

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Technical Publication 80-8

A GEOGRAPHIC OVERVIEW OF 1977
LAND USE/COVER PATTERNS IN
THE LOWER WEST COAST PLANNING AREA
OF SOUTH FLORIDA

by

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and

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Resource Planning Department
South Florida Water Management District
West Palm Beach, Florida

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Our appreciation is extended to the Planning Departments and Agricultural Extension Agents of Charlotte, Lee, Collier, Hendry and Glades Counties for assistance in the review of these data.

INTRODUCTION

The purpose of this report is to provide a general overview of land cover patterns in the Lower West Coast Planning Area. Patterns for selected land cover categories for each of ten surface water drainage basins are illustrated by means of a thematic map series. Each map displays areas of a selected Level I land cover category to show its distribution patterns within the basin. A histogram showing percent of total acreage for each of the three selected land cover categories is included for each basin. The histogram shows the quantity of land within each selected category in relation to the total area of that basin. Since only three of the seven Level I categories were used, the total does not equal one hundred percent. A listing of the detailed land cover acreages for all Level I, Level II and Level III categories, by basin, is also provided.

Land cover acreages in the form of numerical totals by category are used by District staff for various calculations relating to water management. These numbers provide quantities within each category but give no indication of location or distribution patterns. The thematic maps are intended to show these patterns in relation to the overall basin, county boundaries, planning area boundaries and the distribution patterns of other land cover categories.

To know the distribution of a land use category is important because factors affecting a basin are not uniformly distributed. For example, rainfall might occur in different amounts at different times at various points within the basin. In a case such as this the rainfall data would be weighted to determine its impact on various land uses.

Thematic maps are useful to local governments because they show distribution patterns by hydrologic unit as well as political boundaries.

Drainage basins are regional in nature rather than local because they cross various political entities; therefore a land use that has a significant impact, and the area being affected, might occur as different sides of a political boundary.

The land cover data presented in this report provides a base line reference against which future changes may be monitored within each basin. Future reports will present the changes that have occurred within each basin and the new land cover distributions. The Water Use Plan is scheduled to be updated periodically requiring a corresponding update of the land cover data base.

This District has developed an extensive geographic data gathering operation in response to the needs of various District research projects. A computerized data base and mapping system has been installed to allow the data to be aggregated by areas as defined by various users. Presently, the major effort is in building the base-file of land cover data. Aerial photography is used as the source for developing this data. District photointerpreters use a multi-level classification system in developing the data.

Photointerpretation is performed using 1:24000 aerial photography with the U.S.G.S. 7.5 minute quadrangles as a base. 1"=300' photography is used to supplement these sources and the data is extensively field checked by field technicians in cars and aircraft. Wherever possible the data is reviewed by local agencies in the area being mapped before it is finalized. The resulting land cover overlay is then ready to be digitized and stored in the Computervision Automated Mapping System. This system utilizes a 19" CRT Design Console and a free cursor microprocessor controlled digitizer to input the data. The CPU is a 64 K core CV graphic processor

which allows for core expansion up to 128 K. The system includes a 40 million word capacity disc drive and a tape drive.

The software, written in Fortran S, is capable of map alignment, polygon identity, map verification, area calculation, summary by land use, map paneling, map sectioning, cross hatching, point or continuous mode digitizing, associative properties, 3D data base, paper stretch compensation, full edit capability, polygon retrieval, 256 layers of information, multiple line and text fonts, gridding, state plane coordinates, English and metric output, floating point and data smoothing.

The land use and land cover classification system developed to describe the types of land uses that occur throughout the District is a three level system. Level I represents the most general level of detail and agrees with the Level I categories described by the U.S.G.S. (1976) in Professional Paper No. 964. This system includes categories for natural vegetation systems as well as for man's use. The categories at the most detailed level, Level III, were developed by the District and reflect characteristics that are applicable to water resources research and management within the District. Samples of urban categories to illustrate the three levels of detail follow:

<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
(U) Urban & Built-up Land	(UR) Residential	(URSL) Single-Family, Low Density (under 2 D.U./gross acre) (URSM) Single-Family, Medium Density (2 to 5 D.U./gross acre) (URSH) Single-Family, High Density (Over 5 D.U./gross acre) (URMF) Multi-Family Building (URMH) Mobile Homes

As the example shows, the code is four letters with the first letter representing the Level I classification, the second letter representing the Level II classification, and the last two letters representing the Level III

classification. For example, the code URMH breaks down as follows: the first letter (U) indicates the Level I classification, URBAN and BUILT-UP LANDS; the second letter (R) indicates the Level II classification, RESIDENTIAL; and the last two letters (MH) represent the Level III category, MOBILE HOMES. A complete list of all the Level I, II, and III classifications is included in this report with the corresponding DOT classification numbers.

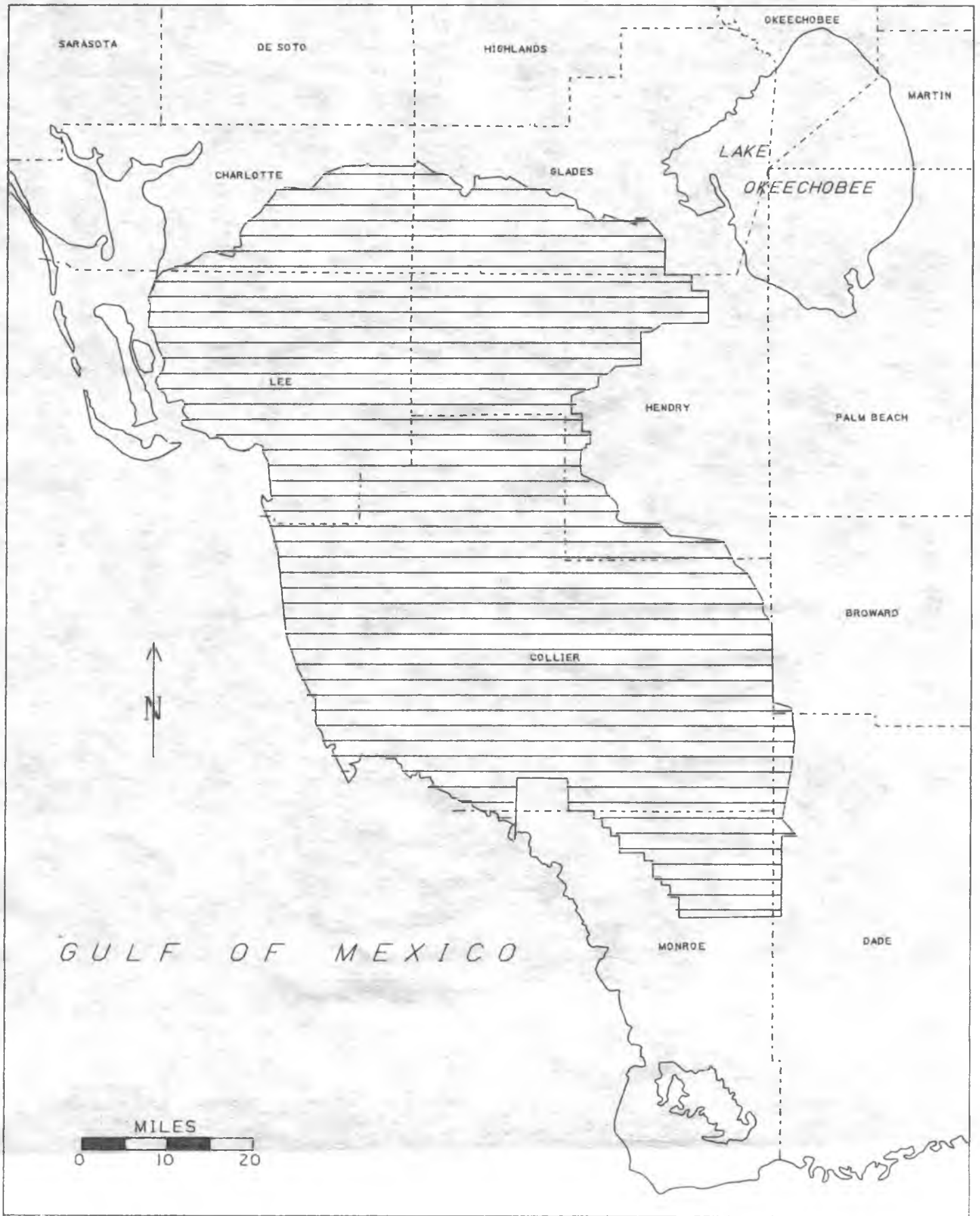
The entire Lower West Coast Planning Area was mapped in 1977 at Level III detail and the data were stored in the computer. The format of these maps corresponds to the U.S.G.S. 7.5 minute quadrangles. These maps were joined by the computer to create a detailed 1977 land cover map for each basin. The thematic maps for this report were created from the detailed data bases using the computer. The three Level I land use/cover classifications for the thematic maps are urban and built-up lands, agriculture and wetlands. These three categories were selected on the basis of their relative importance and impact on water resources.

Urban and built-up lands are areas where much of the land is covered by structures. Included in this category are cities, towns, development along highways, shopping centers, industrial and commercial complexes, institutions, communications and transportation facilities, and utilities. Small areas of nonconforming use may be included in this category as urban development expands. The urban and built-up category takes precedence over other categories when the criteria for more than one category are met. Sub-categories at Level II included in urban and built-up lands are residential, commercial and services, industrial, institutional, transportation, and open lands. These Level II categories coincide with the U.S.G.S. Level II categories as described in Geological Survey Professional Paper 964, but differ from the State of Florida's Department of Transportation (1978)

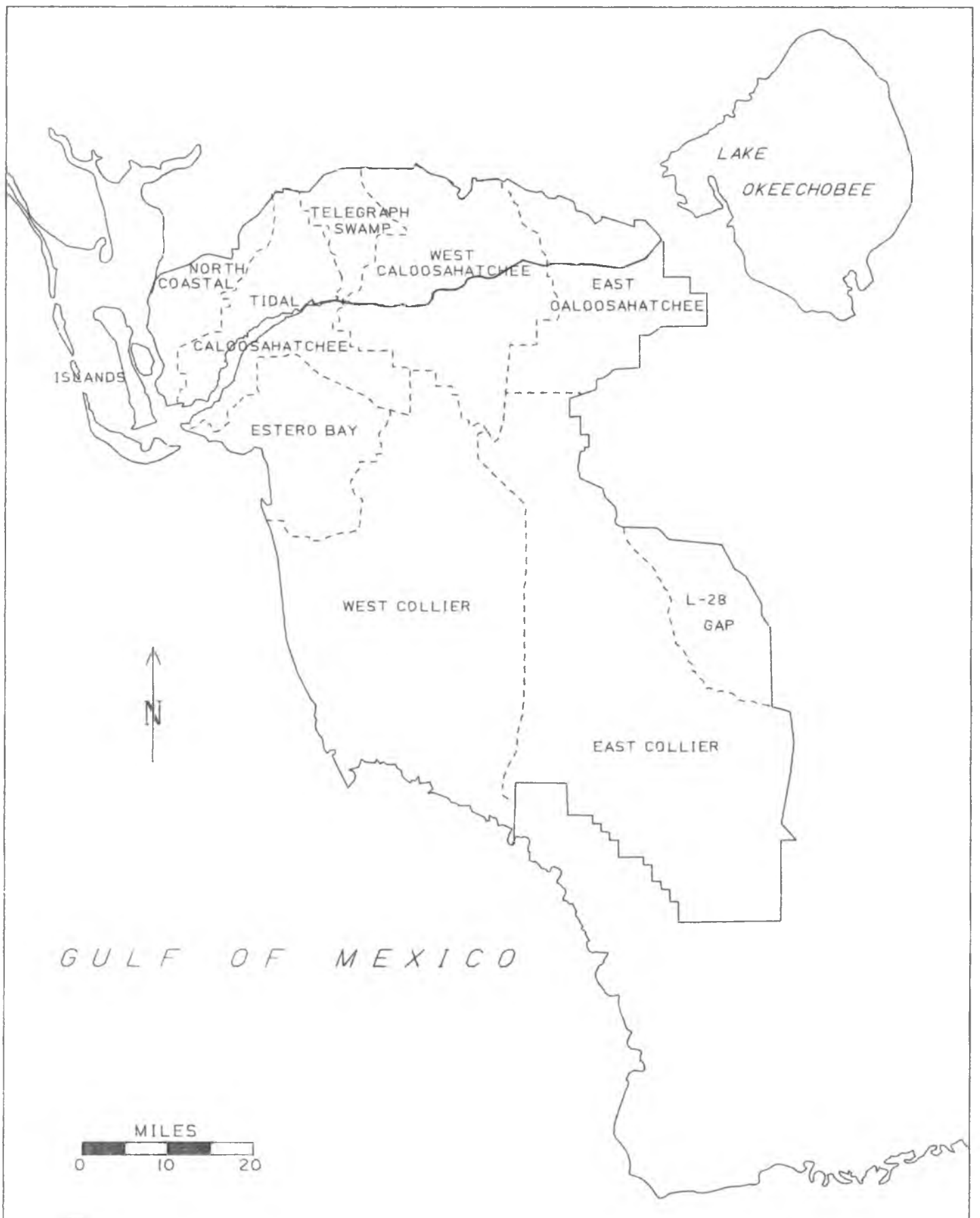
Land Use, Cover, and Forms Classification System in that their Level I separates transportation, communication, and utilities into their own categories, while the District does not.

Agricultural land is defined as land used primarily for food or fibre production. The Level II categories included in agricultural land are cropland; pasture; orchards, groves, vineyards, nurseries, ornamental and horticultural areas; and confined feeding operations. This Level I category is the same as that used by the U.S.G.S. and the State of Florida.

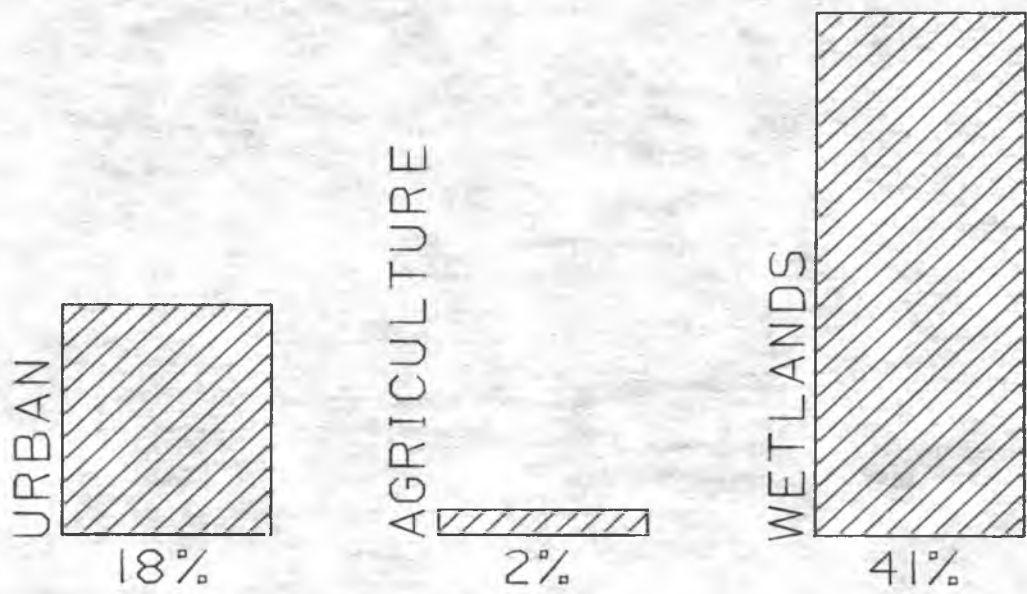
Wetland areas are those lands where the water table is at, near, or above the land surface for a significant portion of most years. The vegetation that grows in these areas is aquatic or hydrophytic. These areas occur in both salt and fresh water environments. Level II sub-categories included are forested fresh (e.g. cypress swamps), non-forested fresh (e.g. sawgrass marshes), forested salt (e.g. mangrove swamps), non-forested salt (e.g. cordgrass marshes), and mixed forested and non-forested fresh (e.g. cypress domes and wet prairie areas). This Level I category agrees with the U.S.G.S. and the State of Florida systems.



