN





- CLEWISTON PARKS**
0. ARC PARK
 1. BASILIAN CRESCENT
 2. CANDY CANE
 3. CENTRAL PARK
 4. CITY MUSEUM
 5. C.S. MOTT POOL
 6. ESPERANZA
 7. RIDGEVIEW #1
 8. RIDGEVIEW #2
 9. RIDGEVIEW #3
 10. RIDGEWOOD #1
 11. RIDGEWOOD #2
 12. SUGARLAND PARK
 13. TRINIDAD
 - 14.

- LABELLE PARKS**
20. BARRON PARK
 21. EUCLID AVENUE
 22. FORD PARK
 23. FRASIER (NATURE PARK)
 24. LABELLE CITY BOCK
 25. BLD DANIELS SCHOOL
 26. SEMINOLE PLAYGROUND
 27. SUNSET PARK

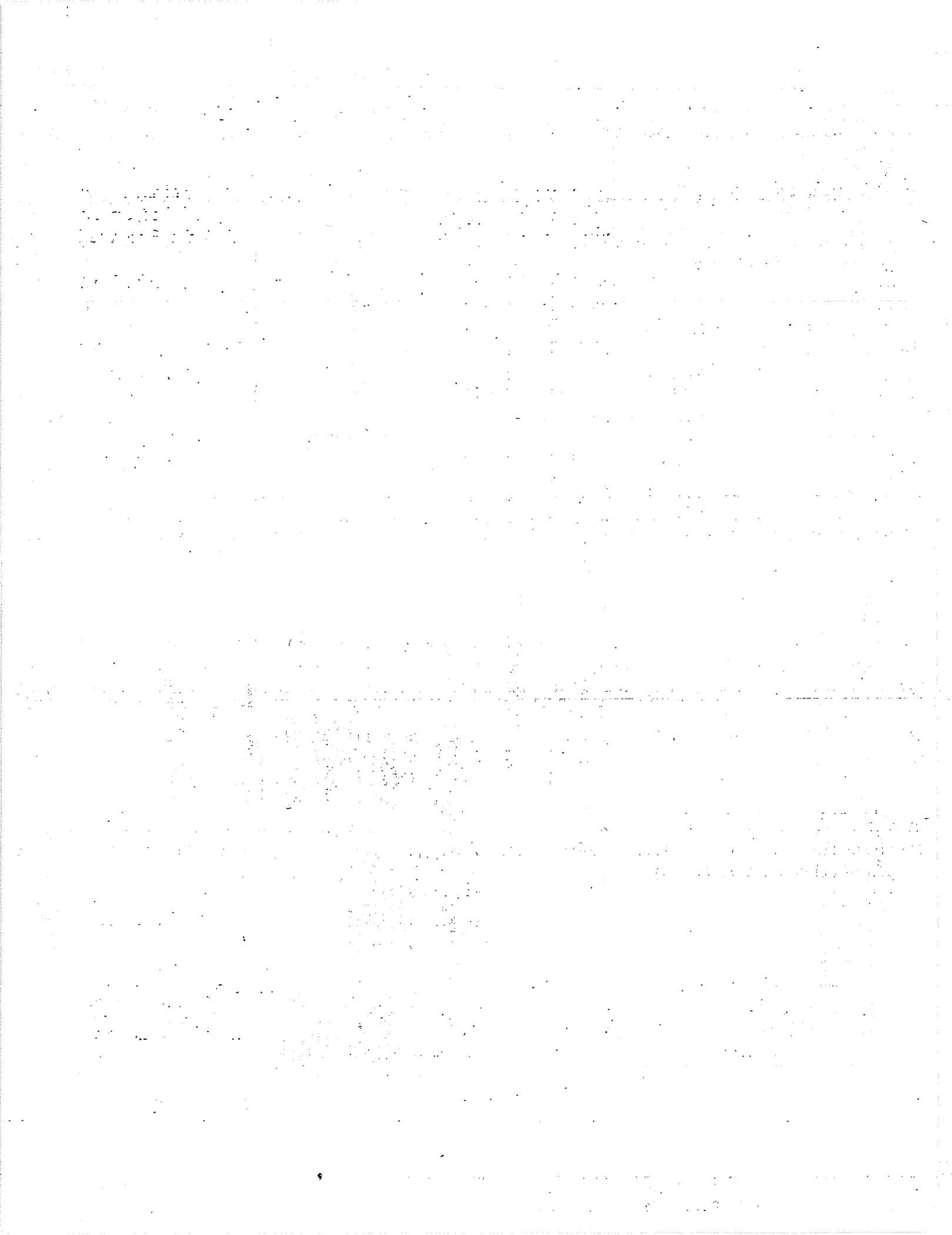
- HENDRY COUNTY**
30. BOB HASON
 31. CANNON HAMMICK
 32. CLEWISTON REC. AREA
 33. DAVIS PRATT
 34. FELDA
 35. HARLEM PLAYGROUND
 36. HARLEM PLAYPARK
 37. HARLEM REC. CENTER
 38. HOOKERS POINT
 39. HODVER DIKE PARK
 40. L-J CANAL
 41. LABELLE RODEO
 42. PIONEER PLANTATION

