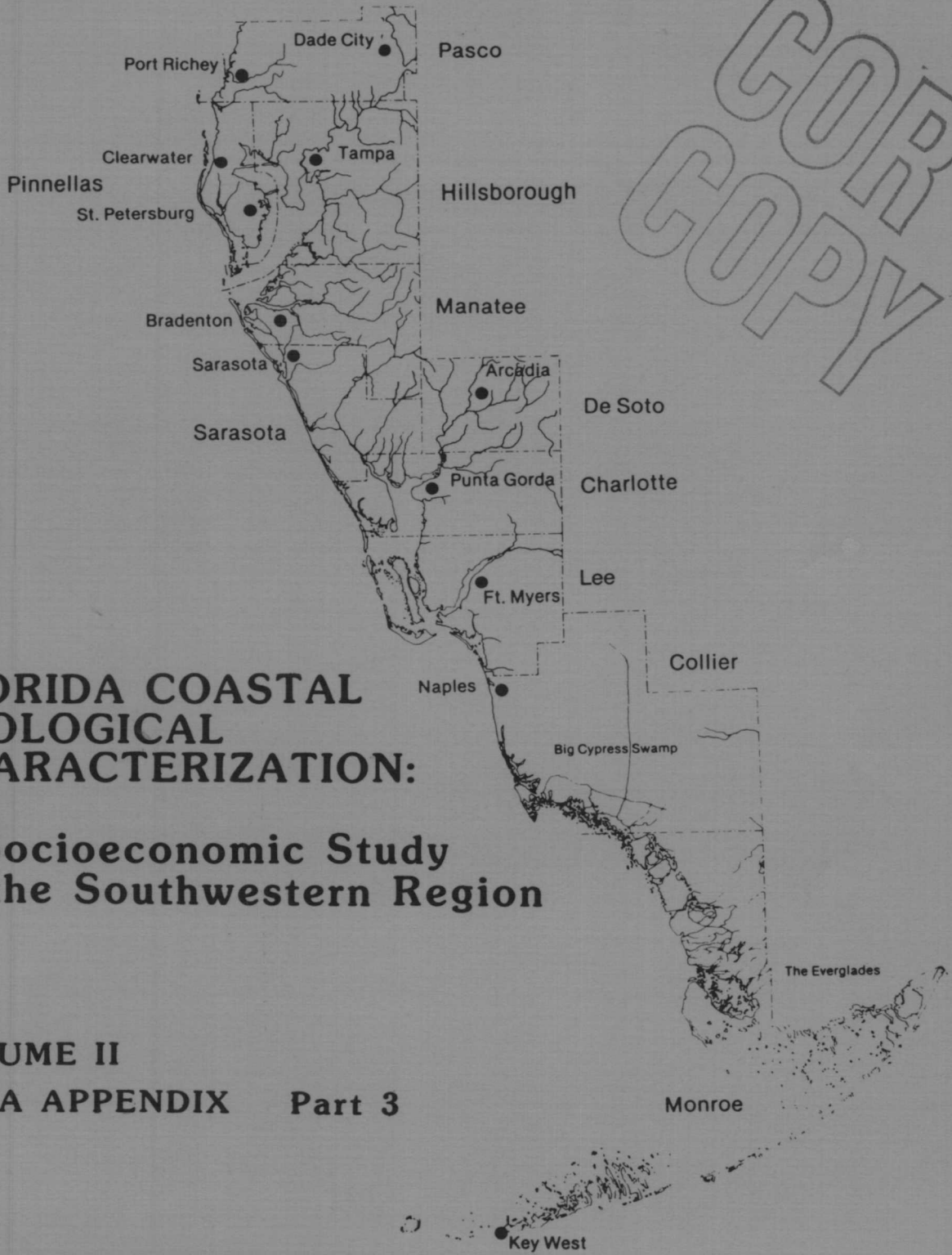


FWS/OBS-83/14
August 1983



FLORIDA COASTAL ECOLOGICAL CHARACTERIZATION:

A Socioeconomic Study of the Southwestern Region

VOLUME II
DATA APPENDIX Part 3

Fish and Wildlife Service
U.S. Department of the Interior

D.5

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FLORIDA COASTAL ECOLOGICAL CHARACTERIZATION: A
SOCIOECONOMIC STUDY OF THE SOUTHWESTERN REGION

Volume II
DATA APPENDIX
Part 3

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and the

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U.S. Department of the Interior
Washington, DC 20240

PREFACE

The purpose of this socioeconomic characterization study is to compile and synthesize information from existing sources about the social and economic characteristics of the southwestern coastal region of Florida, which is made up of Charlotte, Collier, DeSoto, Hillsborough, Lee, Manatee, Monroe, Pasco, Pinellas, and Sarasota Counties. This report and the data appendix should prove useful for coastal planning and management; it is one in a series of characterizations of coastal socioeconomic systems produced by the U.S. Fish and Wildlife Service. The series describes the components and interrelationships among complex processes that include population and demographic characteristics, mineral production, multiple-use conflicts, recreation and tourism, agricultural production, sport and commercial fishing, transportation, industrial and residential development, and environmental issues and regulations.

This study originally was under contract with the NANEX Systems Corporation, Crestview, Florida. The corporation is responsible for the compilations and accuracy of the Data Appendices and their lists of references. Most of the first drafts of the various chapters were prepared in 1980. Only a few of the sections of some of the reports have since been updated.

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ABBREVIATIONS

A/C	Air conditioning
A F B .	Air Force Base
AFDC	Aid to families with dependent children
AGR	Agriculture
Ave	Avenue
bb1	Barrel, barrels
Btu	British thermal unit
BOD	Biochemical oxygen demand
Co	Company
Corp	Corporation
Ct	Court
cwt .	Hundredweight
D	Data withheld to avoid disclosure of individual establishments
dB	Decibel
Dr	Drive
DRI	Development of regional impact
d.u .	Dwelling units
E	Endangered
E	East
EIR	Environmental Issues and Regulations
EMP	Employment
ENE .	East northeast
EPA	Environmental Protection Agency
est	Estimate
FCOLI	Fecal coliform
ft ₂	Foot, feet
ft ₃	Square foot, square feet
ft ³	Cubic foot, cubic feet
FSH	Fish
FY	Fiscal year
gal	Gallon, gallons
GFWFC	Game and Fresh Water Fish Commission
GW	Ground water
ha	Hectare, hectares
H.H	Head of household
Hwy .	Highway
Inc	Incorporated
Jct	Junction
km	Kilometer
kWh	Kilowatthour
kV	Kilovolt
lb	Pound, pounds
lf	Landfill
lin ft	Linear foot, linear feet
LPG	Liquid petroleum gas
LU	Land use
Ltd .	Limited
m/day	Meters per day
Mcf	Million cubic feet

Mgal/d	Million gallons per day
mg/l	Milligrams per liter
MHP	Mobile home park
mi	Mile, miles
mi ²	Square mile, square miles
misc.	Miscellaneous
mm	Millimeter
MP	Minerals Production
MW	Monitoring wells, megawatts
MWh	Megawatthours
N.	North
N.A.	Not applicable
N.D.	No data
NE.	Northeast
NNW.	North northwest
NRP	No reported production
NTSB	National Transportation Safety Board
NW.	Northwest
oz	Ounce
POP	Population
ppm	Parts per million
PU	Public utilities
Rd.	Road
RR.	Railroad
Rt.	Route
R/T	Recreation and Tourism
RV	Recreational vehicle
S.	South
SCi	Special category item
SD	Subdivision
SE.	Southeast
SER	Services (health)
SIC	Standard Industrial Code
slf	Sanitary landfill
SR	State road
SSC	Species of special concern
St.	Street
STP	Sewage treatment plant
SW.	Southwest
SW	Surface water
T	Threatened
tbb1	Thousand barrels
TCOLI	Total coliform
TP	Trailer park
TRANS	Transportation
TSS	Total suspended solids
ug/m ²	Micrograms per square meter
UR	Under review
W.	West
WLA	Waste load allocation
yd ₃	Yard, yards
yd ³	Cubic yards
yd ³ /d	Cubic yards per day

SYMBOLS

\$	Dollar, dollars
%	Percent
"	Inch, inches
#	Number
&	And

METRIC-ENGLISH EQUIVALENTS

Distance

1 cm = 0.39 in
1 m = 39.38 in
1 km = 0.62 mi

1 in = 2.54 cm
1 ft = 0.30 m
1 yd = 0.91 m
1 mi = 1.61 km

Area

1 m² = 1.2 yd²
1 km² = 0.39 mi²
1 ha = 2.5 acres

1 ft² = 0.09 m²
1 yd² = 0.83 m²
1 acre = 0.40 ha
1 mi² = 2.59 km²

Weight

1 g = 0.035 oz
1 kg = 2.20 lb
1 mt (1000 kg) = 1.1 t (2,204.6 lb)

1 oz = 28.35 g
1 lb = 453.60 g
1 lb = 0.45 kg
1 t = 0.91 mt

Volume

1 ml = 0.03 fl oz
1 liter = 2.1 pt
1 liter = 1.06 qt
1 bbl = 42 gal
1 m³ = 35 ft³
1 m³ = 1.3 yd³

1 fl oz = 29.57 ml
1 pt = 0.47 liter
1 qt = 0.95 liter
1 gal = 3.79 liter
1 ft³ = 0.03 m³
1 yd³ = 0.76 m³

Temperature

C⁰ = 5/9 (F⁰ - 32)

F⁰ = 9/5C⁰ + 32

MINERAL AND OIL PRODUCTION (MP)

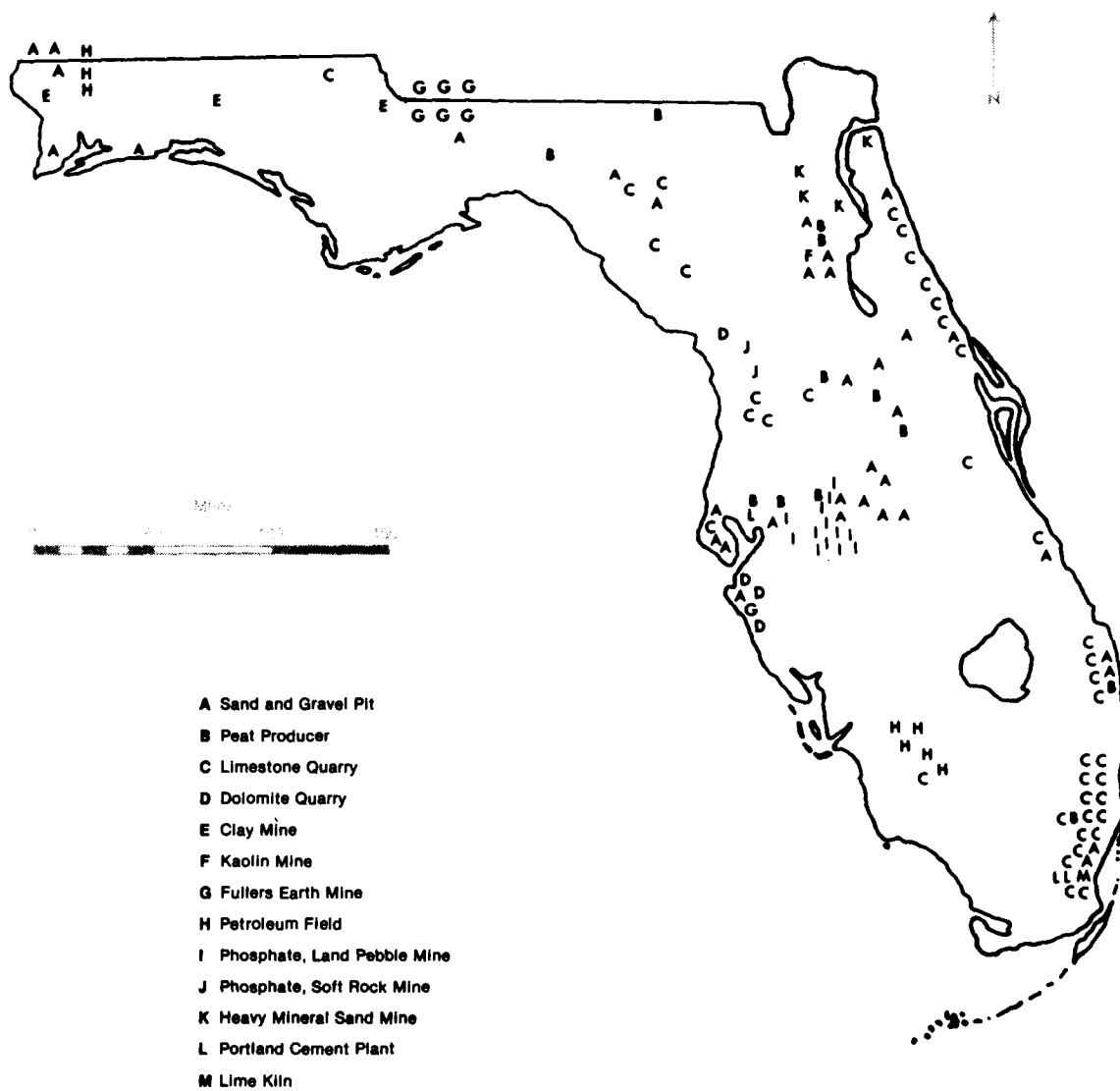


Figure 1. Florida mineral industries (Wood and Fernald 1974).

Table MP 1. Value (\$) of all minerals^a produced, in order of value, for 1955, 1960, 1965, 1970, 1975 and 1979 (U.S. Department of the Interior, Bureau of Mines 1958, 1961, 1967, 1972, 1978b, 1981).

County	Year	Mineral	(\$)
Charlotte	1955	NRP ^b	N.A.
	1960	NRP	N.A.
	1965	NRP	N.A.
	1970	Limestone, sand and gravel	D ^c
	1975	NRP	N.A.
	1979	Stone, sand and gravel	D
Collier	1955	Limestone	N.D.
	1960	Petroleum, limestone, natural gas	D
	1965	Petroleum, limestone, natural gas	D
	1970	Petroleum, limestone	D
	1975	Stone	2,384,000
	1979	Stone	3,521,000
DeSoto	1955	NRP	N.A.
	1960	NRP	N.A.
	1965	NRP	N.A.
	1970	NRP	N.A.
	1975	NRP	N.A.
	1979	NRP	N.A.
Hillsborough	1955	Cement, phosphate rock, oystershell	N.D.
	1960	Cement, phosphate rock, oystershell, peat, gemstones	20,798,784
	1965	Phosphate rock, cement, oystershell, sand and gravel	27,344,444
	1970	Cement, phosphate rock, sand and gravel, oystershell, peat	20,041,000
	1975	Cement, sand and gravel, stone, peat	D
	1979	Phosphate rock, cement, stone, peat	D
	1979	Stone	D
Lee	1955	NRP	N.A.
	1960	Limestone, oystershell	D
	1965	Limestone, oystershell	D
	1970	Limestone, petroleum, oystershell	D
	1975	Stone	D
	1979	Stone	8,036,000

Continued

Table MP 1. Continued.

County	Year	Mineral	(\$)
Manatee	1955	Limestone	N.D.
	1960	Limestone, oystershell	D
	1965	Limestone	D
	1970	Limestone	D
	1975	Cement, stone	D
	1979	Cement	D
	Monroe	1955	Limestone
1960		Limestone	D
1965		Limestone	D
1970		Limestone	615,000
1975		Stone	881,000
1979		Stone	D
Pasco		1955	NRP
	1960	Limestone	D
	1965	NRP	N.A.
	1970	NRP	N.A.
	1975	Stone	343,000
	1979	Stone	D
	Pinellas	1955	Sand, limestone
1960		Oystershell, marl, limestone	D
1965		Oystershell, sand and gravel	D
1970		Oystershell, sand and gravel	D
1975		Stone	D
1979		NRP	N.A.
Sarasota		1955	Limestone
	1960	Limestone	D
	1965	Limestone	D
	1970	NRP	N.A.
	1975	Sand and gravel	D
	1979	Sand and gravel, stone	D
	Florida	1955	All minerals
1960		All minerals	176,920,000
1965		All minerals	249,320,000
1970		All minerals	300,042,000
1975		All minerals	1,775,500,000
1979		All minerals	1,098,772,000

^a Excludes peat, petroleum and natural gas.

^b No reported production.

^c Figures withheld to avoid disclosure of individual establishments

Table MP 2. Non-fuel mineral production and value (\$) for Florida for 1955, 1960, 1965, 1970, 1975 and 1979 (U.S. Department of the Interior, Bureau of Mines 1958, 1961, 1967, 1972, 1978b, 1981).

Mineral	Year	Quantity produced ^a	(\$)
Sand and gravel	1955	5,065,503	4,349,148
	1960	6,757,000	5,559,000
	1965	7,298,000	6,377,000
	1970	12,482,000	12,254,000
	1975	13,237,000	20,199,000
	1979	21,708,000 ^b	39,520,000
Phosphate rock	1955	8,747,282 ^b	53,640,301
	1960	12,321,000	82,530,000
	1965	19,253,000	141,258,000
	1970	N.D.	N.D.
	1975	N.D.	N.D.
	1979	N.D.	N.D.
Stone (including limestone)	1955	17,027,967	22,966,008
	1960	27,629,000	37,419,000
	1965	35,730,000 ^c	41,148,000
	1970	43,089,000 ^c	61,302,000
	1975	39,071,000 ^d	73,372,000
	1979	D ^e	D
Clays	1955	412,766	4,815,855
	1960	252,000	6,357,000
	1965	651,000	9,752,000
	1970	872,000	12,661,000
	1975	712,000	17,063,000 ^f
	1979	681,000	31,308,000 ^f
Peat	1955	61,098	231,829
	1960	39,275	162,000
	1965	19,253	109,000
	1970	46,000	304,000
	1975	82,000 ^g	1,037,000
	1979	153,000	2,190,000

^a In short tons except where otherwise specified.

^b Long tons.

^c Excludes dimension limestone.

^d Excludes dimension stone and shell.

^e Figures withheld to avoid disclosure of individual establishments.

^f Excludes value of kaolin.

^g Source document gave two figures: page 191 (82,000) page 204 (100,895).

Table MP 3. Marketable production of phosphate rock for Florida in 1955, 1960 and 1965 (U.S. Department of the Interior, Bureau of Mines 1958, 1961, 1967, 1972, 1978b, 1981).

Year	Hard rock		Soft rock	
	Long tons	(\$)	Long tons	(\$)
1955	91,200	733,800	69,788	452,301
1960	77,000	670,000	47,000	384,000
1965	69,900	693,000	29,216	226,844

Year	Land pebble		Total	
	Long tons	(\$)	Long tons	(\$)
1955	8,586,294	52,454,200	8,747,282	53,640,301
1960	12,197,000	81,476,000	12,321,000	82,530,000
1965	19,153,835	140,337,900	19,252,931	141,257,744

Table MP 4. Phosphate reserves and resources (million metric tons) for the world, the United States and central Florida (U.S. Department of the Interior, Bureau of Mines 1978b).

Location	Measured reserves	Identified sub-economic resources	Total resources
World ^a	15,207	49,188	74,395
United States ^a	2,902	1,506	4,408
Central Florida ^a	907	635	1,542
Polk County ^b	403	95	498
Hillsborough County ^b	181	14	195
Hardee County ^b	176	299	475
Manatee County ^b	164	150	314
DeSoto County ^b	16	64	80

^a 1976 figures.

^b 1973 figures.

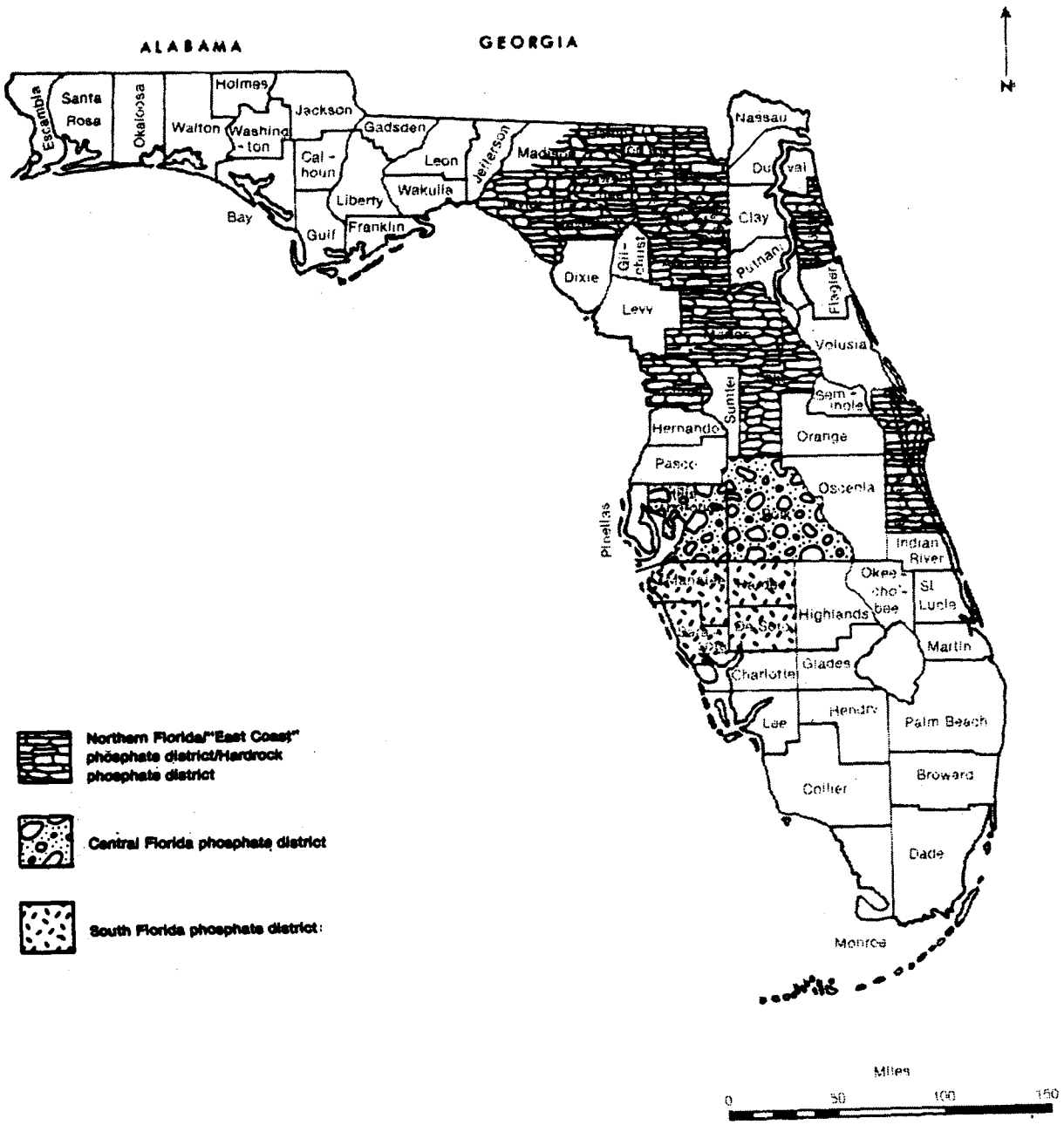


Figure 2. Florida counties with identified phosphate deposits (Zellar - Williams 1978).

Table MP 5. Active phosphate producers in Southwest Florida (Florida Department of Environmental Regulation, Bureau of Water Management 1980a).

County and producer

Hillsborough County

Big Four Mine
Borden Chemical Co.

Lonesome Mine
Brewster Phosphates

Haynesworth Mine
Brewster Phosphates

Kingsford Mine
Brewster Phosphates

Table MP 6. Estimated truck shipments between Tampa and phosphate plants, annual tonnages^a and daily loads for 1973 and 1976 (U.S. Department of the Interior, Bureau of Mines 1978a).

Commodity shipments	1973		1976	
	Annual tonnage (bbl)	Daily loads	Annual tonnage (bbl)	Daily loads
Tampa to phosphate plants				
fuel oils #5 and #6	1,500,000	46	4,000,000	110
anhydrous ammonia	150,000	30	150,000	30
molten sulphur	2,300,000	290	3,400,000	446
caustic soda	120,000	17	130,000	19
Phosphate plants to Tampa				
phosphate rock	1,900,000	250	1,900,000	250
GTSP and DAP	600,000	72	1,250,000	140
phosphoric acid	150,000	14	750,000	108
defluorinated phosphate	100,000	12	170,000	25

^a Short tons.

Table MP 7. Inbound and outbound traffic of selected phosphate industry related commodities for the Port of Tampa in 1976 (U.S. Department of the Interior, Bureau of Mines 1978a).

Commodity	Total	Foreign		Domestic	
		Imports	Exports	Inbound	Outbound
Ammonia	142,852	139,777	0	3,075	0
Coke	11,023	11,023	0	0	0
Fertilizer, bagged	2,197	1,337	860	0	0
Fertilizer materials	60,527	15,993	0	44,534	0
Phosphate, bagged	33,346	0	33,346	0	0
Phosphate, bulk	16,131,425	0	8,340,193	0	7,791,232
Phosphatic chemicals, bagged	82,305	0	72,953	0	9,352
Phosphatic chemicals, bulk	3,389,082	0	2,547,641	0	841,441
Phosphoric acid	434,856	0	434,856	0	0
Phosphorus	323	0	323	0	0
Sulphur, bagged	529	0	529	0	0
Sulphur, dry	5,731	5,731	0	0	0
Sulphur, liquid	3,356,223	91,111	0	2,684,089	8,642,025
Sulphuric acid	91,111	937,106	0	15,363,536	8,781,350
Total, selected commodities	23,741,530	4,896,247	11,430,701	2,731,698	0
Total shipments	41,394,275	0	12,353,142	0	0

Table MP 8. Imports and exports for selected phosphate industry related commodities for the Port of Tampa in 1970-76 (U.S. Department of the Interior, Bureau of Mines 1978c).

Year	Imports					
	Ammonia		Sulphur		Phosphate	
	(\$)	Tons	(\$)	Tons	(\$)	Tons
1970	6,345,867	151,743	5,987,449	211,937	64,907,503	N.D.
1971	6,615,291	154,628	2,623,061	118,121	69,609,530	9,910,366
1972	5,325,014	128,476	916,489	40,303	77,265,679	9,649,670
1973	3,757,691	91,686	1,250,988	55,571	79,048,669	10,455,119
1974	6,938,008	68,754	18,063,481	538,830	194,727,490	11,037,545
1975	11,943,317	154,552	34,961,494	696,818	357,442,499	9,336,913
1976	N.D.	139,777	N.D.	677,865	N.D.	8,373,539

Year	Exports			
	Phosphatic fertilizer		Phosphatic acid	
	(\$)	Tons	(\$)	Tons
1970	55,833,708	1,201,861	1,526,323	32,658
1971	59,514,808	1,240,710	4,754,475	126,811
1972	78,126,808	1,244,986	2,044,099	36,791
1973	118,380,692	1,502,024	2,962,147	40,526
1974	197,416,639	1,037,877	14,169,908	138,247
1975	389,387,103	2,075,246	42,684,021	245,201
1976	N.D.	2,621,454	N.D.	434,856

Table MP 9. Active limestone producers in Southwest Florida (Florida Department of Environmental Regulation, Bureau of Water Management (1980a)).