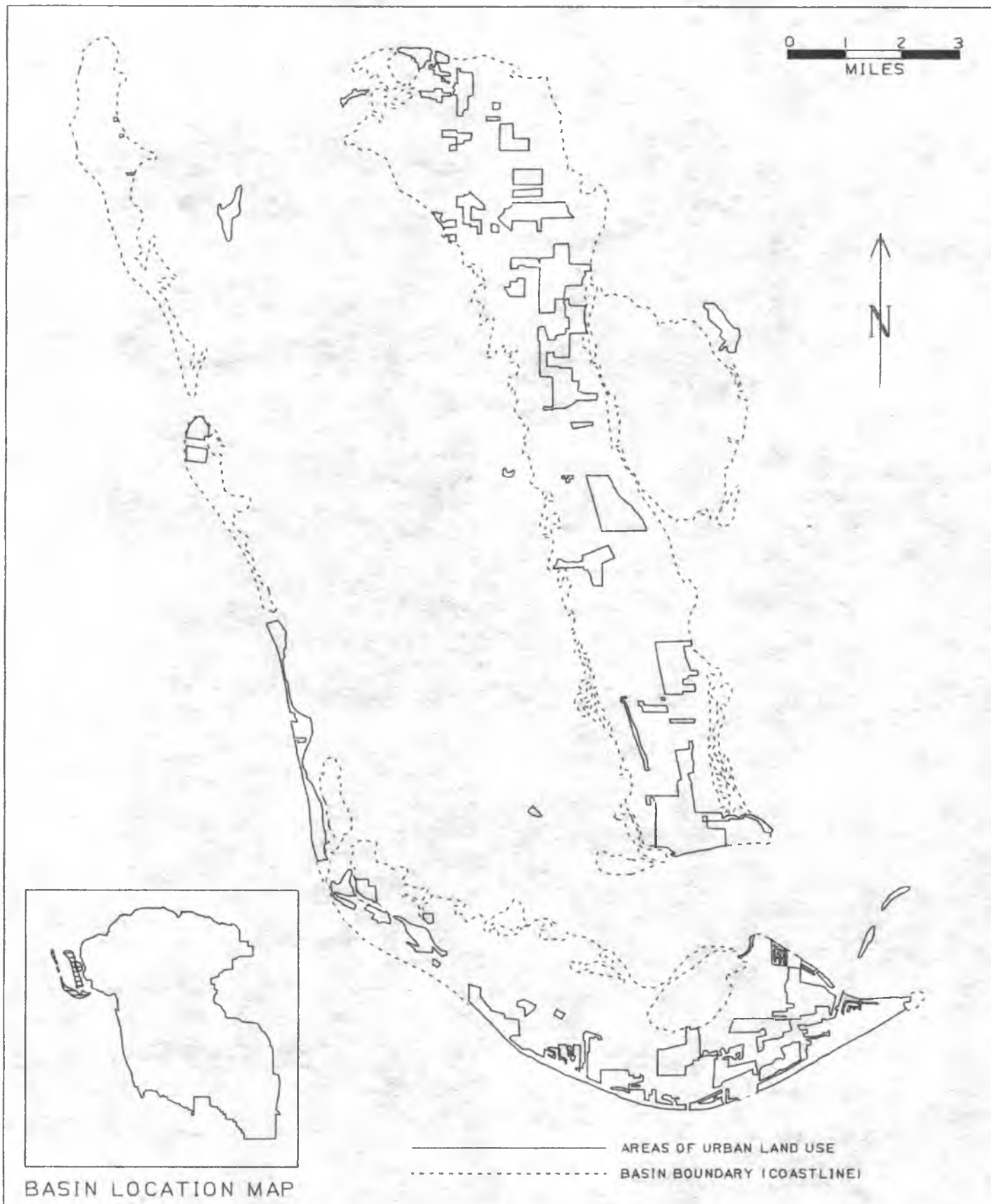
LOWER WEST COAST PLANNING AREA
 SOUTH FLORIDA WATER MANAGEMENT DISTRICT



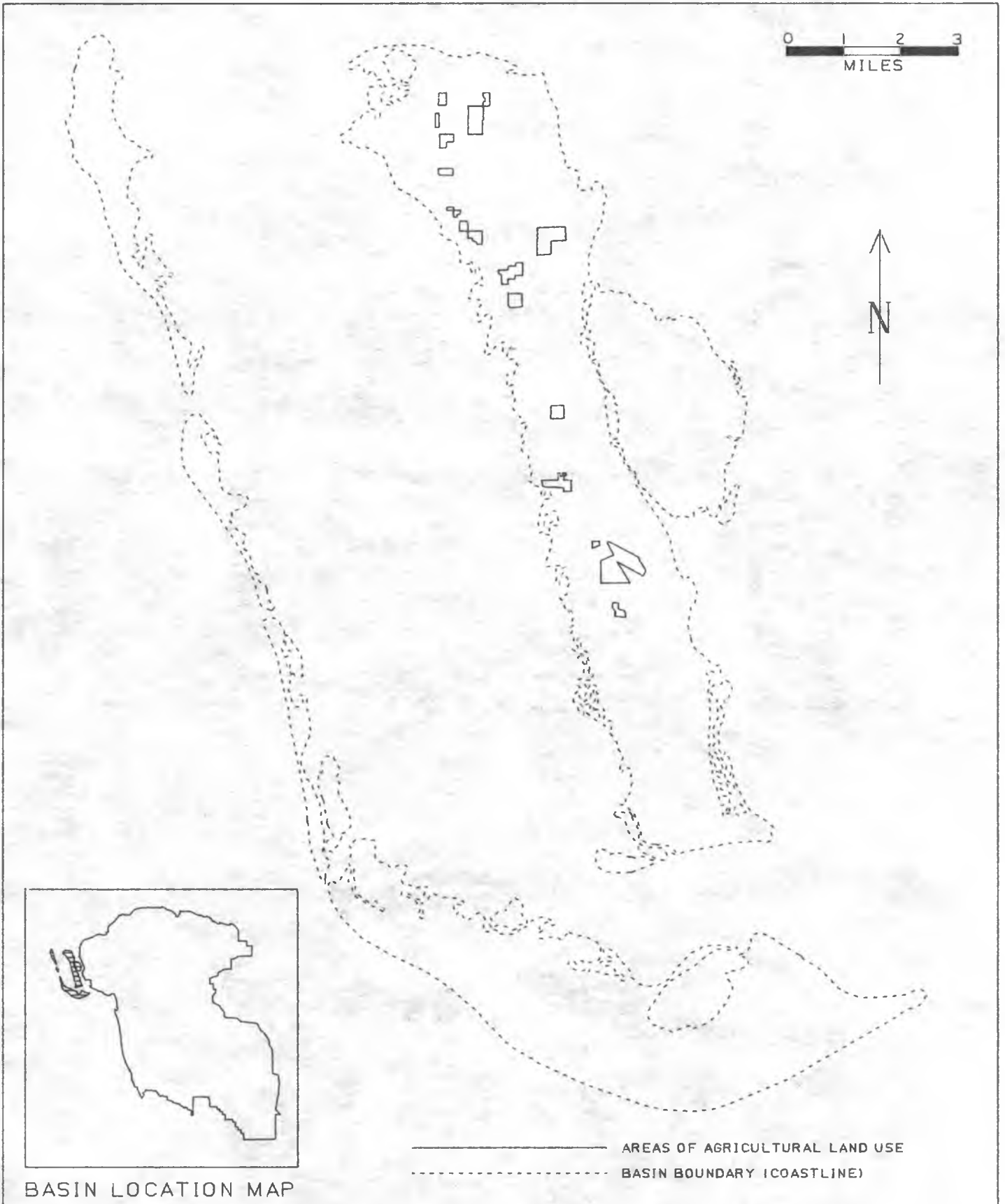
SURFACE WATER DRAINAGE BASINS
 LOWER WEST COAST PLANNING AREA



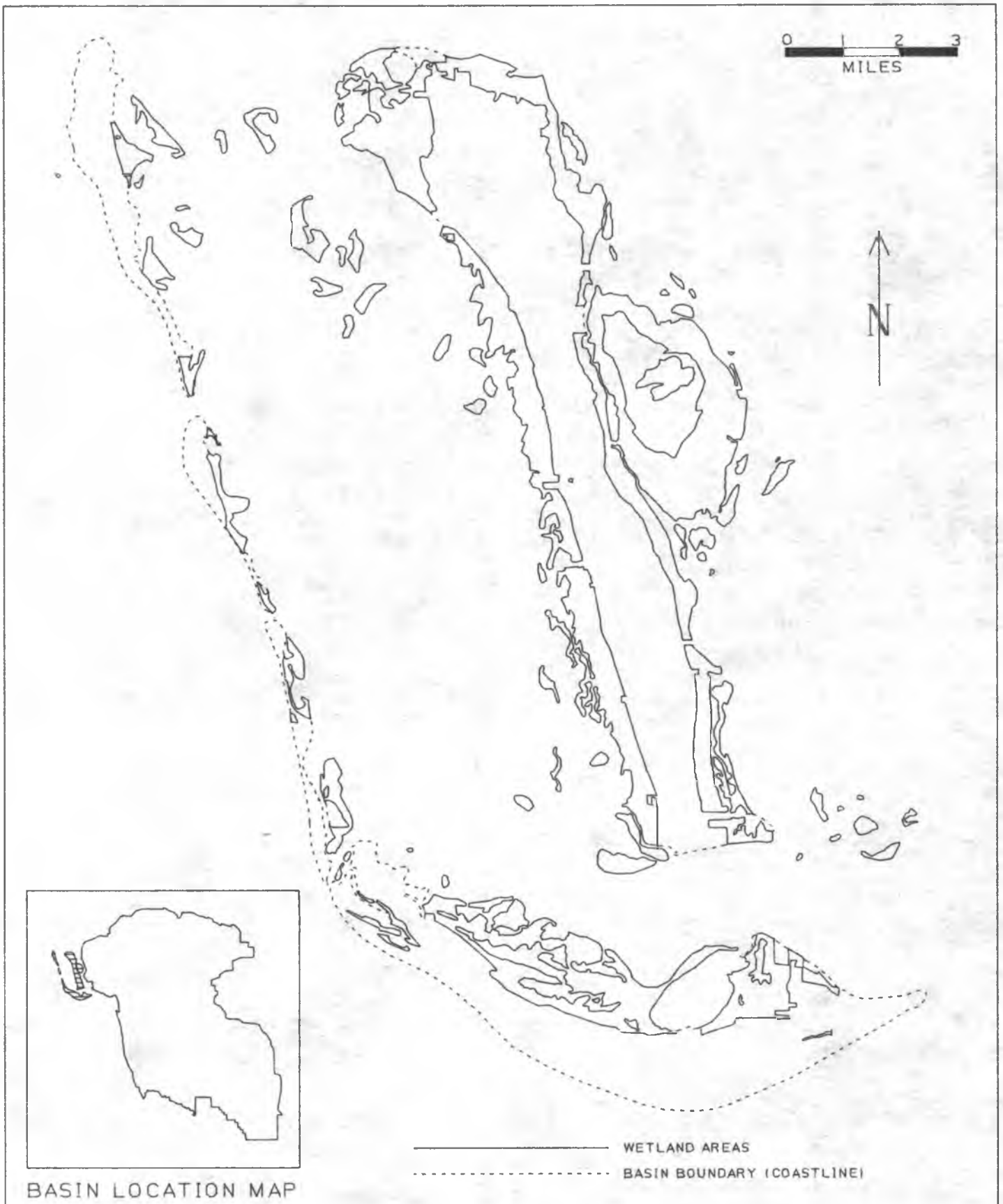
PERCENTAGE OF TOTAL AREA
ISLANDS BASIN
LOWER WEST COAST PLANNING AREA



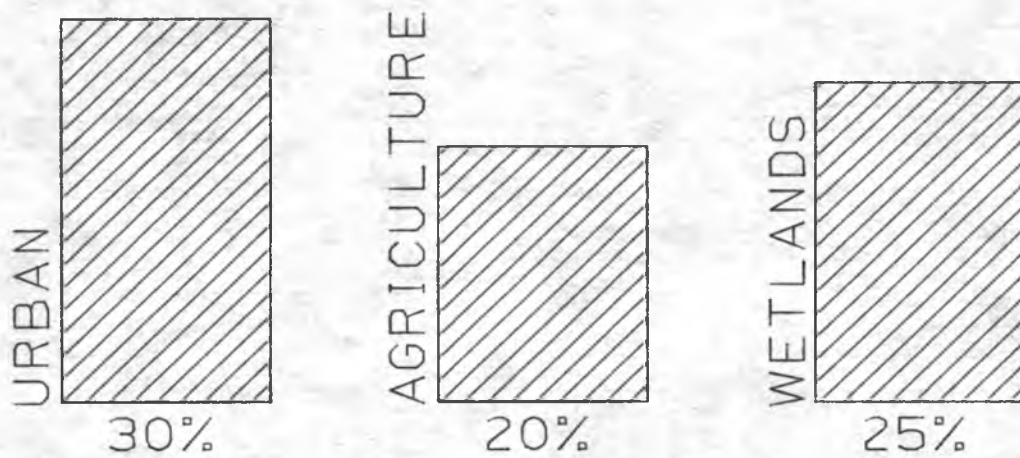
1977 GENERALIZED URBAN MAP
ISLANDS BASIN
LOWER WEST COAST PLANNING AREA



1977 GENERALIZED AGRICULTURE MAP
ISLANDS BASIN
LOWER WEST COAST PLANNING AREA



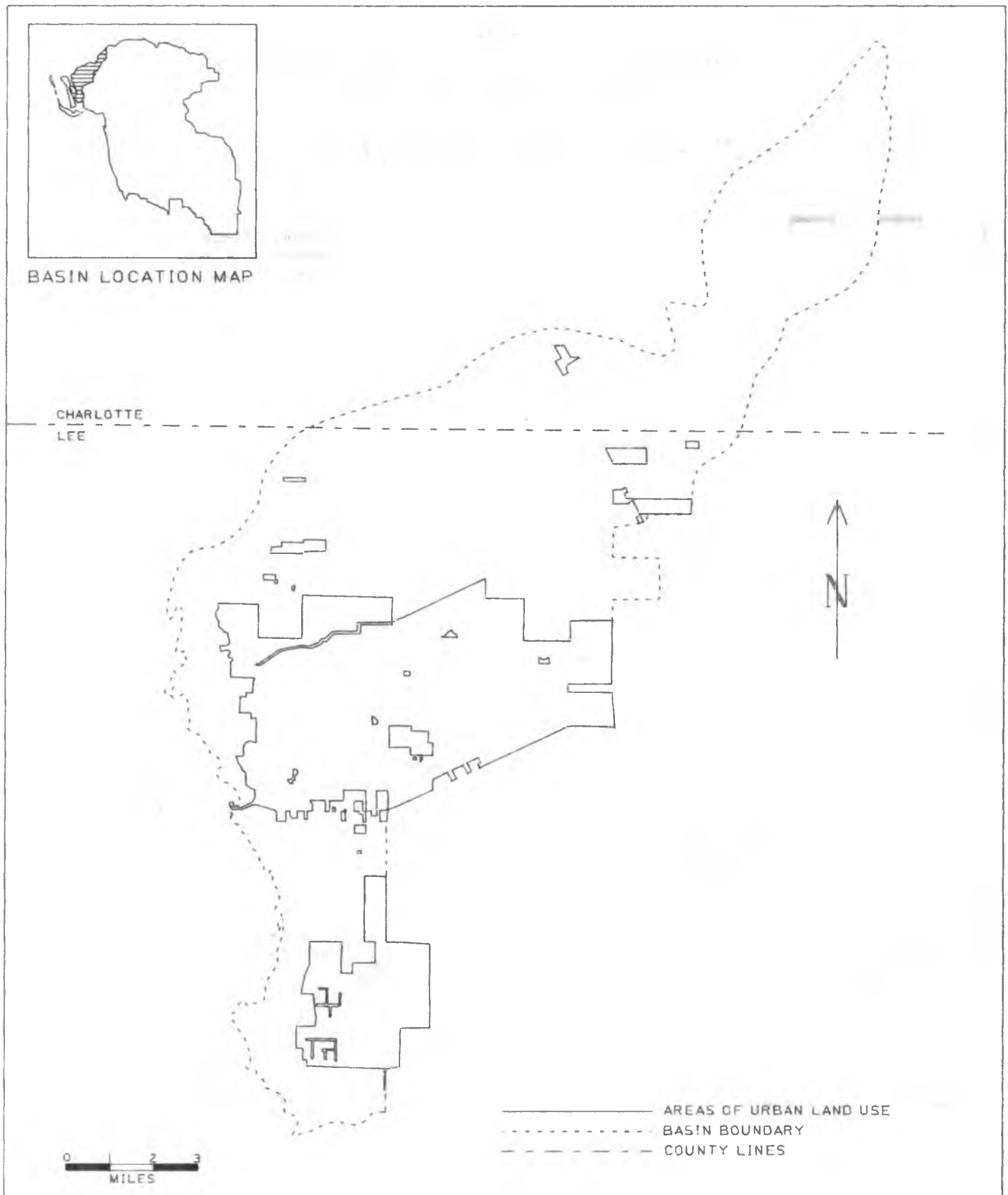
1977 GENERALIZED WETLANDS MAP
ISLANDS BASIN
LOWER WEST COAST PLANNING AREA



PERCENTAGE OF TOTAL AREA

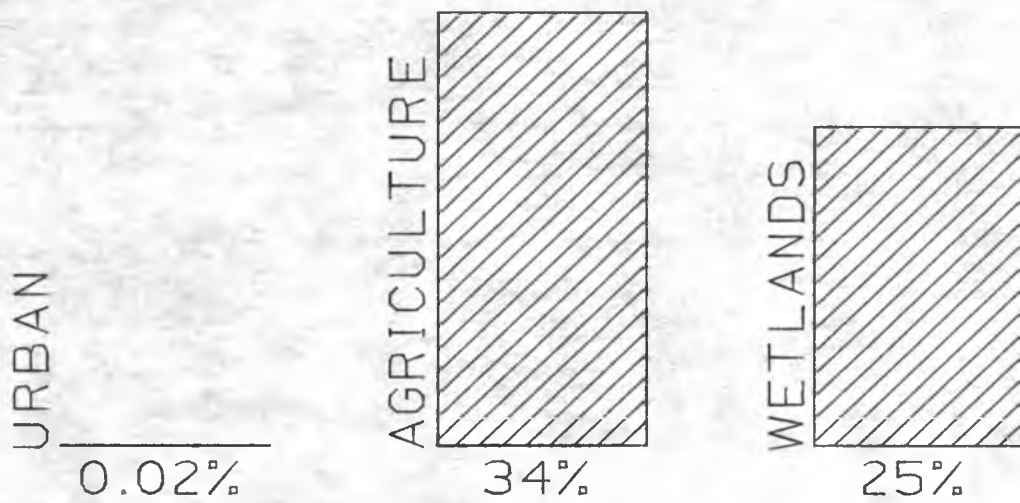
NORTH COASTAL BASIN

LOWER WEST COAST PLANNING AREA

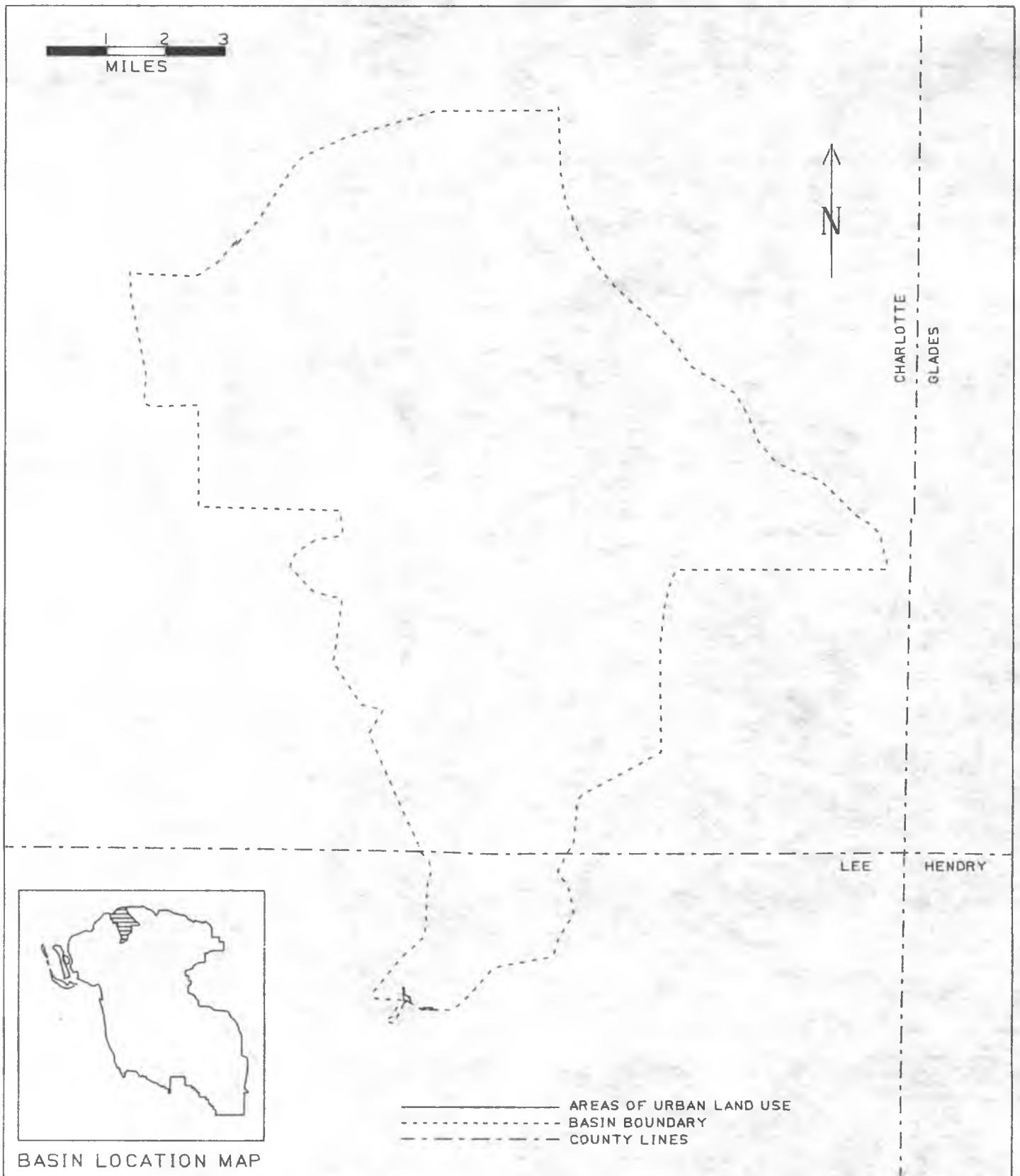


1977 GENERALIZED URBAN MAP

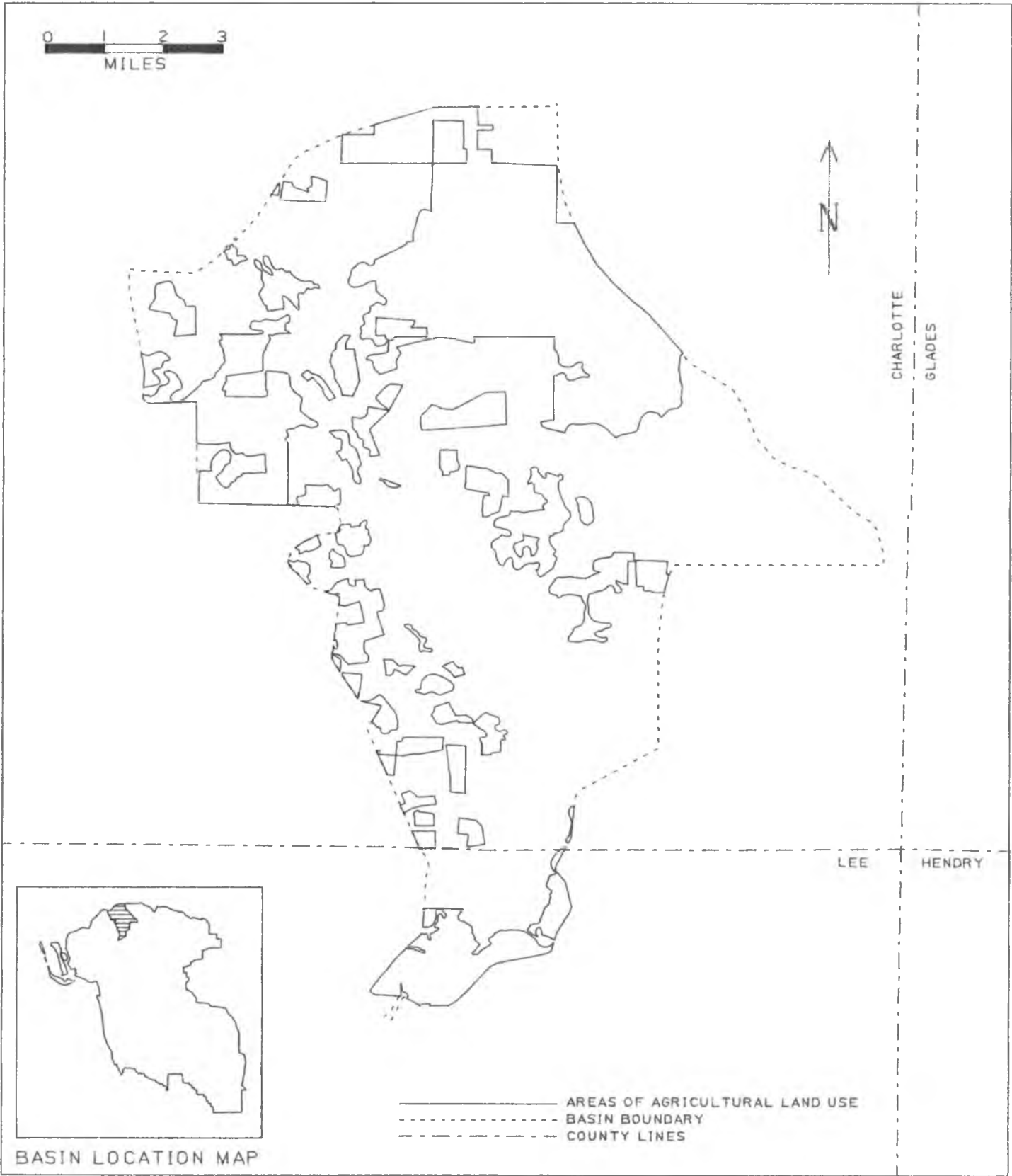
NORTH COASTAL BASIN
LOWER WEST COAST PLANNING AREA



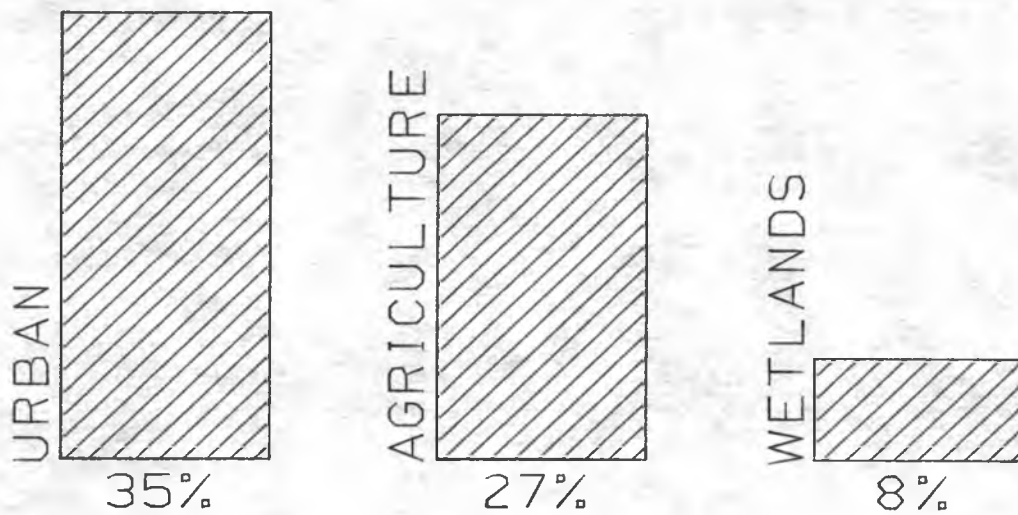
PERCENTAGE OF TOTAL AREA
TELEGRAPH SWAMP BASIN
LOWER WEST COAST PLANNING AREA



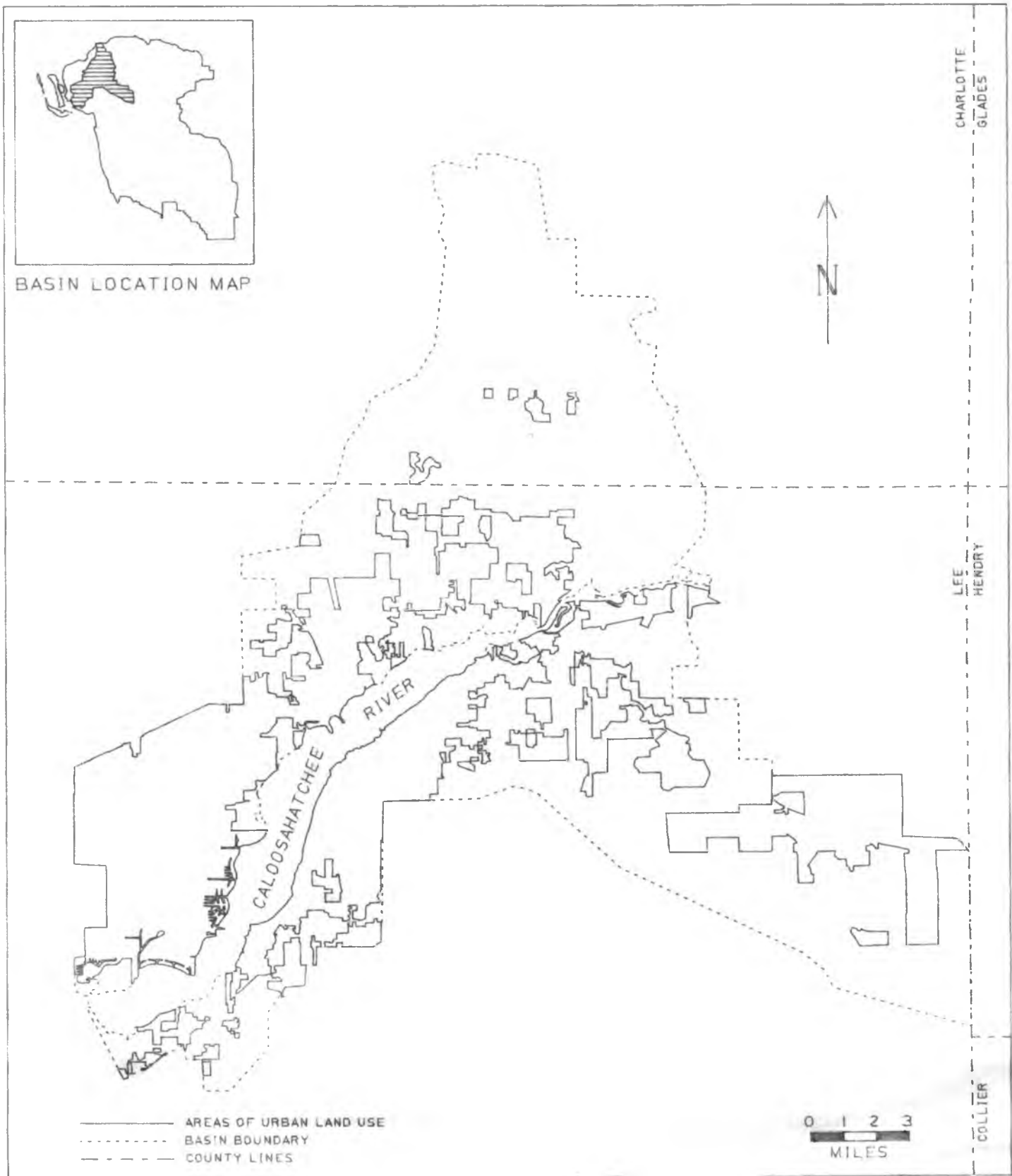
1977 GENERALIZED URBAN MAP
 TELEGRAPH SWAMP BASIN
 LOWER WEST COAST PLANNING AREA