- STATE OF FLORIDA**
50. FORT THOMPSON WAYSIDE
- FEDERAL**
60. BIG CYPRESS RESERY.

- PRIVATE**
70. S. FLA. UNITED METHODIST
 71. GIRL SCOUT CAMP NOCATEE
 72. PORT LABELLE COUNTRY CLUB



HENDRY COUNTY
PARK AND RECREATION AREAS, 1997



VIII. Intergovernmental Coordination
Element
Data & Analysis Support

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT**Introduction**

The general purpose of the data analysis for the Intergovernmental Coordination Element is to identify coordination entities, define the coordination mechanisms, and analyze the effectiveness of the mechanisms. All adjacent governments and those within the County are to be included, as well as any other entities related to elements of the Comprehensive Plan.

Hendry County currently coordinates with approximately 80 government or service entities. Among these are the municipalities within the County, the eight counties adjacent to Hendry County, the Big Cypress Seminole Indian Reservation, numerous special districts, utility companies, regional and state agencies. There are two municipalities within Hendry County: Clewiston and LaBelle (the County Seat). LaBelle is situated on the south shore of the Caloosahatchee River at the Glades County line. Clewiston is located in extreme northeastern Hendry County on the southwest shore of Lake Okeechobee.

The eight surrounding counties: Charlotte County (northwestern point of contact), Glades County (northern boundary), Okeechobee County (northeastern point of contact), Lee County (western boundary), Palm Beach County (eastern boundary), Broward County (southeastern border), Martin County (eastern point of contact) and Collier County (southern boundary).

Inventory

Table VIII-1 is an inventory of all adjacent governments, independent or dependent special districts, state agencies, and utility companies. Table VIII-2 indicates those elements of the current Hendry County Comprehensive Plan affected by the existing coordination mechanisms. The Comprehensive Plan elements, the nature of the relationship, and the office with primary responsibility for coordination are listed.

Coordination Mechanisms

As Table VIII-2 indicates, Hendry County utilizes several mechanisms to ensure intergovernmental coordination. These mechanisms generally include the following:

- Interlocal agreements between Hendry County and other entities
- Capital facility/drainage/wetland management agreements
- Membership in coordinating organizations or groups
- Staff participation in informal working groups

Interlocal Agreements

Hendry County has entered into a number of interlocal agreements. These are formal interlocal agreements between Hendry County and Clewiston, LaBelle, Lee County, Hendry County School Board, and Port LaBelle. These agreements address fire protection, inspection services,

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

sewage lines, animal control, library services, risk management, airport hazard clear zones, solid waste, and data processing. A listing of these formal agreements is presented in Table VIII-3.