Charlotte County

Punta Gorda Shell Pit
Edward G. Hendrickson, Jr.

Collier County

Golden Gate Quarry
Ashland-Warren, Inc.

Collier No. 1 Quarry
A.J. Capeletti, Inc.

Sunniland Quarry
Century Industries

Golden Gate Quarry
Florida Rock Corp.

Virgil Marcum Pit
Highway Pavers, Inc.

Mule Pen Rock Quarry
Meekins, Inc.

DeSoto County

Arcadia Shell Pit
Macasphalt Corp.

Pasco County

Belcher Mine
Belcher Mine, Inc.

Laurel Pit
Venice Fill & Shell Co.

Newburn Road Pit
Warren Bros., Inc.

Hillsborough County

Leisey Shell Pit
Leisey Shell Pit, Inc.

Hillsborough County (continued)

Shell Materials Pit
Shell Materials, Inc.

Lee County

Ballard Pit
Ballard Shell & Fill, Inc.

Cape Coral Pit
Coral Rock Industries, Inc.

Alico Road Pit
Florida Rock Industries, Inc.

Alva Mine
Fugate Construction Co.

Alva Pit.
J.L. Kelly Rock Co., Inc.

Manatee County

State Road 70 Pit
Wendel Kent & Co.

P & R Shell Pit
Purinton & Rhoades Co.

Monroe County

Big Pine Key Quarry
Parks Banks Trucking

Monroe Pit No. 1
A.M. Capeletti, Inc.

Tavernier Pit
Alonzo Cothron, Inc.

Rockland Key Quarry
Charley Toppino & Sons, Inc.

Table MP 10. Active sand producers in Southwest Florida (Florida Department of Environmental Regulation, Bureau of Water Management 1980a).

County and producer

Charlotte County

General Development Corp.
(2 mines)

Lee County

Triple C Fill & Paving
Labelle Limerock Com.

Manatee County

P & R Shell Pit
Purinton & Rhoades

State Road 70 Pit
Wendel Kent & Co.

Sarasota County

Newburn Road Pit
Ashland-Warren, Inc.

General Development Corp.
(18 mines)

Laurel Pit
Venice Kent and Co.

Brown Road Pit
Wendel Kent and Co.

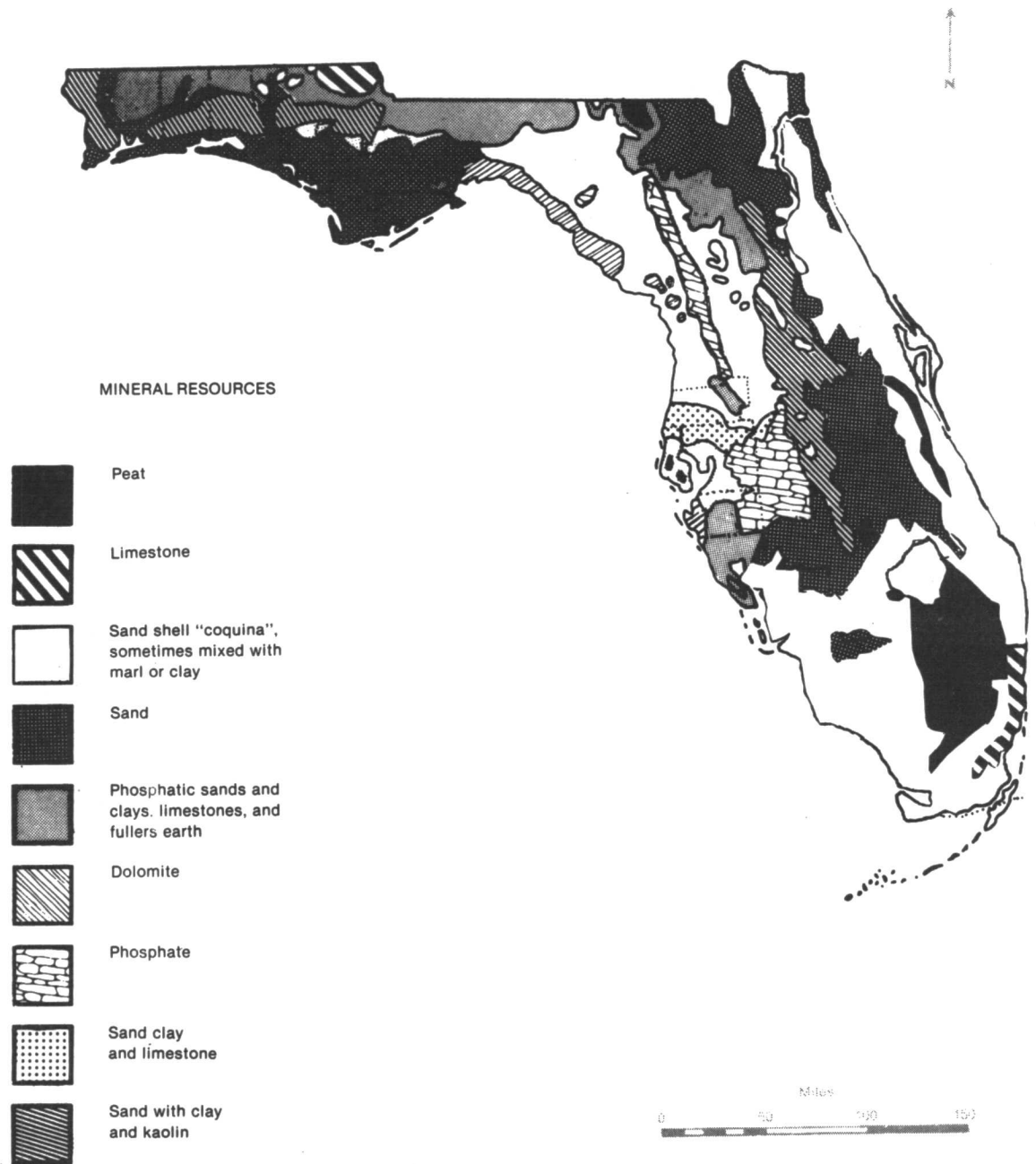


Figure 3. Florida mineral resources (Wood and Fernald 1974).

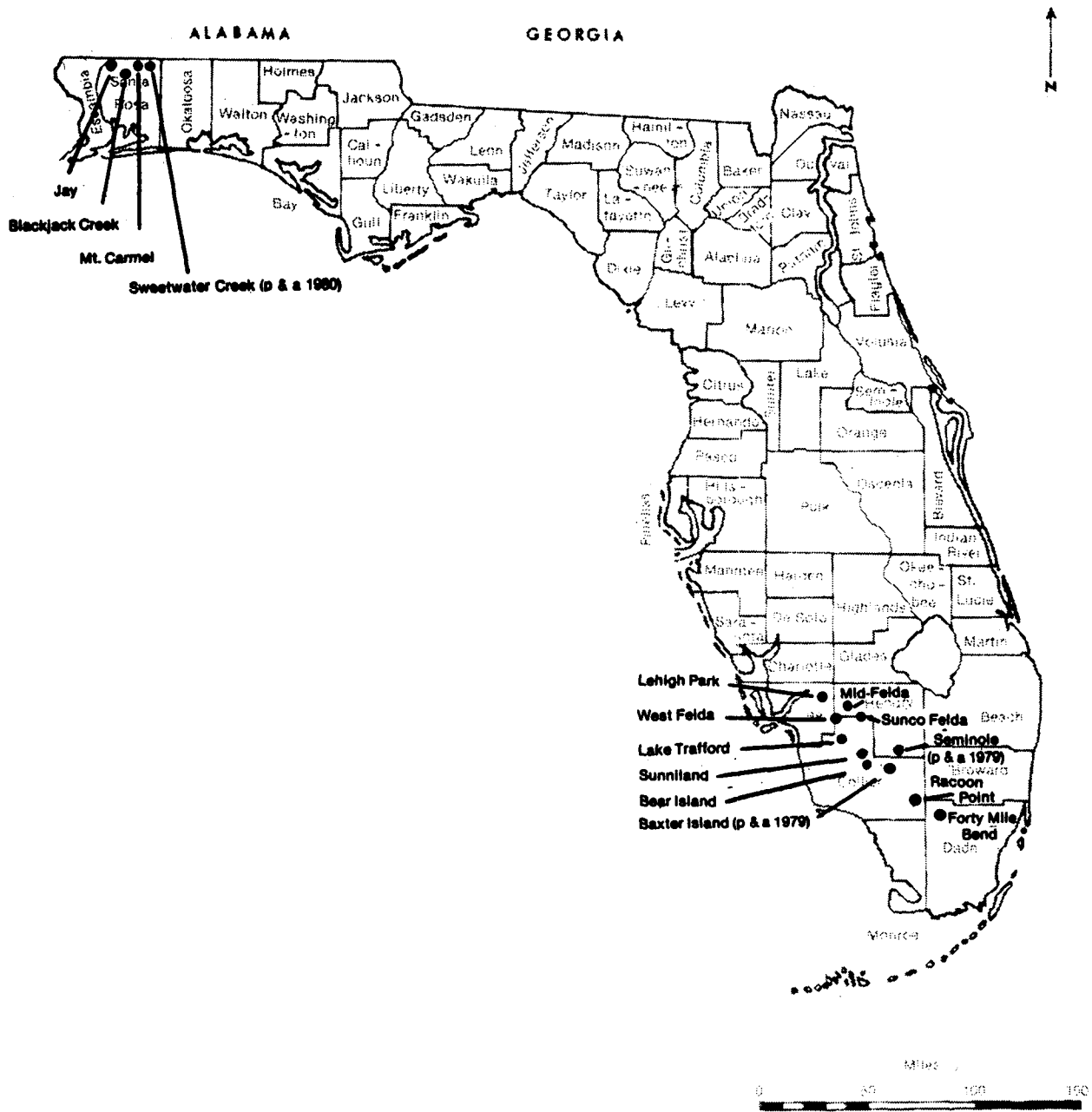


Figure 4. Producing and plugged oil and gas fields in Florida (Curry and Tootle 1980).

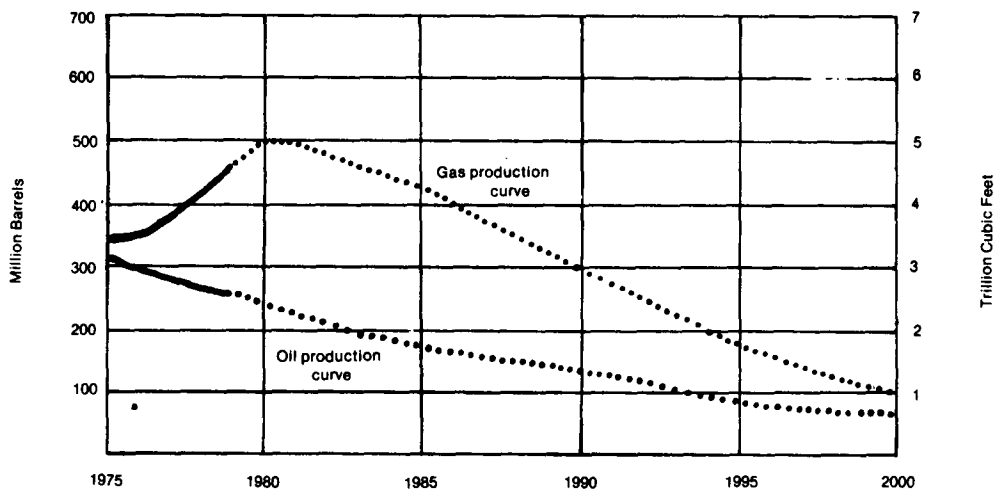


Figure 5. Oil and gas production curves for the Gulf of Mexico to the year 2000 (Rogers et al. 1979).

Table MP 11. Florida's non-fuel mineral supply in 1978 (U.S. Department of the Interior, Bureau of Mines 1978c).

Commodity	Percent of U.S. output	Rank in nation	Reserves
Fuller's earth	37	1	Moderate
Phosphate rock ^a	86	1	Moderate
Rare-earth concentrates	D ^b	2	Small
Staurolite	100	1	Small
Stone (crushed)	5	4	Large
Titanium minerals	D	1	Moderate
Zircon	100	1	Small

^a Includes North Carolina.

^b Data withheld to avoid disclosure of individual establishments.

Table MP 12. Crude petroleum and natural gas production and value for Florida for 1955, 1960, 1965, 1970, 1975 and 1979 (U.S. Department of the Interior, Bureau of Mines 1958, 1961, 1967, 1972, 1978b, 1981).

Year	Crude petroleum		Natural gas	
	Quantity ^a	(\$)	Quantity ^b	(\$)
1955	495	D ^c	36	4,000
1960	368	D	30	5,000
1965	1,464	D	107	14,000
1970	2,999	D	N.D.	N.D.
1975	41,877	490,258,000	44,383	43,185,000
1979	N.D.	N.D.	N.D.	N.D.

^a Thousand barrels.

^b Million ft³.

^c Figures withheld to avoid disclosure of individual establishments.

Table MP 13. Natural gas production (1,000 ft³) by field for 1955, 1960, 1965, 1970, 1975 and 1979 (Florida Department of Administration, State Energy Office 1978; Curry ca. 1980).

Field and county	1955	Cumulative	1960	Cumulative	1965	Cumulative
Baxter Island ^a Collier	0	0	0	0	0	0
Bear Island ^b Collier	0	0	0	0	0	0
Lake Trafford ^a Collier	0	0	0	0	0	0
Lehigh Acres ^c (W. Sunoco Felda) Lee Collier	0	0	0	0	0	0
Lehigh Park ^d Lee	0	0	0	0	0	0
Sunniland ^e Collier	48,300	431,600	36,900	645,700	77,722	908,822
Raccoon Pt. ^c Collier	0	0	0	0	0	0
Region	48,300	431,600	36,900	645,700	77,722	908,822
Florida	48,865	433,256	36,900	647,356	132,682	966,976

Continued

Table MP 13. Concluded.

Field and county	1970	Cumulative	1975	Cumulative	1979	Cumulative
Baxter Island Collier	0	0	0	0	0	0
Bear Island Collier	0	0	24,900	45,174	84,912	306,325
Lake Trafford Collier	0	0	0	0	0	0
Lehigh Acres (W. Sunoco Felda) Lee Collier	280,178	306,370	257,923	1,607,312	162,428	2,036,482
Lehigh Park Lee	0	0	3,995	8,423	67,328	230,243
19 Suniland Collier	72,182	1,523,932	49,789	1,796,561	38,336	N.D.
Raccoon Pt. Collier	0	0	0	0	0	0
Region	352,360	1,830,302	336,607	3,457,470	353,004	2,573,050
Florida	435,869	2,105,511	44,387,541	135,515,010	54,162,641	337,881,773

^a No gas production as of 1979.

^b Production began in 1972.

^c Lehigh Acres production began in 1970, name discontinued 31 December 1974. W. Sunoco Felda production began in 1966.

^d Production began in 1974.

^e Production began in 1943.

Table MP 14. Crude oil production (bbl) by field for 1955, 1960, 1965, 1970, 1975 and 1979 (Florida Department of Administration, State Energy Office 1978; Curry ca. 1980).

Field and county	1955	Cumulative	1960	Cumulative	1965	Cumulative
Baxter Island ^a Collier	0	0	0	0	0	0
Bear Island ^b Collier	0	0	0	0	0	0
Lake Trafford ^c Collier	0	0	0	0	0	0
Lehigh Acres ^d (W. Sunoco Felda) Lee	0	0	0	0	0	0
20 Lehigh Park ^e Lee	0	0	0	0	0	0
Sunniland ^f Collier	483,365	4,317,340	368,978	6,458,448	777,219	9,088,908
Raccoon Pt. ^g Collier	0	0	0	0	0	0
Region	483,365	4,317,340	368,978	6,458,448	777,219	9,088,908
Florida	494,654	4,350,228	368,978	6,491,336	1,464,215	9,828,014

Continued

Table MP 14. Concluded.

Field and county	1970	Cumulative	1975	Cumulative	1979	Cumulative
Baxter Island Collier	0	0	0	0	0	1,859
Bear Island Collier	0	0	330,006	610,197	1,061,161	4,057,533
Lake Trafford Collier	25,806	47,270	9,461	132,287	13,880	179,439
Lehigh Acres (W. Sunoco Felda) Lee	1,547,826	1,718,871	3,361,853	18,463,618	2,176,321	28,924,408
Lehigh Park Lee	0	0	39,943	84,034	664,285	2,275,879
Sunniland Collier	722,534	12,570,832	506,644	15,377,558	383,016	17,151,182
Raccoon Pt. Collier	0	0	0	0	5,670	5,670
Region	2,296,166	14,336,973	4,248,237	34,647,694	4,304,333	52,595,970
Florida	2,992,335	19,400,672	41,680,509	151,972,650	49,811,599	340,423,804

a Production began in 1977.

b Production began in 1972.

c Production began in 1969.

d Lehigh Acres production began in 1970, name discontinued 31 December 1974. W Sunoco Felda production began in 1966.

e Production began in 1974.

f Production began in 1943.

g Production began in 1979.

Table MP 15. Oil and gas drilling permits since 1973 (Florida Department of Natural Resources, Division of Resource Management 1980).

County	Permit number	API ^a number approved	Date approved	Operator
Collier	733	09-021-20037	04-16-74	Exxon GCRC #2-1 Bear Island
	736	09-021-20038	05-07-74	Tribal Collier Development 17-1
	761	09-021-20039	11-12-74	Exxon, Saltwater Disposal System #1
	760	09-021-20040	11-12-74	Robert Mosbacher Collier Well #A-1
	764	09-021-20041	11-26-74	Kanaba Oil and Gas Corp. Collier Well #10-2
	765	09-021-20042	11-26-74	Kanaba Oil and Gas Corp. Collier Well #10-2
	766	09-021-20043	11-26-74	Wainoco, Inc. Collier Well #35-2
	767	09-021-20044	11-26-74	Sohio Petroleum Co. Collier Well #11-3
	775	09-021-20045	03-18-75	Tribal Oil Co., Collier Co. Well #26-4
	778	09-021-20046	04-01-75	Bass Enterprise Production, Collier Co. #12-2
	779	09-021-20047	04-01-75	Exxon, Gulf Coast Real. #2-2
	780	09-021-20048	04-01-75	Exxon, Gulf Coast Real. #34-3
	782	09-021-20035-01	04-01-75	Raymond D. Reynolds, Gerry Bro. #32-2
	797	09-021-20049	09-09-75	Exxon Gerry Bros. #35-3
	798	09-021-20050	09-09-75	Exxon Gerry Bros. #33-3
	799	09-021-20051	09-09-75	Exxon Gerry Bros. #34-4
	800	09-021-20052	09-09-75	Exxon Gulf Coast Real. #2-5
	801	09-021-20053	09-09-75	Exxon Gulf Coast Real. #3-5
	802	09-021-20054	09-09-75	Exxon Gulf Coast Real. #2-6
	803	09-021-20055	09-09-75	Bass Enterprise Production, Oleum Corp. #5-2

Continued

Table MP 15. Continued.

County	Permit number	API number approved	Date approved	Operator
Collier	713A	09-021-20035-02	03-11-76	Raymond D. Reynolds Gerry Bros. #29-3A
	818	09-021-20056	05-04-76	Ashland Oil Inc. Ashland Collier Co. #26-3
	819	09-021-20057	05-04-76	Bass Enterprise Production Co. Collier Reed #11-2
	820	09-021-20058	05-04-76	Bass Enterprise Production Co. Oleum Corp. et al. #18-2
	821	09-021-20059	05-04-76	Exxon Gulf Coast Real. #1-4
	822	09-021-20060	05-04-76	Exxon Gulf Coast Real. #3-1
	823	09-021-20061	05-04-76	Exxon Gulf Coast Real. #3-6
	824	09-021-20062	05-04-76	Exxon Gulf Coast Real. #11-1
	825	09-021-20063	05-04-76	Exxon Gulf Coast Real. #11-4
	826	09-021-20064	05-04-76	Exxon Gulf Coast Real. #12-3
	827	09-021-20065	05-04-76	Exxon Gulf Coast Real. #34-4
	828	09-021-20066	05-18-76	Exxon Oleum Corp. #32-4
	829	09-021-20067	05-18-76	Exxon Oleum Corp. #33-4
	831	09-021-20068	05-04-76	Reynolds State of Fla #31-1
	916	09-021-20113	11-22-77	Exxon Oleum Corp. #33-3
	928	09-021-20114	11-22-77	Exxon Oleum Corp. #35-3
	937	09-021-20115	03-23-78	Exxon Collier Co. #27-3
	938	09-021-20116	03-23-78	Exxon Collier Co. #28-4
	942	09-021-20117	04-20-78	Exxon Collier Co. #33-1
	947	09-021-20118	06-06-78	Total Collier Co. #33-1
	952	09-021-20119	08-15-78	Sierra Production, Oleum Corp. #4-1
	953	09-021-20120	08-15-78	Sierra Production, Barron Collier #5-1
	962	09-021-20121	12-19-78	Exxon Collier Co. Well #2-7
963	09-021-20122	12-19-78	Diamond Shamrock Gerry Bros. #35-1	

Continued

Table MP 15. Continued.

County	Permit number	API number approved	Date approved	Operator
Collier	964	09-021-20123	12-19-78	Exxon Gerry Bros. #36-3
	965	09-021-20124	12-19-78	Diamond Shamrock-Gerry Bros. #36-4
	974	09-021-20125	04-06-79	Hughes and Hughes Collier Co. #19
	975	09-021-20126	04-06-79	Hughes and Hughes Collier Co. #8
	976	09-021-20127	04-06-79	Hughes and Hughes Collier Co. #5
	981	09-021-20128	06-26-79	Exxon Collier Co. #34-5
	982	09-021-20129	06-26-79	Exxon Collier Co. #14-3
	993	09-021-20130	11-06-79	Hughes and Hughes Collier Co. 29-3 #1
	997	09-021-20131	01-08-80	Exxon Oleum Corp. Well #2-2
	998	09-021-20132	01-08-80	Exxon Oleum Corp. Well #2-3
	999	09-021-2-133	01-22-80	American Natural Gas Production Co. Collier Co. #6-4
	1000	09-021-20134	01-22-80	American Natural Gas Production Co. Collier Co. #6-4
	1001	09-021-20135	02-05-80	Natural Resident Management Alico #31-2
	1003	09-021-20136	02-22-80	Exxon Price State of FL #35-4
	1011	09-021-20137	05-06-80	Exxon Oleum Corp. Well #22-2
	1012	09-021-20138	05-06-80	Exxon Oleum Corp. Well #21-1
	1016	09-021-20139	06-17-80	Hughes and Hughes #1 Weisinger #32-2
	1020	09-021-20140	08-26-80	NRM Corp. Lee Well #1-3
	1022	09-021-20141	09-10-80	Hughes and Hughes #1 Collier Co. 23-3 BCS
	1023	09-021-20142	09-10-80	Hughes and Hughes #1 Collier Co. 23-4 BCS
	1024	09-021-20143	09-10-80	Turner Corp. #35-2
	1025	09-021-20144	09-23-80	Exxon Collier Co. #4-2 BCS

Continued

Table MP 15. Continued.

County	Permit number	API number approved	Date approved	Operator
Collier	1030	09-021-20145	11-18-80	NRM Corp. Audubon Society #1-1
	1031	09-021-20146	11-18-80	Exxon Oleum Corp. Well #34-2
	1034	09-021-20147	12-16-80	Hughes and Hughes #1 Gerry Bros. 9-1
	1035	09-021-20148	12-16-80	Hughes and Hughes #1 Gerry Bros. 10-3
	1036	09-021-20149	12-16-80	Hughes and Hughes #1 Gerry Bros. 27-3
	1037	09-021-20150	12-16-80	Hughes and Hughes #1 Gerry Bros. 27-4
	Lee	734	09-071-20038	05-07-74
735		09-071-20039	05-07-74	Exxon Consolidated Tomoka Lands #13-4
744		09-071-20040	07-02-74	Exxon Lehigh Acres #24-3
747		09-071-20041	08-20-74	Exxon Lehigh Acres #4-4
748		09-071-20042	08-20-74	Exxon Salt Water Disposal System #2, Well #1
749		09-071-20043	09-04-74	Exxon Consolidated Tomoka Lands #23-1
752		09-071-20044	10-02-74	Exxon Lehigh Acres Development #24-4
714		09-071-20045	10-15-74	Exxon Consolidated Tomoka Lands Well #13-3
756		09-071-20046	10-15-74	Exxon Consolidated Tomoka Lands Well #22-2
757		09-071-20047	10-15-74	Exxon Lehigh Acres Development Well #14-4

Continued

Table MP 15. Continued.

County	Permit number	API number approved	Date approved	Operator
Lee	758	09-071-20050	11-26-74	Exxon Fort Myers Well #16-2
	770	09-071-20051	01-21-75	Exxon Consolidated Tomoka Lands #22-1
	749A	09-071-20052	03-18-75	Exxon Consolidated Tomoka Lands #23-1
	784	09-071-20053	04-15-75	Exxon Consolidated Tomoka Lands Well #23-2
	786	09-071-20054	05-06-75	Exxon Lehigh Consolidated Tomoka Lands Well #27-1
	787	09-071-20055	05-06-75	Exxon Lehigh Acres Development Well #24-4
	788	09-071-20056	05-06-75	Exxon #1, Salt Water Disposal Unit 23-1
	792	09-071-20057	07-01-75	Exxon SWD Unit 22-4 #1
	804	09-071-20058	09-23-75	Exxon Consolidated Tomoka Lands Unit 27-1
	812	09-071-20059	02-02-76	Exxon Consolidated Tomoka Lands Well #27-2
	813	09-071-20060	02-02-76	Exxon Lehigh Consolidated Tomoka Lands #27-4
	816	09-071-20061	03-23-76	Exxon Consolidated Tomoka Lands #21-4
	817	09-071-20062	04-20-76	Exxon L.A.D. Consolidated Tomoka Lands #10-4
	841	09-071-20063	06-01-76	Exxon Consolidated Tomoka Lands #26-2
	842	09-071-20064	06-01-76	Exxon Lehigh Consolidated Tomoka Lands #26-3

Continued

Table MP 15. Continued.