1977 GENERALIZED AGRICULTURE MAP
TELEGRAPH SWAMP BASIN
LOWER WEST COAST PLANNING AREA

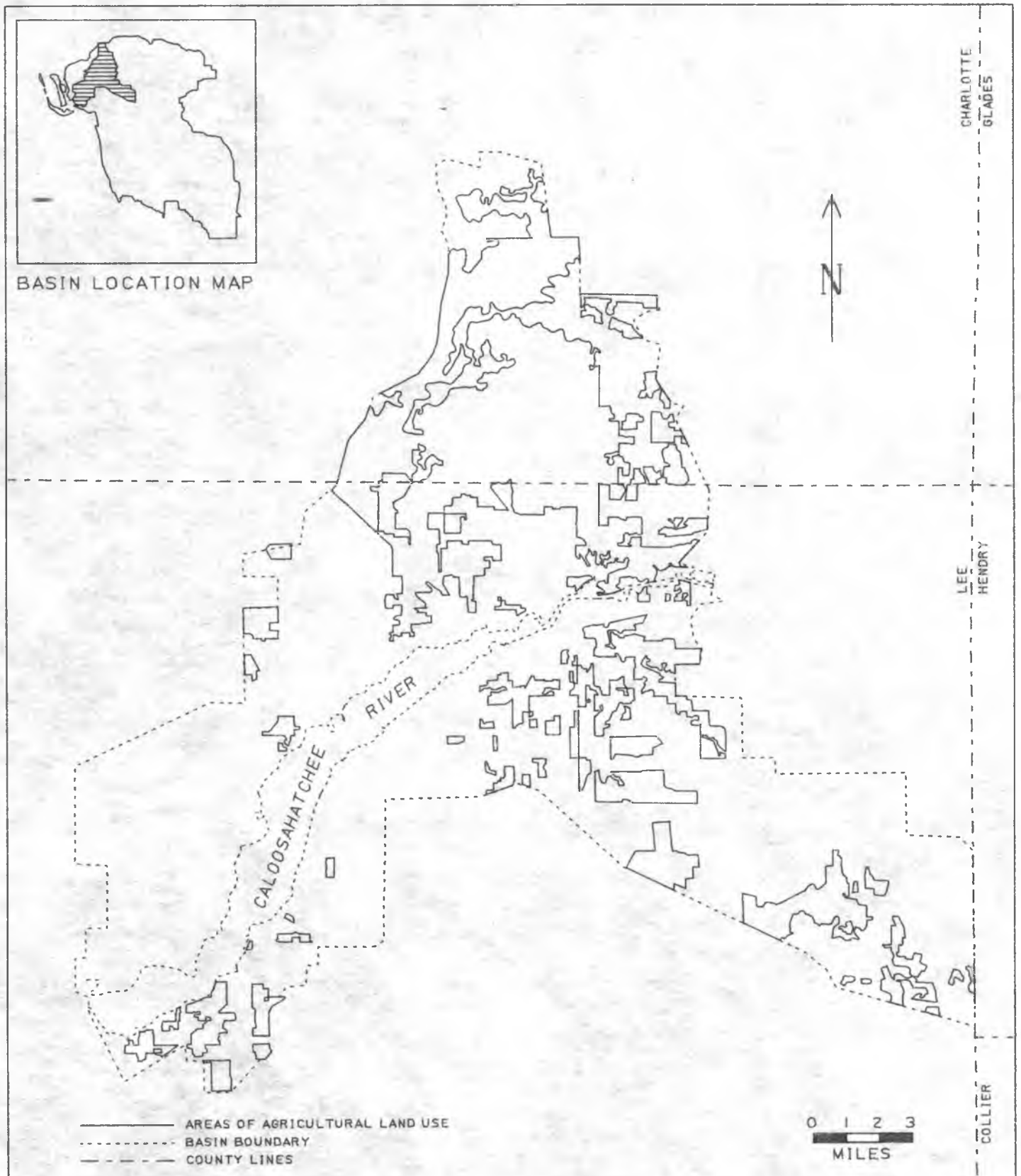


PERCENTAGE OF TOTAL AREA
TIDAL CALOOSAHATCHEE BASIN
LOWER WEST COAST PLANNING AREA

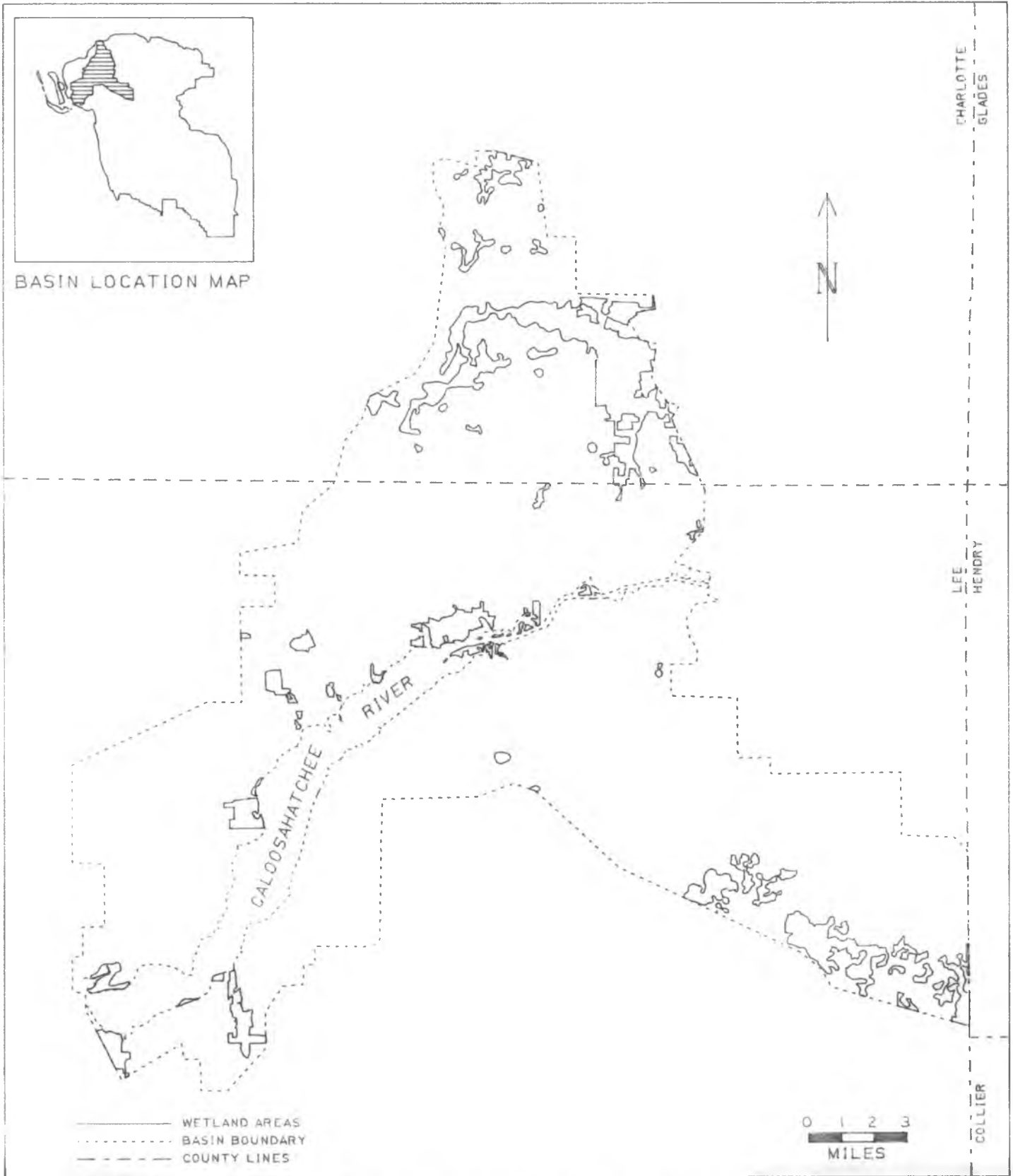


1977 GENERALIZED URBAN MAP

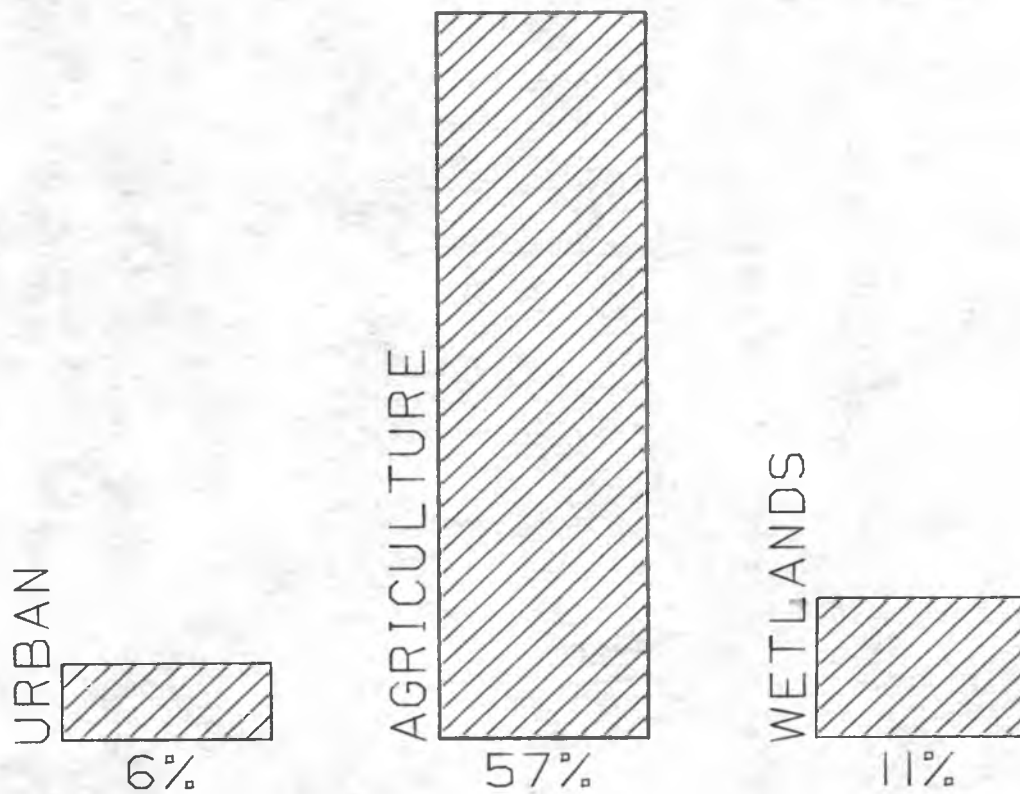
TIDAL CALOOSACHATCHEE BASIN
LOWER WEST COAST PLANNING AREA



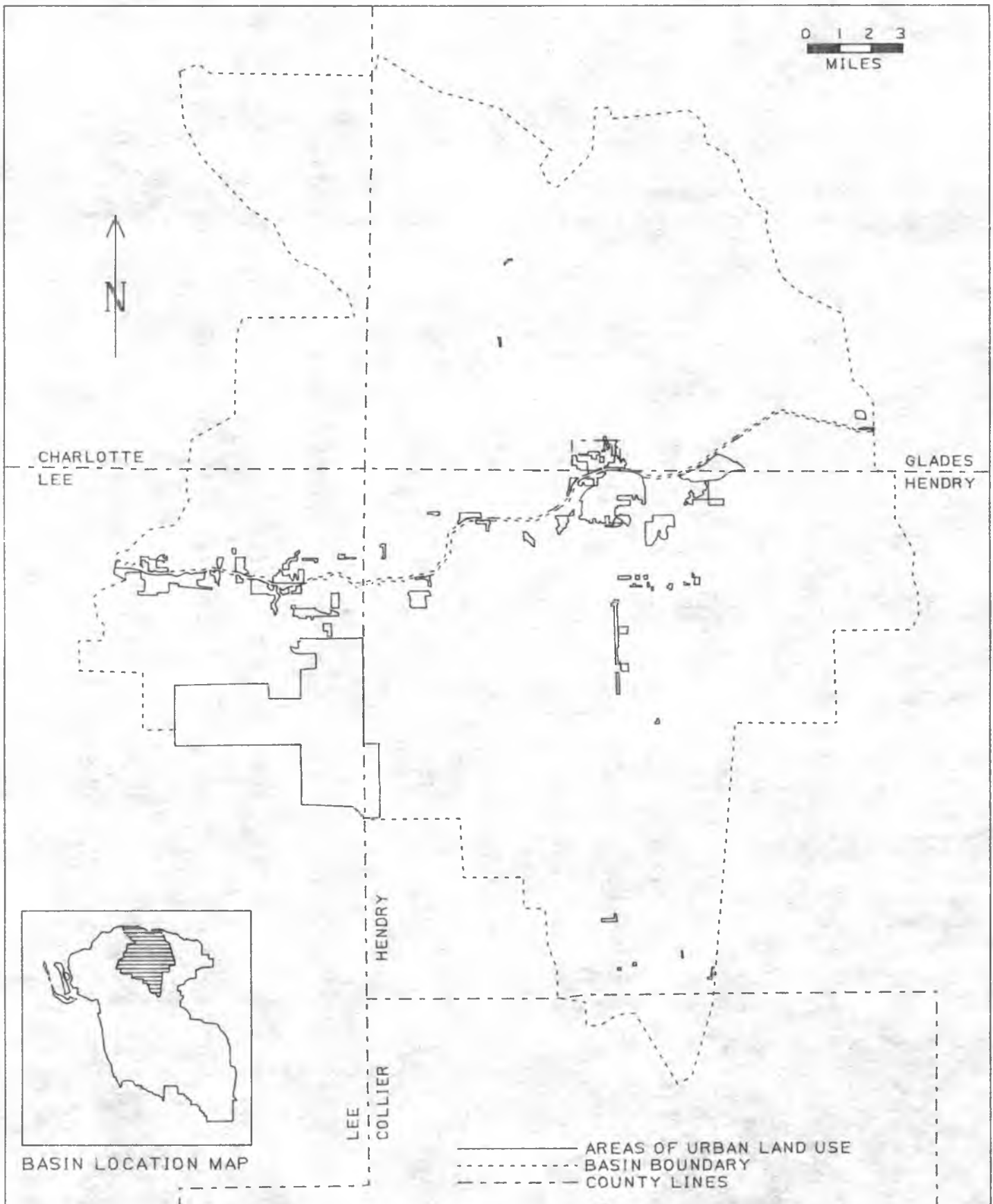
1977 GENERALIZED AGRICULTURE MAP
TIDAL CALOOSACHATCHEE BASIN
LOWER WEST COAST PLANNING AREA



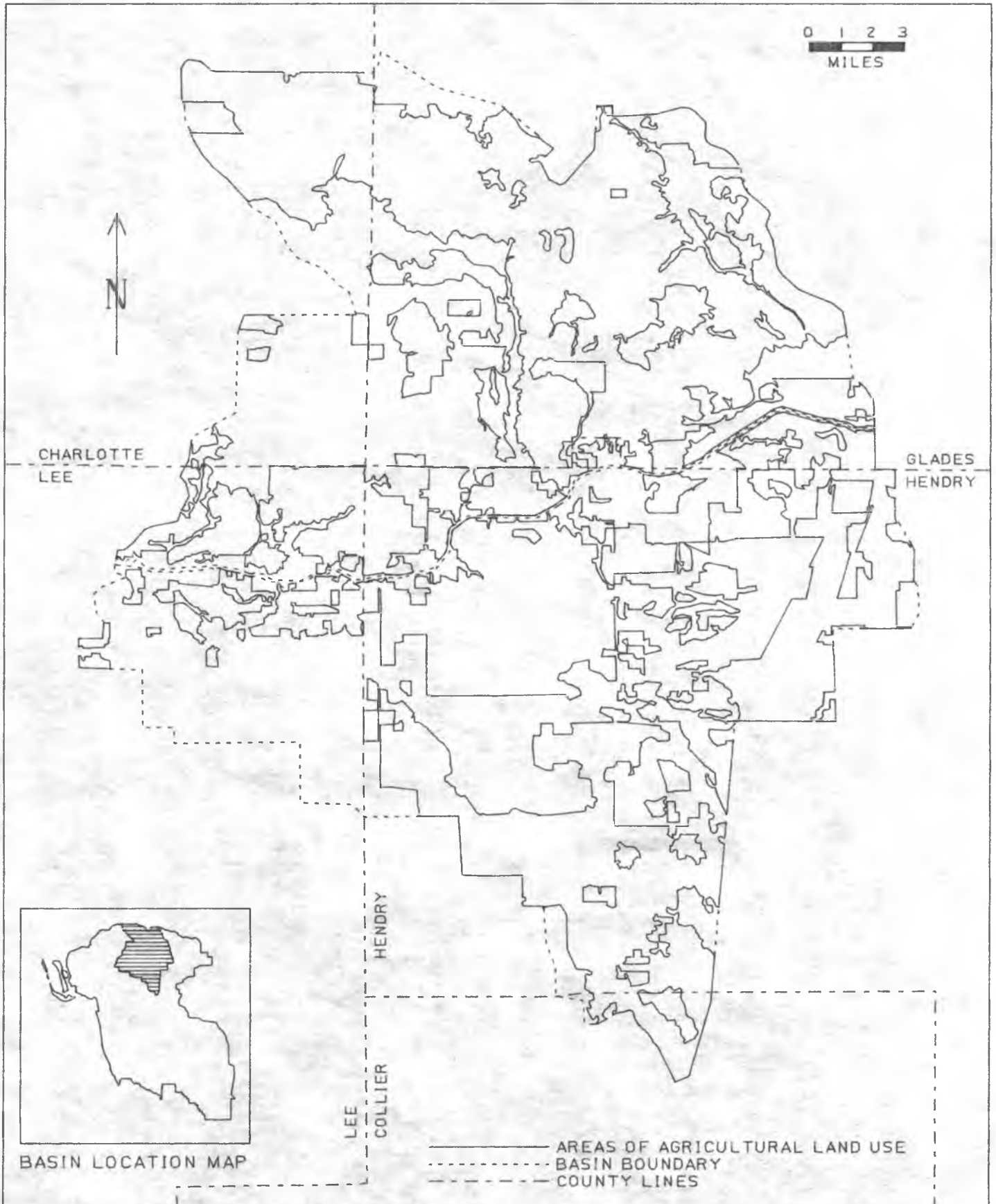
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TIDAL CALOOSACHATCHEE BASIN
LOWER WEST COAST PLANNING AREA



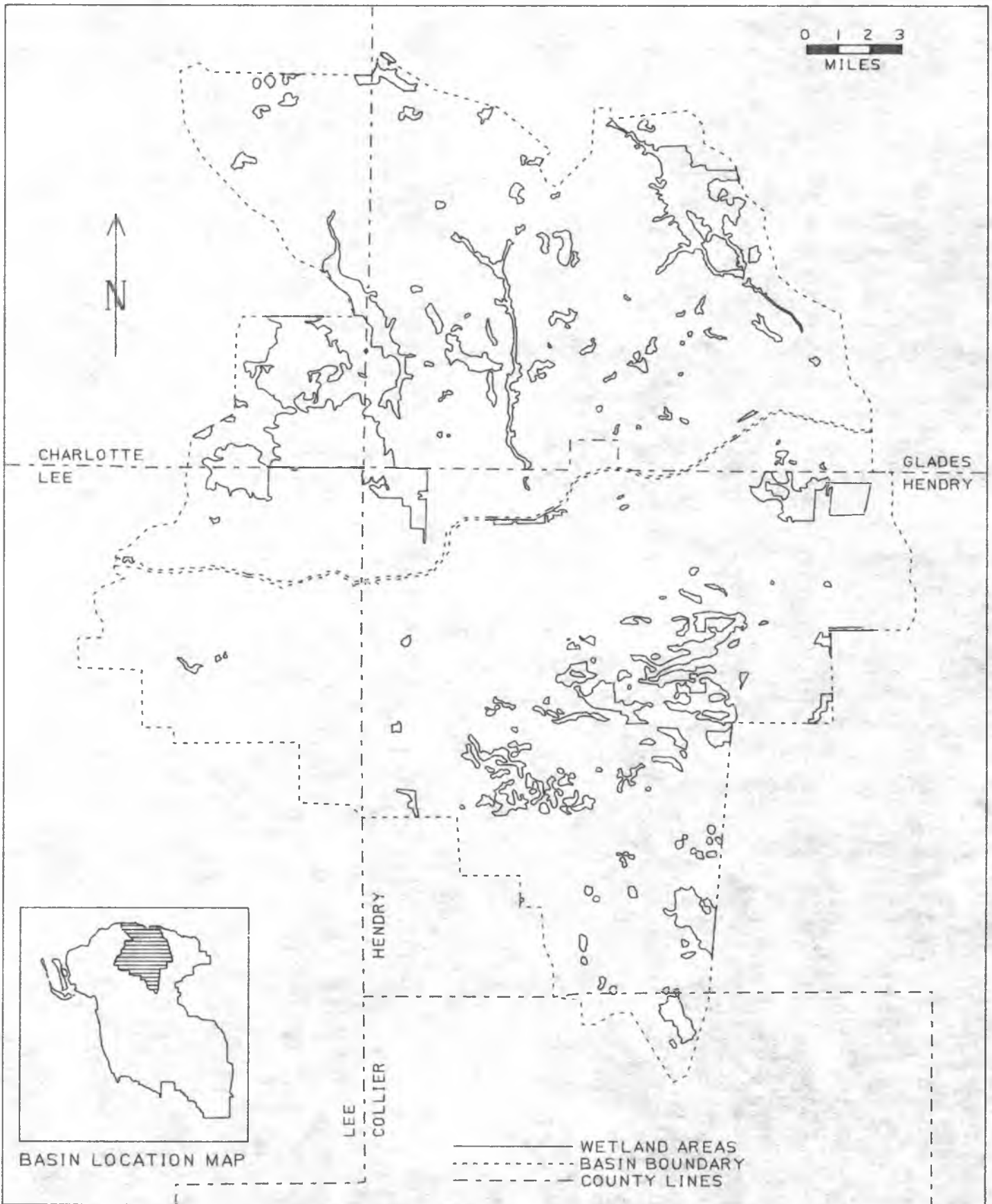
PERCENTAGE OF TOTAL AREA
WEST CALOOSAHATCHEE BASIN
LOWER WEST COAST PLANNING AREA