Regional Coordination

Hendry County belongs to the Southwest Florida Regional Planning Council (SWFRPC). SWFRPC is a sub-state regional organization designed to address issues of regional significance in Southwest Florida. Representatives from the nineteen local governments in the six counties (Charlotte, Collier, Glades, Hendry, Lee and Sarasota), and persons appointed by the Governor, sit on the Council.

Staff Participation

The County staff participates in the SWFRPC Technical Advisory Committee. This Committee consists of representatives from the planning departments of each of Southwest Florida's local governments, the water management districts, the Area Agency on Aging and the Florida Department of Transportation.

Effectiveness of Existing Coordination

As indicated by comparing Table VIII-2 and Table VIII-3 the County's actual intergovernmental coordination surpasses the number of adopted interlocal agreements. The adopted agreements reflect specific solutions to specific projects. These agreements are effective for their purposes.

Informal intergovernmental coordination between Hendry County and numerous other entities is also effective. The County benefits by the experiences of other local governments. Information on proposed projects is exchanged for review and comment.

Among its more formal intergovernmental coordination mechanisms is Hendry County's representation of the Southwest Florida Regional Planning Council. The regional planning council is an advisory body whose function is, by definition, coordinative. It serves in a review capacity for local participation in state and federal programs. Because of Hendry County's position at the edge of the Southwest Florida Region, additional coordination with the jurisdictions lying on its eastern border is necessary.

Plan Elements - Coordination

The 1980 Hendry County Comprehensive Plan and the revised 1990 Plan have been considered to ascertain which elements would benefit from improved coordination.

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

1 *Baseline Assumptions and Analysis (Future Land Use Element)*

2
3 With few exceptions, the information contained in this element is critical to the formulation
4 of every other Plan element. Land use, transportation, recreation and housing needs are forecast from
5 this element. Potential impact on the environment and the County's capital improvements program
6 are related. While Hendry County as a whole is utilizing the population projections prepared by the
7 Bureau of Economic and Business Research, the two municipalities within the County do not have
8 that direct source. Population projections need to be coordinated between the unincorporated and the
9 incorporated areas of Hendry County.

10
11 *Future Land Use Element*

12
13 The land use element provides the framework for the other elements, while at the same time
14 responds to their goals, objectives and policies. Specific issues which would benefit from improved
15 coordination are:

- 16
17 - Wetland identification
18 - Commercial and industrial development
19 - Platted lands
20 - Site location criteria
21 - Land use needs for other governmental entities
22 - Land use implications of adjacent jurisdictions
23 - Interrelationships with other jurisdictions.

24
25 *Housing Element*

26
27 The housing element is related to the other elements. Coordination with agencies charged
28 with providing housing opportunities and with private providers of housing units is needed. Specific
29 issues which would benefit from improved coordination are:

- 30
31 - Existing housing stock
32 - Densities provided by the County and municipalities
33 - Seasonal/tourist housing needs
34 - Infrastructure requirements of various housing types/intensities
35 - Migrant farm labor housing

36
37 *Traffic Circulation Element*

38
39 Current traffic facilities are directly related to the other elements. The location, nature and
40 characteristics of future roadway facilities are based on the future land use map. Any new
41 transportation facility affects the other elements. Specific issues which would benefit from improved
42 coordination are:

- 43
44 - The interrelationships with other transportation agencies

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

- The projected fiscal resources.

Environmental Services Element

In the 1980 Hendry County Comprehensive Plan this element addressed potable water, sanitary sewer, storm drainage and solid waste. With this orientation, the element requires coordination with the land use element, housing element, traffic circulation element and conservation element. The Comprehensive Plan also includes a natural groundwater aquifer recharge element.

Conservation Element

This element is closely tied to any of the other elements which potentially impact the County's natural resources; primarily the land use, housing, traffic circulation and environmental services elements. Coordination of all of those elements is needed with the conservation element and with the agencies charged with resource management. Some specific issues which would benefit from improved coordination are:

- Groundwater recharge areas identification
- Water management
- Identification of wetland areas

Recreation and Open Space Element

Open space and recreation requirements are related to the growth of Hendry County. Plan elements which are involved include the land use element, housing element, and to some extent, the traffic circulation element and conservation element. Cooperation and coordination between Hendry County and its municipalities is needed for the most effective provision of service.