County	Permit number	API number approved	Date approved	Operator
Lee	847	09-071-20065	07-20-76	Exxon Florida State #18-1
	850	09-071-20066	09-07-76	Exxon Consolidated Tomoka Lands #23-3
	851	09-071-20067	09-07-76	Total Leonard Florida Farms Development #35-1
	857	09-071-20068	10-05-76	Exxon Consolidated Tomoka Lands #23-2
	858	09-071-20069	10-05-76	Exxon Consolidated Tomoka Lands #23-4
	859	09-071-20070	10-05-76	Exxon Lehigh Consolidated Tomoka Lands #26-1
	892	09-071-20071	06-07-77	Exxon Lehigh Corp. #12-3
	919	09-071-20072	10-18-77	Burns Chapman Consolidated Tomoka 11-1
	930	09-071-20073	12-20-77	Exxon George Sanders #29-4
	950	09-071-20074	07-06-78	Raymond D. Reynolds Consolidated Tomoka Lands #7-1
	959	09-071-20075	12-05-78	Exxon Lehigh Consolidated Tomoka Lands Well #24-3
	966	09-071-20078	01-09-79	Exxon Consolidated Tomoka Lands #20-1
	969	09-071-20079	02-06-79	Exxon Lehigh #14-1
	979	09-071-20080	05-15-79	Natural Resources Management Chapman #34-1
	1014	09-071-20081	06-03-80	Exxon Consolidated Tomoka Lands Well #29-3

27

Continued

Table MP 15 . Concluded .

County	Permit number	API number approved	Date approved	Operator
Lee	1019	09-071-20082	07-15-80	Exxon Lehigh Park SWD System 1 Well #2
	1028	09-071-20083	11-18-80	Exxon Lehigh Consolidated Tomoka Lands #9-4

^a American Petroleum Institute .

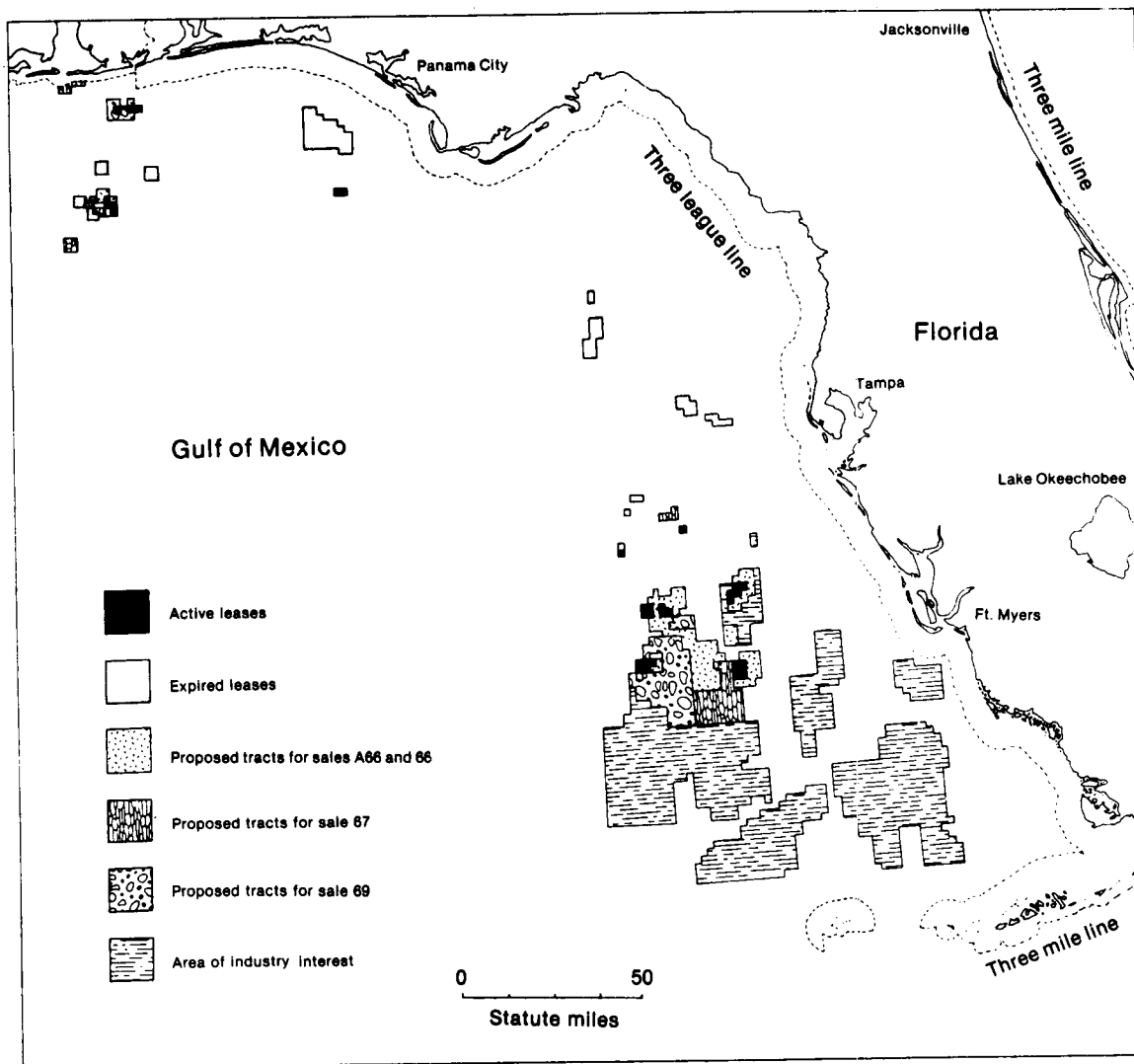


Figure 6. Status of OCS lease areas off the Florida Gulf Coast (U.S. Department of the Interior, Bureau of Land Management 1980; Southwest Florida Regional Planning Council 1981).

Table MP 16. OCS oil and gas lease sales (\$) in Florida for selected dates (Exxon Company U.S.A. 1980).

Date	Offered		Leased		Total bonus (\$)
	Number of tracts	Acres	Number of tracts	Acres	
02-26-59	80	458,000	23	132,480	1,711,872
12-20-73	85	489,600	62	357,120	1,100,399,131
02-08-76	60	350,292	4	23,040	4,040,000
10-31-78	71	408,334	28	161,280	43,823,730

30

Date	Total first year rental (\$)	Average bid per acre (\$)	Highest bid per acre (\$)
02-26-79	397,440	13 .00	16 .00
12-20-73	1,071,360	3,081 .00	36,805 .00
02-08-76	69,120	175 .00	280 .00
10-31-78	483,840	272 .00	1,422 .00

Table MP 17. Florida crude oil and natural gas reserves and production for 1955, 1960, 1965, 1970, 1975, 1977 and 1979 (Florida Department of Administration, State Energy Office 1978).

Year	Oil		Gas	
	Estimated recoverable reserves (bbl)	Cummulative production (bbl)	Estimated recoverable reserves (Mcf)	Cummulative production (Mcf)
1955	14,525,219	4,350,228	1,452,656	443,256
1960	12,384,111	6,491,336	1,238,556	647,356
1965	21,347,433	9,828,014	1,902,936	966,976
1970	382,468,433	19,400,672	405,407,461	2,105,511
1975	302,461,451	151,972,650	312,796,384	135,515,010
1977	211,687,025	243,075,980	216,208,122	232,124,782
1979	N.D.	340,423,804	N.D.	337,881,773

Table MP 18. Estimated crude oil and natural gas reserves in 1977-78 (Florida Department of Administration, State Energy Office 1978).

Field and county	Year discovered	Recovery (%)	Crude oil reserves	
			Original in place (bbl)	Original recoverable (bbl)
Baxter Island Collier	1977	20	480,714	96,143
Bear Island Collier	1972	40	17,874,432	7,149,773
Lake Trafford Collier	1969	10	1,792,098	179,210
Lehigh Acres (W. Sunoco Felda) Lee Collier	1970/1966	35	142,857,143	50,000,000
Lehigh Park Lee	1974	40	3,610,996	1,444,398
Sunniland Collier	1943	50	37,685,118	18,842,559
Raccoon Pt. Collier	1978	N.D.	N.D.	N.D.
Region		N.D.	204,300,501	77,712,083
Florida		41	1,120,525,179	454,763,005

Continued

Table MP 18. Concluded.

Field and county	Natural gas reserves	
	Original in place (Mcf)	Original recoverable (Mcf)
Baxter Island Collier	0	0
Bear Island Collier	1,429,955	571,982
Lake Trafford Collier	0	0
Lehigh Acres (W. Sunoco Felda) Lee Collier	11,428,571	4,000,000
Lehigh Park Lee	361,099	144,440
Sunniland Collier	3,768,512	1,884,256
Raccoon Pt. Collier	N.D.	N.D.
Region	16,988,137	6,600,678
Florida	1,082,608,605	448,332,904

^a Thousand ft³.

Table MP 19. Gulf of Mexico OCS oil and gas resource and reserve estimates in 1979 (U.S. Department of the Interior, U.S. Geological Survey ca. 1981).

Location/depths	Oil (billion bbl)	Gas (trillion ft ³)
Western Gulf of Mexico (Main pass area and west) 0-2,500 m water depth	5.2	69.0
Eastern Gulf of Mexico (East of main pass area) 0-2,500 m water depth	1.3	2.9
Reserves	2.8	37.2

Table MP 20. Mississippi, Alabama and Florida (MAFLA) lease sales for 1959, 1973, 1976 and 1978 (U.S. Department of the Interior, U.S. Geological Survey ca. 1981).

MAFLA				
Lease sale	Date	Number of tracts offered	Number of tracts leased	Percent leased
05 ^a	02/26/59	80 ^b	23	29
32	12/20/73	85 (147) ^c	62 (87)	67 (59)
41	02/18/76	60 (132)	4 (34)	7 (26)
65	10/28/78	71 (89)	28 (35)	39 (39)
Summary		296 (448)	117 (179)	40 (40)

MAFLA				
Lease sale	Date	Acres offered	Acres leased	Percent leased
05	02/26/59	458,000 (817,297)	32,480 (485,396)	29
32	12/20/73	489,600 (687,603)	357,120 (161,285)	73 (59)
41	02/18/76	350,292 (511,709)	23,040 (201,294)	7 (23)
65	10/28/78	408,334	161,280	39 (39)
Summary		1,706,226 (2,474,609)	673,920 (980,455)	39 (40)

^a L.S. #5 is not considered part of MAFLA, but all leasing activity was adjacent to Florida.

^b Figures shown without parenthesis represent data for Florida only.

^c Figures shown in parenthesis represent data for all MAFLA.

Table MP 21. Factors affecting the number and locations of onshore support facilities (New England River Basins Commission 1976).

Location of oil and gas field
 Size of oil and gas field
 Topography of oil and gas field
 Depth of water
 Whether both oil and gas are found
 Availability of coastal frontage (land)
 Availability of additional (back-up) land
 Proximity to existing refineries and processing plants
 Proximity to diverse urban areas and markets
 Public services and facilities (schools, hospitals)
 Labor markets (areas without strong labor unions are preferred)
 Public opinion
 Availability of entertainment
 Proximity to airport or landing strip

Table MP 22. Types and quantities of materials transported offshore for one-year periods (New England River Basins Commission 1976).

Fuel	10,000-15,000 bbl
Drilling mud	2,000-5,000 tons
Cement	1,000-3,000 tons
Fresh water	5,000,000-7,500,000 gal
Tubular goods	2,000-3,000 tons

Table MP 23. General requirements for locating service bases, and potential environmental and economic impacts (New England River Basins Commission 1976).

Item	Requirements/Pollutants/Economics
<u>Site Considerations</u>	
Land: Temporary base Permanent base	2-6 ha (5-15 acres) 10-40 ha (25-100 acres)
Berthage	60-186 m (200-600 ft) water frontage 5-6 m (15-20 ft) depth (draft)
Transportation	Airport, heliport nearby Water, excellent vessel accessibility Rail, desirable Road, adequate accessibility
Economic	Cost of land Proximity to related industries
<u>Environmental Impacts</u>	
Air emission	Hydrocarbons Carbon monoxide Nitrogen oxides
Wastewater contaminants	Hydrocarbons Heavy metals
Solid wastes	Up to 6 tons per day during drilling hazardous, oil contaminated, etc.
Noise	Up to 85 dB on a 24 hour basis
<u>Economic Impacts</u>	
Labor	50-50 jobs/platform during drilling 20-30 jobs/platform during production
Wages	\$750,000-\$1,000,000/year
Capital investment	Temporary base-\$200,000-\$300,000 Permanent base-\$2 million-\$5 million

Table MP 24. General requirements for locating shore facilities associated with pipelines, and potential environmental and economic impacts (New England River Basins Commission 1976).

Item	Requirements/Pollutants/Economics
<u>Site Considerations</u>	
Land: Pipeline easement (on shore)	15-30 m (50-100 ft)
Pipecoating yard	20-68 ha (50-150 acres)
Pumping station (if required)	16 ha (40 acres)
Waterfront	15-30 m (50-100 ft) for landfall 232 m (750 ft) for pipe coating yard, depth at least 3 m (10 ft)
Water	11,350-56,775 liters (3,000-15,000)
<u>Environmental Impacts</u>	
Air emission	Hydrocarbons Sulfur oxides Nitrogen oxides Particulates Carbon monoxide
Wastewater contaminants	Alkaline substances Hydrocarbons Particulates Metal fragments
Solid wastes	Concrete Contaminated debris Packaging materials Metal scraps
Noise	Up to 100 dB on a 24 hour basis
<u>Economic Impacts</u>	
Labor	250-300 jobs/pipeline during construction 100-200 jobs at pipecoating yard during pipeline construction
Wages	\$5 million-\$6 million/year for pipeline construction \$1.5 million-\$3 million for pipecoating yard during construction
Capital investment	\$8 million-\$10 million for pipecoating yard

Table MP 25. General requirements for locating berthing facilities, and potential environmental and economic impacts (New England River Basins Commission 1976).

Item	Requirements/Pollutants/Economics
<u>Site Considerations</u>	
Land: Terminal Tank farm	20-30 ha (50-75 acres) 8-30 ha (20-75 acres)
Berthage	Approximately 304 m (1000 ft) for pier
Water	Potable water Purging
<u>Environmental Impacts</u>	
Air emission	Hydrocarbons Carbon monoxide
Wastewater contaminants	Oil and grease High BOD High COD
<u>Economic Impacts</u>	
Labor	25-75 jobs
Wages	\$500,000-\$1,000,000/year
Capital investment	\$15 million-\$50 million

Table MP 26. General requirements for onshore processing and treatment facilities, and potential environmental and economic impacts (New England River Basins Commission 1976).

Item	Requirements/Pollutants/Economics
<u>Site Considerations</u>	
Land	20-30 ha (50-75 acres)
Water	200,000-750,000 gal/d
<u>Environmental Impacts</u>	
Air emission	Carbon monoxide Hydrocarbons Hydrogen sulfides Nitrogen oxides Particulates Sulfur oxides
Wastewater contaminants	Oil and grease Heavy metals Phenols Halogens Chromium Sulfuric acid Phosphates Chlorine Zinc
Solid wastes	Scale and sludge Oil absorbents Spent desiccants
Noise	Up to 100 db on a 24 hour basis
<u>Economic Impacts</u>	
Labor	50-60 jobs
Wages	\$750,000-\$1,000,000/year
Capital investment	\$50 million-\$200 million

Table MP 27. General requirements for locating oil refineries, and potential environmental and economic impacts (New England River Basins Commission 1976).

Item	Requirements/Pollutants/Economics
<u>Site Considerations</u>	
Land	200-800 ha (500-2,000 acres)
Water	5-10 million gal/d
<u>Environmental Impacts</u>	
Air emission	Ammonia Aldehydes Carbon monoxide Hydrocarbons Particulates Sulfur oxides
Wastewater contaminants	Acids and caustics Floating and dissolved oil Dissolved solids Dissolved organics Cyanide Chromate
<u>Economic Impacts</u>	
Labor	200-600 jobs
Wages	\$6 million-\$10 million/year
Capital investment	\$5 million-\$250 million

Table MP 28. General requirements for locating platform fabrication yards, and potential environmental pollutants (New England River Basins Commission 1976).

Item	Requirements/Pollutants
<u>Site Considerations</u>	
Land	10-325 ha (25-800 acres)
Berthage	60-120 m (200-400 ft) 5-15 m (15-50 ft) depth
Water	40,000-100,000 gal/d
<u>Environmental Impacts</u>	
Air emission	Sand and metal dust Concrete and cement dust Nitrogen oxide Sulfur oxide Hydrocarbons Organic compounds
Wastewater contaminants	Heavy metals Chemicals Particulates
Noise	Up to 100 dB on a 24 hour basis

ENVIRONMENTAL ISSUES AND REGULATIONS (EIR)

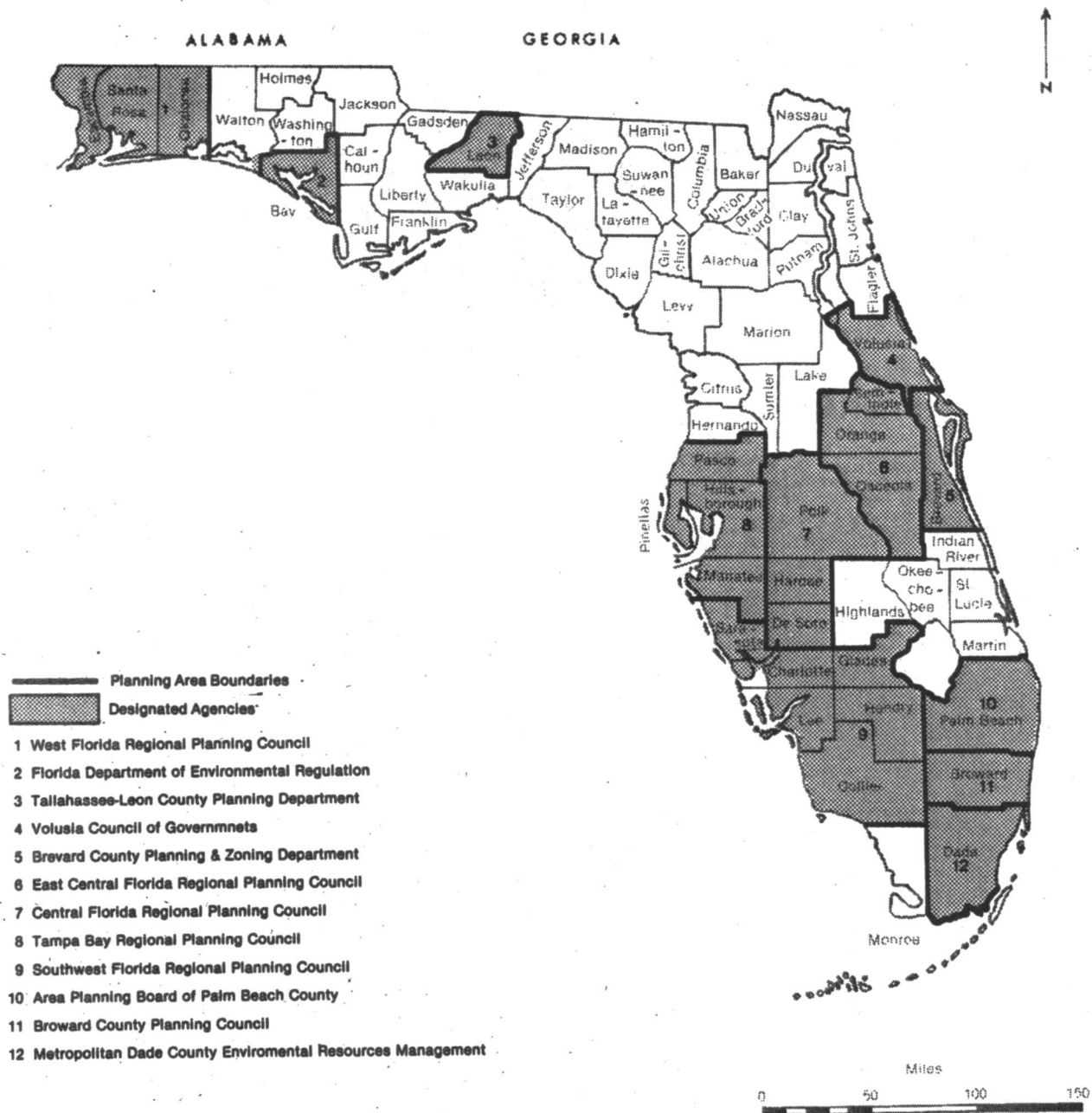


Figure 7. Areawide wastewater management planning areas (Florida Light and Power Co. 1979).

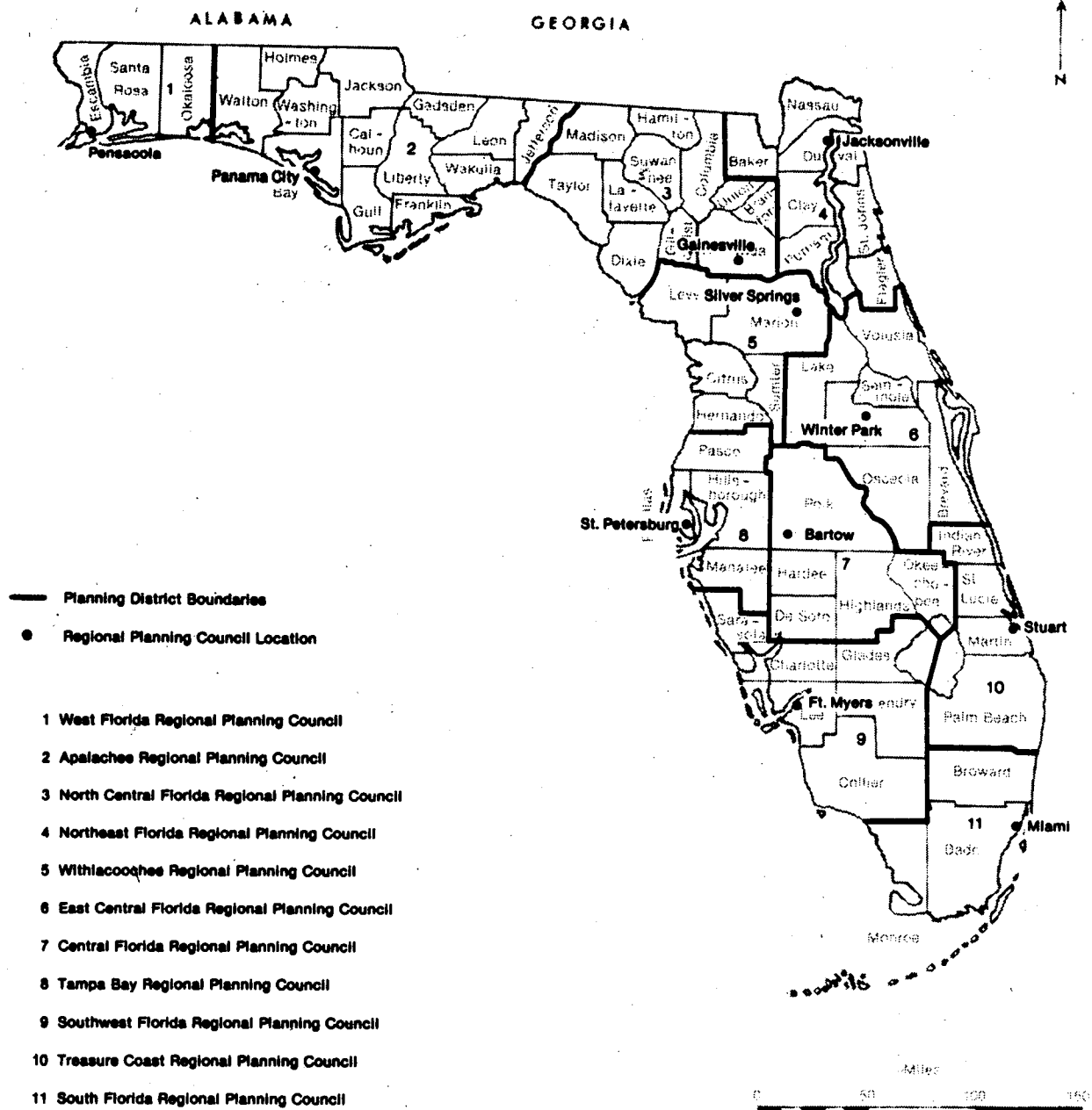


Figure 9. Regional Planning Council area boundaries (Florida Light and Power Co. 1979).

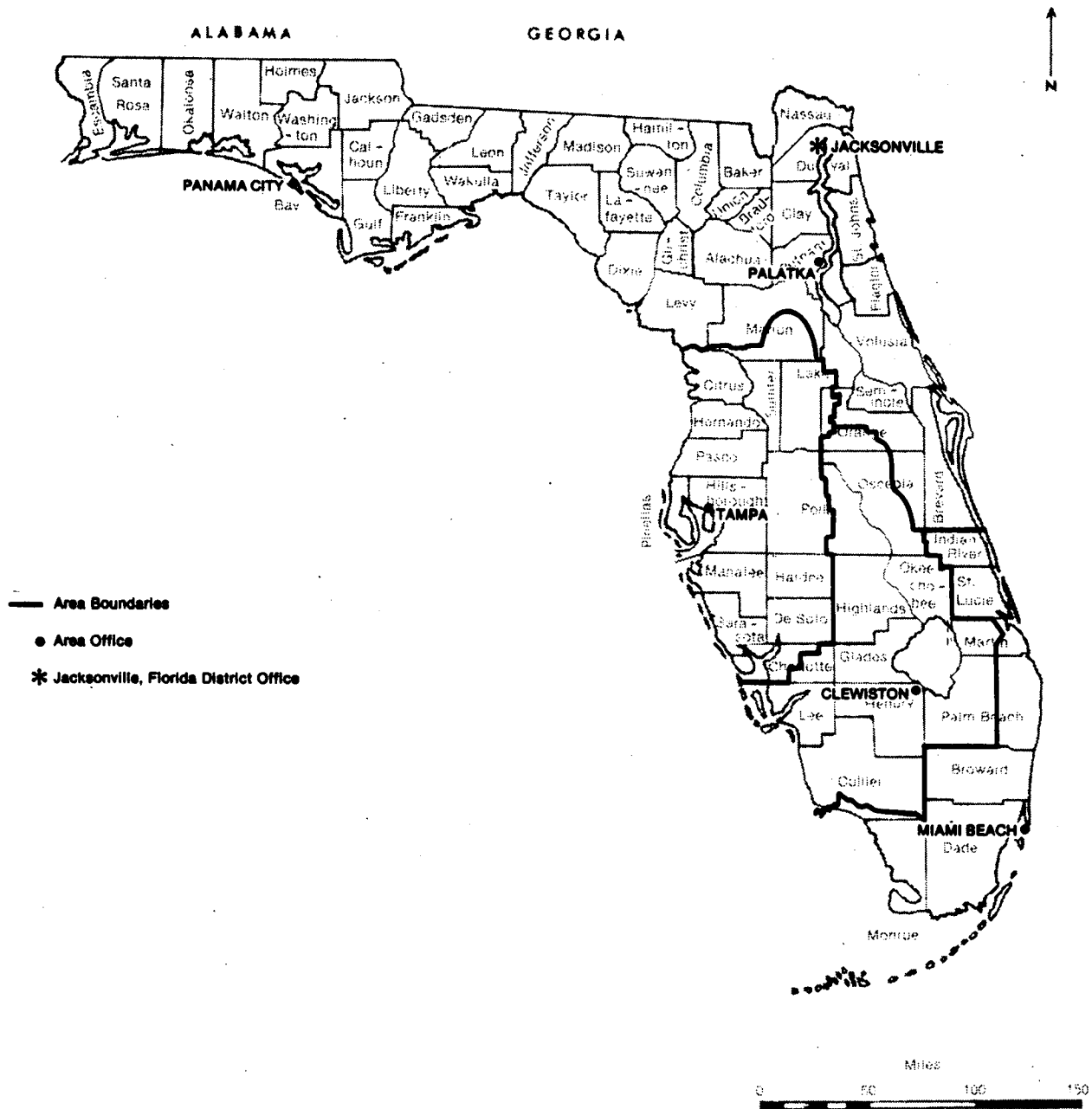


Figure 10. U.S. Army Corps of Engineers regulatory districts (Florida Light and Power Co. 1979).