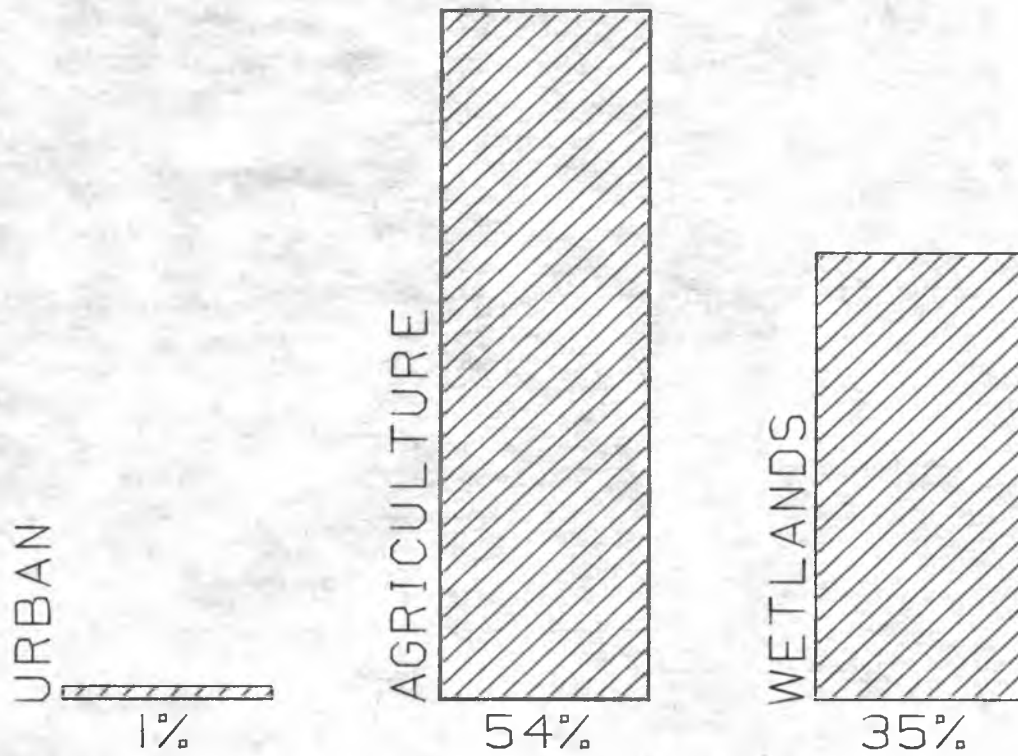
1977 GENERALIZED URBAN MAP
 WEST CALOOSAATCHEE BASIN
 LOWER WEST COAST PLANNING AREA



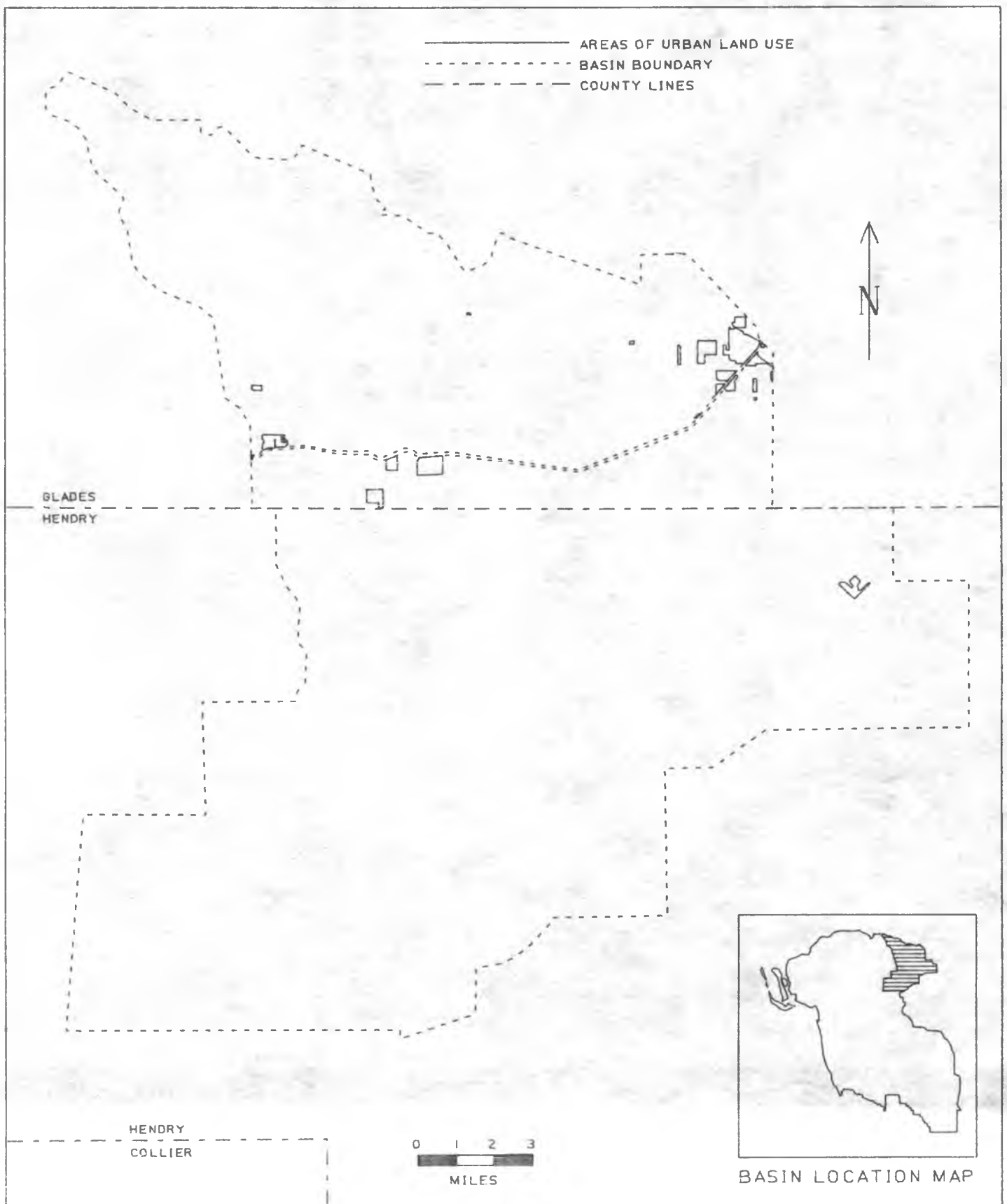
1977 GENERALIZED AGRICULTURE MAP
 WEST CALOOSAHATCHEE BASIN
 LOWER WEST COAST PLANNING AREA