Other Comprehensive Plans*Other Local Government Plans*

For the two municipalities in Hendry County, land use decisions by the County for areas near or adjacent to the municipal boundaries could affect development within the boundaries of the incorporated areas. Related issues are annexation areas, service areas for utility operations, maintenance of existing roadways, and development of new transportation facilities.

Of the border areas shared by Hendry County with other counties, the most significant are the borders with Palm Beach County, Collier County, Glades County, and Lee County. Coordination between Hendry County and these four counties should address the comprehensive plan elements.

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

1 *The Comprehensive Regional Policy Plan*

2
3 The Policy Plan of the SWFRPC contains many relevant regional policies. Many of these call
4 for local government action and require intergovernmental coordination. The Hendry County
5 Comprehensive Plan is required to be consistent with the official regional policy plan.

6
7
8 *The State of Florida Comprehensive Plan*

9
10 Local comprehensive plans are required to be consistent with the State Comprehensive Plan.
11 Local plans are to be compatible with and further the State Plan.

12
13 *Area of Critical State Concern*

14
15 There are no areas within Hendry County that are Areas of Critical State Concern.

16
17

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

**Table VIII-1
Intergovernmental Coordination Inventory
Hendry County**

A. Municipalities within the County

The City of LaBelle
Post Office Box 458
LaBelle, Florida 33935

The City of Clewiston
Post Office Box 698
Clewiston, Florida 33440

B. Counties Adjacent to Hendry County

Charlotte County (northwestern point of contact)
Charlotte County Administrative Center
18500 Murdock Circle
Port Charlotte, Florida 33948-1094

Glades County (northern boundary)
Post Office Box 10
Moore Haven, Florida 33471

Okeechobee County (northeastern point of contact)
304 NW 2nd Street
Okeechobee, Florida 33471

Lee County (western boundary)
Post Office Box 398
Fort Myers, Florida 33902-0398

Palm Beach County (eastern boundary)
Post Office Box 1989
W. Palm Beach, Florida 33402

Broward County (southeastern boundary)
115 S. Andrews Avenue
Fort Lauderdale, Florida 33301

Martin County (eastern point of contact)
50 SE Kindred Street
Stuart, Florida 33494

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

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Collier County (southern boundary)
Collier County Administrative Complex
3301 Tamiami Trail, E.
Naples, Florida 33962

C. Special Units of Government

Big Cypress Seminole Indian Reservation

D. Regional Agencies

Southwest Florida Regional Planning Council
(North Fort Myers)

South Florida Water Management District
(W. Palm Beach)

E. Independent or Dependent Special Districts

Type	Status	Geographic Coverage
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Barron Water Control District	I	A	M
Bolles Drainage District	I	A	S
Central County Water Control District	I	A	S
Clewiston Drainage District	I	A	M
Collins Slough Water Management District	I	A	S
Cooperative Products Water Control District	I	A	M
Devils Garden Water Control District	I	A	M
Diston Island Drainage District	I	A	M
East County Water Control District	I	A	M
East Hendry County Drainage District	D	A	S
Flag Hole Drainage District	I	A	S
Gerber Groves Water Control District I	I	A	S

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

Gerber Groves Water Control District II	I	A	S
Harlem Recreational District	D	A	S
Hendry County Hospital Authority	I	N/A	S
Hendry County School District	I	A	S
Hendry County Soil & Conservation District	I	A	S
Hendry/Hillard Water Management District	I	A	S
Port LaBelle Community Development District	I	A	M
Ritta Drainage District	I	A	M
South Florida Conservancy District	I	A	M
Sugarland Drainage District	I	A	M