Table EIR 1. Location and description of solid waste facilities by county (Florida Department of Environmental Regulation 1981).

County	Site name	Location	Population served ton/day site life	# Monitoring wells (MW) special waste & spilled materials accepted
Charlotte	Charlotte County slf ^a	Zemel Rd.	55,000 ₃ 400 yd ³ /day	9 MW asbestos disposal
	Charlotte Sanitation transfer station	211 W. Harbor View Rd.	40,000 ₃ 200 yd ³ /day	0 MW
	Englewood Disposal transfer station	Redwood Rd.	1,200 ₃ 75 yd ³ /day	0 MW
Collier	Immokalee slf	Eustis Ave. Extension	11,000 ₃ 127 yd ³ /day	8 MW
	Marco Island transfer station	Elcam Circle	5,500 ₃ 65 yd ³ /day	0 MW
	Naples slf	Alligator Alley	69,000 1,586 yd ³ /day	8 MW
	Carnestown yard trash compost site	U.S. 41 N.	2,400 5 ton/day	0 MW
	Carnestown transfer station	SR-29	2,400 ₃ 42 yd ³ /day	0 MW
	Naples yard trash	Goodlette Rd.	22,800 ₃ 218 yd ³ /day	0 MW

Continued

Table EIR 1. Continued.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Collier	Naples transfer station	Airport Rd.	55,000 104 yd ³ /day	0 MW
DeSoto	City of Arcadia	N. Johnson Ave.	7,500 55 yd ³ /day	2 MW
	Section 16 1f ^b	N.D.	10,500	N.D.
Hillsborough	Hillsborough Heights 1f	Taylor Rd.	196,000 270 ton/day	5 MW
	Kingsway Rd. 1f	Kingsway Rd.	100 ton/day	3 MW
	Beasley & Sons 1f	4922 N. 56 St.	N.D.	1 MW
	S. County transfer station	Hwy. 41	50,000 400 ton/day	N.D.
	NW. Hillsborough County solid waste transfer station	Wilsky Rd. and Linebaugh Ave.	175,000 650 ton/day	N.D.
	NW. transfer station	Wilsky Rd. and Linebaugh Ave.	80,000 650 ton/day	N.D.
	Taylor Rd. 1f	N.D.	N.D.	N.D.

Continued

Table EIR 1. Continued.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Hillsborough	NW. 1f	8282 Linebaugh Ave.	125,000 ₃ 1760 yd ³ /day	8 MW
	Waste Manage- ment, Inc.	U.S. 301 and I-4	Industries only variable volume/day	N.A.
Lee	Beach Disposal, Inc. transfer station	Pine Ridge Rd.	10,000 ₃ 175 yd ³ /day	0 MW
	Gulf Coast 1f	SR-82	720,000 542 ton/day	10 MW
	Lee Mar yard trash compost site	Pine Ridge Rd.	50 ton/day	2 MW
	Southern Dis- posal transfer station	Pine Ridge Rd.	3,000 ₃ 14 yd ³ /day	0 MW
	Turner Dis- posal transfer station	Pondella Rd.	25,000 ₃ 125 yd ³ /day	0 MW
	Sunland Center incinerator	Buckingham Rd. Fort Myers	65 lb/hr	0 MW

Continued

Table EIR 1. Continued.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Manatee	Palmeto Erie Rd.	5700 Erie Rd.	24,000 90 ton/day	1 MW
	Lena Rd.	Lena Rd.	104,000 470 ton/day	1 MW
Monroe	Key Largo disposal facility	N.D.	16,000 ₃ 125 yd ³ /day	0 MW
	Stock Island	Junior College Rd.	25,382 90-100 ton/day	3 MW
	Cudjoe Key transfer station	Cudjoe Key Rd.	13,000 20 ton/day	0 MW
	Key Largo disposal site	SR-905A	16,000 5 ton/day	0 MW
	Long Key disposal facility	N.D.	30,000 102 ton/day	0 MW
	Key Largo transfer station	SR-905A	16,000 33 ton/day	0 MW
	Cudjoe Key slf	Cudjoe Key Rd.	10,000 50 ton/day	3 MW sewage sludge

Continued

Table EIR 1. Continued.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Monroe	Long Key slf	U.S. 1	30,000 90 ton/day	2 MW sewage sludge
	Key West Re- source Recovery	Junior College Rd.	25,000 100 ton/day	0 MW
	Cudjoe Key volume reduction facility	Cudjoe Key Rd.	13,500 40 ton/day	N.D.
Pasco	Redding slf	SR-54	22,000 ₃ 250 yd ³ /day	4 MW
	City of Zephyrhills	Sixth St.	47,000	N.D.
	Environmental Waste Control, Inc.	SR-587A	40,000 ₃ 400 yd ³ /week	4 MW
	Ridge Rd. lf	Landfill Rd.	65,000 ₃ 600 yd ³ /day	4 MW
	East Pasco lf	Auton Rd.	30,000 ₃ 345 yd ³ /day	2 MW
Pinellas	Toytown slf	Roosevelt Blvd. and 16th St. N.	550,000 ₃ 5230 yd ³ /day	9 MW special waste and spill materials accepted

Continued

Table EIR 1. Continued.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Pinellas	Sunshine Excavating	126th Ave. N.	100,000	2 MW construction debris
	City of Clear- water transfer station	1005 Old Coachman Rd.	75,000 350 ton/day	N.D.
	Bridgeway Acres	34th St. N.	350,000 700 ton/day	12 MW
	Pierce lf	119th St. N.	N.D.	4 MW to be installed
	Pinellas County RR. facility	28th St.	775,000 2,100 ton/day	N.D.
	City of Largo slf	8th Ave. and SR-124A	58,000 ₃ 900 yd ³ /day	3 MW
	Toytown Sod Farm	N.D.	270,000 120,000 gal/day	5 MW
City of Tarpon Springs lf	S. Grosse Ave.	15,000 ₃ 400 yd ³ /day	4 MW	
Sarasota	Venice lf	E. Venice Ave.	60,000 200 ton/day	9 MW

Continued

Table EIR 1. Concluded.

County	Site name	Location	Population served ton/day site life	# Monitoring wells special waste & spilled materials accepted
Sarasota	Bee Ridge lf	Bee Ridge Rd.	162,000 600 ton/day	13 MW
	City of North Port slf	Cazes Ave.	6,000 25 ton/day	4 MW

^a Sanitary landfill.
^b Land fill.

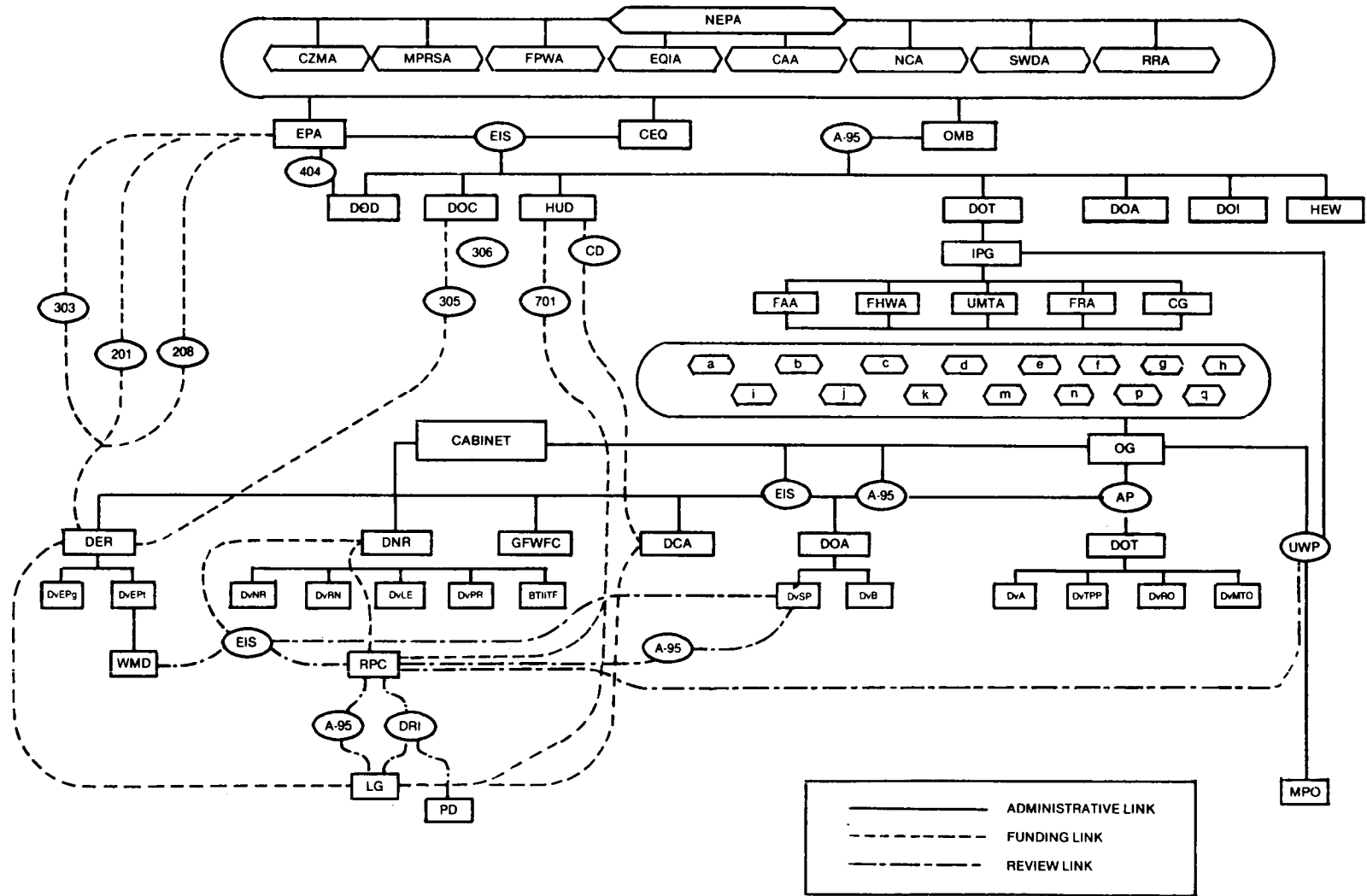


Figure 11. Interrelationships of agencies in the environmental review process in transportation planning (South Florida Regional Planning Council 1977) Continued.

- FEDERAL ENVIRONMENTAL LAWS**
- NEPA National Environmental Policy Act of 1969
 - EQIA Environmental Quality Improvement Act of 1970
 - FWPA The Federal Water Pollution Act Amendments of 1972
 - CAA The Clean Air Act
 - NCA Noise Control Act of 1972
 - CZMA Coastal Zone Management Act of 1972
 - MPRSA The Marine Protection, Research and Sanctuaries Act of 1972
 - SWDA Solid Waste Disposal Act, 1965
 - RRA Resource Recovery Act of 1970

- FEDERAL AGENCIES**
- EPA Environmental Protection Agency
 - CEQ Council on Environmental Quality
 - OMB Office of Management and Budget
 - HUD Department of Housing and Urban Development
 - DOC Department of Commerce
 - DOD Department of Defense (U.S. Army Corps of Engineers)
 - DOT Department of Transportation
 - IPG Intermodal Planning Group
 - DOA Department of Agriculture
 - DOI Department of Interior
 - HEW Department of Health, Education and Welfare
 - FAA Federal Aviation Administration
 - FRA Federal Railroad Administration
 - FHWA Federal Highway Administration
 - UMTA Urban Mass Transit Administration
 - CG Coast Guard

- FLORIDA ENVIRONMENTAL LAWS**
- a Florida Air and Water Pollution Control Act
 - b The Environmental Protection Act of 1971
 - c Oil Spill Prevention and Pollution Control
 - d Florida Electrical Power Plant Siting Act
 - e The Florida Litter Law of 1971
 - f State Bond Program and Sewage Treatment Revolving Loan Program
 - g Trustees of the Internal Improvement Trust Fund
 - h Land Conservation Act of 1975
 - i Environmental Reorganization Act of 1975
 - j Resource Recovery and Management Act
 - k Florida Water Resources Act of 1972
 - m Florida Water Pollution Control and Sewage Treatment Plant Grant Act of 1970
 - n The Florida Environmental Land and Water Management Act of 1972
 - p Florida State Comprehensive Planning Act of 1972
 - q Local Government Comprehensive Planning Act of 1975

- REVIEW PROCESSES**
- EIS Environmental Impact Statement
 - A-95 Clearinghouse Review
 - DRI Development of Regional Impact
 - UWP Unified Work Program
 - AP Action Plan

- FLORIDA AGENCIES**
- DER Department of Environmental Regulation
 - DvEPg Division of Environmental Programs
 - DvEPT Division of Environmental Permitting
 - WMD Water Management District
 - DCA Department of Community Affairs
 - GFWFC Game and Freshwater Fish Commission
 - DNR Department of Natural Resources
 - BTIIF Board of Trustees of the Internal Improvement Trust Fund (Division of State Lands)
 - DvMR Division of Marine Resources
 - DvRN Division of Resource Management
 - DvLe Division of Law Enforcement
 - DvPR Division of Parks and Recreation
 - DOA Department of Administration
 - DvSP Division of State Planning
 - DvB Division of Budget
 - DOT Department of Transportation
 - DvA Division of Administration
 - DvTPP Division of Transportation Planning and Programming
 - DvRO Division of Road Operations
 - DvMTO Division of Mass Transit Operations
 - OG Office of the Governor

- CABINET**
- Secretary of State
 - Attorney General
 - Comptroller
 - Treasurer
 - Commissioner of Agriculture
 - Commissioner of Education

- LOCAL AND REGIONAL AGENCIES**
- RPC Regional Planning Council
 - LG Local Government Agencies
 - MPO Metropolitan Planning Organization
 - PD Private Developer

Figure 11. Concluded.

Table EIR 2. Hazardous waste incident, unauthorized DDT incineration by the City of Tampa (Herndon and Teaf 1978).

Personal damage: None.

Environmental damage: Unknown, but includes the release of possibly contaminated incinerator ash as well as potential problems associated with disposal of DDT residues from the incinerator after burning.

Economic damage: None

Cause of problem: Unauthorized incineration by the City of Tampa of approximately 2060 lb of the pesticide DDT and associated containers which were discovered five days previously in the fire-gutted Myers Building in Tampa.

Type and quantity of hazardous waste: About 2,060 lb of DDT and the associated containers.

Date of incident: 6 February 1976.

Location: Initial discovery of pesticide was made at 1314 Franklin St., Tampa; incineration took place at City of Tampa Incinerator.

Remedial action: Official reprimands were made by the Florida Department of Environmental Regulation (DER) to the City of Tampa and arrangements were made with Florida DER, U.S. Environmental Protection Agency and City of Tampa to plan together to clarify existing regulations and avoid future confusion which could result in problems similar to the ones presented here.

Table EIR 3. Hazardous waste incident, pesticide-oil mixture contamination of river in Lee County (Herndon and Teaf 1978).

Personal damage: Two U.S. Coast Guard personnel and one Florida Department of Environmental Regulation (DER) lab technician became ill during clean-up and testing procedures following the pesticide spill.

Environmental damage: A water-oil pesticide mixture reached the Orange River causing an unknown amount of damage to aquatic life. Evidence of this damage includes some small shrimp killed and probably significant (but undetectable due to sinking or washing downriver after death) numbers of fish killed.

Economic damage: Cost was approximately \$15,000 for commercial crews employed in the clean-up operations.

Cause of problem: Lee County Mosquito Control personnel, while cleaning and flushing tanks of an aerial sprayer, allowed rinsewater to discharge into a ditch adjacent to the facility. Heavy rains subsequently flushed this pesticide waste into the Orange River.

Type and quantity of hazardous waste: Approximately 500 gal of oilwater pesticides (e.g., Baytex, Cythion, Malathion).

Date of incident: Early December (before December 12) 1977.

Location: Lee County Mosquito Control facility, Fort Myers.

Remedial action: In late March, 1978 Lee County Mosquito Control signed a consent order with the Florida DER agreeing to perform certain tasks in lieu of a penalty payment. This Consent Order directed Lee County Mosquito Control to: 1) develop a prevention and control contingency plan to avoid a recurrence of the problem; 2) implement this program; and 3) conduct a three-year study of arthropods in the Orange River to evaluate them as potential biological controls of Hydrilla.

Table EIR 4. Hazardous waste incident, oil spill in Tampa Bay (Herndon and Teaf 1978).

Personal damage: None.

Environmental damage: Many injured and dead waterfowl, predominately ducks, of which more than 65 were dead and approximately 30 oil-coated. Also, other injuries to aquatic life which are less evident than birds will not be cited, but nevertheless did occur within the marshland.

Economic damage: The cost of the clean-up exceeded \$100,000 and although initially financed by the U.S. Coast Guard (USCG) and other federal money, reimbursement by the Moran Maritime Association, owners of the vessel, was ordered.

Cause of problem: An oil-carrying barge was being moved by tugboat through Tampa Bay when in close quarters it collided with the Tampa Electric Company dock and was damaged badly, leaking fuel oil into the bay.

Type and quantity of hazardous waste: Approximately 110,000 gal of light diesel fuel.

Date of incident: 9 January 1977.

Location: Sparkman Channel, Tampa Bay.

Remedial action: Clean-up by private crews and USCG will be repaid by Moran Maritime Association. The pilot and tugboat captain appeared before an investigative judge to decide fault. Penalties could reach \$55,000, but due to Moran's cooperation in the clean-up operations, Major John Walker of the Florida Marine Patrol said there would probably be no penalty.

Table EIR 5. Hazardous waste incident, fish kill, Exxon Company, Lehigh Acres, Lee County (Herndon and Teaf 1978).

Personal damage: None.

Environmental damage: Extensive damage to canal fish (more than 3000 killed) and invertebrate populations, with associated death of aquatic vegetation lining the banks and within the canal.

Economic damage: Cost of clean-up was borne by Exxon Company and exceeded \$47,000. Fines and damages paid to Florida Department of Environmental Regulation (DER) Pollution Recovery Trust Fund exceeded \$14,000, including expenses incurred by Florida Game and Fresh Water Fish Commission personnel and costs of fish and vegetation killed.

Cause of problem: A leak developed in a flowing serving an oil well on Exxon property at Lehigh Acres. The leak was close to a drainage canal and a large quantity of oil reached the water level.

Type and quantity of hazardous waste: An estimated 425 bbl (23,400 gallons) of oil-water mixture were recovered, with 30-35 bbl unrecovered or unrecoverable on absorbent materials used in clean-up operations.

Date of incident: 7-8 June, 1976.

Location: Lehigh Acres, Exxon Company oil field area, Lee County.

Remedial action: Exxon financed clean-up operations and submitted a plan to Florida DER which outlined present and future measures to avoid this and associated incidents in the future. Fines were paid to Florida DER Pollution Recovery Trust Fund.

Table EIR 6. Hazardous waste incident, Florida Keys oil spill (Herndon and Teaf 1978).

Personal damage: None.

Environmental damage: Uncalculated damage was done to mangrove areas from Key Largo to Key West, in addition to kills of invertebrate life on beaches along the Atlantic Coast of the Florida Keys.

Economic damage: Cost of clean-up operation, financed by the U.S. Coast Guard and money from federal oil spill contingency funds, totalled over \$367,340. Investigative costs to the Florida Department of Natural Resources totalled \$4,737. No costs have been recovered as of September 1980.

Cause of problem: A marine oil spill was created on 17-18 July 1975 when it was suspected that a tanker carrying fuel oil cleaned its bilges off the Atlantic Coast of the Florida Keys.

Type and quantity of hazardous waste: Recent estimates place the volume of oil spilled at approximately 60,000 gal. Final clean-up produced 1,500 yd³ of debris and oily vegetation, plus nearly 45,000 gal of oil-water mixture sucked up from sites on the Monroe County coast.

Date of incident: 17-30 July 1975.

Location: Florida Keys (Key Largo to Key West).

Remedial action: Massive clean-up operations took place from 21 July until 30 July. Extensive testing was undertaken of oil samples from the spill site as well as from the holds of 243 tankers suspected of being in the area of the Florida Keys at the time of the spill, in an attempt to determine the offender.

In November 1975, the M.T. Garbis was determined to be responsible and the captain, Mr. V. Psarroulis, was taken into custody in Philadelphia on 11 November. The U.S. Department of Justice reported in September 1980, that no fines or criminal penalties had been levied in the case.

Table EIR 7. Hazardous waste incident, groundwater contamination at battery reclaimer, Hillsborough County (Teaf 1980).

Personal damage: None.

Environmental damage: Contamination of water in monitoring wells on company property. Some destruction of vegetation on company property from contaminated surface runoff.

Economic damage: Uncalculated.

Cause of problem: Discharge of acid and metals from battery recycling operation.

Type and quantity of hazardous waste: Wastes include sulfuric acid and the following metals: nickel, chromium, cadmium, lead, copper, zinc, vanadium, barium and strontium.

Date of incident: 1978 to present.

Location: Gulf Coast Lead Company, Tampa, FL.

Remedial action: The company plans to grade their property so that surface drainage is inward toward a permanent treatment system. They also plan a low berm around the property to keep surface drainage within the boundaries of the plant. Final resolution of the problem will result from agreements among the Florida Department of Environmental Regulation, the U.S. Environmental Protection Agency and the company owners. Temporary operating permits extend until 1 January 1982.

Table EIR 8. Hazardous waste incident, improper disposal of infectious wastes, Hillsborough and Pinellas Counties (Teaf 1980).

Personal damage: None.

Environmental damage: None suspected.

Economic damage: Not calculated. Includes costs to Hillsborough County for investigation and Infectious Waste Survey, as well as costs to hospitals for construction or improvement of private incinerators.

Cause of problem: The Tampa City incinerator closed on 31 December 1979. Since that date, some incineration has been taking place at a small "pathological incinerator" which is only open at limited times and is inadequate to handle all of the incoming loads from hospitals and clinics in the Tampa-St. Petersburg area. Some land disposal is taking place as a result of incinerator inadequacy.

Type and quantity of hazardous waste: An unknown quantity of "red bags" from area hospitals, veterinary clinics and other medical facilities. These "red bags" contained soiled bandages, hypodermic needles, blood samples, and other infectious materials. A survey was initiated by the Hillsborough Environmental Protection Commission (EPC) in May 1980 to collect information on the amount of such materials needing proper disposal.

Date of incident: February 1980 to present.

Location: Hillsborough County and Pinellas County landfills.

Remedial action: Officials from the Hillsborough County EPC have contacted area hospitals and clinics to advise the facilities of proper disposal procedures for infectious wastes. Similar notifications and visits have been made by the St. Petersburg Department of Environmental Sanitation. Sterilization (autoclaving) prior to disposal is considered acceptable in some cases, but incineration is preferred. Some area hospitals currently have incinerators at their facilities which are capable of burning these wastes.

Narrative: Since closure of the Tampa City incinerator in December 1979, there has been no adequate facility for incineration of infectious hospital wastes in Hillsborough and Pinellas Counties. Although a small "pathological incinerator" is maintained, this is not adequate to cope with the large volumes of potentially dangerous wastes delivered to it.

EPC officials from Hillsborough County contacted area hospitals, veterinary clinics and other facilities which generate such wastes in order to determine existing disposal procedures. Although some larger hospitals have private incinerators, the majority of "red bags" are merely placed in

Continued

Table EIR 8. Concluded.

dumpsters. Previously, contents of these dumpsters went to the Tampa City incinerators, but they are currently disposed of in landfills such as Taylor Rd. and Toytown. In April 1980, hospital staffs in the Hillsborough - Pinellas area were notified of proper procedures such as sterilization prior to disposal. In addition, a survey was initiated in May 1980 by the Hillsborough EPC which will collect information on the magnitude of the infectious waste disposal problem in the Tampa area.

Local enforcement action for illegal disposal of the "red bags" was incomplete in September 1980.

Table EIR 9. Hazardous waste incident, Toxaphene spill, Pasco County (Teaf 1980).

Personal damage: None.

Environmental damage: Minor. Includes initial contamination of soil at incident site by the pesticide Toxaphene.

Economic damage: Not calculated, but included clean-up and disposal costs.

Cause of problem: Traffic accident in which a tank truck containing Toxaphene overturned and spilled a large portion of its contents.

Type and quantity of hazardous waste: 4,240 lb of liquid Toxaphene contaminated approximately 110 yd³ of soil which required disposal.

Date of incident: 16 February 1979.

Location: Dade City, FL, at intersection of Hwy. 98 and Rt. 301.

Remedial action: Approximately 18-24 inches (110 yd³) of contaminated topsoil were removed at the spill site and shipped to a permitted hazardous waste disposal site in Livingston, AL. Reclaimed liquid portion was shipped to the original manufacturer in Vicksburg, MS for reprocessing. Final clean-up was approved by the Florida Department of Environmental Regulation (DER) on 23 February 1979.

Narrative: On 16 February 1979 a traffic accident caused 4,240 lb of liquid Toxaphene to be spilled onto the median and drainage ditch on Hwy 98 in Dade City, FL at its intersection with Route 301. Initial notification of the Florida DER was through a call from the U.S. Environmental Protection Agency (EPA) Region IV.

Personnel from Vicksburg Chemical Co. and the Florida Department of Transportation were brought in to clean up the spilled material. The drainage ditch was diked to prevent Toxaphene from entering the storm sewer. Pooled liquid Toxaphene was pumped into drums and contaminated soil was placed in trucks for proper disposal.

Various in-state disposal options for the spilled material were considered, including incineration, calcining and landfilling. None of these proved viable. Finally, the liquid Toxaphene was returned to Vicksburg Chemical Co. plant in Vicksburg, MS for reprocessing and the contaminated soil was shipped to the Chemical Waste Management of Alabama hazardous waste disposal facility in Livingston, AL.

Soil samples were analyzed by the Florida Department of Agriculture to assure complete removal of Toxaphene. Final clean-up was approved on 23 February 1979 by the Florida DER.

Table EIR 10. Inventory of potential hazardous waste sites by county^a (Florida Department of Environmental Regulation 1981b).