1977 GENERALIZED WETLANDS MAP
 WEST CALOOSAATCHEE BASIN
 LOWER WEST COAST PLANNING AREA

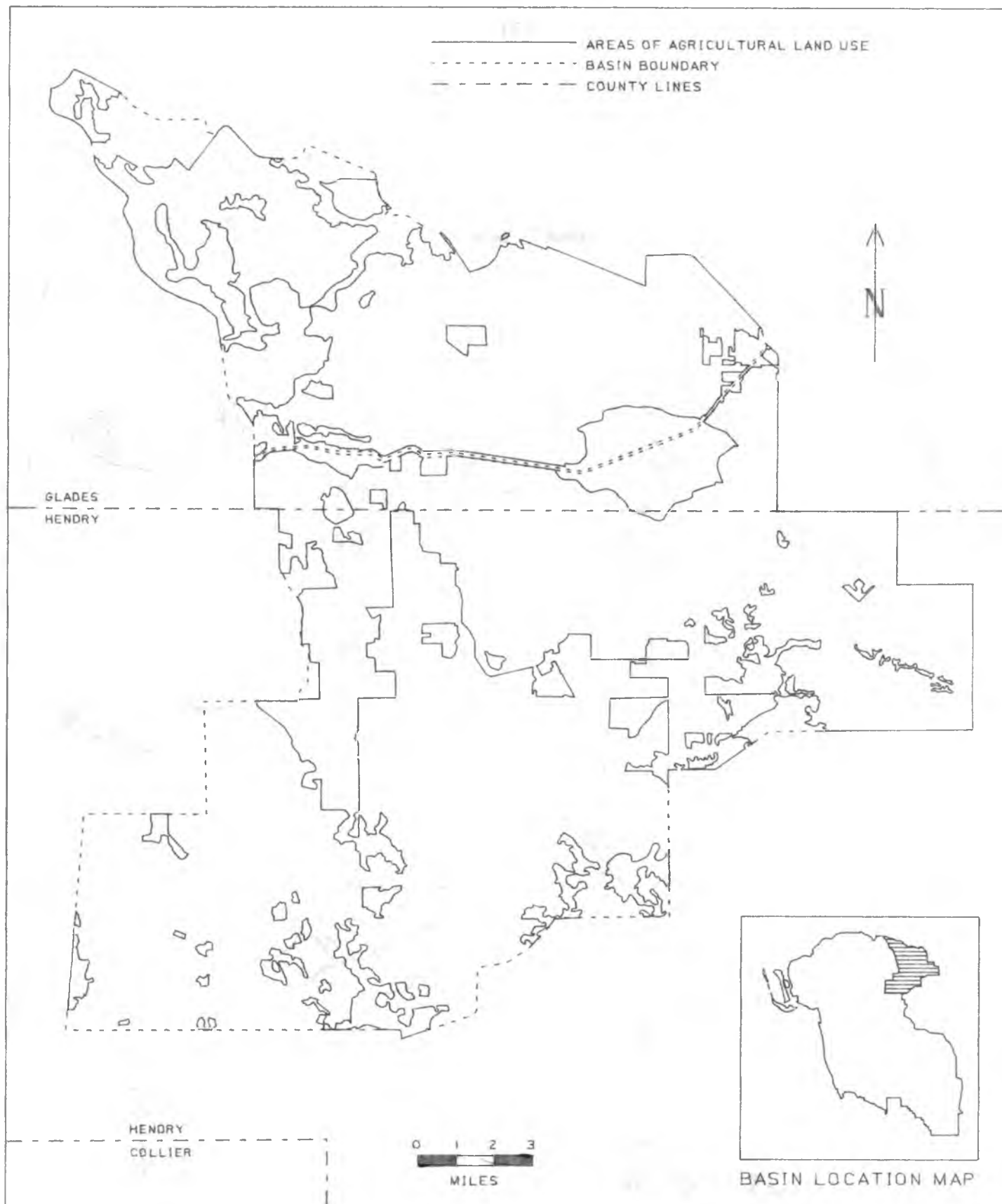


PERCENTAGE OF TOTAL AREA
EAST CALOOSA HATCHEE BASIN
LOWER WEST COAST PLANNING AREA

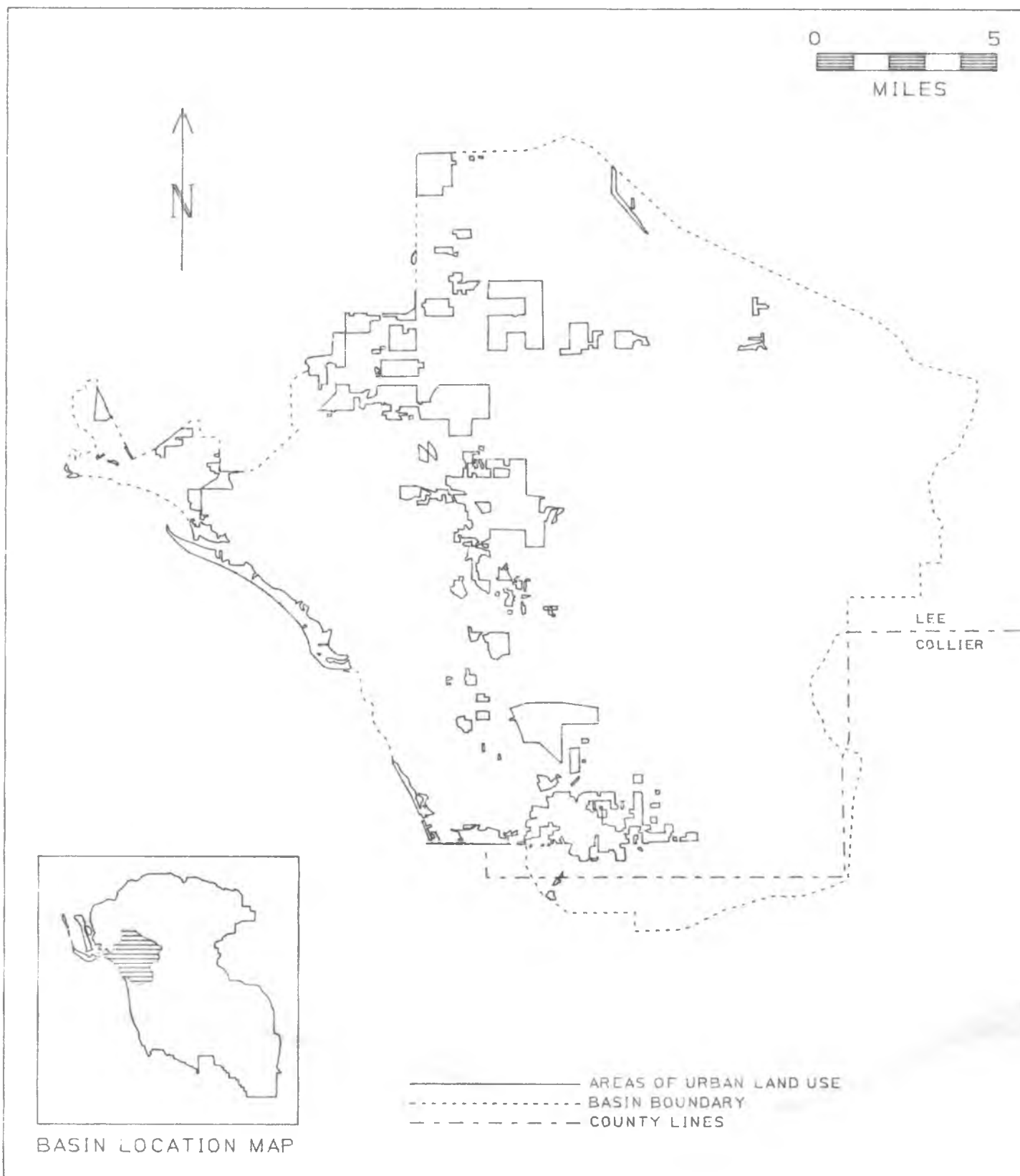


1977 GENERALIZED URBAN MAP

EAST CALOOSAATCHEE BASIN
 LOWER WEST COAST PLANNING AREA

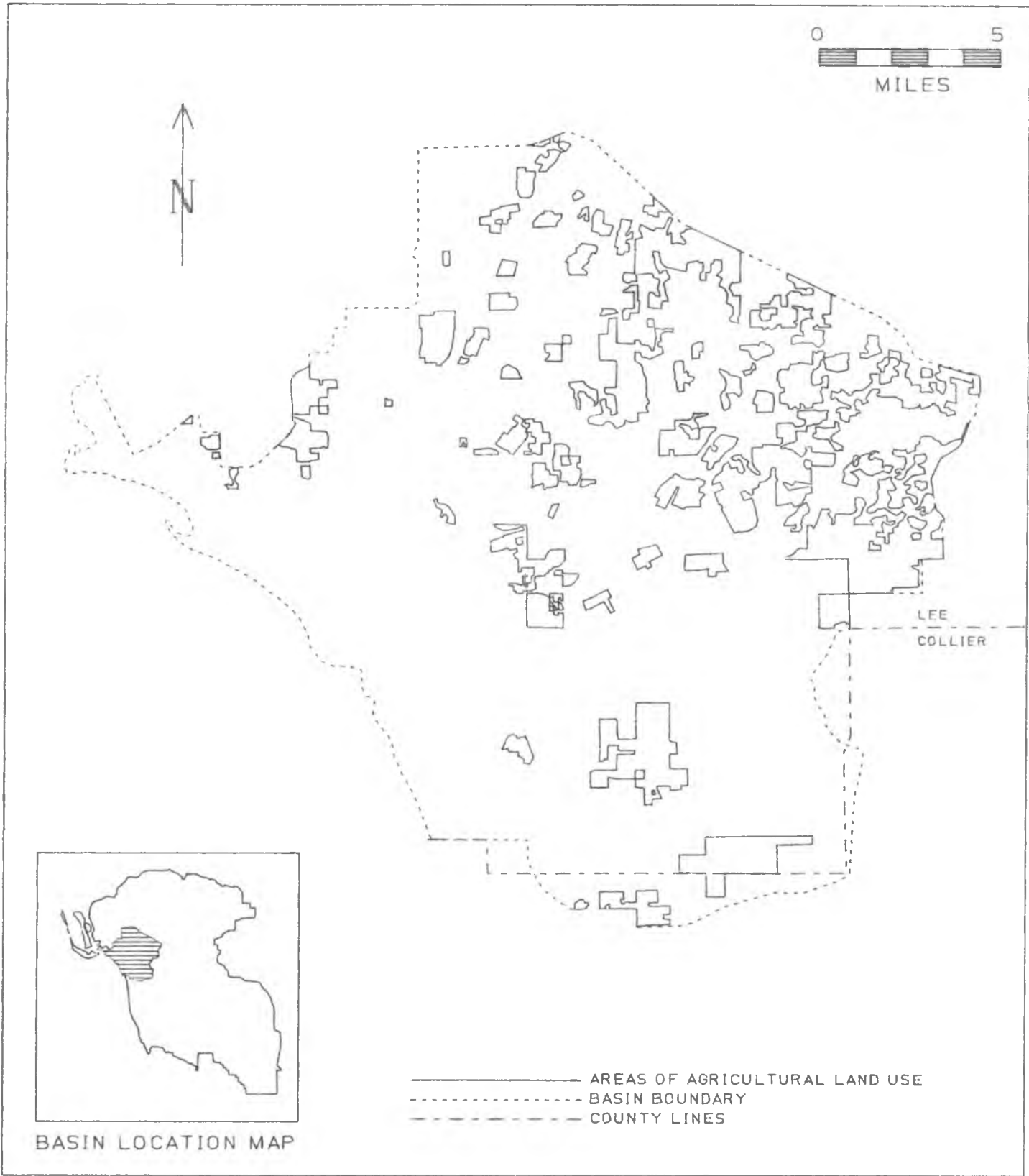


1977 GENERALIZED AGRICULTURE MAP
 EAST CALOOSAHATCHEE BASIN
 LOWER WEST COAST PLANNING AREA



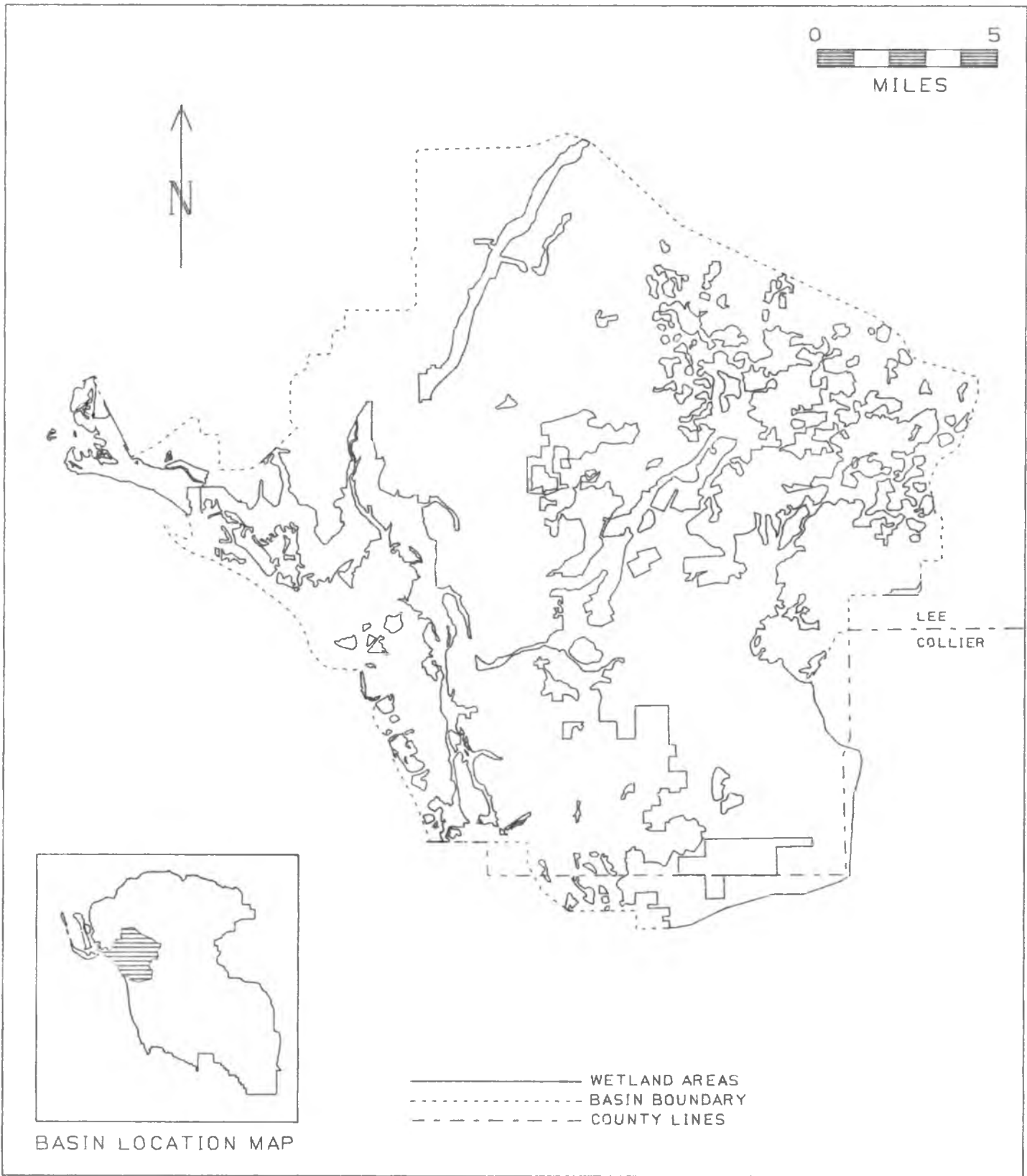
GENERALIZED URBAN MAP

ESTERO BAY BASIN
 LOWER WEST COAST PLANNING AREA



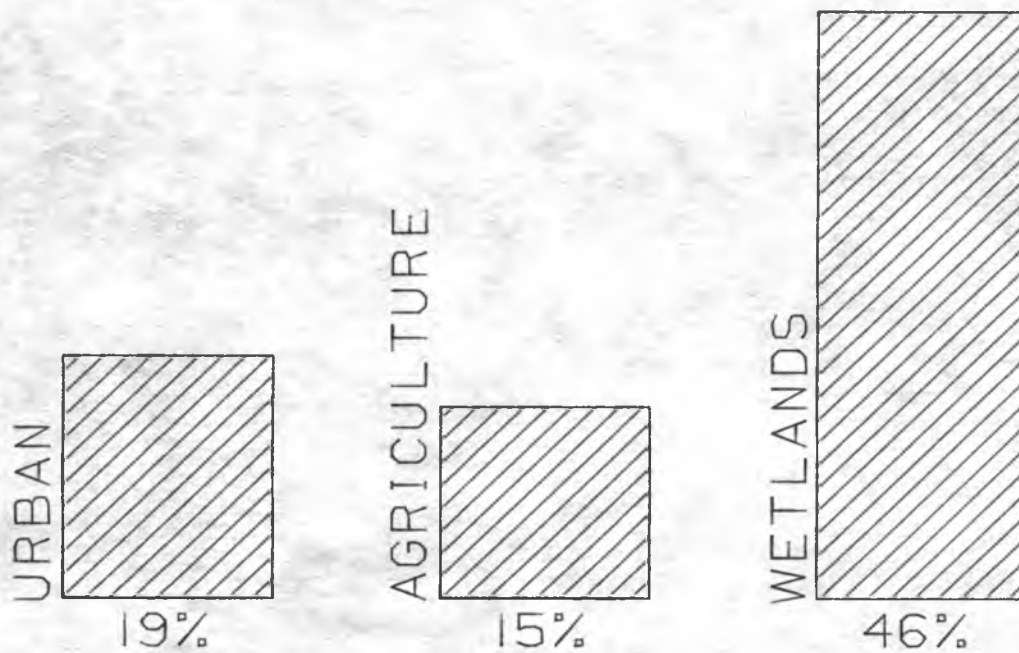
GENERALIZED AGRICULTURE MAP

ESTERO BAY BASIN
LOWER WEST COAST PLANNING AREA



GENERALIZED WETLANDS MAP

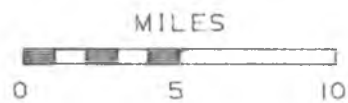
ESTERO BAY BASIN
LOWER WEST COAST PLANNING AREA



PERCENTAGE OF TOTAL AREA
WEST COLLIER BASIN
LOWER WEST COAST PLANNING AREA



BASIN LOCATION MAP



HENDRY
COLLIER

LEE



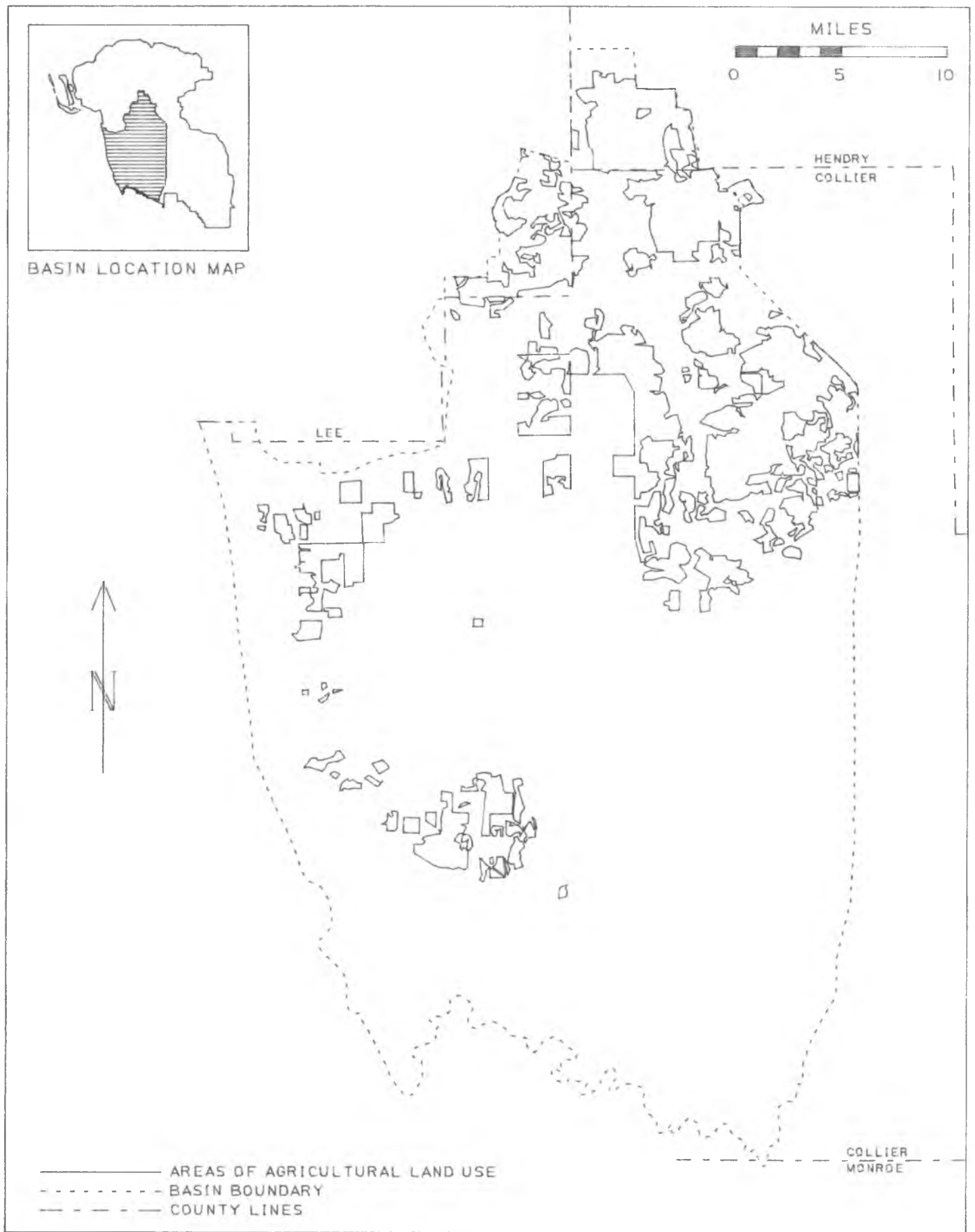
COLLIER
MONROE

- AREAS OF URBAN LAND USE
- - - - BASIN BOUNDARY
- - - - COUNTY LINES

1977 GENERALIZED URBAN MAP

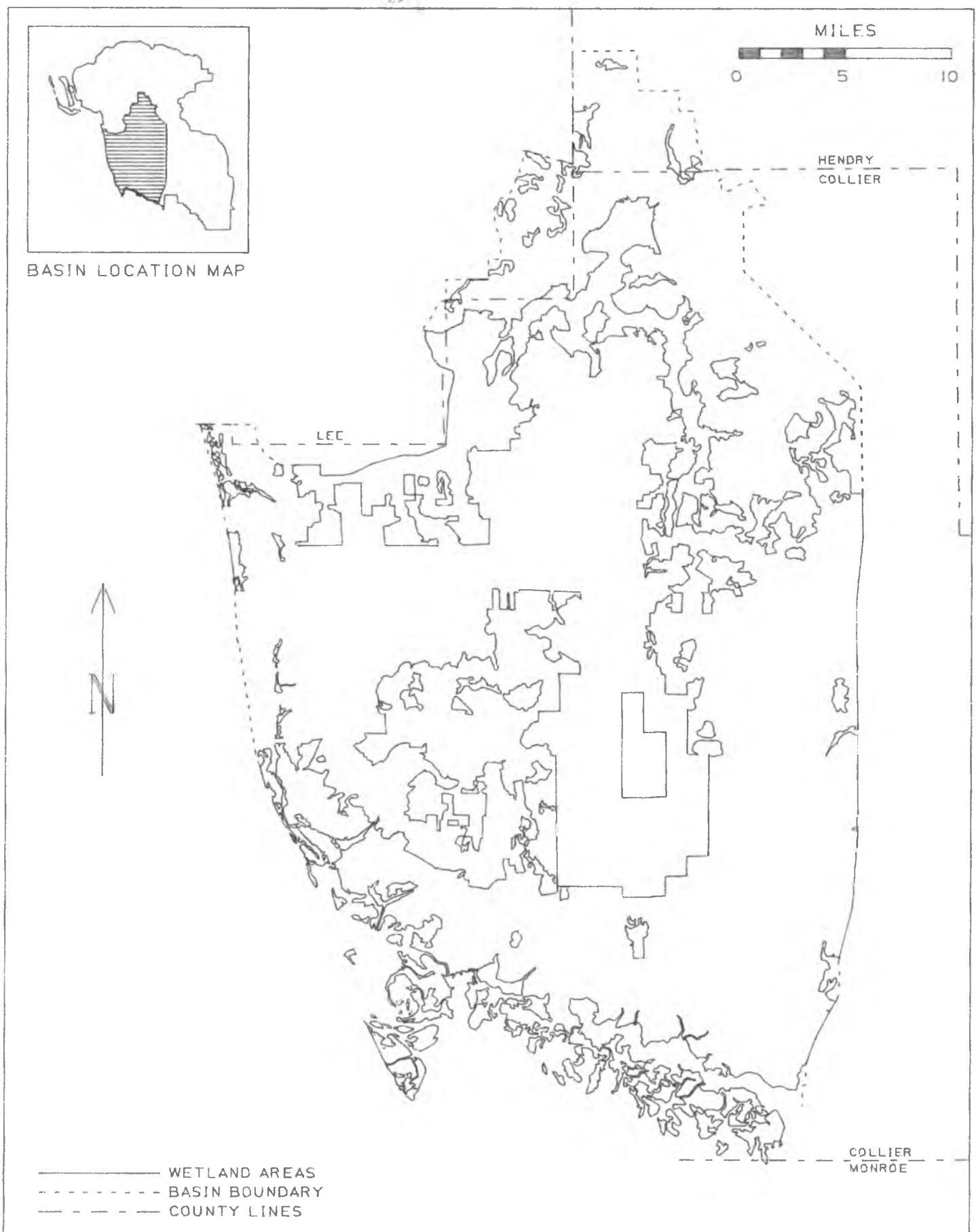
WEST COLLIER BASIN

LOWER WEST COAST PLANNING AREA



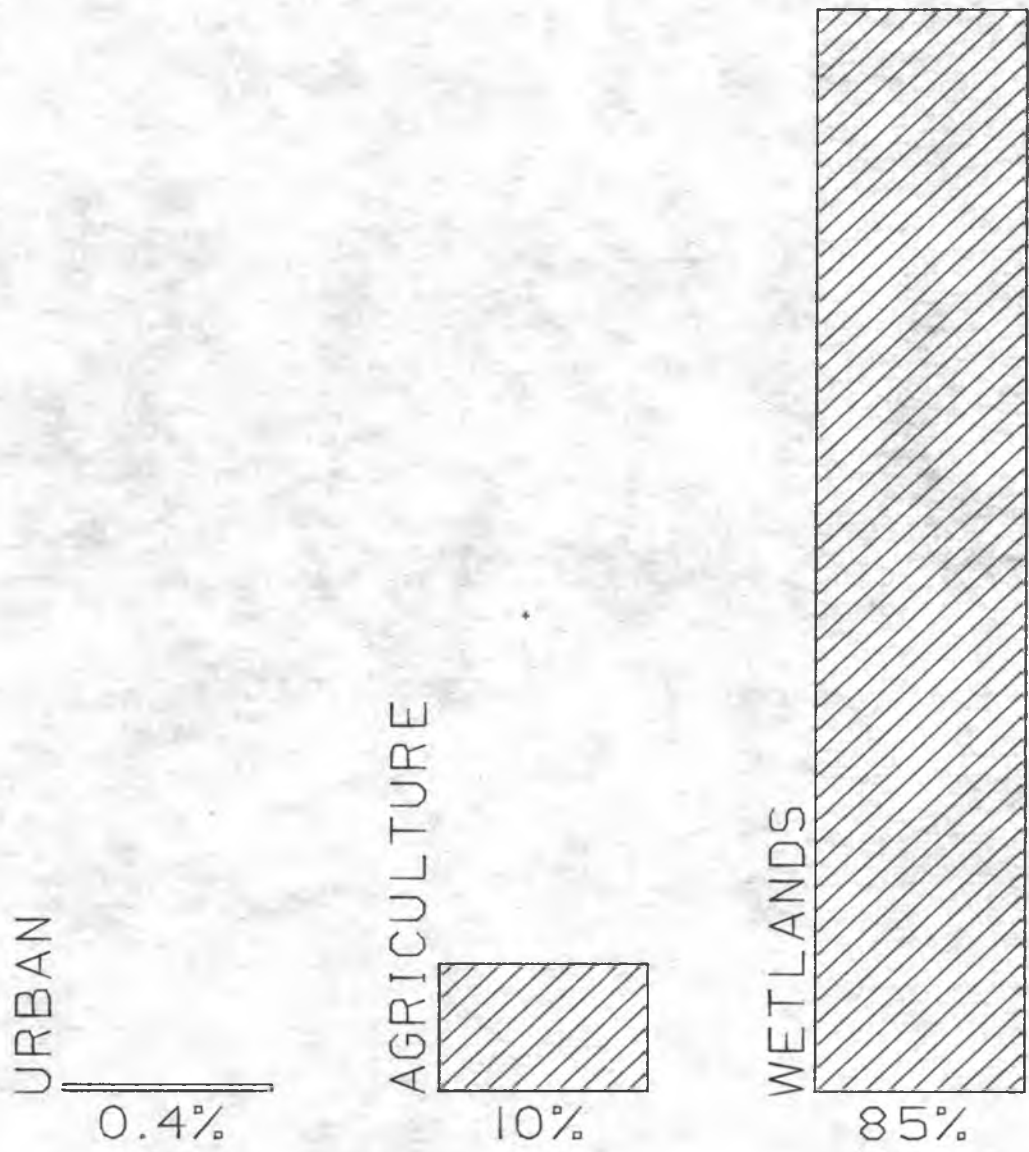
1977 GENERALIZED AGRICULTURE MAP

WEST COLLIER BASIN
LOWER WEST COAST PLANNING AREA

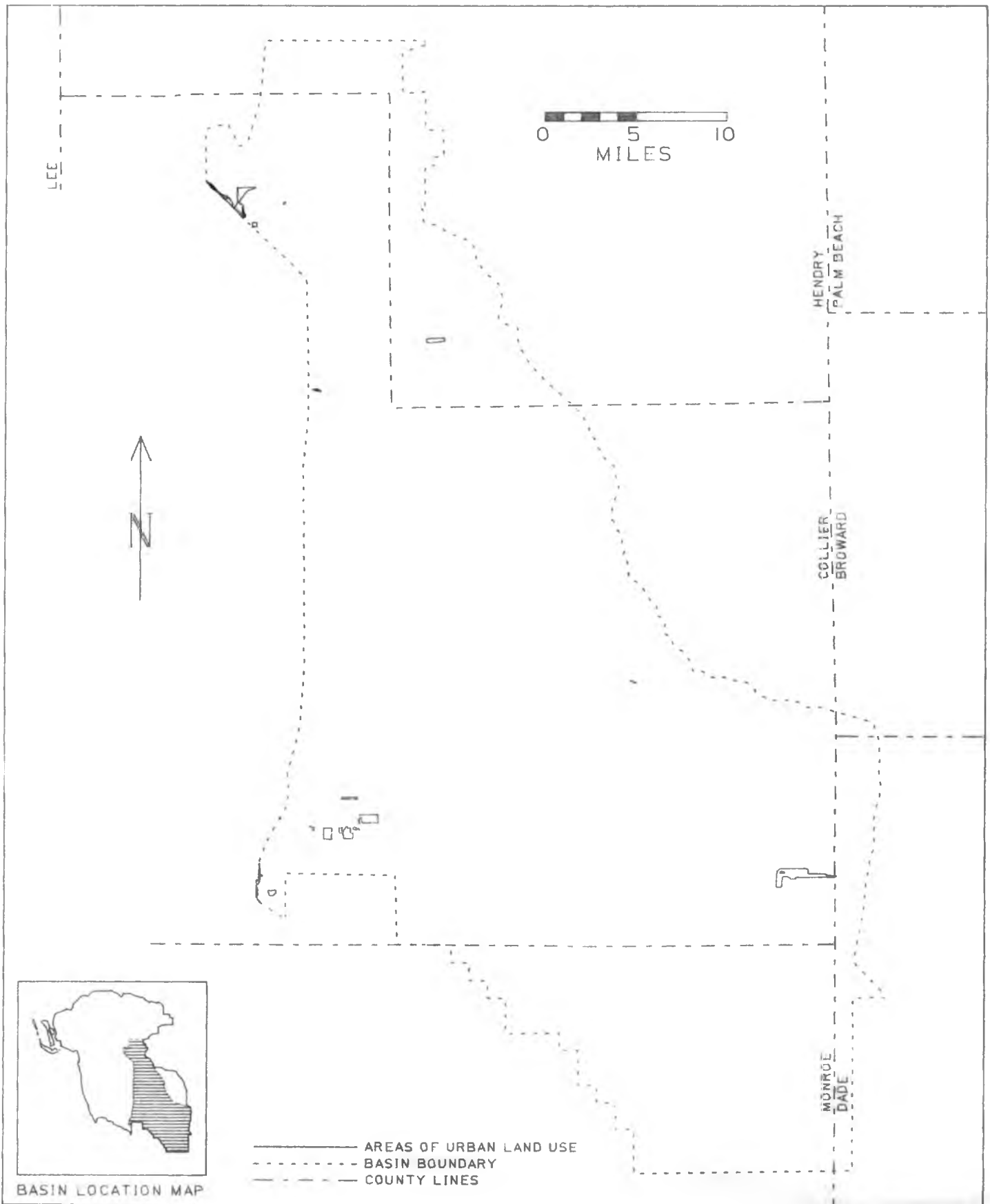


1977 GENERALIZED WETLANDS MAP

WEST COLLIER BASIN
 LOWER WEST COAST PLANNING AREA

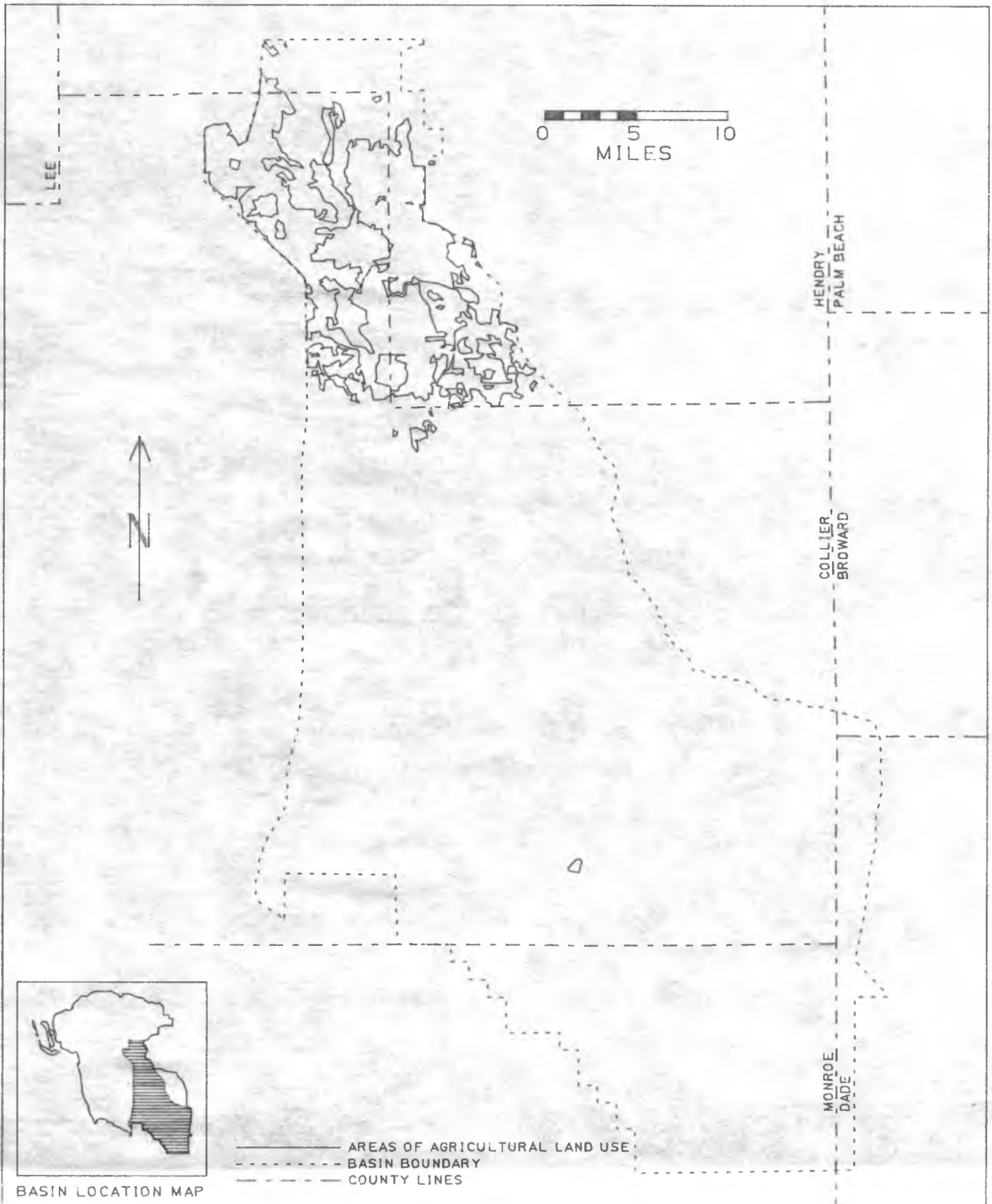


PERCENTAGE OF TOTAL AREA
EAST COLLIER BASIN
LOWER WEST COAST PLANNING AREA



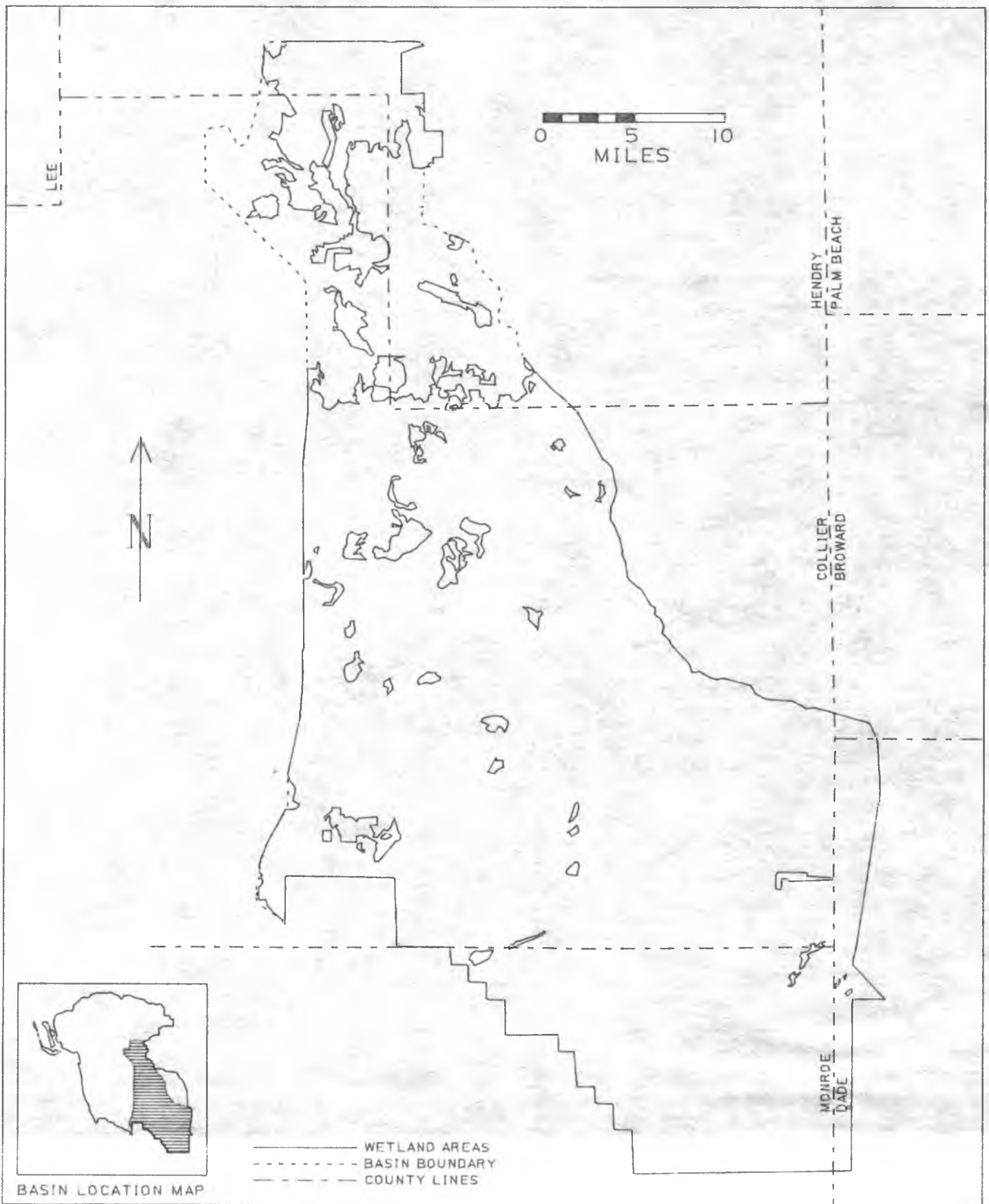
1977 GENERALIZED URBAN MAP

EAST COLLIER BASIN
LOWER WEST COAST PLANNING AREA

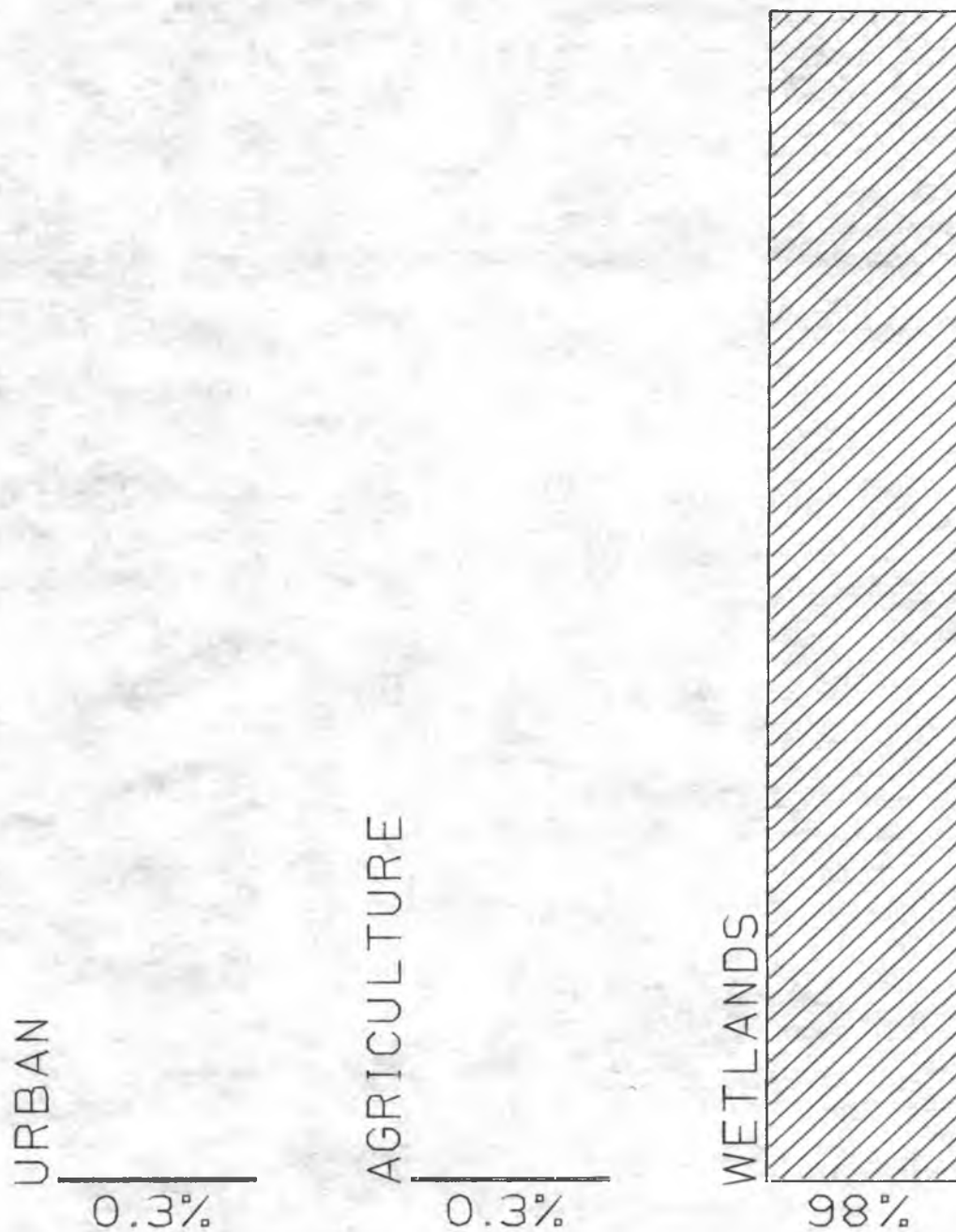


1977 GENERALIZED AGRICULTURE MAP

EAST COLLIER BASIN
LOWER WEST COAST PLANNING AREA



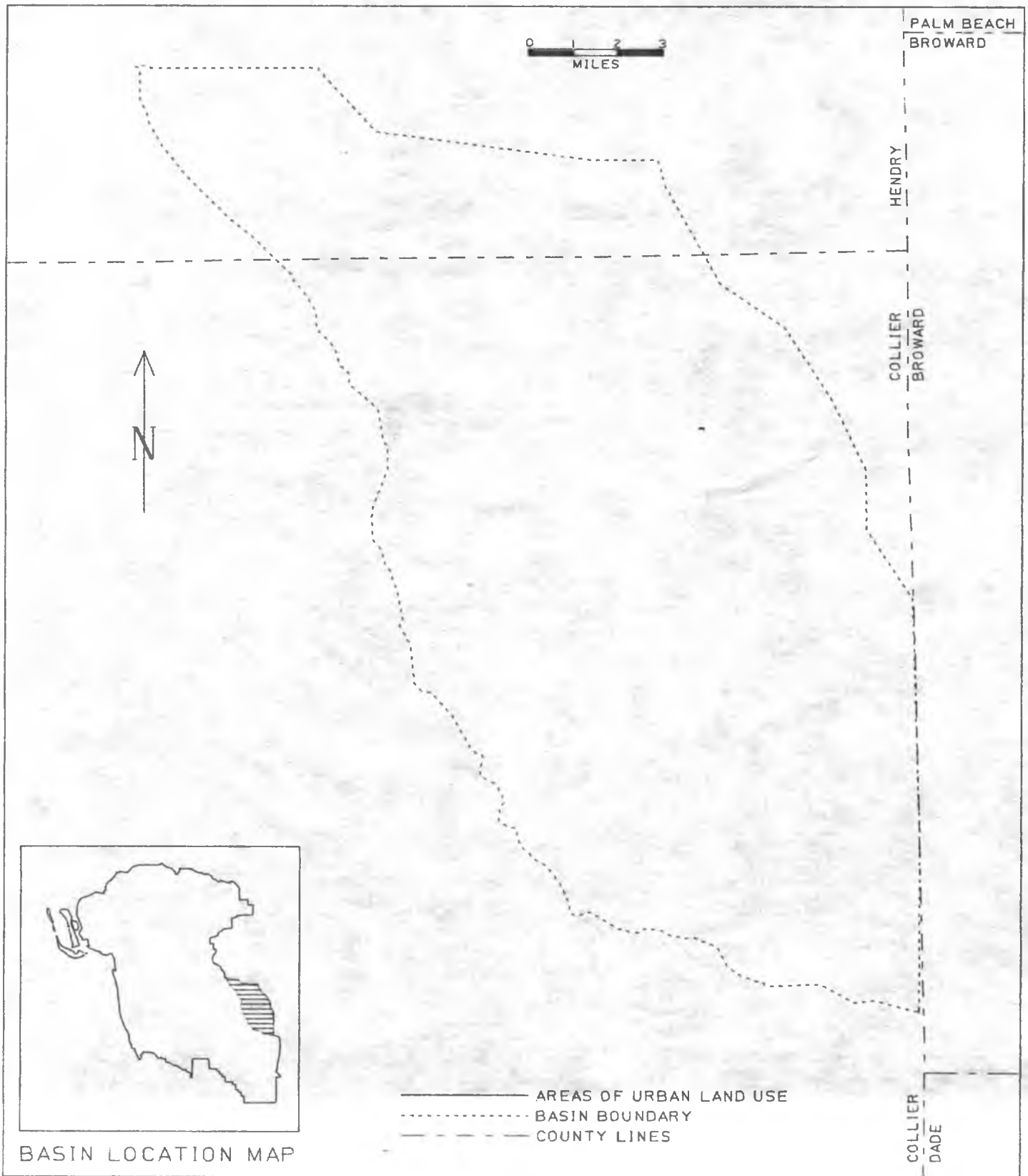
1977 GENERALIZED WETLANDS MAP
EAST COLLIER BASIN
LOWER WEST COAST PLANNING AREA



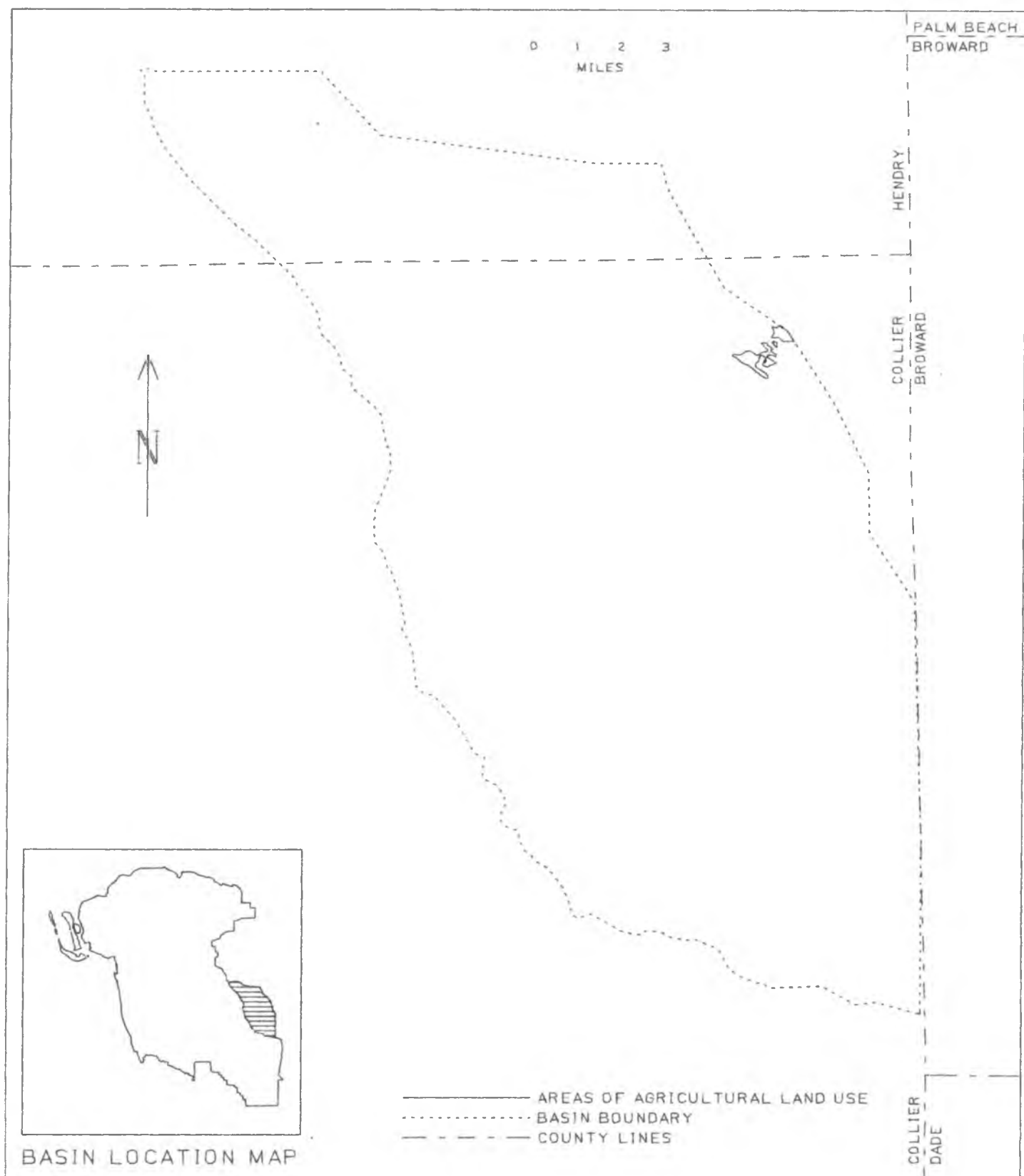
PERCENTAGE OF TOTAL AREA

L-28 GAP BASIN

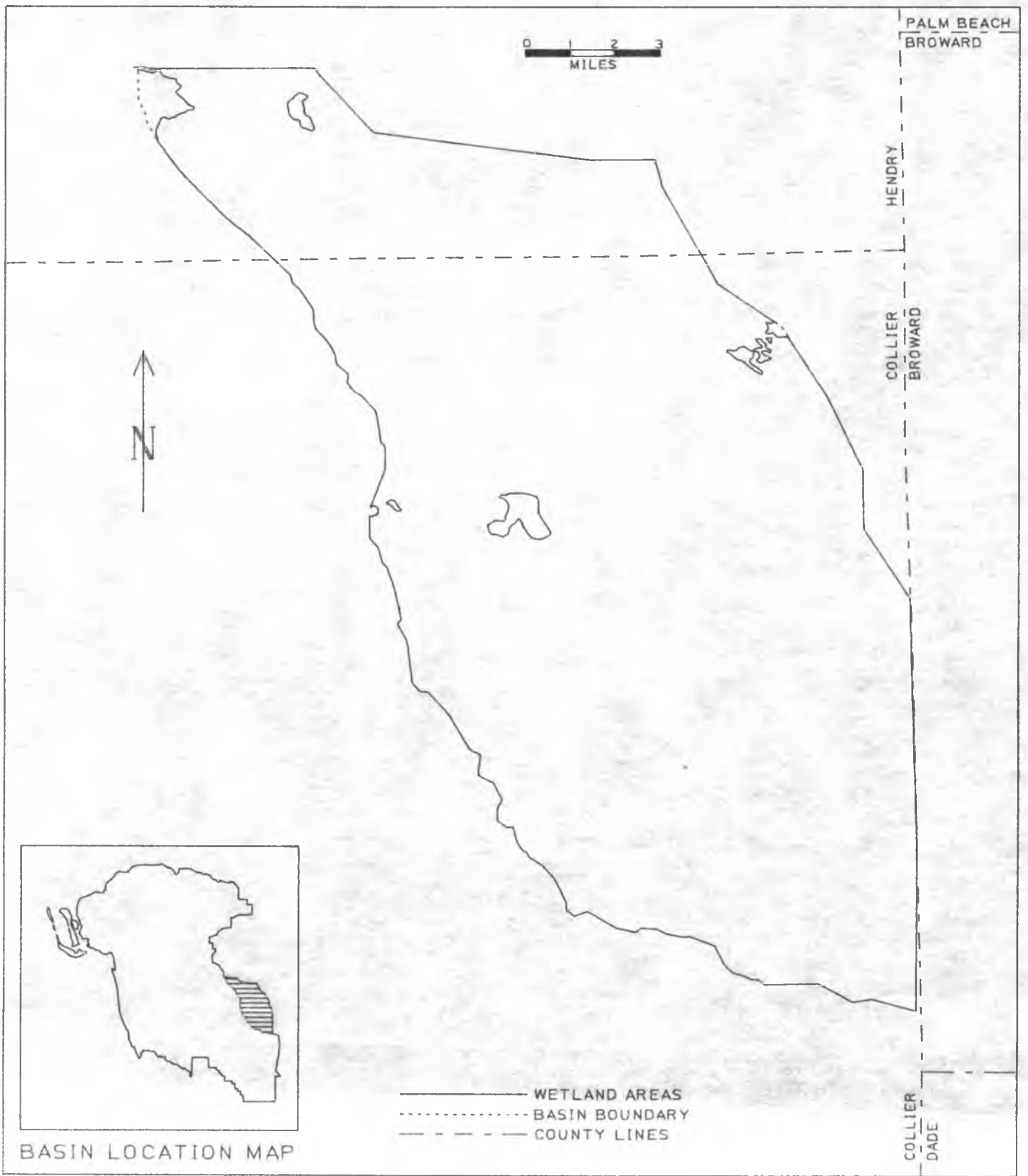
LOWER WEST COAST PLANNING AREA



1977 GENERALIZED URBAN MAP
L28 GAP BASIN
LOWER WEST COAST PLANNING AREA



1977 GENERALIZED AGRICULTURE MAP
 L28 GAP BASIN
 LOWER WEST COAST PLANNING AREA



1977 GENERALIZED WETLANDS MAP
L28 GAP BASIN
LOWER WEST COAST PLANNING AREA

COMPARISON OF SFWMD AND DOT LAND USE AND LAND

<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL I</u>	<u>SFWMD</u>	<u>DOT</u>
(U)	(100)	Urban & Built- up Land	(UR)	(120)
			(UC)	(140)
			(UI)	(150)
			(US)	(170)
			(UT)	(810)

COVER CLASSIFICATION CODES

<u>LEVEL II</u>	<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL III</u>
Residential	(URSL)	(111)	Single-Family, Low Density (Under 2 D.U./gross acre)
	(URSM)	(121)	Single-Family, Medium Density (2 to 5 D.U./gross acre)
	(URSH)	(131)	Single-Family, High Density (over 5 D.U./gross acre)
	(URMF)	(134)	Multi-Family Building
	(URMH)	(122)	Mobile Homes
Commercial & Services	(UCPL)	(141)	Parking Lot
	(UCSC)	(141)	Shopping Center
	(UCSS)	(141)	Sales & Services
	(UCCE)	(144)	Cultural & Entertainment
	(UCMC)	(184)	Marine Commercial (Marinas)
	(UCHM)	(145)	Hotel-Motel
Industrial	(UIJK)	(141)	Junkyard