TYPE: I - Independent
D-Dependent

STATUS: A - Active
I - Inactive

N/A - Not Filing

COVERAGE: M - Multi-County
S - Single County

G. State Agencies with District Offices

Department of Agriculture, Division of Forestry, District 16
 Department of Banking and Finance, District 6
 Division of Alcoholic Beverages and Tobacco, District 9
 Department of Business Regulation, Division of Hotels and Restaurants, District 5
 Department of Commerce, Bureau of Business and Community Development, District 5
 Department of Community Affairs, Bureau of Disaster Preparedness, District 4
 Department of Correction, District 4
 Department of Education, Division of Community Colleges, District 24 (Edison Community College)
 Division of Universities, District 4 (University of South Florida)
 Division of Vocational Education, District 5
 Department of Environmental Regulation, District 5
 Game and Fresh Water Fish Commission, District 5
 Department of Health and Rehabilitative Services, District 8
 Department of Insurance, District 4
 Circuit Courts, 20th District

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

- 1 District Courts of Appeal, District Two
 2 Department of Labor and Employment Security,
 3 Division of Security Rehabilitation. (East Hendry County is in the Lake Okeechobee District;
 4 West Hendry County is sited with Collier County)
 5 Bureau of Unemployment Compensation, Balance of State" program
 6 Bureau of Apprenticeship, District 6
 7 Bureau of Compliance, District 4
 8 Bureau of Industrial Safety and Health, District 2
 9 Bureau of Investigation, District 10
 10 Bureau of Rehabilitation, District 5
 11 Department of Law Enforcement, Bureau of Criminal Justice Standards and Treasury,
 12 District 10
 13 Remainder of the Department, District 3
 14 Department of Legal Affairs, District 3
 15 Department of Military Affairs District 4
 16 Department of Natural Resources, Division of Law Enforcement, District 8
 17 Department of Natural Resources, Division of Parks and Recreation, District 6
 18 Parole and Probation Commissioner, District 4
 19 Department of Professional Regulation, District 6
 20 Department of Revenue, Division of Ad Valorem Tax, District 8
 21 Department of Revenue, Division of Audit, District 4
 22 Department of Revenue, Division of Collections and Enforcement, District 16
 23 Department of State, Division of Licensing, District 6
 24 Department of Transportation, District 1
 25
 26 H. Utility Companies
 27
 28 Water and Sewer Utilities are listed in Chapter IV.
 29
 30 Glades County Electric Cooperative
 31 Florida Power & Light
 32 United Telephone Company
 33 Lee Electric Cooperative (Felda area)
 34 City of Clewiston Electric

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

**Table VIII-2
Existing Coordinating Mechanisms**

Entity	Subject*	Nature of Relationship	Office with Primary Authority
LaBelle	ALL	Statutory; Interlocal Agreements	BCC
Clewiston	ALL	Statutory; Interlocal Agreements	BCC
Charlotte County	ALL	Coordination through Planning Dept.	BCC
Glades County	ALL	Pt LaBelle CDD; Interlocal Agreement Coordination through the Planning Dept. Water and Sewer Agreement*	BCC
Collier County	ALL	Coordination through Planning Dept.	BCC
Okeechobee County	ALL	Lake Okeechobee Management	SFWMD
Lee County	ALL	Coordination through Planning Dept.	BCC
Palm Beach County	ALL	Lake Okeechobee Management Coordination through RPC's Planning Dept.	BCC
Martin County	C	Lake Okeechobee management	SFWMD
Broward County	C/E/L	Coordination between RPC's Planning Dept.	BCC
Big Cypress Reservation	ALL	Independent Federal Agency	BCC
SWFRPC	ALL	DR/Local Plan Review; items of topical interest	BCC
SFWMD	L/C/E	Regulatory and technical assistance; public works assistance	BCC
Barron WCD	C/E	Drainage Services & Water Management	County Engineer
Bolles DD	E	Drainage Services	County Engineer
Central County WCD	C/E	Drainage Services & Water Management	County Engineer
Clewiston WMD	E	Drainage Services	County Engineer
Collins Slough WMD	E	Drainage Services & Water Management	County Engineer
Cooperative Products	L/E	Drainage Services & Water Management	County Engineer
Devil's Garden WCD	C/E	Drainage Services & Water Management	County Engineer
Diston Island DD	E	Drainage Services	County Engineer