County	Site	Type	Permit	Status	Degree	Other
Charlotte	Charlotte County Airport	N.D.	N.D.	N.D.	N.D.	N.D.
DeSoto	City of Arcadia Landfill	N.D.	N.D.	N.D.	N.D.	N.D.
Hillsborough	Asgrow Chemical Co.	Private	None	N.D.	Medium	N.D.
	Borden Feed Phosphate Complex	N.D.	N.D.	N.D.	Low	Landfill on site
	Chloride Metal, Inc.	N.D.	N.D.	N.D.	High	N.D.
	FMA Plant	Private	None	N.D.	Medium	N.D.
	Gibsonton Landfill	Municipal	None	Inactive	Low	No pond
	Gulf Coast Lead	Private	N.D.	N.D.	Medium	N.D.
	International Petroleum Corp.	Private	N.D.	N.D.	Low	Pond
	Memorial Hwy. and Cypress Ave. Landfill	Municipal	None	Inactive	N.D.	N.D.
	MRI (also known as M&T Chemical)	Private	N.D.	N.D.	Medium	Surge pond

Continued

Table EIR 10. Continued.

County	Site	Type	Permit	Status	Degree	Other
Hillsborough	National Oil (also known as International Petroleum Co.)	N.D.	None	N.D.	Low	Pond
	NW. Landfill	Municipal	None	Active	Low	N.D.
	Plant City Phosphate Complex (also known as Central Phosphates)	Private	N.D.	N.D.	Medium	No pond
	Schuylkill Metals	N.D.	Temporary operational	N.D.	Medium	Surface impoundment
	Southeastern Wire and Galvanizing	N.D.	Temporary operational	N.D.	High	N.D.
	Southern Mill Creek Products	Private	N.D.	N.D.	Low	N.D.
	Stauffer Plant Site	Private	Expired	N.D.	Low	No pond
	Sydney Mine	Private	N.D.	N.D.	N.D.	N.D.
	City of Tampa Landfill	Municipal	None	Active	N.D.	No pond

Continued

Table EIR 10. Continued.

County	Site	Type	Permit	Status	Degree	Other
Hillsborough	Tampa City Incinerator	Municipal	N.D.	N.D.	Low	4 settling ponds, 1 cooling
	Tampa Municipal Incinerator	Municipal	N.D.	N.D.	Low	N.D.
	Taylor Rd. Site	Municipal	Operational	Active	Medium	No pond
	Manhattan Landfill	N.D.	N.D.	Inactive	N.D.	N.D.
	Southern Mill Piedmont Co.	N.D.	N.D.	N.D.	N.D.	N.D.
	Plant City Landfill	N.D.	N.D.	N.D.	N.D.	N.D.
Lee	The Edison Home	N.D.	N.D.	N.D.	N.D.	N.D.
	Ohio Medical Products	N.D.	N.D.	N.D.	N.D.	N.D.
	Yoder Brothers	N.D.	N.D.	N.D.	N.D.	N.D.
Manatee	Piney Point Phosphoric Products (also Borden Piney Point Phosphoric Products)	Private	N.D.	N.D.	High	No pond

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Continued

Table EIR 10. Concluded.

County	Site	Type	Permit	Status	Degree	Other
Pinellas	General Components, Inc.	N.D.	N.D.	N.D.	Low	N.D.
	Tarpon Springs Plant	Private	N.D.	N.D.	Low	No pond
	Stauffer Chemical	Private	N.D.	Active	High	N.D.

^a These data reflect information provided by the Eckhardt Sub-Committee of the U.S. House of Representatives, the U.S. Environmental Protection Agency and the Florida Department of Environmental Regulation.

Table EIR 11. Number of industrial surface impoundments in Florida by size (Florida Department of Environmental Regulation 1980b).

Total number of industrial impoundments	Size (acres)
508	1
172	1-5
81	6-15
57	16-40
87	40
431	N.D.
1336	N.A.

Table EIR 12. Number of industrial impoundments with monitoring wells and liners (Florida Department of Environmental Regulation 1980).

County	Number of impoundments	Number with monitoring wells	Number with liners
Charlotte	18	5	0
Collier	28	8	4
DeSoto	2	0	0
Hillsborough	72	13	1
Lee	66	13	4
Manatee	19	8	0
Monroe	1	0	0
Pasco	30	4	1
Pinellas	62	2	1
Sarasota	24	3	0
Region	322	56	11

Table EIR 13. Known cases of groundwater contamination (Florida Department of Environmental Regulation 1980b).

Case name: Reeves Southeastern Corp. contamination of the Shallow Clastic Aquifer, Hillsborough County.

Case description: Two divisions of the Reeves Southeastern Corp., the Southeastern Galvanizing Division and the Southeastern Wire Division, are located immediately adjacent to each other in Hillsborough County. Both facilities utilized seepage ponds to dispose of low pH waste waters containing heavy metals. In 1975, monitoring wells were constructed downgradient from each of the divisions' ponds. In 1977, water analyses from the monitoring wells showed ground water contamination from each of the ponds. The Southeastern Galvanizing monitoring well recorded high zinc, iron, BOD, suspended solids and low pH. The Southeastern Wire well recorded high chromium, zinc, iron, BOD, suspended solids and low pH. Both divisions have now employed a lime treatment process, which has resulted in a hazardous sludge disposal problem and in failure to bring the waste within health standards. Further company action is expected to take place in 1980^a.

Case name: Taylor Rd. Landfill contamination of the Floridan Aquifer, Hillsborough County.

Case description: Hillsborough County has been operating the 42 acre Taylor Road Landfill since 1957. The landfill is located in a recharge area of the Floridan Aquifer with little or no confining bed between the waste and the top of the aquifer. Ground water movement is towards the south and southwest. There are a few individual water supply wells in the immediate vicinity of the landfill. The landfill is reported to have received different kinds of industrial wastes (paints and solvents) besides regular household municipal waste. During a recent Environmental Protection Agency (EPA) investigation, water samples from neighboring water supply wells were collected and analyzed for organic volatile substances. EPA reported traces of carcinogens in five wells near the landfill. These carcinogens are vinyl chloride, dichloroethylene, chloroform, and trichloroethylene. According to EPA these chemicals are "in the water in amounts that are serious enough to cause problems." The extent of plume development has not yet been determined, but according to EPA the well nearest the landfill had the highest concentration, and the wells further away had lower concentrations.

^a Data relevant to this action are unavailable.

Table EIR 14. Summary of oil spill investigations from 1 January 1975 to 31 August 1980 by the Florida Department of Natural Resources (Florida Department of Natural Resources 1980).

Classification of spill	Year					
	1980	1979	1978	1977	1976	1975
Major ^a	1	4	6	2	9	8
Moderate ^b	15	17	5	4	4	9
Minor ^c	81	86	79	125	147	189

^a Discharge of pollutant of more than 10,000 gal into inland waters, or more than 100,000 gal into coastal waters, or a discharge of any quantity that substantially threatens the public health or welfare or generates wide public interest.

^b Discharge of pollutant of 1,000 gal to 10,000 gal into inland waters, or 10,000 gal to 100,000 in coastal waters, or a discharge of any volume that poses a threat to the public health or welfare.

^c Discharge of pollutant of less than 1,000 gal into inland waters, or less than 10,000 in coastal waters.

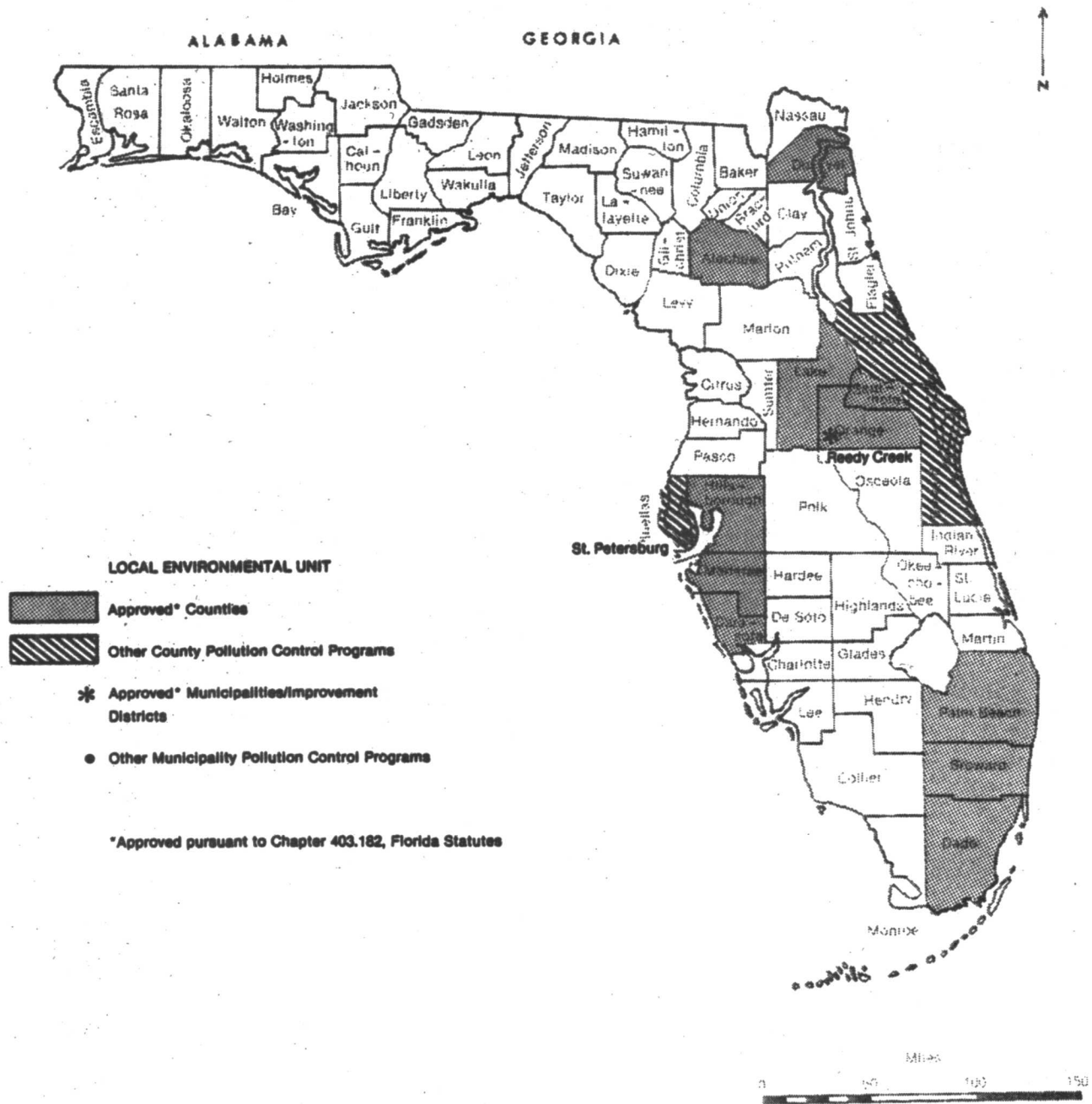


Figure 12. Local pollution control programs (Florida Light and Power Co. 1979).

Table EIR 15. Geographic areas considered by the Florida Department of Environmental Regulation as having the greatest potential for agricultural non-point water quality problems^a. (Florida Department of Environmental Regulation 1979a).

County	Agricultural activities
Charlotte	No great potential
Collier	No great potential
DeSoto	No great potential
Hillsborough	Citrus, poultry, cattle, vegetables, dairy
Lee	No great potential
Manatee	No great potential
Monroe	No great potential
Pasco	Citrus, poultry, cattle, vegetables, dairy
Pinellas	No great potential
Sarasota	No great potential

^a Potential problem determination is based upon these variables:
 1) fertilizer loading density, 2) pesticide loading density, 3) animal unit density, 4) amount of sediment delivered to streams.

Table EIR 16. Florida surface water dischargers with current wasteload allocations (WLA's)(Florida Department of Environmental Regulation 1979b).

County	Discharger	Receiving water
Charlotte	City of Punta Gorda STP ^a	Peace River
	South Port Charlotte	Peace River
Collier	Enchanting Acres MHP ^b	Unnamed canal
	Golden Gate STP	Canal
	Naples STP	Gordon River
	North Collier County 201	Cocohatchee River
	Royal Park Villas	Unnamed canal
	Marco Island STP	Big Marco River
	South Collier County STP	Henderson Creek
Hillsborough	Apollo Beach S. Big Bend Utilities	Canal
	South Hillsborough STP	Canal to Cypress Creek
	South Hillsborough STP	Golf course lake
	City of Plant City	Pemberton Creek
	City of Plant City	Canal to Mill Creek
	City of Plant City	Pemberton Creek
	City of Tampa, Hookers Point	Hillsborough Bay
	Eastside Water Co., East Lake Park	Harney Canal
	FGCAP Plastic Kaolin County	Swamp to Sparkman
	Florida STP Inc.	Pemberton Creek
	Hillsborough Utility Corp.	Six Mile Creek
	J.H. Williams Oil Co.	Six Mile Creek
	M and T Chemicals, Inc.	Ditch to swamps
	Nitrate Chemicals	Canal to Delaney Creek
	Tampa Suburban Utilities, Lakewood	Curiosity Creek
	C.F. Industries	Ditch
	Lykes Brothers Meat Packers	Ditch to Turkey Creek
	Gardinier, Inc.	Ditch
	Carrollwood S. Florida Cities	Sweetwater Creek
	Hillsborough Utilities River Oaks	Channel A
	Honeywell Plant #1	Sweetwater Creek
	Pinecrest Utility Corp.	Sweetwater Creek
	Sweetwater Utilities #2	Rocky Creek
	Sweetwater Utilities #1	Sweetwater Creek
	Tampa Suburban Utilities	Sweetwater Creek
Lee	City of Cape Coral	Caloosahatchee River
	City of Cape Coral, Plant B	Caloosahatchee River
	New Fort Myers	Caloosahatchee River
	Old Fort Myers	Caloosahatchee River
	Russell Park	Caloosahatchee River
	Shell Point Village	Caloosahatchee River
	Windmill Village of Fort Myers	Drainage ditch
Manatee	Blackburn Elementary School	Manatee River
	Carolyn Estates	Unnamed creek
	City of Bradenton, main plant	Manatee River

Continued

Table EIR 16 . Continued .

County	Discharger	Receiving water
Manatee	City of Palmetto	Terra Ceia Bay
	Coach House MHP	Canal to McMullen
	Floridana MHP #1 and #2	Cedar Hammock
	Golf Lake Mobile Estates N.	Wares Creek
	Leisure Lake STP	Unnamed canal
	Manatee Manor SD ^C	Canal to Manatee
	Manatee Palms SD	Ditch to Manatee
	Oneca Elementary School	Bowles Creek
	Palm Grove TP ^D	Canal to Manatee
	Ramada Inn Palmetto	Drainage ditch
	Southeast High School	Ditch to Bowles
	S. Manatee County 201 #1	Manatee River
	S. Manatee County 201 #2	Sarasota Bay
	Stills Motel	Manatee River
Pasco	Tillman Elementary School	Ditch to Manatee
	City of Dade City	Larkin Canal
Pinellas	Lykes Pasco Citrus Packing	Larkin Canal
	Aerosonics Corp.	Alligator Creek
	Bay Pines Estates	Long Bayou
	Belcher Road Elementary School	Allen Creek
	Boulevard TP	Alligator Creek
	City of Clearwater, East Plant	Old Tampa Bay
	City of Clearwater, Marina Station	Clearwater Harbor
	City of Clearwater, Marshall Plant	Stevensons Creek
	City of Dunedin, Honeymoon Sound	St. Joseph Sound
	City of Dunedin, Mainland Plant	St. Joseph Sound
	City of Pinellas, Park Main Plant	Cross Bayou W.
	City of St. Petersburg, #3 NW.	Boca Ciega Bay
	City of Tarpon Springs, Main Plant	Anclote River
	City of Treasure Island	Boca Ciega Bay
	City of Largo	Cross Bayou E.
	City of Oldsmar	Mobbly Bayou
	City of Safety Harbor	Mullet Creek
	Clearwater E. STP	Old Tampa Bay
	Clearwater NE.	Old Tampa Bay
	Coquina Cove TP	Narrows
	Dyna Flow Services, Inc.	Curlew Creek
	Greenbrier Services Corp.	Jerry Lake
	Holiday Harbor TP	Cross Bayou Canal
	H.P. Hood Dairy	St. Joseph Sound
	Kakusha MHP	Ditch
	Marshall Street STP	Stevenson Creek
	McKay Creek STP	Narrows
	North Pinellas 201	Anclote River
Ozona Shores	Smith Bayou	

Continued

Table EIR 16 . Concluded .

County	Discharger	Receiving water	
Pinellas	Pinellas County Cross State	Cross Bayou W.	
	Pinellas County McKay Creek Plant	Narrows	
	Pinellas County Cross Bayou	Joes Creek	
	Plast Kraft Corp.	Smith Bayou	
	Regency Heights Mobile Homes	Curlew Creek	
	Seminole Lake Golf and Country Club	Cross Bayou W.	
	South Gate TP	Unmapped Creek	
	Southern Comfort TP	Alligator Creek	
	Sperry Rand	Moccasin Creek	
	Town of Bellair	Clearwater Harbor	
	Town of Indian Shores STP	Narrows	
	Tropic Hills SD	Unmapped Creek	
	City of St. Petersburg, Beach	Boca Ceiga Bay	
	City of St. Petersburg, #2 NE.	Tampa Bay	
	City of St. Petersburg, #1 SE.	Tampa Bay	
	City of St. Petersburg, #4 SW.	Lower Boca Ceiga	
	Fort DeSoto Park	Mullet Key Bayou	
	Fort DeSoto Park	Mullet Key Bayou	
	Fort DeSoto Park	Mullet Key Bayou	
	Fort Desoto Park	Mullet Key Bayou	
	S. Cross Bayou STP	Boca Ciega Bay	
	Tierra Verde City, Inc.	Boca Ciega Bay	
	Sarasota	City of Sarasota, 201	Howard Creek
		City of Sarasota, 201	Phillippi Creek
Myakka State Park, #1		Myakka River	
City of Sarasota		Whitaker Bayou	
Dolomite Utilities		Canal to Whitaker	
Florida Cities Gulf Gate		Matheny Creek	
Florida Cities S. Gate		Canal to Phillippi	
Kensington Park Utilities		Canal to Phillippi	
Siesta Key Utilities Authority		Grand Canal	
South Eastern Development Corp.		Phillippi Creek	
Southeast Plaza		Ditch to Phillippi	
Southeastern Development and Utilities		Ditch	
Southern Gulf Utilities		Canal to Phillippi	
City of Venice		Red Lake	

- a Sewage treatment plant.
- b Mobile home park.
- c Subdivision.
- d Trailer park.

Table EIR 17. Permanent network stations (PNS)^a water quality violations for 1974-78 (Florida Department of Environmental Regulation 1979c).

County	Name	DO ^b		PH		TCOLI ^c		FCOLI ^d	
		N ^e	NV ^f	N	NV	N	NV	N	NV
Charlotte	Peace River	57	9	95	0	40	0	40	0
	Shell Creek	47	9	86	1	37	0	41	0
DeSoto	Peace River	44	1	55	1	5	0	4	0
	Horse Creek	91	5	126	4	32	0	38	1
Hillsborough	Middle Tampa Bay	45	0	47	6	43	4	41	0
	Alafia River	50	3	93	1	51	12	47	2
	Alafia River	43	1	44	0	46	20	43	2
	Alafia River	46	2	49	0	48	19	44	3
	Lake Thonotassa	48	0	41	28	47	6	47	2
	Hillsborough Bay	41	1	42	8	40	4	37	1
	Old Tampa Bay	45	0	54	7	45	3	42	0
Lee	Caloosahatchee River	56	11	82	0	28	0	30	0
	Estero Bay	67	2	104	1	41	0	38	0
Manatee	Tampa Bay	15	0	17	1	4	0	5	1
Monroe	John Penekamp Park	82	0	92	8	26	1	29	1
Pasco	Withlacoochee River	54	17	65	2	32	2	33	2
	Hillsborough River	22	11	26	0	18	4	18	3
Sarasota	Myakka River	82	19	118	5	40	0	40	0

^a Established in 1973, for the purpose of monitoring water quality in Florida's lakes, streams and estuaries.

^b Dissolved oxygen.

^c Total coliform.

^d Fecal coliform.

^e Number of samples.

^f Number of violations.

Table EIR 18. Point source analysis, discharge^a to receiving waters, Sarasota County (Southwest Florida Regional Planning Council 1980).

Discharger	Receiving water body	Flow (Mgal/d ^d)	BOD ^b Monthly average (lb/day)	TSS ^c Monthly average (lb/day)	Coliform
Southern Gulf Utilities Inc. Brentwood Sub-division	Sarasota-Fruitville Drainage ditch canal	0.5	83.4	83.0	200/100 ml
Strathmore Realty Co.	Fruitville drainage canal Tributary to Roberts Bay	0.05	8.3	8.3	200/100 ml
Windward Isles MPH ^e	Canal system to main #1 to Phillippi Creek to Sarasota Bay	0.015	2.5	2.5	200/100 ml
Siesta Key Utilities Authority, Inc.	Grand Canal to Roberts Bay	2.7	450.0	450.0	200/100 ml
Myakka Utilities Inc. Harbor Cove MHP	Tidal canal to Myakka River	0.1	16.6	16.6	200/100 ml
Dolomite Utilities, Inc. Tri Par Estates Plant	Drainage ditch to Whitaker Bay to Sarasota Bay	0.2	33.0	33.0	200/100 ml
City of Sarasota	Whitaker Bayou to Sarasota Bay	9.1	1,210.0	1,670.0	200/100 ml
City of Venice	Red Lake	3.0	500.0	500.0	200/100 ml
Buckingham Mobile Home Colony, Inc.	Sarasota Bay	0.028	4.6	4.6	200/100 ml

Continued

Table EIR 18. Concluded.

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
Twin Shore Inc. discontinued. Connected to treatment plant	Sarasota Bay	0.0325	5.4	5.4	200/100 ml
Oyster Bars of Sarasota discontinued. Connected to treatment plant	Lower Sarasota Bay	0.012	2.0	2.0	200/100 ml
Mobile Estates discontinued. Connected to treatment plant	Lower Sarasota Bay	0.064	10.6	10.6	200/100 ml

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- a Data were presented as found and were not rounded.
- b Biochemical oxygen demand.
- c Total suspended solids.
- d Million gal per day.
- e Mobile home park.

Table EIR 19. Point source analysis, discharge^a to receiving waters, Charlotte County (Southwest Florida Regional Planning Council 1980).

Discharger	Receiving water body	Flow (Mgal/d ^d)	BOD ^b Monthly average (lb/day)	TSS ^c Monthly average (lb/day)	Coliform
General Development Utilities, U.S. 41 and Lester Point	Olman Waterway to Charlotte Harbor	N.D.	0.38	0.90	N.D.
Deep Creek Utilities	DeSoto Canal to Peace River	N.D.	N.D.	N.D.	N.D.
Mary Lu TP ^e Charlotte Harbor	Polishing pond to Peace River	N.D.	0.05	0.23	N.D.
River Forest MHP ^f Punta Gorda	Peace River	N.D.	0.47	7.8	N.D.
Palm and Pines TP Punta Gorda	Peace River	N.D.	0.06	0.08	N.D.
Palmetto MHP Charlotte Harbor	Charlotte Harbor	N.D.	N.D.	N.D.	N.D.
Harbor Inn Motel Charlotte Harbor	Peace River	N.D.	N.D.	N.D.	N.D.
Pine Terrace TP Punta Gorda	Pond to drainage ditch to Charlotte Harbor	N.D.	N.D.	N.D.	N.D.
Parkhill Manor #2 Punta Gorda	Alligator Creek	N.D.	0.94	0.85	N.D.

Continued

Table EIR 19. Concluded.

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
Parkhill Manor #1	Alligator Creek	N.D.	1.1	1.3	N.D.
Gasparilla Pines Englewood	Golf course irrigation	N.D.	N.D.	N.D.	N.D.
Lazy Lagoon MHP	Hobson Branch	0.015	2.5	0.8	200/100 ml
City of Punta Gorda	Peace River	1.0	42.0	67.0	200/100 ml
Gulf Shore Seafood	Charlotte Harbor	N.D.	(oil and grease 0.3 kg/day)	2.2	N.D.
Gasparilla Mobile Home Estates	Gasparilla Sound	0.015	2.5	2.5	200/100 ml

- a Data were presented as found and were not rounded.
- b Biochemical oxygen demand.
- c Total suspended solids.
- d Million gallons per day.
- e Trailer park.
- f Mobile home park.

Table EIR 20. Point source analysis, discharge^a to receiving waters, Lee County (Southwest Florida Regional Planning Council 1980).

Discharger	Receiving water body	Flow (Mgal/d ^d)	BOD ^b Monthly average (lb/day)	TSS ^c Monthly average (lb/day)	Coliform
USDOJ, Fish and Wildlife Service, "Ding" Darling National Wildlife Refuge #1	San Carlos Bay	0.001	0.25	0.25	200/100ml
USDOJ, Fish and Wildlife Service, "Ding" Darling National Wildlife Refuge #2	Mosquito ditch	No discharge to surface waters			
Tahiti Mobile Village	Estero River	0.03	5.0	5.0	200/100 ml
Windmill Village Fort Myers	Ditch to east branch of Yellow Fever Creek	0.05	8.0	8.0	200/100 ml
Pink Shell Cottages, Inc.	Gulf of Mexico	0.01	1.7	1.7	200/100 ml
Florida Cities Water Co. Fiesta Village	Caloosahatchee River	0.3	50.0	50.0	200/100 ml
Florida Cities Water Co. Waterways Estates	Caloosahatchee River	0.33	55.0	55.0	200/100 ml
Sunland Training Center	Drainage canal to orange River	0.096	16.0	16.0	200/100 ml

Continued

Table EIR 20. Continued.

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
City of Fort Myers, Raleigh St. plant	Caloosahatchee River	6.7	1501	1501	N.D.
City of Fort Myers, S. Drive plant	Caloosahatchee River	6.0	300.0	300.0	200/100 ml
S. and H. Marine Products, Inc.	Matanzas Pass	N.D.	N.D.	N.D.	N.D.
S. and H. Seafoods, Inc.	Matanzas Pass	N.D.	N.D.	N.D.	N.D.
The Island Water Association, Inc.	Gulf of Mexico	N.D.	N.D.	N.D.	N.D.
Greater Pine Island Water Association, Inc.	Gulf of Mexico	N.D.	N.D.	N.D.	N.D.
M.F. Hagan Seafood Packer	Caloosahatchee River	N.D.	N.D.	N.D.	ND.
Island Packing Co.	Matanzas Pass	N.D.	N.D.	N.D.	N.D.
Exxon Co. U.S.A.	Caloosahatchee River	N.D.	N.D.	N.D.	N.D.
U.S. Army Corps of Engineers W.D. Franklin Lock, Olga	Caloosahatchee River	.001	0.25	0.28	200/100 ml

Continued

Table EIR 20. Continued.