Institutional	(USED)	(171)	Educational
	(USMD)	(174)	Medical
	(USRL)	(172)	Religious
	(USMF)	(173)	Military
	(USCF)	(176)	Correctional
	(USGF)	(175)	Governmental (other than military or correctional)
Transportation	(UTAP)	(811)	Airports
	(UTAG)	(811)	Small Grass Airport
	(UTRR)	(812)	Railroad Yards & Terminals
	(UTPF)	(815)	Port Facilities
	(UTOG)	(817)	Oil & Gas Storage
	(UTEP)	(831)	Electrical Power Facilities
	(UTTL)	(832)	Major Transmission Lines
	(UTHW)	(814)	Major Highways & Rights-of-way
	(UTWS)	(833)	Water Supply Plants
	(UTSP)	(834)	Sewerage Treatment Plants
	(UTSW)	(835)	Solid Waste Disposal
	(UTRS)	(821)	Broadcasting or Receiving Towers

<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL I</u>	<u>SFWMD</u>	<u>DOT</u>
			(U0)	(190)
(A)	(200)	Agriculture	(AC)	(210)
			(AM)	(220)
			(AF)	(230)
(R)	(300)	Rangeland	(RG)	(310)
			(RS)	(320)
(F)	(400)	Forested Uplands	(FE)	(410)
			(FO)	(420)

<u>LEVEL II</u>	<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL III</u>
Open and Others	(UORC)	(186)	Recreational Facility
	(UOGC)	(182)	Golf Courses
	(UOPK)	(185)	Parks
	(UOCM)	(148)	Cemeteries
	(UOUN)	(191)	Open and Undeveloped Within Urban Area
	(UOUD)	(193)	Open Under Development
Cropland	(ACSC)	(216)	Sugar Cane
	(ACTC)	(214)	Truck Crops
	(ACRF)	(215)	Rice Fields
Orchards, Groves, Vineyards, Orn- amentals, Nurs- eries, horti- cultural areas	(AMCT)	(221)	Citrus
	(AMTF)	(222)	Tropical Fruits
	(AMSF)	(242)	Sod Farms
	(AMOR)	(243)	Ornamentals
Confined Feeding Operations	(AFFL)	(231)	Cattle Feed Lots
	(AFDF)	(252)	Dairy Farms
	(AFFF)	(254)	Fish Farms
	(AFHT)	(251)	Horse Training & Stables
	(AFPY)	(232)	Poultry
Grassland			
Scrub and Brushland	(RSPP)	(321)	Palmetto Prairies
	(RSSB)	(329)	Brushland
Coniferous	(FEPF)	(411)	Pine Flatwoods
	(FESP)	(413)	Sand Pine Scrub
	(FECF)	(441)	Commercial Forest (Pine)
Non-Coniferous	(FOAP)	(414)	Australian Pine
	(FOBP)	(422)	Brazilian Peppers
	(FOPA)	(428)	Palms
	(FOSO)	(432)	Scrub Oak
	(FOOK)	(425)	Oak
	(FOCF)	(442)	Commercial Forest

<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL I</u>	<u>SFWMD</u>	<u>DOT</u>
(W)	(600)	Wetlands	(WF)	(610)
(W)	(600)	Wetlands	(WN)	(640)
			(WS)	(640)
			(WM)	(642)
			(WX)	(643)
(H)	(500)	Water	(HC)	(510)
			(HO)	(520)
			(HM)	(500)
			(HE)	(540)
(B)	(700)	Barren Land	(BB)	(710)
			(BP)	(742)
			(BS)	(743)
			(BL)	(744)

April 30, 1980

<u>LEVEL II</u>	<u>SFWMD</u>	<u>DOT</u>	<u>LEVEL III</u>
Forested Fresh	(WFCY)	(621)	Cypress
	(WFWL)	(610)	Willow
	(WFME)	(424)	Melaleuca
	(WFSB)	(610)	Scrub & Brushland
	(WFMX)	(630)	Mixed Forested
Non-Forested Fresh	(WNSG)	(641)	Sawgrass
	(WNCT)	(641)	Cattail
	(WNBR)	(641)	Bullrush
	(WNWC)	(641)	Wire Cordgrass
	(WNAG)	(641)	Mixed Aquatic Grass
	(WNWL)	(641)	Sloughs
Forested Salt	(WSRM)	(612)	Red Mangrove
	(WSBW)	(612)	Black & White Mangrove
Non-Forested Salt			
Mixed Forested	(WXPP)	(643)	Pine & Wet Prairies
& Non-Forested	(WXCP)	(643)	Cypress Domes & Wet Prairies
Fresh	(WXHM)	(643)	Hardwood & Marsh
Rivers, Streams, Canals			
Open Fresh Water			
Open Marine Water			
Bays & Estuaries			
Beaches			
Extractive (Strip Mines,			
Quarries & Gravel Pits			
Spoil Areas			
Levees			

Island Basin - Lower West Coast Planning Area. Preliminary 1977
Existing Land Use and Land Cover Inventory.