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

Table VIII-2
Existing Coordinating Mechanisms

	Entity	Subject*	Nature of Relationship	Office with Primary Authority
1	East County WCD	C/E	Drainage Services & Water Management	County Engineer
2	Flaghole DD	E	Drainage Services & Water Management	County Engineer
3	Gerber Groves SCD	L/E	Drainage Services & Water Supply for Groves	County Engineer
4	Harlem Recreation Dist.	P	Park operation in Harlem	MSBU - Recreation Director Special Districts
5	Hendry County Hospital District	L	Operation of Hospital	BBC
6	Hendry County School District	L	Operation of Schools	BBC
7	Hendry County Soil Conservation District	C	Technical assistance for land management	Planning Dept.
8	Hendry/Hillard WMD	E	Drainage Services & Water Management	County Engineer
9	Port LaBelle CD District	ALL	Implementing Pt. LaBelle Development Order	Planning Dept.
10	Ritta DD	E	Drainage Services	County Engineer
11	S. Florida Conservation District	C	Drainage Services & Water Management	County Engineer
12	Sugarland DD	E	Drainage Services	County Engineer
13	Business Regulation DAET	L	Zoning of bars and liquor stores	BCC
14	Business Regulation DHR	L	Licensing of hotels, restaurants, etc.	Tax Collector
15	Commerce/BBCD	L	Commercial & industrial development	BCC
16	Department of Community Affairs	L	Local Planning, DRI's	Planning Dept.
17	Department of Community Affairs	L	Emergency Management	Disaster Preparedness
18	Department of Community Affairs	H	Community Development Block Grant	Planning Dept.
19	Corrections	L	Siting and licensing correctional facilities	Sheriff's Dept.
20	Educational/Vocational	L	Assistance in progress at high school	School Board

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

Table VIII-2
Existing Coordinating Mechanisms

Entity	Subject*	Nature of Relationship	Office with Primary Authority
Dept. Environmental Protection	C/E	Permitting development in wetlands; water & sewer plant inspections; landfill operation	County Engineer
Game & Freshwater Fish Commission	C	Assistance in wildlife & aquatic management	Planning Dept.
Children and Family Services	L/E	Septic tank inspections; management/Labor camp permits	Health Dept.
Labor & Employment Security	H	Promoting affirmative action	BCC
Dept. of Environmental Protection	C/P	Assistance in park development and lands management	Planning Dept.
Professional Regulation	L	Licensing of Building professionals	Building Dept.
State	L/H	Inventory of historical archaeological resources; technical assistance	Planning Dept.
Transportation	L/T	Construction and maintenance of state roads; planning and development of Lake Okeechobee segment of the Florida Scenic Trail; regulation of railroads & airports	County Engineer
Electric Co-ops	L	Provision of electric services	BCC
United Telephone Service	L	Provision of telephone services	BCC

* - Comprehensive Plan Element

L - Land Use

T - Traffic Circulation

H - Housing

C - Conservation

P - Parks and Recreation

E - Water/Sewer/Solid Waste, etc.

VIII. INTERGOVERNMENTAL COORDINATION ELEMENT

Table VIII-3
Interlocal Agreements

	Party	Subject
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3	Clewiston	Airport Hazard Area
4		Auditorium Construction
5		Sewer Lines
6		Clewiston Airport
7		Animal Control
8		Volunteer Fire Department
9		Library Services
10		Section 8 Housing
11		Community Development Block Grant
12		
13	LaBelle	Airport Hazard Area
14		Animal Control
15		Section 8 Housing
16		Recreational Facility
17		
18	Hendry County School Board	Data Processing
19		
20	Lee County	Mutual Aid Emergencies
21		Risk Management
22		Solid Waste
23		
24	Port LaBelle	Community Development District
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26		

IX. References

Data & Analysis Support

This section contains the references for the Data Analysis. These references are numbered, and the numbers appearing in the text refer to the number of the reference from which data or information was derived.

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