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
Beach Shrimp Packing Co., Inc.	Matanzas Pass	N.D.	N.D.	N.D.	N.D.
City of Cape Coral (GAC Utilities)	Caloosahatchee River	1.3	216.0	216.0	N.D.
Pewett Center	Wyomi Creek	N.D.	N.D.	N.D.	N.D.
Trailwinds	Wyomi Creek	N.D.	N.D.	N.D.	N.D.
Orange River Elementary School	Billy's Creek	N.D.	N.D.	N.D.	N.D.
Bayshore Elementary School	Caloosahatchee River	N.D.	N.D.	N.D.	N.D.
Riverview Restorium	Caloosahatchee River	N.D.	N.D.	N.D.	N.D.
Island Shores Coin Laundry	Estero Pass	N.D.	N.D.	N.D.	N.D.
Mid-Island Coin Laundry	San Carlos Bay	N.D.	N.D.	N.D.	N.D.
Bob's Coin Laundry	Imperial River	N.D.	N.D.	N.D.	N.D.
Bamboo Mobile Village	Imperial River	N.D.	N.D.	N.D.	N.D.

Continued

Table EIR 20. Concluded.

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
Oak Creek TP ^e	Imperial River	N.D.	N.D.	N.D.	N.D.
Florida Power and Light Co.	Orange River Caloosahatchee River				<p>Discharge from once through cooling water: temperature rise-instantaneous maximum 7.9^o C Free available chlorine 0.2 mg/l average.</p> <p>Discharge from ash pond from 1 July 1977: oil and grease, daily average 15 mg/l: TSS, daily average 30.</p> <p>Discharge from low volume waste sources be- ginning 1 July 1977: oil and grease, daily aveage 15 mg/l.</p> <p>Discharge from construction runoff: TSS, instantaneous maximum 50 mg/l.</p> <p>Discharge from material storage runoff be- ginning 1 July 1977: TSS, maximum 50 mg/l.</p> <p>Discharge from metal cleaning wastes and boiler blowdown beginning 1 July 1977: oil and grease daily average 15 mg/l: TSS, daily average 30 mg/l.</p>

^a Data were presented as found and were not rounded.
^b Biochemical oxygen demand.
^c Total suspended solids.
^d Million gal per day.
^e Trailer park.

Table EIR 21. Point source analysis, discharge^a to receiving waters, Collier County (Southwest Florida Regional Planning Council 1980).

Discharger	Receiving water body		Flow (Mgal/d ^d)	BOD ^b Monthly average (lb/day)	TSS ^c Monthly average (lb/day)	Coliform
City of Golden Gate (operated by Naples)	Canal to Gordon River	N.D.	5.0	1.20	N.D.	
Moorehead Manor MHP ^e	Ditch to stream	N.D.	10.63	0.57	N.D.	
Pinecrest Early Childhood School	Ditch to swamp to Lake Trafford	N.D.	1.44	1.63	N.D.	
River Bend MHP	Canal to Cocohatchee River	N.D.	0.15	1.10	N.D.	
Collier County Government Center	Haldeman Creek	N.D.	3.21	4.76	N.D.	
Naples Shopping Plaza	Oyster Bay to Gordon River	N.D.	1.42	5.67	N.D.	
Ville de Marco Apartments	Marco River	N.D.	1.25	19.35	N.D.	
Palm River MHP	Cocohatchee River	0.007	1.0	1.0	200/100 ml	
Royal Park Villas, Inc.	Haldeman Creek	0.01	1.6	1.6	200/100 ml	
LaPlaya Motor Inn	Vanderbilt Lagoon	0.02	3.3	3.3	200/100 ml	
GAC Utilities, Inc. Golden Gate Division	Golden Gate Channel to Gordon River	0.03	50.0	50.0	200/100 ml	
King's Crown Motel	Wiggins Pass Waterway	0.0069	1.0	1.0	200/100 ml	

Continued

Table EIR 21 . Concluded .

Discharger	Receiving water body	Flow (Mgal/d)	BOD Monthly average (lb/day)	TSS Monthly average (lb/day)	Coliform
Plantation Isle Unit #3	Canal to Halfway Creek	N.D.	1.39	2.40	N.D.
Enchanting Acres, Inc.	Haldeman Creek to Bay of Naples	0.025	4.0	4.0	200/100 ml
City of Naples	Gordon River to Bay of Naples	5.0	830.0	830.0	200/100 ml
City of Everglades	Lake Placid canal to Chokoloskee Bay	0.1	25.0	25.0	200/100 ml
Vanderbilt Club sewage treatment plant	Vanderbilt Lagoon	0.005	0.83	0.83	200/100 ml

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^a Data were presented as found and were not rounded .
^b Biochemical oxygen demand .
^c Total suspended solids .
^d Million gal per day .
^e Mobile home park .

Table EIR 22. Point source analysis, discharge^a to other than receiving waters, Sarasota County (Southwest Florida Regional Planning Council 1980).

Discharger	Type	Flow ^b (Mgal/d ^b)	BOD ^c (lb/day)	TSS ^d (lb/day)	NH ₄ -N ^e lb/day
Barclay House	Polishing pond	0.0145	N.D.	N.D.	N.D.
Japanese Gardens/Venice	P/E pond ^f	0.047 ^g	N.D.	N.D.	N.D.
Kansas City Royals baseball park	Irrigating grounds	0.015 ^g	N.D.	N.D.	N.D.
Lake Village Mobile Home Park	Polishing pond	0.010	N.D.	N.D.	N.D.
Longboat Arms Condominium	Absorption field	0.050 ^g	N.D.	N.D.	N.D.
Oscar Scherer	Absorption beds	0.015	N.D.	N.D.	N.D.
Windward Isle Mobile Home Park	P/E pond	0.045 ^g	N.D.	N.D.	N.D.
City of Venice	Spray to golf course & airport	0.79	N.D.	N.D.	N.D.

^a Data were presented as found and were not rounded.

^b Million gal per day.

^c Biochemical oxygen demand.

^d Total suspended solids.

^e Ammonia.

^f Percolation/evaporation pond.

^g Actual flow unknown; design flow indicated.

Table EIR 23. Point source analysis, discharge^a to other than receiving waters, Charlotte County (Southwest Florida Regional Planning Council 1980).

Discharger	Type	Flow ^b (Mgal/d ^b)	BOD ^c (lb/day)	TSS ^d (lb/day)	NH ₄ -N ^e (lb/day)
General Development Utilities	Percolation pond	0.010	N.D.	N.D.	N.D.
Richmond Hidden Garden	Unknown	0.015	N.D.	N.D.	N.D.
Sandpiper Gulf Resort	Drainfield	0.005	N.D.	N.D.	N.D.
Shell Creek Trailer Park	Percolation pond	0.010	1.9	12.3	N.D.
Sea Cove Motel	Drainfield	0.0033	0.10	0.12	N.D.
Tropicana Garden Apartments	Drainfield	0.0065	N.D.	N.D.	N.D.
Charlotte County Country Club	Percolation pond	0.005	N.D.	N.D.	N.D.
Charlotte County Development Authority	Percolation pond	0.0075	N.D.	N.D.	N.D.
E. Elementary School	Percolation pond	0.009	N.D.	N.D.	N.D.
Gulf Bay Estates	Percolation pond	0.015	N.D.	N.D.	N.D.
Gasparilla Pines	Golf course irrigation	0.043	N.D.	N.D.	N.D.
Palm Marina Trailer Park	Percolation pond	0.005	N.D.	N.D.	N.D.
Rotonda West #2	Percolation pond	0.050	9.4	2.0	N.D.

Continued

Table EIR 23. Concluded.

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Rotonda West #1	Percolation pond	0.025	3.7	2.3	N.D.
Rotonda #3 Utilities	Percolation pond	0.025	N.D.	N.D.	N.D.
Rotonda #4	Percolation pond	0.025	N.D.	N.D.	N.D.
Windmill Village	Percolation pond	0.050	0.39	1.11	N.D.
K.O.A. Punta Gorda	Percolation pond	0.015	N.D.	N.D.	N.D.
Safari Campground	Percolation pond	0.015	N.D.	N.D.	N.D.
Eagles Nest Mobile Home Park	Percolation pond	0.025	5.8	1.08	N.D.
River Haven Mobile Home Park	Percolation pond	0.015	N.D.	N.D.	N.D.
Punta Gorda Mobile Home Park	Percolation pond	0.025	N.D.	N.D.	N.D.
Mercury Marine	Drainfield	0.0083	0.0048	0.4499	N.D.
Sun-n-Fun	Percolation pond	0.010	0.0167	0.0167	N.D.

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a Data were presented as found and were not rounded.
 b Million gal per day.
 c Biochemical oxygen demand.
 d Total suspended solids.
 e Ammonia.
 f Percolation/evaporation pond.

Table EIR 24. Point source analysis, discharge^a to other than receiving waters, Lee County (Southwest Florida Regional Planning Council 1980).

Discharger	Type	Flow ^b (Mgal/d)	BOD ^c (lb/day)	TSS ^d (lb/day)	NH ₄ -N ^e (lb/day)
Island Shopping Center	Unknown	0.0065	0.90	1.56	1.77
Coral Cape Mobile Home Park	Unknown	0.005	0.70	1.20	1.36
Jolly Rogers Motel	Unknown	0.005	0.70	1.20	1.36
G.A.C. Utilities	Unknown	0.140	2.93	5.04	N.D.
Chateau Estates	Unknown	0.125	18.14	31.28	N.D.
Pine Mobile Home Park	Unknown	0.080	7.43	12.81	N.D.
Six Lakes City Estates	Unknown	0.080	7.43	12.81	N.D.
Bermuda Condo Apts	Unknown	0.070	5.69	9.81	N.D.
Buccaneer Mobile Home Estates	Unknown	0.060	4.18	7.21	N.D.
Orange Harbor Mobile Home Park	Unknown	0.050	2.90	5.00	N.D.
Sunland Training Center	Unknown	0.046	1.45	1.50	N.D.
Peppertree Pointe	Unknown	0.416	2.01	3.46	N.D.
Carl's Sunrise Village	Unknown	0.040	1.86	3.20	N.D.

Continued

Table EIR 24 . Continued .

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Old Bridge Park Co.	Unknown	0.040	1.86	3.20	N.D.
Caloosa Elementary School	Unknown	0.020	0.46	0.80	N.D.
Gulf Air Trailer Park	Unknown	0.020	0.46	0.80	N.D.
Jones Motel and Trailer Park	Unknown	0.020	0.46	0.80	N.D.
Sunny Palms	Unknown	0.040	5.57	9.60	N.D.
Gasparilla Water Association	Retention pond	N.D.	N.D.	N.D.	N.D.
Tupila Way	Unknown	0.250	34.80	60.90	68.00
Jamestown Beachview	Unknown	0.120	16.70	28.80	32.64
Nationwide Realty	Unknown	0.060	8.35	14.4	16.32
King's Crown Condo	Unknown	0.055	7.66	13.20	14.96
Cherry Estates	Unknown	0.100	4.87	8.40	9.52
Flamingo Bay Inc.	Unknown	0.035	4.87	8.40	9.52
Mariner Properties	Unknown	0.030	4.18	7.20	8.16
Peaceful Pines	Unknown	0.30	4.18	7.20	8.16

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Continued

Table EIR 24. Continued.

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Palmetto Pipe Co.	Unknown	0 .007	0 .97	1 .68	1 .90
Serendipity Mobile Home Park	Unknown	0 .040	1 .86	3 .20	N .D .
Laurel Estates Mobile Home Park	Unknown	0 .040	0 .187	0 .32	N .D .
Four Season	Unknown	0 .034	1 .38	2 .38	N .D .
Sun-n-Fun	Unknown	0 .028	0 .68	1 .18	N .D .
Family Estates, Inc.	Unknown	0 .025	0 .73	1 .25	N .D .
The Groves	Unknown	0 .025	0 .73	1 .25	N .D .
Maple Condominium	Unknown	0 .025	0 .73	1 .25	N .D .
Tanglewood Elementary School	Unknown	0 .0075	0 .059	0 .103	N .D .
The Hut (restaurant)	Unknown	0 .005	0 .029	0 .050	N .D .
Gaylor Mobile Gardens	Unknown	0 .005	0 .028	0 .049	N .D .
Tamishaw Trailer Park	Unknown	0 .005	0 .020	0 .034	N .D .
Fox Trailer Park	Unknown	0 .005	0 .028	0 .048	N .D .

Continued

Table EIR 24 . Continued .

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Everglades Lanes	Unknown	0 .0043	0 .006	0 .006	N .D .
Lazy J Trailer Park	Unknown	0 .0036	0 .008	0 .013	N .D .
Ohio Med Products	Unknown	0 .004	0 .013	0 .022	N .D .
Star Plaza	Unknown	0 .0033	0 .013	0 .021	N .D .
Miners Shopping Center	Unknown	0 .0033	0 .013	0 .021	N .D .
Bayshore Coin Laundry	Unknown	0 .0212	0 .522	0 .090	N .D .
Victor Paulk Laundry	Unknown	0 .0148	0 .026	0 .044	N .D .
Star Plaza Laundry	Unknown	0 .0137	0 .046	1 .906	N .D .
Handy Corner Laundry	Unknown	0 .010	0 .17	0 .20	N .D .
Pondella Coin Laundry	Unknown	0 .010	0 .17	0 .20	N .D .
Shell Point Village	Unknown	0 .20	46 .43	80 .06	N .D .
Whiskey Creek Estates	Unknown	0 .15	26 .12	45 .04	N .D .
Leisure Village	Unknown	0 .15	26 .12	45 .04	N .D .
The Landings	Unknown	0 .02	0 .46	0 .80	N .D .

Continued

Table EIR 24 . Concluded .

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Rivertrails Mobile Home Park	Unknown	0 .02	0 .46	0 .80	N .D .

- ^a Data were presented as found and were not rounded .
- ^b Million gal per day .
- ^c Biochemical oxygen demand .
- ^d Total suspended solids .
- ^e Ammonia .

Table EIR 25. Point source analysis, discharge^a to other than receiving waters, Collier County (Southwest Florida Regional Planning Council 1980).

Discharger	Type	Flow ^b (Mgal/d ^b)	BOD ^c (lb/day)	TSS ^d (lb/day)	NH4-N ^e (lb/day)
Harmony Shores Trailer Park	P/E pond ^f	0 .0139	1 .88	3 .24	3 .67
Naples Park Elementary School	P/E pond	0 .0135	1 .88	3 .24	3 .67
Tara Park Trailer Court	Drainfield	0 .012	1 .67	2 .88	3 .26
Lake Trafford Elementary School	P/E pond	0 .010	1 .39	2 .40	2 .72
McGinnis Apartments	P/E pond	0 .010	1 .25	2 .16	2 .45
Highlands Elementary School	P/E pond	0 .009	1 .29	2 .16	2 .45
Avalon Elementary School	P/E pond	0 .008	1 .11	1 .92	2 .18
Crawford and Wood Apartments	P/E pond	0 .0075	1 .04	1 .80	2 .04
Sunny Acres Mobile Home Park	P/E pond	0 .0075	1 .04	1 .80	2 .04
Harbor Lakes Corp.	P/E pond	0 .006	0 .84	1 .44	1 .63
Administration and Courts Building	P/E pond	0 .005	0 .70	1 .20	1 .36

Continued

Table EIR 25 . Continued .

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Fire Tower Apartments	P/E pond	0 .005	0 .70	1 .20	1 .36
Lake Trafford Marina	P/E pond	0 .005	0 .70	1 .20	1 .36
Naples Drive-In Theatre	Retention pond	0 .005	0 .70	1 .20	1 .36
Imperial Golf Club	P/E pond	0 .0005	0 .67	1 .15	1 .31
Victoria Park	P/E pond	0 .100	13 .92	24 .00	27 .20
Glades Subdivision	P/E pond spray irrigation	0 .100	8 .26	0 .26	10 .88
Vanderbilt Towers	Retention pond	0 .070	9 .74	16 .80	19 .04
Forest Lakes Estates	Spray irrigation	0 .050	0 .16	0 .68	13 .60
Palm River Estates	P/E pond	0 .050	4 .18	7 .20	8 .16
Naples Mobile Estates	P/E pond	0 .050	4 .18	7 .20	7 .62
Naples Land Yacht Harbor	P/E pond Drainfield	0 .040	5 .57	9 .60	10 .88
Carribean Trailer Park	P/E pond	0 .035	4 .87	8 .40	9 .52
Riviera Colony Estates	P/E pond	0 .0033	4 .59	7 .92	8 .98
Lakewood Subdivision	P/E pond	0 .030	4 .18	7 .20	8 .16

Continued

Table EIR 25 . Concluded .

Discharger	Type	Flow (Mgal/d)	BOD (lb/day)	TSS (lb/day)	NH4-N (lb/day)
Immokalee High School	Retention pond	0 .030	4 .73	4 .17	3 .67
Desha N. Sanders Motel	P/E pond	0 .025	3 .48	6 .00	6 .80
Camp Happy	P/E pond	0 .020	2 .78	4 .80	5 .44
Sorrento Villas Apartments	Drainfield	0 .020	2 .78	4 .80	5 .44
Pine Ridge Middle School	Retention pond	0 .020	2 .78	4 .80	5 .44
LaPlaya Motor Inn	Percolation pond	0 .015	4 .76	4 .76	2 .67
E. Naples Middle School	P/E pond	0 .0135	1 .88	3 .24	3 .67
El Rancho Mobile Home Park	P/E pond	0 .035	2 .23	3 .84	4 .35

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- a Data were presented as found and were not rounded .
- b Million gal per day .
- c Biochemical oxygen demand .
- d Total suspended solids .
- e Ammonia .
- f Percolation/evaporation pond .

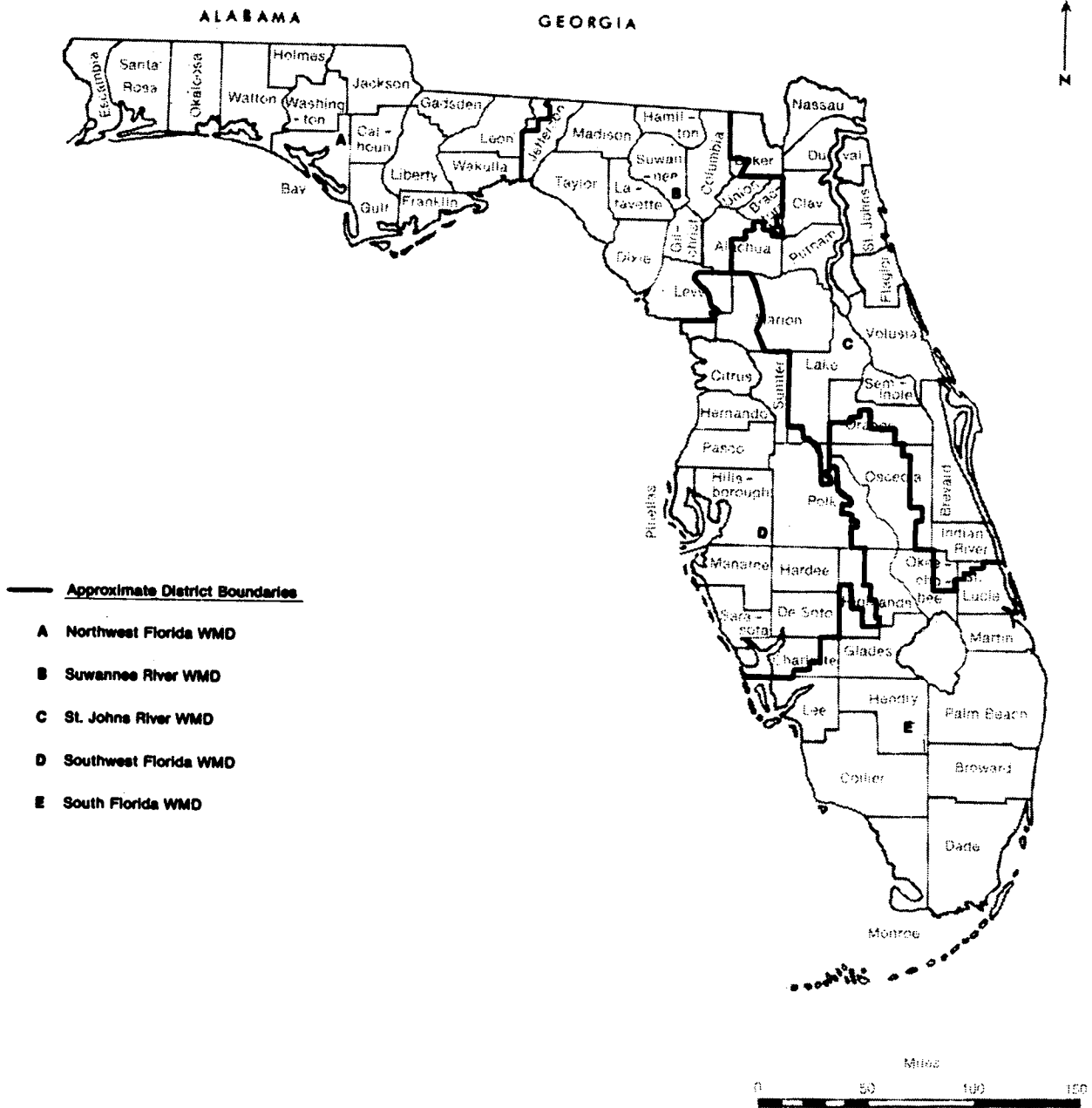


Figure 13. State Water Management Districts (Florida Light and Power Co. 1979).

Table EIR 26. Water used for public supplies in Water Resources Council (WRC) subregions in 1970 (Pride 1973).

WRC Subregion	Water withdrawn (Mgal/d) ^a			
	GW ^b	SW ^c	All water	Per capita
WRC Subregion 0309				
Collier	5.00	0.90	5.90	200.00
Lee	6.70 ^d	1.60	8.30	91.00 ^f
Monroe	0.00 ^d	1.60	1.60 ^e	106.00 ^f
Subregion	404.50	27.90	432.40	162.00
WRC Subregion 0310				
Charlotte	0.40 ^g	2.20	2.60 ^g	169.00 ^f
DeSoto	0.50 ^h	0.00	0.50 ^h	83.00 ^f
Hillsborough	35.20 ^h	44.60	79.80 ^h	140.00 ^f
Manatee	0.30	9.60	9.90	153.00
Pasco	2.00 ⁱ	0.00	2.00 ⁱ	82.00 ^f
Pinellas	32.00 ^j	0.00	32.00 ^j	145.00 ^f
Sarasota	11.00 ^j	0.30	11.30 ^j	107.00 ^f
Subregion	84.60	56.70	141.30	138.00
Florida	758.80	124.70	883.50	163.00

Continued

Table EIR 26. Concluded.

WRC Subregion	Water delivered (Mgal/d)				
	Industrial and commercial			Domestic use and losses	Consumed
	A/C ^k	Except A/C	All uses		
WRC Subregion 0309					
Collier	0.30	0.30	0.60	5.30	1.40
Lee	0.00	1.60	1.60	6.70	2.50
Monroe	0.30	0.40	0.70	6.10	1.40
Subregion	19.60	37.40	57.00	375.40	114.20
WRC Subregion 0310					
Charlotte	0.00	0.10	0.10	2.60	0.10
DeSoto	0.00	0.00	0.00	0.50	0.20
Hillsborough	0.20	3.90	4.10	47.70	11.80
Manatee	0.60	1.40	2.00	7.90	0.30
Pasco	0.00	0.40	0.40	1.60	1.20
Pinellas	6.00	6.00	12.00	48.00	24.00
Sarasota	1.00	1.10	2.10	9.10	0.50
Subregion	7.80	13.00	20.80	120.50	39.10
Florida	46.20	120.00	166.20	717.30	234.80

^a Million gal per day.

^b Ground water.

^c Surface water.

^d 5.2 Mgal/d imported from Dade County.

^e Does not include 5.2 Mgal/d of ground water imported from Dade County.

^f Net use in county.

^g Does not include 0.1 Mgal/d imported from Sarasota County.

^h Includes 28.0 Mgal/d exported to Pinellas County.

ⁱ Does not include 28.0 Mgal/d imported from Hillsborough County.

^j Includes 0.1 Mgal/d exported to Charlotte County.

^k Air conditioning.

Table EIR 27. Water used for irrigation in Water Resources Council (WRC) subregions in 1970 (Pride 1973).

WRC Subregion	Water withdrawn (Mgal/d) ^a					
	SW ^b	GW ^c	Other	All	Conveyance loss	Consumptive use
WRC Subregion 0309						
Collier	0.40	47.10	0.00	47.50	11.80	28.60
Lee	8.00	27.30	0.00	35.30	0.40	20.50
Monroe	0.00	0.00	0.00	0.00	0.00	0.00
Subregion	863.70	692.60	0.01	1556.30	126.00	907.30
WRC Subregion 0310						
Charlotte	0.70	28.20	0.00	28.90	0.00	18.80
DeSoto	0.00	64.70	0.00	64.70	0.00	44.60
Hillsborough	5.10	64.20	0.00	69.30	0.00	48.20
Manatee	0.00	49.50	0.00	49.50	0.00	34.60
Pasco	0.00	9.60	0.00	9.60	0.00	7.10
Pinellas	0.04	4.00	0.00	4.04	0.00	2.90
Sarasota	2.30	27.30	0.00	29.60	0.00	19.60
Subregion	8.20	321.60	0.00	329.80	0.00	229.10
Florida	898.43	1,172.24	28.11	2,070.66	127.10	1,270.40

- ^a Million gal per day.
^b Surface water.
^c Ground water.

Table EIR 28. Self-supplied water for industrial use in Water Resources Council (WRC) subregions in 1970 (Pride 1973).

WRC Subregion	Water withdrawn (Mgal/d) ^a						Water consumed fresh
	Ground water		Surface water		All water		
	Fresh	Saline	Fresh	Saline	Fresh	Saline	
WRC Subregion 0309							
Collier	0.50	0.00	0.00	0.00	0.50	0.00	0.10
Lee	0.30	0.40	4.00	0.00	4.30	0.40	0.20
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subregion	276.20	0.40	80.70	0.00	356.90	0.40	62.50
WRC Subregion 0310							
Charlotte	0.10	0.00	0.00	0.00	0.10	0.00	0.10
DeSoto	0.70	0.00	0.00	0.00	0.70	0.00	0.20
Hillsborough	40.00	86.40	11.90	0.00	51.90	86.40	5.20
Manatee	3.00	0.00	0.00	0.00	3.00	0.00	0.50
Pasco	30.00	0.00	0.00	0.00	30.00	0.00	23.00
Pinellas	2.00	0.00	0.00	0.00	2.00	0.00	1.60
Sarasota	7.60	0.00	0.00	0.80	7.60	0.80	0.30
Subregion	102.80	86.40	11.90	0.80	114.70	87.20	32.10
Florida	736.20	86.90	190.60	45.60	926.80	132.50	163.10

Continued

Table EIR 28. Concluded.