<u>Classification</u>	<u>Area (In Acres)</u>	<u>Percent Impervious</u>	<u>Impervious Area(In Acres)</u>
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	1871	20	374
(URSM) Med. Density	1583	50	792
(URSH) High Density	289	65	188
(URMF) Multi-family	171	80	137
(URMH) Mobile Home	<u>201</u>	24	<u>48</u>
TOTAL (UR)	4115		1539
(UC) <u>Commercial & Service</u>			
(UCSC) Shopping Center	17	95	16
(UCSS) Sales & Service	191	85	162
(UCMC) Marine Commercial (Marinas)	<u>14</u>	90	<u>13</u>
TOTAL (UC)	222		191
(UI) <u>Industrial</u>	<u>2</u>	75	<u>1.5</u>
TOTAL (UI)	2		1.5
(US) <u>Institutional</u>			
(USED) Educational	22	26	6
(USRL) Religious	6	72	4
(USGF) Government & Correctional	<u>24</u>	81	<u>19</u>
TOTAL (US)	52		29
(UT) <u>Transportation</u>			
(UTAG) Small grass airport	12	0	0
(UTWS) Water supply plant	26	15	4
(UTSP) Sewerage plant	<u>8</u>	15	<u>1</u>
TOTAL (UT)	46		5
(UO) <u>Open & Other</u>			
(UORC) Recreational	39	5	2
(UOGC) Golf course	420	5	21
(UOPK) Parks	42	5	2
(UOUD) Under development	2471	5	124
(UOUN) Open & undeveloped	<u>541</u>	5	<u>27</u>
TOTAL (UO)	3513		176
TOTAL (U)	7950		1941.5

(A) <u>Agriculture</u>			
(AC) <u>Cropland</u>	33	0	0
(ACTC) Truck crops	<u>119</u>	0	<u>0</u>
TOTAL (AC)	152		0
(AP) <u>Pasture</u>			
(APIM) Improved pasture	<u>145</u>	0	<u>0</u>
TOTAL (AP)	145		0
(AM) <u>Orchards, groves, vineyards, nurseries, ornamental & horticultural area</u>			
(AMCT) Citrus	265	0	0
(AMTF) Tropical fruits	29	0	0
(AMOR) Ornamentals	<u>35</u>	0	<u>0</u>
TOTAL (AM)	494		0
TOTAL (A)	791		0
(R) <u>Rangeland</u>			
(RG) <u>Grassland</u>	<u>320</u>	0	<u>0</u>
TOTAL (RG)	320		0
(RS) <u>Scrub & Brushland</u>			
(RSP) Palmetto Prairies	<u>2627</u>	0	<u>0</u>
TOTAL (RS)	2627		0
TOTAL (R)	2947		0
(F) <u>Forested Upland</u>			
(FE) <u>Coniferous</u>			
(FEPF) Pine Flatwoods	<u>5789</u>	0	<u>0</u>
TOTAL (FE)	5789		0
(FO) <u>Non-Coniferous</u>			
(FOAP) Australian Pines	2925	0	0
(FOBP) Brazilian Peppers	194	0	0
(FOPA) Palms	1124	0	0
	<u>242</u>	0	<u>0</u>
TOTAL (FO)	4485		0
(FM) <u>Mixed Forested</u>			
(FMCO) Cabbage Palms/Oaks	592	0	0
(FMOF) Old Fields	405	0	0
(FMCD) Coastal Dunes	420	0	0
	<u>657</u>	0	<u>0</u>
TOTAL (FM)	2074		0
TOTAL (F)	12,348		0

(W)	<u>Wetlands</u>			
(WF)	<u>Forested Fresh</u>	11	0	0
	(WFME) <u>Metateuca</u>	<u>287</u>	0	<u>0</u>
	TOTAL (WF)	298		0
(WS)	<u>Forested Salt</u>	17,043	0	0
	(WSRM) <u>Red Mangrove</u>	<u>825</u>	0	<u>0</u>
	TOTAL (WS)	17,868		0
	TOTAL (W)	18,166		0
(H)	<u>Water</u>			
(HC)	<u>Rivers, Streams, Canals</u>	<u>96</u>	100	<u>96</u>
	TOTAL (HC)	96		96
(HO)	<u>Open Fresh</u>	<u>233</u>	100	<u>233</u>
	TOTAL (HO)	233		233
(HE)	<u>Bays & Estuaries</u>	<u>923</u>	100	<u>923</u>
	TOTAL (HE)	923		923
	TOTAL (H)	1252		1252
(B)	<u>Barren Land</u>			
(BB)	<u>Beaches</u>	<u>895</u>	0	<u>0</u>
	TOTAL (BB)	895		0
	TOTAL (B)	895		0
	Total Area	44,349		
	Total Impervious Area	3,193.5		
	Total % of Impervious Area	7%		

North Coastal Basin - Lower West Coast Planning Area. Preliminary 1977
Existing Land Use and Land Cover Inventory

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
(U) <u>Urban & Built-up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	855	20	171
(URSM) Med. Density	31	50	16
(URMH) Mobile Home	<u>106</u>	24	<u>25</u>
TOTAL (UR)	992		212
(UC) <u>Commercial & Service</u>			
(UCSS) Sales & Services	43	85	37
(UCCE) Cultural & Entertainment	<u>18</u>	85	<u>15</u>
TOTAL (UC)	61		52
(UI) <u>Industrial</u>	<u>59</u>	75	<u>44</u>
TOTAL (UI)	59		44
(US) <u>Institutional</u>	<u>15</u>	49	<u>7</u>
TOTAL (US)	15		7
(UT) <u>Transportation</u>			
(UTEP) Electrical Power Facilities	2	50	1
(UTWS) Water Supply Plants	<u>8</u>	15	<u>1</u>
TOTAL (UT)	10		2
(UO) <u>Open & Others</u>			
(UOCM) Cemeteries	27	5	1
(UOUN) Open & Undeveloped	537	5	27
(UOUD) Under development	<u>25138</u>	5	<u>1257</u>
TOTAL (UO)	25702		1285
TOTAL (U)	26839		1602
(A) <u>Agriculture</u>			
(AP) <u>Pasture</u>			
(APIM) Improved Pasture	15675	0	0
(APUN) Unimproved Pasture	<u>2411</u>	0	<u>0</u>
TOTAL (AP)	18086		0
TOTAL (A)	18086		0

(R)	<u>Rangeland</u>			
(RG)	<u>Grassland</u>	<u>138</u>	0	<u>0</u>
	TOTAL (RG)	138		0
(RS)	<u>Scrub & Brushland</u>	<u>331</u>	0	<u>0</u>
	TOTAL (RS)	331		0
	TOTAL (R)	469		0
(F)	<u>Forested Uplands</u>			
(FE)	<u>Coniferous</u> (FEFP)	<u>19039</u>	0	<u>0</u>
	TOTAL (FE)	19039		0
(FM)	<u>Mixed Forested</u> (FMOF) Old Fields	806	0	0
	(FMPC) Pine/Cabbage Palm	<u>136</u>	0	<u>0</u>
	TOTAL (FM)	942		0
	TOTAL (F)	19981		0
(W)	<u>Wetlands</u>			
(WF)	<u>Forested Fresh</u> (WFCY) Cypress	470	0	0
	(WFMX) Mixed Forested	<u>1263</u>	0	<u>0</u>
	TOTAL (WF)	1733		0
(WN)	<u>Non-Forested Fresh</u>	<u>56</u>	0	<u>0</u>
	TOTAL (WN)	56		0
(WS)	<u>Forested Salt</u> (WSRM) Red Mangrove	6738	0	0
		<u>266</u>	0	<u>0</u>
	TOTAL (WS)	7004		0
(WM)	<u>Non-Forested Salt</u>	<u>718</u>	0	<u>0</u>
	TOTAL (WM)	718		0
(WX)	<u>Mixed Forested & Non-Forested Fresh</u> (WXPP) Pine & Wet Prairie	<u>12825</u>	0	<u>0</u>
	TOTAL (WX)	12825		0
	TOTAL (W)	22336		0

(H) <u>Water</u>			
(HC) <u>Rivers, Streams, Canals</u>	<u>319</u>	100	<u>319</u>
TOTAL (HC)	319		319
(HO) <u>Open Fresh Water</u>	<u>138</u>	100	<u>138</u>
TOTAL (HO)	138		138
(HE) <u>Bays & Estuaries</u>	<u>89</u>	100	<u>89</u>
TOTAL (HE)	89		89
TOTAL (H)	546		546
(B) <u>Barren Land</u>	786	0	0
(BB) <u>Beaches</u>	<u>13</u>	0	<u>0</u>
TOTAL (BB)	13		0
(BS) <u>Spoil Areas</u>	<u>26</u>	0	<u>0</u>
TOTAL (BS)	26		0
TOTAL (B)	825		0
TOTAL AREA	89,082 Acres		
TOTAL IMPERVIOUS AREA	2,148 Acres		
TOTAL % OF IMPERVIOUS AREA	2 %		

Telegraph Swamp - Lower West Coast Planning Area. Preliminary 1977
Existing Land Use and Land Cover Inventory

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) <u>Low Density</u>	<u>8</u>	20	<u>2</u>
TOTAL (UR)	8		2
(UO) <u>Open & Others</u>			
(UOUD) <u>Under development</u>	<u>4</u>	5	<u>0</u>
TOTAL (UO)	4		0
TOTAL (U)	12		2

(A) Agriculture

(AP) Pasture

(APIM) Improved pasture	16,938	0	0
(APUN) Unimproved pasture	<u>2,399</u>	0	<u>0</u>

TOTAL (AP)	19,337		0
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(AM) Orchards, groves, vineyards, nurseries, ornamental & horticultural area

(AMCT) Citrus	<u>810</u>	0	<u>0</u>
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TOTAL (AM)	810		0
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TOTAL (A)	20,147		0
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(R) Rangeland

(RS) <u>Scrub and Brushland</u>	2113	0	0
(RSPP) Palmetto Prairies	<u>4014</u>	0	<u>0</u>

TOTAL (RS)	6127		0
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TOTAL (R)	6127		0
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(F) Forested Upland

(FE) Coniferous

(FEPP) Pine Flatwoods	<u>9781</u>	0	<u>0</u>
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TOTAL (FE)	9781		0
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(FM) Mixed Forested

(FMCO) Cabbage Palms/Oaks	344	0	0
(FMOF) Old Fields	314	0	0
(FMPC) Pine/Cabbage Palm	7316	0	0
(FMPO) Pine/Oaks	<u>55</u>	0	<u>0</u>

TOTAL (FM)	8029		0
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TOTAL (F)	17,810		0
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(W) Wetlands

(WF) Forested Fresh

(WFCY) Cypress	<u>6276</u>	0	<u>0</u>
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TOTAL (WF)	6276		0
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(WN) Non-Forested Fresh

(WNAG) Mixed Aquatic Grass	<u>12</u>	0	<u>0</u>
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TOTAL (WN)	1173		0
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(WX) <u>Mixed Forested & Non-Forested</u>			
<u>Fresh</u>			
(WXPP) Pine & Wet Prairie	7600	0	0
TOTAL (WX)	7600		0
TOTAL (W)	15,049		0
(W) <u>Water</u>			
(HO) <u>Open Fresh Water</u>	10	100	10
TOTAL (HO)	10		10
TOTAL (H)	10		10
TOTAL AREA	59,155 Acres		
TOTAL IMPERVIOUS AREA	12 Acres		
TOTAL % OF IMPERVIOUS AREA	0%		

Tidal Caloosahatchee Basin - Lower West Coast Planning Area, Preliminary
1977 Existing Land Use and Land Cover Inventory

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	20067	20	4013
(URSM) Med. Density	13951	50	6976
(URSH) High Density	27	65	18
(URMF) Multi-Family	1121	80	897
(URMH) Mobile Home	2625	24	630
TOTAL (UR)	37791		12534
(UC) <u>Commercial & Services</u>			
(UCSC) Shopping Center	19	95	18
(UCSS) Sales & Services	1771	85	1505
(UCCE) Cultural & Entertainment	30	85	26
(UCMC) Marine Commercial (Marinas)	39	90	35
(UCHM) Hotel-Motel	7	85	6
TOTAL (UC)	1866		1590
(UI) <u>Industrial</u>	1881	75	1411
(UIJK) Junkyard	16	2	0
TOTAL (UI)	1897		1411

(US) Institutional	42	49	21
(USED) Educational	759	26	197
(USMD) Medical	43	19	8
(USRL) Religious	47	72	34
(USCF) Correctional	26	81	21
(USGF) Government	<u>10</u>	81	<u>8</u>
TOTAL (US)	927		289
(UT) Transportation			
(UTAP) Airports	1488	15	223
(UTAG) Small Grass Airports	11	0	0
(UTRR) Railroad Yards & Terminals	18	5	9
(UTEP) Electrical Power Facilities	98	50	49
(UTTL) Major Transmission Lines	568	0	0
(UTHW) Major Highways & Rights-of-Way	70	20	14
(UTWS) Water Supply Plants	4	15	1
(UTSP) Sewerage Plants	<u>47</u>	15	<u>7</u>
TOTAL (UT)	2304		303
(UO) Open & Others			
(UORC) Recreational Facility	90	5	5
(UOGC) Golf Courses	1694	5	85
(UOPK) Parks	54	5	3
(UOCM) Cemeteries	79	5	4
(UOUN) Open & Undeveloped	5357	5	268
(UOUD) Under Development	<u>24544</u>	5	<u>1,227</u>
TOTAL (UO)	31818		1,592
TOTAL (U)	76603		17,719
(A) Agriculture			
(AC) Cropland			
(ACCT) Truck Crops	<u>3820</u>	0	<u>0</u>
TOTAL (AC)	3820		0
(AP) Pasture			
(APIM) Improved	40377	0	0
(APUN) Unimproved	<u>12165</u>	0	<u>0</u>
TOTAL (AP)	52542		0
(AM) Orchards, Groves, etc.			
(AMCT) Citrus	798	0	0
(AMOR) Ornamentals	<u>305</u>	0	<u>0</u>
TOTAL (AM)	1103		0

(AF)	<u>Confined Feeding Operations</u>			
	(AFFF) Fish Farms	37	0	0
	(AFHT) Horse Training & Stables	28	0	0
	(AFPY) Poultry	<u>6</u>	0	<u>0</u>
	TOTAL (AF)	71		0
	TOTAL (A)	57536		0
(R)	<u>Rangeland</u>			
(RG)	<u>Grassland</u>	<u>2665</u>	0	<u>0</u>
	TOTAL (RG)	2665		0
(RS)	<u>Scrub & Brushland</u>	<u>9291</u>	0	<u>0</u>
	TOTAL (RS)	9291		0
	TOTAL (R)	11956		0
(F)	<u>Forested Upland</u>			
(FE)	<u>Coniferous</u>			
	(FEPF) Pine Flatwoods	24277	0	0
	(FESP) Sand Pine Scrub	<u>42</u>	0	<u>0</u>
	TOTAL (FE)	24319		0
(FO)	<u>Non-Coniferous</u>			
	(FOAP) Australian Pines	29	0	0
	(FOBP) Brazilian Peppers	119	0	0
	(FOPA) Palms	<u>197</u>	0	<u>0</u>
	TOTAL (FO)	347		0
(FM)	<u>Mixed Forested</u>	3	0	0
	(FMCO) Cabbage Palms/Oaks	1194	0	0
	(FMPO) Pine/Oak	2471	0	0
	(FMDF) Old Fields Forested	4622	0	0
	(FMPC) Pine/Cabbage Palm	<u>1873</u>	0	<u>0</u>
	TOTAL (FM)	10163		0
	TOTAL (F)	34829		0
(W)	<u>Wetlands</u>			
(WF)	<u>Forested Fresh</u>	12	0	0
	(WFCY) Cypress	135	0	0
	(WFMX) Mixed Forested	<u>694</u>	0	<u>0</u>
	TOTAL (WF)	841		0

(WN) <u>Non-Forested Fresh</u>	9606	0	0
(WNAG) <u>Mixed Aquatic Grass</u>	<u>10</u>	0	<u>0</u>
TOTAL (WN)	9616		0
(WS) <u>Forested Salt</u>	1158	0	0
(WSRM) <u>Red Mangrove</u>	<u>34</u>	0	<u>0</u>
TOTAL (WS)	1192		0
(WX) <u>Mixed Forested & Non-Forested Fresh</u>			
(WXPP) <u>Pine & Wet Prairies</u>	5705	0	0
(WXCP) <u>Cypress Domes & Wet Prairies</u>	9	0	0
(WXHM) <u>Hardwood & Marsh</u>	<u>858</u>	0	<u>0</u>
TOTAL (WX)	6572		0
TOTAL (W)	18221		0
(H) <u>Water</u>			
(HC) <u>Rivers, Streams, Canals</u>	<u>847</u>	100	<u>847</u>
TOTAL (HC)	847		847
(HO) <u>Open Fresh Water</u>	<u>747</u>	100	<u>747</u>
TOTAL (HO)	747		747
(HE) <u>Bays & Estuaries</u>	<u>15785</u>	100	<u>15785</u>
TOTAL (HE)	15785		15785
TOTAL (H)	17379		17379
(B) <u>Barren Land</u>			
(BB) <u>Beaches</u>	<u>73</u>	0	<u>0</u>
TOTAL (BB)	73		0
(BP) <u>Extractives</u>	<u>323</u>	0	<u>0</u>
TOTAL (BP)	323		0
(BS) <u>Spoil Areas</u>	<u>113</u>	0	<u>0</u>
TOTAL (BS)	113		0
TOTAL (B)	509		0
TOTAL AREA	217,033		
TOTAL IMPERVIOUS AREA	35,098		
TOTAL % OF IMPERVIOUS AREA	16%		

West Caloosahatchee Basin - Lower West Coast Planning Area. Preliminary
1977 Existing Land Use and Land Cover Inventory.

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
<u>(U) Urban & Built-Up Land</u>			
<u>(UR) Residential</u>			
(URSL) Low Density	4353	20	871
(URSM) Med. Density	<u>48</u>	50	<u>24</u>
TOTAL (UR)	4401		895
<u>(UC) Commercial & Service</u>			
(UCSC) Shopping Center	6	95	6
(UCSS) Sales & Services	<u>37</u>	85	<u>31</u>
TOTAL (UC)	43		37
<u>(US) Institutional</u>			
(USED) Educational	33	26	9
(USGF) Governmental	<u>4</u>	81	<u>3</u>
TOTAL (US)	37		12
<u>(UT) Transportation</u>			
(UTAG) Small grass airport	<u>30</u>	0	<u>0</u>
TOTAL (UT)	30		0
<u>(UO) Open & Others</u>			
(UOPK) Parks	19	5	1
(UOUN) Open & Undeveloped	416	5	21
(UOUD) Under development	<u>14047</u>	5	<u>702</u>
TOTAL (UO)	14482		724
TOTAL (U)	18993		1668
<u>(A) Agriculture</u>			
<u>(AC) Cropland</u>			
(ACTC) Truck Crops	<u>2315</u>	0	<u>0</u>
TOTAL (AC)	2315		0
<u>(AP) Pasture</u>			
(APIM) Improved Pasture	141242	0	0
(APUN) Unimproved Pasture	<u>10266</u>	0	<u>0</u>
TOTAL (AP)	151508		0
<u>(AM) Orchards, Groves, etc.</u>			
(AMCT) Citrus	28860	0	0
(AMOR) Ornamentals	<u>259</u>	5	<u>13</u>
TOTAL (AM)	29119		13

(AF) <u>Confined Feeding Operations</u>			
(AFFF) Fish Farms	<u>10</u>	0	<u>0</u>
TOTAL (AF)	10		0
TOTAL (A)	182952		13
(R) <u>Rangeland</u>			
(RG) <u>Grassland</u>	<u>3288</u>	0	<u>0</u>
TOTAL (RG)	3288		0
(RS) <u>Scrub & Brushland</u>	<u>9614</u>	0	<u>0</u>
TOTAL (RS)	9614		0
TOTAL (R)	12902		0
(F) <u>Forested Uplands</u>			
(FE) <u>Coniferous</u>			
(FEPF) Pine Flatwoods	33257	0	0
(FECF) Commercial Forest	<u>1199</u>	0	<u>0</u>
TOTAL (FE)	34456		0
(F0) <u>Non-Coniferous</u>			
(FOPA) Palms	618	0	0
(FDOK) Oak	2519	0	0
(FOCF) Commercial Forest	<u>802</u>	0	<u>0</u>
TOTAL (F0)	3939		0
(FM) <u>Mixed Forested</u>			
(FMCO) Cabbage Palms/Oaks	6037	0	0
(FMPO) Pine/Oak	1109	0	0
(FMOF) Old Fields	964	0	0
(FMPC) Pine/Cabbage Palm	<u>18393</u>	0	<u>0</u>
TOTAL (FM)	26503		0
TOTAL (F)	64898		0
(W) <u>Wetlands</u>			
(WF) <u>Forested Fresh</u>	5	0	0
(WFCY) Cypress	9667	0	0
(WFMX) Mixed Forested	<u>1947</u>	0	<u>0</u>
TOTAL (WF)	11619		0
(WN) <u>Non-Forested Fresh</u>	13853	0	0
(WNSG) Sawgrass	<u>1798</u>	0	<u>0</u>
TOTAL (WN)	15651		0

(WX) <u>Mixed Forested & Non-Forested Fresh</u>			
(WXPP) Pine & Wet Prairie	<u>8029</u>	0	<u>0</u>
TOTAL (WX)	8029		0
TOTAL (W)	35299		0
(H) <u>Water</u>			
(HC) <u>Rivers, Streams & Canals</u>	<u>1537</u>	100	<u>1537</u>
TOTAL (HC)	1537		1537
(HO) Open Fresh Water	<u>35</u>	100	<u>35</u>
TOTAL (HO)	35		35
TOTAL (H)	1572		1572
(B) <u>Barren Land</u>			
(BP) <u>Extractive</u>	<u>851</u>	0	<u>0</u>
TOTAL (BP)	851		0
(BS) <u>Spoil Areas</u>	<u>18</u>	0	<u>0</u>
TOTAL (BS)	18		0
(BL) <u>Levees</u>	<u>768</u>	0	<u>0</u>
TOTAL (BL)	768		0
TOTAL (B)	1637		0
TOTAL AREA	318,253 Acres		
TOTAL IMPERVIOUS AREA	3,253 Acres		
TOTAL % OF IMPERVIOUS AREA	1%		

East Caloosahatchee Basin - Lower West Coast Planning Area. Preliminary
1977 Existing Land Use and Land Cover Inventory.