WRC Subregion	Fresh water use by major classifications (Mgal/d)					
	Phosphate mining	Pulp and paper processing	Citrus processing	Limerock mining	Chemical products processing	Other
WRC Subregion 0309						
Collier	0.00	0.00	0.00	0.00	0.00	0.50
Lee	0.00	0.00	0.00	4.00	0.00	0.30
Monroe	0.00	0.00	0.00	0.00	0.00	0.00
Subregion	271.00	0.00	29.80	4.00	0.00	52.10
WRC Subregion 0310						
Charlotte	0.00	0.00	0.00	0.00	0.00	0.10
DeSoto	0.00	0.00	0.20	0.00	0.50	0.00
Hillsborough	45.90	0.00	2.80	0.00	0.00	3.20
Manatee	0.00	0.00	0.00	0.00	3.00	0.00
Pasco	0.00	0.00	30.00	0.00	0.00	0.00
Pinellas	0.00	0.00	0.40	0.00	0.00	1.60
Sarasota	0.00	0.00	0.10	0.00	0.00	7.50
Subregion	45.90	0.00	33.90	18.60	3.50	12.80
Florida	318.30	237.40	86.50	28.90	97.10	158.60

^a Million gal per day.

Table EIR 29. Water used for thermoelectric power in Water Resources Council (WRC) subregions in 1970 (Pride 1973).

WRC Subregion	Cooling water (Mgal/day) ^a				Public supply
	Self-supplied				
	Surface water		Ground water		
	Fresh	Saline	Fresh	Saline	
WRC Subregion 0309					
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.00	552.00	0.00	0.00	0.00
Monroe	0.00	0.00	0.00	50.00	0.00
Subregion	336.00	4,199.00	1.80	50.00	1.22
WRC Subregion 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	1,899.00	0.00	0.00	0.05
Manatee	0.00	0.00	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	0.00	0.00
Pinellas	0.00	954.00	0.00	0.00	0.00
Sarasota	0.00	0.00	0.00	0.00	0.00
Subregion	0.00	2,965.00	0.00	0.00	0.05
Florida	1,675.00	9,340.00	10.90	50.10	2.30

Continued

Table EIR 29. Concluded.

WRC Subregion	Other water (Mgal/d)		Public supply	Water consumed	
	Self-supplied			Fresh	Saline
	Surface Fresh	Ground Fresh			
WRC Subregion 0309					
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.00	0.04	0.06	0.10	4.40
Monroe	0.00	0.00	0.20	0.20	0.50
Subregion	0.00	0.08	0.57	2.70	39.20
WRC Subregion 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	1.20	0.50	12.00
Manatee	0.00	0.00	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	0.00	0.00
Pinellas	0.00	0.00	0.60	0.30	7.10
Sarasota	0.00	0.00	0.00	0.00	0.00
Subregion	0.00	0.02	1.80	0.80	25.60
Florida	0.00	1.00	2.50	19.70	86.00

^a Million gal per day.

Table EIR 30. Water used for public supplies in 1975 (Leach 1978).

County	Water withdrawn (Mgal/d) ^a			Per capita
	GW ^b	SW ^c	Total	
Charlotte	0.18	3.90	4.08	128.00
Collier	11.93	0.00	11.93	228.00
DeSoto	0.76 ^d	0.00	0.76 ^d	109.00
Hillsborough	7.17 ^d	52.70	59.87 ^d	148.00
Lee	9.97	6.85	16.82	114.00
Manatee	0.00	18.91 ^e	18.91	236.00
Monroe	5.96 ^e	1.71 ^e	7.67 ^f	138.00
Pasco	2.96 ^f	0.00	2.96 ^f	113.00
Pinellas	76.97 ^g	0.00	76.97 ^g	127.00
Sarasota	9.33	0.98	10.31	115.00
Region	125.23	85.05	210.28	N.D.
Florida	982.83	162.98	1145.81	168.00

Continued

Table EIR 30 . Concluded .

County	Water delivered by uses (Mgal/d)					Consumed
	Public supply	Agriculture	Industry	Commercial	A/C ^h	
Charlotte	3.63	0.00	0.00	0.45	0.00	2.15
Collier	9.35	2.28	0.10	0.10	0.10	7.43
DeSoto	0.68	0.00	0.05	0.03	0.00	0.38
Hillsborough	55.14	0.00	3.61	0.80	0.32	8.55
Lee	14.60	0.00	1.08	1.14	0.00	3.44
Manatee	12.91	0.00	6.00	0.00	0.00	11.92
Monroe	6.60	0.00	0.00	0.77	0.31	7.67
Pasco	2.85	0.00	0.00	0.10	0.00	1.73
Pinellas	62.98	0.22	3.19	4.00	6.58	68.44
Sarasota	7.93	0.00	0.71	0.48	1.19	2.02
Region	176.67	2.50	14.74	7.87	8.50	113.73
Florida	923.58	24.71	80.90	83.62	33.00	559.97

^a Million gal per day.
^b Ground water.
^c Surface water.
^d Does not include 24.27 Mgal/d exported to Pinellas County.
^e Imported from Dade County.
^f Does not include 15.7 Mgal/d exported to Pinellas County.
^g Includes 24.27 Mgal/d exported from Hillsborough County and 15.7 Mgal/d exported from Pasco County.
^h Air conditioning.

Table EIR 31. Rural water use in 1975 (Leach 1978).

County	Domestic use (Mgal/d) ^a				Livestock use (Mgal/d)			
	Withdrawn				Withdrawn			
	SW ^b	GW ^c	All	Consumed	SW	GW	All	Consumed
Charlotte	0.00	1.17	1.17	0.24	0.00	0.34	0.34	0.34
Collier	0.75	0.40	1.15	0.23	0.00	0.25	0.25	0.25
DeSoto	0.00	1.12	1.12	0.11	0.00	2.93	2.93	2.93
Hillsborough	0.00	21.26	21.26	2.13	0.00	4.87	4.87	4.87
Lee	0.00	2.00	2.00	0.49	0.03	0.30	0.33	0.33
Manatee	0.00	4.40	4.40	0.50	0.18	1.65	1.83	1.83
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pasco	0.00	10.39	10.39	1.04	1.00	2.21	3.21	3.21
Pinellas	0.00	6.46	6.46	0.65	0.02	0.50	0.52	0.52
Sarasota	0.00	7.33	7.33	0.73	0.34	0.36	0.70	0.70
Region	0.75	54.53	55.18	6.12	1.57	13.14	14.98	14.98
Florida	2.05	200.93	202.98	50.33	12.15	50.87	63.02	62.57

County	All uses (Mgal/d)			
	Withdrawn			Consumed
	SW	GW	All	
Charlotte	0.00	1.51	1.51	0.58
Collier	0.75	0.65	1.40	0.48
DeSoto	0.00	4.05	4.05	3.04
Hillsborough	0.00	26.13	26.13	7.00
Lee	0.03	2.30	2.33	0.82
Manatee	0.18	6.05	6.23	2.33
Monroe	0.00	0.00	0.00	0.00
Pasco	1.00	12.60	13.60	4.25
Pinellas	0.02	6.96	6.98	1.17
Sarasota	0.34	7.69	8.03	1.43
Region	2.32	67.94	70.26	21.10
Florida	14.20	251.80	266.00	112.90

^a Million gal per day.

^b Surface water.

^c Ground water.

Table EIR 32. Water used for irrigation in 1975 (Leach 1978).

County	Total water withdrawn (Mgal/d) ^a				
	SW ^b	GW ^c	All	Conveyance loss	Consumptive use
Charlotte	0.00	34.31	34.31	0.00	12.95
Collier	5.00	64.52	69.52	14.40	34.92
DeSoto	2.00	61.79	63.79	0.00	42.80
Hillsborough	2.27	43.63	45.90	0.00	32.51
Lee	15.53	48.53	64.06	0.87	37.68
Manatee	1.20	22.78	23.98	0.00	2.74
Monroe	0.00	0.00	0.00	0.00	0.00
Pasco	9.43	37.75	47.19	0.00	29.18
Pinellas	0.00	33.77	33.77	0.00	10.00
Sarasota	2.00	17.99	19.99	0.00	16.68
Region	37.43	365.07	402.51	15.27	219.46
Florida	1,628.52	1,238.96	2,867.48	218.11	1,331.86

- ^a Million gal per day.
^b Surface water.
^c Ground water.

Table EIR 33. Self-supplied water for industrial use in 1975 (Leach 1978).

County	Water withdrawn (Mgal/d) ^a						Water consumed
	Ground water		Surface water		All water		
	Fresh	Saline	Fresh	Saline	Fresh	Saline	
Charlotte	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DeSoto	0.59	0.00	0.00	0.00	0.59	0.00	0.11
Hillsborough	8.02	45.00	8.10	0.00	16.12	45.00	8.56
Lee	0.40	0.00	8.00	0.00	8.40	0.00	0.02
Manatee	1.99	0.00	0.00	0.00	1.99	0.00	0.20
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pasco	25.01	0.00	0.00	0.00	25.01	0.00	15.72
Pinellas	1.30	0.00	0.00	0.00	1.30	0.00	0.40
Sarasota	2.99	0.00	0.00	0.00	2.99	0.00	0.61
Region	40.40	45.00	16.10	0.0	56.50	45.00	25.72
Florida	778.91	47.80	160.70	15.24	939.61	63.04	262.91

County	Water use by major classification (Mgal/d)			
	Limerock mining	Pulp and paper	Chemical products	Phosphate mining
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	8.60	0.83
Lee	8.00	0.00	0.00	0.00
Manatee	0.00	0.00	0.00	0.00
Monroe	0.00	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	0.00
Pinellas	0.00	0.00	0.00	0.00
Sarasota	0.00	0.00	0.00	0.00
Region	8.00	0.00	8.60	0.83
Florida	87.97	225.31	100.05	270.33

Continued

Table EIR 33. Concluded.

County	Water use by major classification (Mgal/d)			
	Citrus processing	Food processing	A/C ^b	Other
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
DeSoto	0.23	0.11	0.00	0.25
Hillsborough	0.10	2.83	0.29	48.47
Lee	0.00	0.00	0.40	0.00
Manatee	0.00	1.34	0.61	0.04
Monroe	0.00	0.00	0.00	0.00
Pasco	24.03	0.73	0.00	0.25
Pinellas	0.39	0.24	0.00	0.67
Sarasota	0.02	0.13	1.80	1.04
Region	24.77	5.48	3.10	50.72
Florida	69.94	65.77	52.69	130.75

^a Million gal per day.

^b Air conditioning.

Table EIR 34. Water used for thermoelectric power in 1975 (Leach 1978).

County	Cooling water (Mgal/d) ^a				
	Self-supplied				Public supply
	Ground water		Surface water		
	Fresh	Saline	Fresh	Saline	
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	0.00	3,031.00	0.00
Lee	0.00	0.00	0.00 ^b	568.00	0.00
Manatee	0.00	0.00	25.00 ^b	0.00	0.00
Monroe	0.00	47.50	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	670.00	0.00
Pinellas	0.00	0.00	0.00	794.00	0.00
Sarasota	0.00	0.00	0.00	0.00	0.00
Region	0.00	47.50	25.00	5,063.00	0.00
Florida	51.70	47.50	1,633.00	11,391.50	1.44

County	Other water (Mgal/d)				
	Self-supplied			Water consumed	
	Ground	Surface	Public supply	Fresh	Saline
	Fresh	Fresh		Fresh	Saline
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.37	2.04	0.00	1.30	19.10
Lee	0.04	0.00	0.07	0.10	4.80
Manatee	0.02	0.00	0.00	0.00	0.00
Monroe	0.10	0.00	0.00	0.10	0.50
Pasco	0.00	0.00	0.23	0.20	4.20
Pinellas	0.00	0.00	0.14	0.10	5.80
Sarasota	0.00	0.00	0.00	0.00	0.00
Region	0.53	2.04	0.44	1.80	34.40
Florida	8.45	2.39	1.64	36.10	91.10

^a Million gal per day.

^b Water used to fill reservoir only, not in operation during 1975.

Table EIR 35. Water used for public supplies by hydrologic unit in 1975 (Leach 1978).

County	Water withdrawn (Mgal/d) ^a			
	GW ^b	SW ^c	Total	Per capita
Hydrologic unit 0309				
Charlotte	0 .00	0 .00	0 .00	0 .00
Collier	11 .93	0 .00	11 .93	228 .00
Lee	8 .44	6 .85	15 .29	112 .00
Monroe	5 .96 ^d	1 .71 ^d	7 .67	138 .00
Unit	528 .69	42 .83	571 .52	179 .00
Hydrologic unit 0310				
Charlotte	0 .18	3 .90	4 .08	128 .00
DeSoto	0 .76	0 .00	0 .76	109 .00
Hillsborough	7 .17 ^e	52 .70	59 .87 ^e	148 .00
Lee	1 .53	0 .00	1 .53	139 .00
Manatee	0 .00 ^f	18 .91	18 .91 ^f	236 .00
Pasco	2 .96 ^f	0 .00	2 .96 ^f	113 .00
Pinellas	76 .97 ^g	0 .00	76 .97 ^g	127 .00
Sarasota	9 .33	0 .98	10 .31	115 .00
Unit	134 .64	76 .49	211 .13	143 .00
Florida	982 .84	162 .98	1,145 .82	168 .00

Continued

Table EIR 35. Concluded.

County	Water delivered by uses (Mgal/d)					Water Consumed
	Public supply	Agriculture	Industry	Commercial	A/C ^h	
Hydrologic unit 0309						
Charlotte	0.00	0.00	0.00	0.00	0.00	0.00
Collier	9.35	2.28	0.10	0.10	0.10	7.43
Lee	13.07	0.00	1.08	1.14	0.00	3.28
Monroe	6.60	0.00	0.00	0.77	0.31	7.67
Unit	463.31	22.99	26.86	39.36	19.00	316.72
Hydrologic unit 0310						
Charlotte	3.63	0.00	0.00	0.45	0.00	2.15
DeSoto	0.68	0.00	0.05	0.03	0.00	0.38
Hillsborough	55.14	0.00	3.61	0.80	0.32	8.55
Lee	1.53	0.00	0.00	0.00	0.00	0.16
Manatee	12.91	0.00	6.00	0.00	0.00	11.92
Pasco	2.85	0.00	0.00	0.10	0.00	1.73
Pinellas	62.98	0.22	3.19	4.00	6.58	68.44
Sarasota	7.93	0.00	0.71	0.48	1.19	2.02
Unit	180.51	1.24	14.18	7.11	8.09	115.52
Florida	923.59	24.71	80.90	83.63	33.00	559.98

^a Million gal per day.

^b Ground water.

^c Surface water.

^d Imported from Dade County.

^e Does not include 24.27 Mgal/d exported to Pinellas County.

^f Does not include 15.7 Mgal/d exported to Pinellas County.

^g Includes 24.27 Mgal/d exported from Hillsborough County and 15.7 Mgal/d exported from Pasco County.

^h Air conditioning.

Table EIR 36 . Rural water use by hydrologic unit in 1975 (Leach 1978) .

County	<u>Domestic use (Mgal/d)^a</u>				<u>Livestock use (Mgal/d)</u>			
	<u>Withdrawn</u>				<u>Withdrawn</u>			
	SW ^b	GW ^c	All	Consumed	SW	GW	All	Consumed
Hydrologic unit 0309								
Charlotte	0.0	0.16	0.16	0.03	0.0	0.10	0.10	0.10
Collier	0.75	0.40	1.15	0.23	0.0	0.25	0.25	0.25
Lee	0.0	1.72	1.72	0.43	0.03	0.26	0.29	0.29
Monroe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit total	1.20	50.14	51.34	17.58	5.41	9.04	14.45	14.45
Hydrologic unit 0310								
Charlotte	0.0	1.01	1.01	0.21	0.0	0.24	0.24	0.24
DeSoto	0.0	1.12	1.12	0.11	0.0	2.93	2.93	2.93
Hillsborough	0.0	21.26	21.26	2.13	0.0	4.87	4.87	4.87
Lee	0.0	0.28	0.28	0.06	0.0	0.04	0.04	0.04
Manatee	0.0	4.40	4.40	0.50	0.18	1.65	1.83	1.83
Pasco	0.0	10.39	10.39	1.04	1.00	2.21	3.21	3.21
Pinellas	0.0	6.46	6.46	0.65	0.02	0.50	0.52	0.52
Sarasota	0.0	7.33	7.33	0.73	0.34	0.36	0.70	0.70
Unit total	0.0	68.62	68.62	7.51	2.09	20.87	22.96	22.96
Florida total	2.05	200.93	202.98	50.33	12.15	50.87	63.02	62.57

Continued

Table EIR 36 . Concluded .

County	All uses (Mgal/d)			Consumed
	Withdrawn		ATT	
	SW	GW		
Hydrologic unit 0309				
Charlotte	0.00	0.26	0.26	0.13
Collier	0.75	0.65	1.40	0.48
Lee	0.03	1.98	2.01	0.72
Monroe	0.00	0.00	0.00	0.00
Unit	6.61	59.18	65.79	32.03
Hydrologic unit 0310				
Charlotte	0.00	1.25	1.25	0.45
DeSoto	0.00	4.05	4.05	3.04
Hillsborough	0.00	26.13	26.13	7.00
Lee	0.00	0.32	0.32	0.10
Manatee	0.18	6.05	6.23	2.33
Pasco	1.00	12.60	13.60	4.25
Pinellas	0.02	6.96	6.98	1.17
Sarasota	0.34	7.69	8.03	1.43
Unit	2.09	89.49	91.58	30.47
Florida	14.20	251.80	266.00	112.90

- a Million gal per day
- b Surface water .
- c Ground water .

Table EIR 37. Water used for irrigation by hydrologic unit in 1975 (Leach 1978).

County	Total water withdrawn (Mgal/d) ^a				
	SW ^b	GW ^c	All	Conveyance loss	Consumptive use
Hydrologic unit 0309					
Charlotte	0.00	10.97	10.97	0.00	4.06
Collier	5.00	64.52	69.52	14.40	34.92
Lee	13.39	41.74	55.13	0.75	32.42
Monroe	0.00	0.00	0.00	0.00	0.00
Unit	1,229.15	577.19	1,806.34	172.34	856.82
Hydrologic unit 0310					
Charlotte	0.00	23.34	23.34	0.00	8.90
DeSoto	2.00	61.79	63.79	0.00	42.80
Hillsborough	2.27	43.63	45.90	0.00	32.51
Lee	2.13	6.80	8.93	0.12	5.27
Manatee	1.20	22.78	23.98	0.00	2.74
Pasco	9.43	37.75	47.19	0.00	29.18
Pinellas	0.00	33.77	33.77	0.60	10.00
Sarasota	2.00	17.99	19.99	0.00	16.68
Unit	31.71	417.07	448.78	0.83	286.25
Florida	1,628.52	1,238.96	2,867.48	218.11	1,331.87

^a Million gal per day.

^b Surface water.

^c Ground water.

Table EIR 38. Self-supplied water for industrial use by hydrologic unit in 1975 (Leach 1978).

County	Water withdrawn (Mgal/d) ^a						Water consumed
	Ground water		Surface water		All water		
	Fresh	Saline	Fresh	Saline	Fresh	Saline	
Hydrologic unit 0309							
Charlotte	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lee	0.40	0.00	8.00	0.00	8.40	0.00	0.02
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unit	25.78	0.00	55.65	0.00	81.43	0.00	19.21
Hydrologic unit 0310							
Charlotte	0.10	0.00	0.00	0.00	0.10	0.00	0.10
DeSoto	0.59	0.00	0.00	0.00	0.59	0.00	0.11
Hillsborough	8.02	45.00	8.10	0.00	16.12	45.00	8.56
Lee	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manatee	1.99	0.00	0.00	0.00	1.99	0.00	0.20
Pasco	25.01	0.00	0.00	0.00	25.01	0.00	15.72
Pinellas	1.30	0.00	0.00	0.00	1.30	0.00	0.40
Sarasota	2.99	0.00	0.00	0.00	2.99	0.00	0.61
Unit	384.91	45.00	8.65	0.00	393.56	45.00	90.89
Florida	778.92	47.80	160.70	15.24	939.62	63.04	262.91

Continued

Table EIR 38. Concluded.

County	Fresh water use by major classification (Mgal/d)			
	Citrus processing	Food processing	A/C ^b	Other
Hydrologic unit 0309				
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
Lee	0.00	0.00	0.40	0.00
Monroe	0.00	0.00	0.00	0.00
Unit	7.59	44.88	0.40	19.56
Hydrologic unit 0310				
Charlotte	0.00	0.10	0.00	0.00
DeSoto	0.23	0.11	0.00	0.25
Hillsborough	0.10	2.83	0.29	48.47
Lee	0.00	0.00	0.00	0.00
Manatee	0.00	1.34	0.61	0.04
Pasco	24.03	0.73	0.00	0.25
Pinellas	0.39	0.24	0.00	0.67
Sarasota	0.02	0.13	1.80	1.04
Unit	37.13	13.80	2.70	55.33
Florida	69.94	65.77	52.69	130.75

^a Million gal per day.

^b Air conditioning.

Table EIR 39. Water used for thermoelectric power by hydrologic unit in 1975 (Leach 1978).

County	Cooling water (Mgal/d) ^a				
	Self-supplied				Public supply
	Ground water		Surface water		
	Fresh	Saline	Fresh	Saline	
Hydrologic unit 0309					
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.00	0.00	0.00	568.00	0.00
Monroe	0.00	47.50	0.00	0.00	0.00
Unit	0.50	47.50	95.20	3,407.00	0.54
Hydrologic unit 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	0.00	3,031.00	0.00
Lee	0.00	0.00	0.00 ^b	0.00	0.00
Manatee	0.00	0.00	25.00 ^b	0.00	0.00
Pasco	0.00	0.00	0.00	670.00	0.00
Pinellas	0.00	0.00	0.00	794.00	0.00
Sarasota	0.00	0.00	0.00	0.00	0.00
Unit	0.00	0.00	323.50	5,414.00	0.00
Florida	51.70	47.50	1,633.00	11,391.50	1.44

Continued

Table EIR 39. Concluded.

County	Other water (Mgal/d)				
	Self-supplied		Public supply	Water consumed	
	Ground Fresh	Surface Fresh		Fresh	Saline
Hydrologic unit 0309					
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.04	0.00	0.07	0.10	4.80
Monroe	0.10	0.00	0.00	0.10	0.50
Unit	0.86	0.03	0.12	1.60	36.40
Hydrologic unit 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.37	2.04	0.00	1.30	19.10
Lee	0.00	0.00	0.00	0.00	0.00
Manatee	0.02	0.00	0.00	0.00	0.00
Pasco	0.00	0.00	0.23	0.20	4.20
Pinellas	0.00	0.00	0.14	0.10	5.80
Sarasota	0.00	0.00	0.00	0.00	0.00
Unit	1.13	2.04	0.79	6.00	36.60
Florida	8.45	2.39	1.64	36.10	91.10

^a Million gal per day.

^b Water used to fill reservoir only, not in operation during 1975.

Table EIR 40. Water used for public supplies in 1977 (Leach 1980).

County	Water withdrawn (Mgal/d) ^a			Per capita
	GW ^b	SW ^c	Total	
Charlotte	0.08	3.89	3.97	118
Collier	14.12	0.00	14.12	234
DeSoto	0.74	0.00	0.74	106
Hillsborough	13.42 ^d	56.64	70.06 ^d	135
Lee	12.27	6.74	19.01	122
Manatee	0.00	22.36	22.36	269
Monroe	7.20 ^e	0.00	7.20 ^e	131
Pasco	3.57 ^f	0.00	3.57 ^f	133
Pinellas	88.68 ^g	0.00	88.68 ^g	135
Sarasota	9.58	1.26	10.84	105
Region	149.66	90.89	240.55	1,488
Florida	1,059.06	172.82	1,231.88	171

Continued

Table EIR 40. Concluded.

County	Water delivered by uses (Mgal/d)					Consumed
	Public supply	Agriculture	Industry	Commercial	A/C ^h	
Charlotte	3.27	0.00	0.00	0.70	0.00	1.89
Collier	11.32	2.47	0.11	0.11	0.11	6.88
DeSoto	0.67	0.00	0.04	0.03	0.00	0.00
Hillsborough	38.99	0.00	7.99	23.08	0.00	12.94
Lee	16.64	0.00	1.16	1.22	0.00	3.77
Manatee	14.14	0.00	7.87	0.35	0.00	14.77
Monroe	6.48	0.00	0.00	0.72	0.00	1.85
Pasco	3.45	0.00	0.00	0.12	0.00	1.49
Pinellas	65.92	0.00	2.66	15.87	4.23	16.75
Sarasota	7.38	0.64	0.30	2.32	0.21	2.70
Region	168.26	3.11	20.13	44.52	4.55	63.04
Florida	960.82	23.84	92.88	124.67	29.67	508.45

^a Million gal per day.

^b Ground water.

^c Surface water.

^d Does not include 27.96 Mgal/d exported to Pinellas County.

^e Includes 5.96 Mgal/d imported from Dade County and 1.24 Mgal/d produced by the desalination plant at Stock Island, FL.

^f Does not include 18.1 Mgal/d exported to Pinellas County.

^g Includes 27.96 Mgal/d exported from Hillsborough County and 18.1 Mgal/d exported from Pasco County.

^h Air conditioning.

Table EIR 41. Rural water use in 1977 (Leach 1980).

County	Domestic use (Mgal/d) ^a				Livestock use (Mgal/d)			
	Withdrawn			Consumed	Withdrawn			Consumed
	SW ^b	GW ^c	All		SW	GW	All	
Charlotte	0.00	1.23	1.23	0.31	0.00	0.38	0.38	0.38
Collier	0.45	0.61	1.06	0.16	0.00	0.31	0.31	0.31
DeSoto	0.00	1.12	1.12	0.28	0.00	1.04	1.04	1.04
Hillsborough	0.00	8.73	8.73	1.96	0.00	4.39	4.39	4.39
Lee	0.00	2.44	2.44	0.35	0.04	0.35	0.39	0.39
Manatee	0.00	4.68	4.68	1.17	0.20	1.80	2.00	2.00
Monroe	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.00
Pasco	0.00	11.55	11.55	2.89	0.00	1.80	1.80	1.80
Pinellas	0.00	2.91	2.91	1.61	0.02	0.54	0.56	0.56
Sarasota	0.00	6.70	6.70	1.68	0.19	0.28	0.47	0.47
Region	0.45	39.99	40.44	10.42	0.45	10.89	11.34	11.34
Florida	1.01	191.81	192.82	55.26	20.07	44.00	64.07	64.07

Continued

Table EIR 41 . Concluded .

County	All uses (Mgal/d)			Consumed
	Withdrawn		ATT	
	SW	GW		
Charlotte	0.00	1.61	1.61	0.69
Collier	0.45	0.92	1.37	0.47
DeSoto	0.00	2.16	2.16	1.32
Hillsborough	0.00	13.12	13.12	6.35
Lee	0.04	2.79	2.83	0.74
Manatee	0.20	6.48	6.68	3.17
Monroe	0.00	0.02	0.02	0.01
Pasco	0.00	13.35	13.35	4.69
Pinellas	0.02	3.45	3.47	2.17
Sarasota	0.19	6.98	7.17	2.15
Region	0.90	50.88	51.78	21.76
Florida	21.08	235.81	256.89	114.33

- ^a Million gal per day.
- ^b Surface water.
- ^c Ground water.