<u>Classification</u>	<u>Area (in acres)</u>	<u>Percent Impervious</u>	<u>Impervious Area (in acres)</u>
(U) <u>Urban & Built-up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	299	20	60
(URSM) Med. Density	369	50	185
(URMH) Mobile Homes	<u>24</u>	24	<u>6</u>
TOTAL (UR)	692		251

(UI) <u>Industrial</u>	<u>11</u>	75	<u>8</u>
TOTAL (UI)	11		8
(US) <u>Institutional</u>			
(USED) Educational	50	26	13
(USGF) Governmental	<u>16</u>	81	<u>13</u>
TOTAL (US)	66		26
(UT) <u>Transportation</u>			
(UTAP) Airports	<u>118</u>	15	<u>18</u>
TOTAL (UT)	118		18
(UO) <u>Open & Others</u>			
(UOPK) Parks	2	5	0
(UOCM) Cemeteries	136	5	7
(UOUD) Under Development	<u>505</u>	5	<u>25</u>
TOTAL (UO)	643		32
TOTAL (U)	1530		335
(A) <u>Agriculture</u>			
(AC) <u>Cropland</u>			
(ACSC) Sugar Cane	4163	0	0
(ACTC) Truck Crops	<u>136</u>	0	<u>0</u>
TOTAL (AC)	4299		0
(AP) <u>Pasture</u>			
(APIM) Improved	105585	0	0
(APUN) Unimproved	<u>5297</u>	0	<u>0</u>
TOTAL (AP)	110882		0
(AM) <u>Orchards, Groves, etc.</u>			
(AMCT) Citrus	<u>848</u>	0	<u>0</u>
TOTAL (AM)	848		0
TOTAL (A)	116029		0
(R) <u>Rangeland</u>			
(RG) <u>Grassland</u>	<u>194</u>	0	<u>0</u>
TOTAL (RG)	194		0
(RS) <u>Scrub & Brushland</u>			
(RSPP) Palmetto Prairies	2525	0	0
	<u>3495</u>	0	<u>0</u>
TOTAL (RS)	6020		0
TOTAL (R)	6214		0

(F) Forested Uplands

(FE) <u>Coniferous</u>			
(FEFP) Pine Flatwoods	<u>10131</u>	0	<u>0</u>
TOTAL (FE)	10131		0
(FO) <u>Non-Coniferous</u>			
(FOPA) Palms	816	0	0
(FDOK) Oak	378	0	0
(FOCF) Commercial Forest	<u>585</u>	0	<u>0</u>
TOTAL (FO)	1779		0
(FM) <u>Mixed Forested</u>			
(FMCO) Cabbage Palms/Oaks	960	0	0
(FMPC) Pine/Cabbage Palm	<u>1208</u>	0	<u>0</u>
TOTAL (FM)	2168		0
TOTAL (F)	14078		0

(W) Wetlands

(WF) <u>Forested Fresh</u>			
(WFCY) Cypress	1055	0	0
(WFMX) Mixed Forested	<u>658</u>	0	<u>0</u>
TOTAL (WF)	1713		0
(WN) <u>Non-forested Fresh</u>	<u>19856</u>	0	<u>0</u>
TOTAL (WN)	19856		0
(WX) <u>Mixed Forested & Non-Forested Fresh</u>			
(WXPP) Pine & Wet Prairie	54867	0	0
(WXHM) Hardwood & Marsh	<u>15</u>	0	<u>0</u>
TOTAL (WX)	54882		0
TOTAL (W)	76451		0

(H) Water

(HC) <u>Rivers, Streams & Canals</u>	<u>741</u>	100	<u>741</u>
TOTAL (HC)	741		741
(HO) <u>Open Fresh Water</u>	<u>436</u>	100	<u>436</u>
TOTAL (HO)	436		436
TOTAL (H)	1177		1177

(B) Barren Land

(BP) <u>Extractive</u>	<u>164</u>	0	<u>0</u>
TOTAL (BP)	164		0
(BL) <u>Levees</u>	<u>490</u>	0	<u>0</u>
TOTAL (BL)	490		0
TOTAL (B)	654		0

TOTAL AREA	216,133
TOTAL IMPERVIOUS AREA	1,512
TOTAL % OF IMPERVIOUS AREA	1%

Estero Bay Basin - Lower West Coast Planning Area. Preliminary
1977 Existing Land Use and Land Cover Inventory

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	5949	20	1190
(URSM) Med. Density	2451	50	1226
(URSH) High Density	31	65	20
(URMF) Multi-Family	390	80	312
(URMH) Mobile Homes	<u>953</u>	24	<u>229</u>
TOTAL (UR)	9774		2977
(UC) <u>Commercial & Services</u>			
(UCSC) Shopping Center	17	95	16
(UCSS) Sales & Service	180	85	153
(UCCE) Cultural & Entertainment	41	85	35
(UCHM) Hotel-Motel	<u>19</u>	85	<u>16</u>
TOTAL (UC)	257		220
(UI) <u>Industrial</u>	738	75	554
(UIJK) Junkyard	<u>8</u>	2	<u>0</u>
TOTAL (UI)	746		554
(US) <u>Institutional</u>			
(USED) Educational	<u>36</u>	26	<u>9</u>
TOTAL (US)	36		9

(UT)	<u>Transportation</u>			
(UTAP)	Airport	3	15	1
(UTEF)	Electrical Power Facilities	16	50	8
(UTTL)	Major Transmission Lines	155	0	0
(UTHW)	Major Highways & Rights-of-way	3	20	1
(UTSP)	Sewage Treatment Plants	5	15	1
(UTRS)	Broadcasting or Receiving Towers	<u>61</u>	25	<u>15</u>
	TOTAL (UT)	243		26

(UO)	<u>Open and Others</u>			
(UORC)	Recreational Facility	160	5	8
(UOGC)	Golf Courses	584	5	29
(UOPK)	Parks	32	5	2
(UOCM)	Cemeteries	14	5	1
(UOUN)	Open & Undeveloped	1740	5	87
(UOUD)	Under Development	<u>5702</u>	5	<u>285</u>
	TOTAL (UO)	8232		412
	TOTAL (U)	19288		4198

(A) Agriculture

(AC)	<u>Cropland</u>			
(ACTC)	Truck Crops	<u>6322</u>	0	<u>0</u>
	TOTAL (AC)	6322		0
(AP)	<u>Pasture</u>			
(APIM)	Improved Pasture	23951	0	0
(APUN)	Unimproved Pasture	<u>2523</u>	0	<u>0</u>
	TOTAL (AP)	26474		0
(AM)	<u>Orchards, Groves, Etc.</u>			
(AMCT)	Citrus	204	0	0
(AMOR)	Ornamentals	<u>17</u>	5	<u>1</u>
	TOTAL (AM)	221		1
(AF)	<u>Confined Feeding Operations</u>			
(AFDF)	Dairy Farms	5	0	0
(AFHT)	Horse Training & Stables	<u>4</u>	0	<u>0</u>
	TOTAL (AF)	9		0
	TOTAL (A)	33026		1

(R)	<u>Rangeland</u>			
(RG)	<u>Grassland</u>	<u>3693</u>	0	<u>0</u>
	TOTAL (RG)	3693		0
(RS)	<u>Scrub & Brushland</u>	<u>9311</u>	0	<u>0</u>
	(RSPP) Palmetto Prairies	<u>157</u>	0	<u>0</u>
	TOTAL (RS)	9468		0
	TOTAL (R)	13161		0
(F)	<u>Forested Uplands</u>			
(FE)	<u>Coniferous</u>			
	(FEFP) Pine Flatwoods	<u>47785</u>	0	<u>0</u>
	TOTAL (FE)	47785		0
(FO)	<u>Non-Coniferous</u>			
	(FOAP) Australian Pines	263	0	0
	(FOBP) Brazilian Peppers	38	0	0
	(FOPA) Palms	<u>202</u>	0	<u>0</u>
	TOTAL (FO)	503		0
(FM)	<u>Mixed Forested</u>	13	0	0
	(FMOF) Old Field Forested	3818	0	0
	(FMCD) Coastal Dunes	13	0	0
	(FMPC) Pine/Cabbage Palm	<u>59</u>	0	<u>0</u>
	TOTAL (FM)	3903		0
	(TOTAL (F)	52191		0
(W)	<u>Wetlands</u>			
(WF)	<u>Forested Fresh</u>	137	0	0
	(WFCY) Cypress	20819	0	0
	(WFME) Melaleuca	4892	0	0
	(WFMX) Mixed Forested	<u>14927</u>	0	<u>0</u>
	TOTAL (WF)	40775	0	0
(WN)	<u>Non-Forested Fresh</u>	<u>7700</u>	0	<u>0</u>
	TOTAL (WN)	7700		0
(WS)	<u>Forested Salt</u>	12380	0	0
	(WSRM) Red Mangrove	<u>533</u>	0	<u>0</u>
	TOTAL (WS)	12913		0
(WM)	<u>Non-Forested Salt</u>	<u>321</u>	0	<u>0</u>
	TOTAL (WM)	321		0

(WX)	<u>Mixed Forested & Non-Forested Fresh</u>			
(WXCP)	Cypress Domes & Wet Prairies	6483	0	0
(WXHM)	Hardwood & Marsh	<u>9</u>	0	<u>0</u>
	TOTAL (WX)	6492		0
	TOTAL (W)	68201		0

(H)	<u>Water</u>			
(HO)	<u>Open Fresh Water</u>	<u>907</u>	100	<u>907</u>
	TOTAL (HO)	907		907
	TOTAL (H)	907		907
(B)	<u>Barren Land</u>	61	0	0
(BB)	<u>Beaches</u>	<u>611</u>	0	<u>0</u>
	TOTAL (BB)	672		0
(BP)	<u>Extractives</u>	504	0	0
	TOTAL (BP)	504		0
	TOTAL (B)	1176		0

TOTAL AREA	187,950
TOTAL IMPERVIOUS AREA	5,106
TOTAL % IMPERVIOUS AREA	3 %

West Collier Basin - Lower West Coast Planning Area. Preliminary 1977
Existing Land Use and Land Cover Inventory.

Classification	Area (in acres)	Percent Impervious	Impervious Area (in acres)
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	6503	20	1301
(URSM) Med. Density	6722	50	3361
(URSH) High Density	63	65	41
(URMF) Multi-Family	940	80	752
(URMH) Mobile Homes	<u>1159</u>	24	<u>278</u>
TOTAL (UR)	15387		5733

(UC) <u>Commercial & Services</u>			
(UCSC) Shopping Center	232	95	220
(UCSS) Sales & Services	766	85	651
(UCCE) Cultural & Entertainment	103	85	88
(UCMC) Marine Commercial (Marinas)	60	90	54
(UCHM) Hotels & Motels	<u>25</u>	85	<u>21</u>
TOTAL (UC)	1186		1034
(UI) <u>Industrial</u>	731	75	548
(UIJK) Junkyard	<u>32</u>	2	<u>1</u>
TOTAL (UI)	763		549
(US) <u>Institutional</u>			
(USED) Educational	418	26	109
(USMD) Medical	24	19	5
(USRL) Religious	44	72	32
(USCF) Correctional	19	81	15
(USGF) Governmental	<u>64</u>	81	<u>52</u>
TOTAL (US)	569		213
(UT) <u>Transportation</u>			
(UTAP) Airports	784	15	118
(UTAG) Small Grass Airports	72	0	0
(UTEP) Electrical Power Facilities	10	50	5
(UTHW) Major Highways & Rights- of-way	903	20	181
(UTWS) Water Supply Plants	1	15	0
(UTSP) Sewage Treatment Plants	66	15	10
(UTSW) Solid Waste Disposal	<u>16</u>	0	<u>0</u>
TOTAL (UT)	1852		314
(UO) <u>Open & Others</u>			
(UORC) Recreational Facility	99	5	5
(UOGC) Golf Courses	3151	5	158
(UOPK) Parks	104	5	5
(UOCM) Cemeteries	47	5	2
(UOUN) Open & Undeveloped	2758	5	138
(UOUD) Under Development	<u>111117</u>	5	<u>5556</u>
TOTAL (UO)	117276		5864
TOTAL (U)	137033		13707
(A) <u>Agriculture</u>			
(AC) <u>Cropland</u>			
(ACTC) Truck Crops	<u>15806</u>	0	<u>0</u>
TOTAL (AC)	15806		0

(AP) <u>Pasture</u>			
(APIM) Improved	71529	0	0
(APUN) Unimproved	<u>11349</u>	0	<u>0</u>
TOTAL (AP)	82878		0
(AM) <u>Orchards, Groves, Etc.</u>			
(AMCT) Citrus	5226	0	0
(AMOR) Ornamentals	<u>734</u>	5	<u>37</u>
TOTAL (AM)	5960		37
(AF) <u>Confined Feeding Operations</u>			
(AFFF) Fish Farms	<u>9</u>	0	<u>0</u>
TOTAL (AF)	9		0
TOTAL (A)	104653		37
(R) <u>Rangeland</u>			
(RG) Grassland	<u>1185</u>	0	<u>0</u>
TOTAL (RG)	1185		0
(RS) <u>Scrub & Brushland</u>	6041	0	0
(RSPF) Palmetto Prairies	<u>1713</u>	0	<u>0</u>
TOTAL (RS)	7754		0
TOTAL (R)	8939		0
(F) <u>Forested Uplands</u>			
(FE) <u>Coniferous</u>			
(FEPF) Pine Flatwoods	<u>53445</u>	0	<u>0</u>
TOTAL (FE)	53445		0
(FO) <u>Non-Coniferous</u>			
(FOAP) Australian Pines	157	0	0
(FOBP) Brazilian Peppers	871	0	0
(FOPA) Palms	2813	0	0
(FOOK) Oak	<u>36</u>	0	<u>0</u>
TOTAL (FO)	3877		0
(FM) <u>Mixed Forested</u>			
(FMCO) Cabbage Palms/Oaks	315	0	0
(FMOF) Old Fields Forested	5768	0	0
(FMCD) Coastal Dunes	1050	0	0
(FMPC) Pine/Cabbage Palm	<u>20541</u>	0	<u>0</u>
TOTAL (FM)	27674		0
TOTAL (F)	84996		0

(W) Wetlands

(WF) <u>Forested Fresh</u>			
(WFCY) Cypress	91935	0	0
(WFME) Melaleuca	347	0	0
(WFMX) Mixed Forested	<u>8341</u>	0	<u>0</u>
TOTAL (WF)	100623		0
(WN) <u>Non-Forested Fresh</u>	42944	0	0
(WNAG) Mixed Aquatic Grass	<u>1128</u>	0	<u>0</u>
TOTAL (WN)	44072		0
(WS) <u>Forested Salt</u>	<u>75689</u>	0	<u>0</u>
TOTAL (WS)	75689		0
(WM) <u>Non-Forested Salt</u>	<u>14914</u>	0	<u>0</u>
TOTAL (WM)	14914		0
(WX) <u>Mixed Forested & Non-Forested Fresh</u>			
(WXPP) Pine & Wet Prairies	3330	0	0
(WXCP) Cypress Domes & Wet Prairies	84300	0	0
(WXHM) Hardwood & Marsh	<u>94</u>	0	<u>0</u>
TOTAL (WX)	87724		0
TOTAL (W)	323022		0

(H) Water

(HC) <u>Rivers, Streams, Canals</u>	<u>747</u>	100	<u>747</u>
TOTAL (HC)	747		747
(HO) <u>Open Fresh Water</u>	<u>2375</u>	100	<u>2375</u>
TOTAL (HO)	2375		2375
(HE) <u>Bays & Estuaries</u>	<u>41120</u>	100	<u>41120</u>
TOTAL (HE)	41120		41120
TOTAL (H)	44242		44242

(B) Barren Land

(BB) <u>Beaches</u>	<u>626</u>	0	<u>0</u>
TOTAL (BB)	626		0

(BP) <u>Extractive</u>	<u>669</u>	0	<u>0</u>
TOTAL (BP)	669		0
(BS) <u>Spoil Areas</u>	<u>26</u>	0	<u>0</u>
TOTAL (BS)	26		0
TOTAL (B)	1321		0
TOTAL AREA	704206 Acres		
TOTAL IMPERVIOUS AREA	57986 Acres		
TOTAL % OF IMPERVIOUS AREA	1%		

East Collier Basin - Lower West Coast Planning Area. Preliminary 1977
Existing Land Use and Land Cover Inventory.

<u>Classification</u>	<u>Area (in acres)</u>	<u>Percent Impervious</u>	<u>Impervious Area (in acres)</u>
(U) <u>Urban & Built-Up Land</u>			
(UR) <u>Residential</u>			
(URSL) Low Density	158	20	32
(URSM) Med. Density	56	50	28
(URMH) Mobile Homes	<u>96</u>	24	<u>23</u>
TOTAL (UR)	310		83
(UC) <u>Commercial & Services</u>			
(UCSS) Sales & Services	40	85	34
(UCMC) Marine Commercial (Marinas)	<u>22</u>	90	<u>20</u>
TOTAL (UC)	62		54
(UI) <u>Industrial</u>			
(UIJK) Junkyard	96	75	72
	<u>4</u>	2	<u>0</u>
TOTAL (UI)	100		72
(UT) <u>Transportation</u>			
(UTAP) Airports	1167	15	175
(UTAG) Small Grass Airport	149	0	0
(UTHW) Major Highways & Rights-of-way	<u>677</u>	20	<u>135</u>
TOTAL (UT)	1993		310

(UO)	<u>Open & Others</u>			
	(UOUN) Open & Undeveloped	273	5	14
	(UOUD) Under Development	<u>514</u>	5	<u>26</u>
	TOTAL (UO)	787		40
	TOTAL (U)	3252		559
(A)	<u>Agriculture</u>			
(AC)	<u>Cropland</u>			
	(ACTC) Truck Crops	<u>1381</u>	0	<u>0</u>
	TOTAL (AC)	1381		0
(AP)	<u>Pasture</u>			
	(APIM) Improved	52251	0	0
	(APUN) Unimproved	<u>17744</u>	0	<u>0</u>
	TOTAL (AP)	69995		0
(AM)	<u>Orchards, Groves, Etc.</u>			
	(AMCT) Citrus	<u>1883</u>	0	<u>0</u>
	TOTAL (AM)	1883		0
(AF)	<u>Confined Feeding Operations</u>			
	(AFDF) Dairy Farms	<u>17</u>	0	<u>0</u>
	TOTAL (AF)	17		0
	TOTAL (A)	73276		0
(R)	<u>Rangeland</u>			
(RG)	<u>Grassland</u>	<u>81</u>	0	<u>0</u>
	TOTAL (RG)	81		0
(RS)	<u>Scrub & Brushland</u>	17	0	0
	(RSPP) Palmetto Prairies	<u>1740</u>		<u>0</u>
	TOTAL (RS)	1757		0
	TOTAL (R)	1838		0
(F)	<u>Forested Uplands</u>			
(FE)	<u>Coniferous</u>			
	(FEPF) Pine Flatwoods	<u>5264</u>	0	<u>0</u>
	TOTAL (FE)	5264		0
(FO)	<u>Non-Coniferous</u>			
	(FOBP) Brazilian Peppers	2248	0	0
	(FOPA) Palms	<u>2194</u>	0	<u>0</u>
	TOTAL (FO)	4442		0

(FM)	<u>Mixed Forested</u>			
	(FMCO) Cabbage Palm/Oaks	255	0	0
	(FMTH) Tropical Hammocks	716	0	0
	(FMOF) Old Fields Forested	1203	0	0
	(FMCD) Coastal Dunes	11	0	0
	(FMPC) Pine/Cabbage Palm	<u>19318</u>	0	<u>0</u>
	TOTAL (FM)	21503		0
	TOTAL (F)	31209		0
(W)	<u>Wetlands</u>			
(WF)	<u>Forested Fresh</u>			
	(WFCY) Cypress	67437	0	0
	(WFWL) Willow	1805	0	0
	(WFMX) Mixed	<u>18307</u>	0	<u>0</u>
	TOTAL (WF)	87549		0
(WN)	<u>Non-Forested Fresh</u>	104186	0	0
	(WNAG) Mixed Aquatic Grass	3482	0	0
	(WNWL) Sloughs	<u>3173</u>	0	<u>0</u>
	TOTAL (WN)	110841		0
(WS)	<u>Forested Salt</u>	<u>30535</u>	0	<u>0</u>
	TOTAL (WS)	30535		0
(WM)	<u>Non-Forested Salt</u>	<u>28072</u>	0	<u>0</u>
	TOTAL (WM)	28072		0
(WX)	<u>Mixed Forested & Non-Forested Fresh</u>			
	(WXPP) Pine & Wet Prairies	68127	0	0
	(WXCP) Cypress Domes & Wet Prairies	325084	0	0
	(WXHM) Hardwood & Marsh	<u>5971</u>	0	<u>0</u>
	TOTAL (WX)	399182		0
	TOTAL (WX)	656179		0
(H)	<u>Water</u>			
(HO)	<u>Open Fresh Water</u>	<u>257</u>	100	<u>257</u>
	TOTAL (HO)	257		257
(HE)	<u>Bays & Estuaries</u>	<u>2728</u>	100	<u>2728</u>
	TOTAL (HE)	2728		2728
	TOTAL (H)	2985		2985

(B) Barren Land

(BP) <u>Extractive</u>	<u>823</u>	0	<u>0</u>
TOTAL (BP)	823		0
TOTAL (B)	823		0

TOTAL AREA	769562 Acres
TOTAL IMPERVIOUS AREA	3544 Acres
TOTAL % IMPERVIOUS AREA	0%

L28 Gap Basin - Lower West Coast Planning Area, Preliminary 1977 Existing Land Use & Land Cover Inventory

<u>Classification</u>	<u>Area (in acres)</u>	<u>Percent Impervious</u>	<u>Impervious Area (in acres)</u>
(U) <u>Urban & Built-Up Land</u>			
(UT) <u>Transportation</u> (UTHW) Major Highways & Rights-of-way	<u>355</u>	20	<u>71</u>
TOTAL (UT)	355		71
TOTAL (U)	355		71
(A) <u>Agriculture</u>			
(AP) <u>Pasture</u> (APIM) Improved Pasture	<u>461</u>	0	<u>0</u>
TOTAL (AP)	461		0
TOTAL (A)	461		0
(F) <u>Forested Uplands</u>			
(FE) <u>Coniferous</u> (FEFP) Pine Flatwoods	<u>547</u>	0	<u>0</u>
TOTAL (FE)	547		0
(FM) <u>Mixed Forested</u> (FMPC) Pine/Cabbage Palm	<u>612</u>	0	<u>0</u>
TOTAL (FM)	612		0
TOTAL (F)	1159		0

(W) Wetlands

(WF) <u>Forested Fresh</u> (WFCY) Cypress	<u>18365</u>	0	<u>0</u>
TOTAL (WF)	18365		0
(WN) <u>Non-Forested Fresh</u>	<u>7376</u>	0	<u>0</u>
TOTAL (WN)	7376		0

(WX) <u>Mixed Forested &</u> <u>Non-Forested Fresh</u>			
(WXPP) Pine & Wet Prairies	14968	0	0
(WXCP) Cypress Domes & Wet Prairies	<u>86288</u>	0	<u>0</u>
TOTAL (WX)	101256		0
TOTAL (W)	126997		0

TOTAL AREA	128972		
TOTAL IMPERVIOUS AREA	71		
TOTAL % OF IMPERVIOUS AREA	0%		

BIBLIOGRAPHY

- Anderson, J. R.; Hardy, E. E.; Roach, J. T. and Witmer, R. E., 1976. A Land Use and Land Cover Classification System for Use With Remote Sensor Data. Geological Survey Professional Paper 964. United States Geological Survey, Washington, D.C.
- Kuyper, W. H.; Becker, J. E. and Shopmyer, A., 1978. Land Use, Cover and Forms Classification System - A Technical Manual. State Topographic Office, Remote Sensing Center, State of Florida Department of Transportation, Tallahassee, Florida.

10/8/80

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appears correctly in Promulgation box already on title page

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