Table EIR 42. Water used for irrigation in 1977 (Leach 1978).

County	Total water withdrawn (Mgal/d) ^a				
	SW ^b	GW ^c	All	Conveyance loss	Consumptive use
Charlotte	0.00	20.90	20.90	0.00	7.89
Collier	4.82	72.62	77.44	14.40	34.92
DeSoto	1.93	62.06	64.00	0.00	42.80
Hillsborough	2.52	47.89	50.41	0.00	36.43
Lee	22.50	70.99	93.50	1.07	42.06
Manatee	2.16	40.98	43.14	0.00	4.72
Monroe	0.00	0.04	0.04	0.00	0.01
Pasco	7.31	29.29	36.60	0.00	22.63
Pinellas	0.00	28.08	28.08	0.00	8.31
Sarasota	2.49	22.37	24.86	0.00	20.74
Region	43.73	395.22	438.97	15.47	220.51
Florida	1,449.29	1,423.25	2,872.55	191.74	1,255.23

^a Million gal per day.

^b Surface water.

^c Ground water.

Table EIR 43. Self-supplied water for industrial use in 1977 (Leach and Healy 1978).

County	Water withdrawn (Mgal/d) ^a						Water consumed
	Ground water		Surface water		All water		
	Fresh	Saline	Fresh	Saline	Fresh	Saline	
Charlotte	0.10	0.00	0.00	0.00	0.10	0.00	0.10
Collier	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DeSoto	1.10	0.00	0.00	0.00	1.10	0.00	0.11
Hillsborough	26.76	56.65	7.40	0.00	34.16	56.65	10.80
Lee	0.40	0.00	8.00	0.00	8.40	0.00	0.02
Manatee	3.35	0.00	0.00	0.00	3.35	0.00	0.47
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pasco	13.19	0.00	0.00	0.00	13.19	0.00	6.45
Pinellas	1.28	0.00	0.00	0.00	1.28	0.00	0.56
Sarasota	2.92	0.00	0.00	0.00	2.92	0.00	0.59
Region	49.10	56.65	15.40	0.00	41.44	40.00	18.41
Florida	733.06	58.25	189.23	15.24	922.28	73.49	294.65

County	Fresh Water use by major classification (Mgal/d)			
	Lime rock mining	Pulp and paper	Chemical products	Phosphate mining
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	16.87	11.52
Lee	8.00	0.00	0.00	0.00
Manatee	0.00	0.00	0.00	0.31
Monroe	0.00	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	0.00
Pinellas	0.00	0.00	0.16	0.00
Sarasota	0.00	0.00	0.00	0.00
Region	0.00	0.00	16.87	11.52
Florida	49.49	225.41	175.85	181.22

Continued

EIR 43 . Concluded .

County	Fresh water use by major classification (Mgal/d) ^a			
	Citrus processing	Food processing	A/C ^b	Other
Charlotte	0 .00	0 .10	0 .00	0 .00
Collier	0 .00	0 .00	0 .00	0 .00
DeSoto	0 .74	0 .11	0 .00	0 .25
Hillsborough	0 .10	4 .35	0 .34	57 .63
Lee	0 .00	0 .00	0 .40	0 .00
Manatee	1 .51	0 .88	0 .61	0 .04
Monroe	0 .00	0 .00	0 .00	0 .00
Pasco	12 .30	0 .73	0 .00	0 .16
Pinellas	0 .39	0 .24	0 .00	0 .49
Sarasota	0 .02	0 .13	1 .80	0 .97
Region	15 .06	6 .54	3 .15	59 .54
Florida	59 .91	90 .60	55 .27	158 .01

^a Million gal per day.
^b Air conditioning.

Table EIR 44. Water used for thermoelectric power for 1977 (Leach and Healy 1980).

County	Cooling water (Mgal/d) ^a				
	Self-supplied				Public supply
	Ground water		Surface water		
	Fresh	Saline	Fresh	Saline	
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	0.00	1,957.60	0.00
Lee	0.00	0.00	0.00	568.00	0.00
Manatee	0.00	0.00	14.00	0.00	0.00
Monroe	0.00	49.30	0.00	0.00	0.00
Pasco	0.00	0.00	0.00	1,271.00	0.00
Pinellas	0.00	0.00	0.00	635.00	0.00
Sarasota	0.00	0.00	0.00	0.00	0.00
Region	0.00	49.30	14.00	4,431.60	0.00
Florida	46.40	49.30	1,309.90	14,688.90	1.54

County	Other water (Mgal/d)				
	Self-supplied			Water consumed	
	Ground Fresh	Surface Fresh	Public supply	Fresh	Saline
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	1.14	1.95	0.00	3.00	12.30
Lee	0.04	0.00	0.07	0.10	4.80
Manatee	0.01	0.00	0.00	1.30	0.00
Monroe	0.10	0.00	0.00	0.10	0.50
Pasco	0.12	0.00	0.00	0.10	11.40
Pinellas	0.15	0.00	0.00	0.10	4.70
Sarasota	0.00	0.00	0.00	0.00	0.00
Region	1.56	1.95	0.07	4.70	33.70
Florida	8.82	2.15	1.12	32.00	137.60

^a Million gal per day.

Table EIR 45. Water used for public supplies by hydrologic unit in 1977 (Leach and Healy 1980).

County	Water withdrawn (Mgal/d) ^a			Per capita
	GW ^b	SW ^c	Total	
Hydrologic unit 0309				
Charlotte	0.00	0.00	0.00	0.00
Collier	14.12	0.00	14.12	234.00
Lee	10.51	6.74	17.25 ^d	119.00
Monroe	7.20 ^d	0.00	7.20 ^d	131.00
Unit	154.33	39.62	603.46	178.00
Hydrologic unit 0310				
Charlotte	0.00	1.92	1.92	183.00
DeSoto	0.74	0.00	0.74	106.00
Hillsborough	13.42 ^e	56.64	70.06 ^e	135.00
Lee	1.76	0.00	1.76	160.00
Manatee	0.00 ^f	22.36	22.36 ^f	269.00
Pasco	3.57 ^f	0.00	3.57 ^f	133.00
Pinellas	88.68 ^g	0.00	88.68 ^g	135.00
Sarasota	9.58	1.26	10.84	105.00
Unit	154.33	82.18	236.51	144.00
Florida	1,058.99	170.85	1,229.84	172.00

Continued

Table EIR 45 . Concluded .

County	Water delivered by uses (Mgal/d)					Water consumed
	Public supply	Agriculture	Industry	Commercial	A/C ^h	
Hydrologic unit 0309						
Charlotte	0.00	0.00	0.00	0.00	0.00	0.00
Collier	11.32	2.47	0.11	0.11	0.11	6.88
Lee	14.88	0.00	1.16	1.22	0.00	3.33
Monroe	6.48	0.00	0.00	0.72	0.00	1.85
Unit	496.56	20.53	29.94	36.63	19.81	290.05
Hydrologic unit 0310						
Charlotte	1.63	0.00	0.00	0.29	0.00	0.92
DeSoto	0.67	0.00	0.04	0.03	0.00	0.00
Hillsborough	38.99	0.00	7.99	23.08	0.00	12.94
Lee	1.76	0.00	0.00	0.00	0.00	0.44
Manatee	14.14	0.00	7.87	0.35	0.00	14.77
Pasco	3.45	0.00	0.00	0.12	0.00	1.49
Pinellas	65.92	0.00	2.66	15.87	4.23	16.75
Sarasota	7.38	0.64	0.30	2.32	0.21	2.70
Unit	167.25	1.47	19.70	43.66	4.44	69.38
Florida	959.19	23.84	92.88	124.26	29.67	507.49

^a Million gal per day.

^b Ground water .

^c Surface water .

^d Includes 5.96 Mgal/d imported from Dade County and 1.24 Mgal/d produced by the desalination plant at Stock Island, FL .

^e Does not include 27.96 Mgal/d exported to Pinellas County .

^f Does not include 18.1 Mgal/d exported to Pinellas County .

^g Includes 27.96 Mgal/d exported from Hillsborough County and 18.1 Mgal/d exported from Pasco County .

^h Air conditioning .

Table EIR 46 . Rural water use by hydrologic unit in 1977 (Leach and Healy 1980) .

County	Domestic use (Mgal/d) ^a				Livestock use (Mgal/d)			
	Withdrawn				Withdrawn			
	SW ^b	GW ^c	All	Consumed	SW	GW	All	Consumed
Hydrologic unit 0309								
Charlotte	0 .00	0 .17	0 .17	0 .04	0 .00	0 .11	0 .11	0 .11
Collier	0 .45	0 .61	1 .06	0 .16	0 .00	0 .31	0 .31	0 .31
Lee	0 .00	2 .24	2 .24	0 .30	0 .04	0 .31	0 .35	0 .35
Monroe	0 .00	0 .02	0 .02	0 .01	0 .00	0 .00	0 .00	0 .00
Unit	0 .90	44 .08	44 .98	12 .53	6 .64	13 .73	20 .37	20 .37
Hydrologic unit 0310								
Charlotte	0 .00	1 .06	1 .06	0 .27	0 .00	0 .27	0 .27	0 .27
DeSoto	0 .00	1 .12	1 .12	0 .28	0 .00	1 .04	1 .04	1 .04
Hillsborough	0 .00	8 .73	8 .73	1 .96	0 .00	4 .39	4 .39	4 .39
Lee	0 .00	0 .20	0 .20	0 .05	0 .00	0 .04	0 .04	0 .04
Manatee	0 .00	4 .68	4 .68	1 .17	0 .20	1 .80	2 .00	2 .00
Pasco	0 .00	11 .55	11 .55	2 .89	0 .00	1 .80	1 .80	1 .80
Pinellas	0 .00	2 .91	2 .91	1 .61	0 .02	0 .54	0 .56	0 .56
Sarasota	0 .00	6 .70	6 .70	1 .68	0 .19	0 .28	0 .47	0 .47
Unit	0 .00	54 .54	54 .54	14 .31	0 .59	14 .18	14 .77	14 .77
Florida	1 .01	191 .81	192 .82	50 .26	20 .07	44 .00	64 .07	64 .07

Continued

Table EIR 46. Concluded.

County	All uses (Mgal/d)			Consumed
	Withdrawn		All	
	SW	GW		
Hydrologic unit 0309				
Charlotte	0.00	0.28	0.28	0.15
Collier	0.45	0.92	1.37	0.47
Lee	0.04	2.55	2.59	0.65
Monroe	0.00	0.02	0.02	0.01
Unit	7.54	57.81	65.35	32.90
Hydrologic unit 0310				
Charlotte	0.00	1.33	1.33	0.54
DeSoto	0.00	2.16	2.16	1.32
Hillsborough	0.00	13.12	13.12	6.35
Lee	0.00	0.24	0.24	0.09
Manatee	0.20	6.48	6.68	3.17
Pasco	0.00	13.35	13.35	4.69
Pinellas	0.02	3.45	3.47	2.17
Sarasota	0.19	6.98	7.17	2.15
Unit	0.59	68.72	69.31	29.08
Florida	21.08	235.81	256.89	114.33

- a Million gal per day
- b Surface water.
- c Ground water.

Table EIR 47. Water used for irrigation by hydrologic unit in 1977 (Leach and Healy 1980).

County	Total water withdrawn (Mgal/d) ^a				
	SW ^b	GW ^c	All	Conveyance loss	Consumptive use
Hydrologic unit 0309					
Charlotte	0.00	6.67	6.67	0.00	2.46
Collier	4.82	72.62	77.44	14.40	34.92
Lee	19.35	61.05	80.41	0.92	36.17
Monroe	0.00	0.04	0.04	0.00	0.01
Unit	1236.86	660.63	1897.49	175.62	812.39
Hydrologic unit 0310					
Charlotte	0.00	14.23	14.23	0.00	5.42
DeSoto	1.93	62.06	64.00	0.00	42.80
Hillsborough	2.52	47.89	50.41	0.00	36.43
Lee	3.15	9.94	13.09	0.15	5.89
Manatee	2.16	40.98	43.14	0.00	4.72
Pasco	7.31	29.29	36.60	0.00	22.63
Pinellas	0.00	28.08	28.08	0.00	8.31
Sarasota	2.49	22.37	24.86	0.00	20.74
Unit	32.16	387.94	420.10	0.58	254.40
Florida	1,449.30	1,423.25	2,872.55	191.74	1,255.23

^a Million gal per day.

^b Surface water.

^c Ground water.

Table EIR 48. Self-supplied water for industrial use by hydrologic unit in 1977 (Leach and Healy 1980).

County	Water withdrawn (Mgal/d) ^a						Water consumed
	Ground water		Surface water		All water		
	Fresh	Saline	Fresh	Saline	Fresh	Saline	
Hydrologic unit 0309							
Charlotte	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lee	0.40	0.00	8.00	0.00	8.40	0.00	0.02
Monroe	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unit	30.35	0.00	76.74	0.00	107.09	0.00	27.16
Hydrologic unit 0310							
Charlotte	0.10	0.00	0.00	0.00	0.10	0.00	0.10
DeSoto	1.10	0.00	0.00	0.00	1.10	0.00	0.11
Hillsborough	26.76	56.65	7.40	0.00	34.16	56.65	10.80
Lee	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manatee	3.35	0.00	0.00	0.00	3.35	0.00	0.47
Pasco	13.19	0.00	0.00	0.00	13.19	0.00	6.45
Pinellas	1.28	0.00	0.00	0.00	1.28	0.00	0.56
Sarasota	2.92	0.00	0.00	0.00	2.92	0.00	0.59
Unit	337.65	56.65	7.40	0.00	345.05	56.65	103.91
Florida	733.06	58.25	189.23	15.24	922.29	73.49	294.65

Continued

Table EIR 48. Continued

County	Fresh water use by major classification (Mgal/d) ^a			
	Limerock mining	Pulp and paper	Chemical products	Phosphate mining
Hydrologic unit 0309				
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
Lee	8.00	0.00	0.00	0.00
Monroe	0.00	0.00	0.00	0.00
Unit	8.00	0.00	1.25	0.00
Hydrologic unit 0310				
Charlotte	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	16.87	11.52
Lee	0.00	0.00	0.00	0.00
Manatee	0.00	0.00	0.00	0.31
Pasco	0.00	0.00	0.00	0.00
Pinellas	0.00	0.00	0.16	0.00
Sarasota	0.00	0.00	0.00	0.00
Unit	40.46	0.00	90.98	154.92
Florida	49.49	225.41	175.85	181.22

Continued

Table EIR 48. Concluded.

County	Fresh water use by major classification (Mgal/d) ^a			
	Citrus processing	Food processing	A/C ^b	Other
Hydrologic unit 0309				
Charlotte	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00
Lee	0.00	0.00	0.40	0.00
Monroe	0.00	0.00	0.00	0.00
Unit	7.94	68.07	0.40	21.41
Hydrologic unit 0310				
Charlotte	0.00	0.10	0.00	0.00
DeSoto	0.74	0.11	0.00	0.25
Hillsborough	0.10	4.35	0.34	57.63
Lee	0.00	0.00	0.00	0.00
Manatee	1.51	0.88	0.61	0.04
Pasco	12.30	0.73	0.00	0.16
Pinellas	0.39	0.24	0.00	0.49
Sarasota	0.02	0.13	1.80	0.97
Unit	26.75	15.88	2.75	69.96
Florida	59.91	90.60	55.27	158.01

^a Million gal per day.

^b Air conditioning.

Table EIR 49. Water used for thermoelectric power by hydrologic unit in 1977 (Leach and Healy 1980).

County	Cooling water (Mgal/d) ^a				
	Self-supplied				Public supply
	Ground water		Surface water		
	Fresh	Saline	Fresh	Saline	
Hydrologic unit 0309					
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.00	0.00	0.00	568.00	0.00
Monroe	0.00	49.30	0.00	0.00	0.00
Unit	1.00	49.30	95.20	5,107.30	0.63
Hydrologic unit 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	0.00	0.00	0.00	1,957.60	0.00
Lee	0.00	0.00	0.00	0.00	0.00
Manatee	0.00	0.00	14.00	0.00	0.00
Pasco	0.00	0.00	0.00	1,271.00	0.00
Pinellas	0.00	0.00	0.00	635.00	0.00
Sarasota	0.00	0.00	0.00	0.00	0.00
Unit	0.00	0.00	236.90	5,755.80	0.00
Florida	46.40	49.30	1,309.90	14,688.90	1.54

Continued

Table EIR 49 . Concluded .

County	Other water (Mgal/d)				
	Self-supplied		Public supply	Consumed	
	Ground Fresh	Surface Fresh		Fresh	Saline
Hydrologic unit 0309					
Charlotte	0.00	0.00	0.00	0.00	0.00
Collier	0.00	0.00	0.00	0.00	0.00
Lee	0.04	0.00	0.07	0.10	4.80
Monroe	0.10	0.00	0.00	0.10	0.50
Unit	0.89	0.03	1.07	2.10	74.30
Hydrologic unit 0310					
Charlotte	0.00	0.00	0.00	0.00	0.00
DeSoto	0.00	0.00	0.00	0.00	0.00
Hillsborough	1.14	1.95	0.00	3.00	12.30
Lee	0.00	0.00	0.00	0.00	0.00
Manatee	0.01	0.00	0.00	1.30	0.00
Pasco	0.12	0.00	0.00	0.01	11.40
Pinellas	0.15	0.00	0.00	0.10	4.70
Sarasota	0.00	0.00	0.00	0.00	0.00
Unit	2.38	1.95	0.00	8.00	43.90
Florida	8.82	2.15	1.12	32.00	137.60

^a Million gal per day .

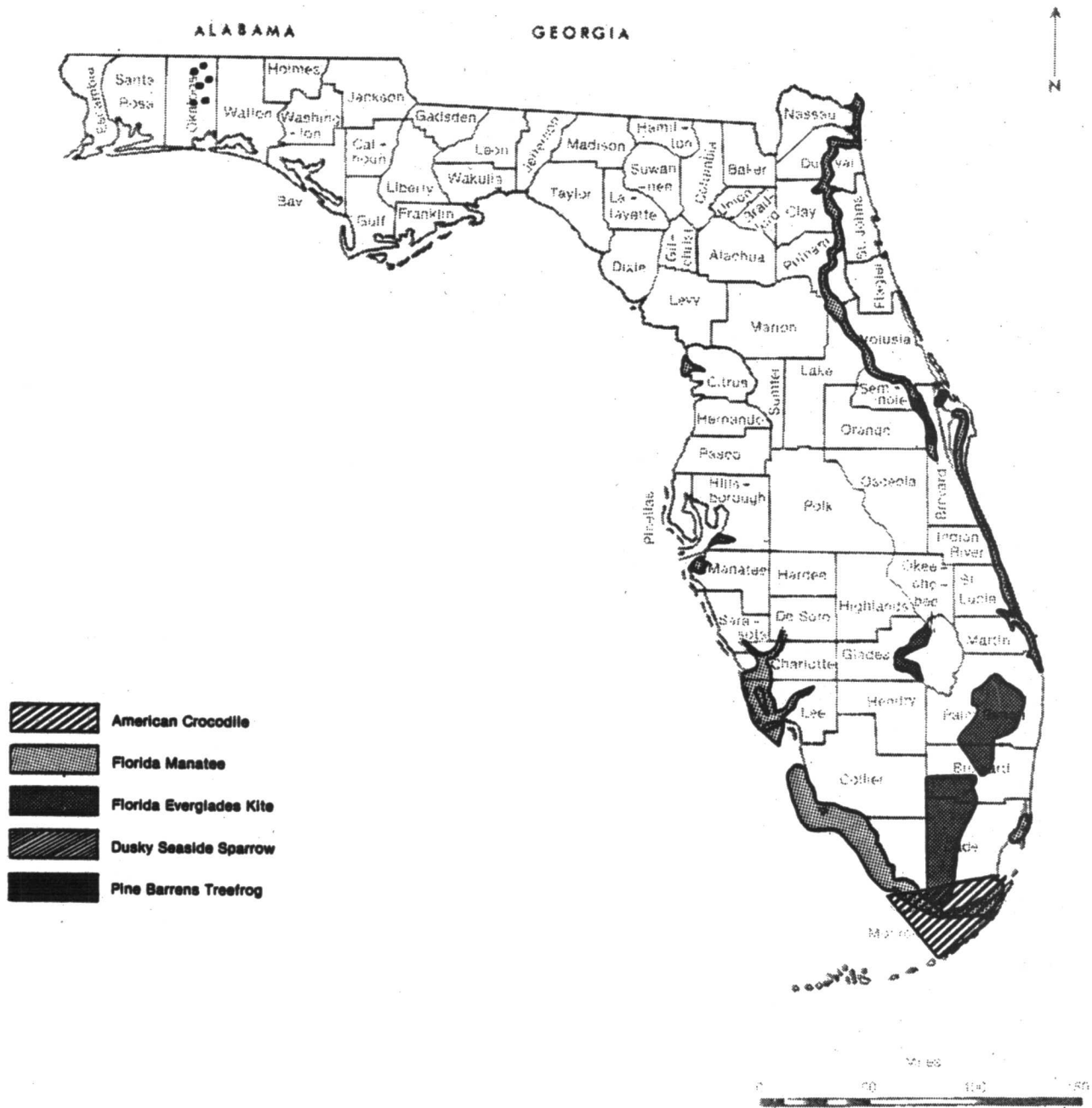


Figure 14. Critical habitats in Florida (Florida Power and Light Co. 1979).



Figure 15. Areas of critical State concern (Florida Power and Light Co. 1979).

Table EIR 50. Endangered and threatened species in Charlotte County (Miller 1980).

<u>Common Name</u>	<u>Scientific Name</u>
<u>Threatened Mammals</u>	
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Endangered Birds</u>	
Red-cockaded woodpecker	<u>Picoides borealis</u>
<u>Threatened Birds</u>	
Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Threatened Plants</u>	
Curtiss milkweed	<u>Asclepias curtissii</u>
Prickly-apple	<u>Cereus gracilis</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 51. Endangered and threatened species in Collier County (Miller 1980).

<u>Common Name</u>	<u>Scientific Name</u>
<u>Endangered Mammals</u>	
Mangrove fox squirrel	<u>Sciurus niger avicennia</u>
<u>Threatened Mammals</u>	
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Endangered Birds</u>	
Wood stork	<u>Mycteria americana</u>
Red-cockaded woodpecker	<u>Picoides borealis</u>
Cape sable seaside sparrow	<u>Ammodramus maritima mirabilis</u>
<u>Threatened Birds</u>	
Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Endangered Plants</u>	
Auricled spleenwort	<u>Asplenium auritum</u>
Bird's-nest spleenwort	<u>Asplenium serratum</u>
Rat-tail orchid	<u>Bulbophyllum pachyrhachis</u>

Continued

Table EIR 51. Concluded.

<u>Common Name</u>	<u>Scientific Name</u>
<u>Endangered Plants</u>	
Auricled spleenwort	<u>Asplenium auritum</u>
Bird's-nest spleenwort	<u>Asplenium serratum</u>
Rat-tail orchid	<u>Bulbophyllum pachyrhachis</u>
Leafless orchid	<u>Campylocentrum pachyrrhizum</u>
Narrow strap fern	<u>Campyloneurum angustifolium</u>
Nodding catopsis	<u>Catopsis nutans</u>
Dwarf epidendrum	<u>Encyclia pygmaea</u>
Acuna's epidendrum	<u>Epidendrum acunae</u>
Wild cotton	<u>Gossypium hirsutum</u>
Hanging club-moss	<u>Lycopodium dichotomum</u>
Hidden orchid	<u>Maxillaria crassifolia</u>
Hand fern	<u>Ophioglossum palmatum</u>
Snake orchid	<u>Restrepiella ophiocephala</u>
<u>Threatened Plants</u>	
Curtiss milkweed	<u>Asclepias curtissii</u>
Prickly-apple	<u>Cereus gracilis</u>
Night-scent orchid	<u>Epidendrum nocturnum</u>
Pineland jacquemontia	<u>Jacquemontia curtissii</u>
Twisted air-plant	<u>Tillandsia flexuosa</u>
Fuzzy-wuzzy air-plant	<u>Tillandsia pruinosa</u>

Table EIR 52. Endangered and threatened species in DeSoto County (Miller 1980).

<u>Common Name</u>	<u>Scientific Name</u>
<u>Threatened Mammals</u>	
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Endangered Birds</u>	
Ivory-billed woodpecker	<u>Campephilus principalis</u>
<u>Threatened Birds</u>	
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
Sand skink	<u>Neoseps reynoldsi</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Threatened Plants</u>	
Curtiss milkweed	<u>Asclepias curtissii</u>
Florida bonamia	<u>Bonamia grandiflora</u>
Edison's ascyrum	<u>Hypericum edisonianum</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 53. Endangered and threatened species in Hillsborough County (Miller 1980).

<u>Common Name</u>	<u>Scientific Name</u>
<u>Threatened Mammals</u>	
Shermans fox squirrel	<u>Sciurus niger shermani</u>
Florida mouse	<u>Peromyscus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Endangered Birds</u>	
Wood stork	<u>Mycteria americana</u>
<u>Threatened Birds</u>	
Florida sandhill crane	<u>Grus canadensis pratensis</u>
<u>Endangered Reptiles</u>	
Short-tailed snake	<u>Stilosoma extenuatum</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Endangered Plants</u>	
Auricled spleenwort	<u>Asplenium auritum</u>
Florida golden-aster	<u>Chrysopsis floridana</u>

Continued

Table EIR 53. Concluded.

<u>Common Name</u>	<u>Scientific Name</u>
	<u>Threatened Mammals</u>
Curtiss milkweed	<u>Asclepias curtissii</u>
Needle palm	<u>Rhapidophyllum hystrix</u>
Jackson-vine	<u>Smilax smallii</u>

Table EIR 54. Endangered and threatened species in Lee County (Miller 1980).

<u>Endangered Mammals</u>	
<u>Common Name</u>	<u>Scientific Name</u>
Mangrove fox squirrel	<u>Sciurus niger shermani</u>
<u>Threatened Mammals</u>	
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Threatened Birds</u>	
Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Endangered Plants</u>	
Hand fern	<u>Ophioglossum palmatum</u>

Continued

Table EIR 54. Concluded.

<u>Threatened Plants</u>	
<u>Common Name</u>	<u>Scientific Name</u>
Curtiss milkweed	<u>Asclepias curtissii</u>
Prickly-apple	<u>Cereus gracilis</u>
Twisted air-plant	<u>Tillandsia flexuosa</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 55. Endangered and threatened species in Manatee County (Miller 1980).

Threatened Mammals

<u>Common Name</u>	<u>Scientific Name</u>
Florida mouse	<u>Peromyscus floridanus</u>
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>

Threatened Birds

Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>

Threatened Reptiles

Gopher tortoise	<u>Gopherus polyphemus</u>
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Threatened Amphibians

Florida gopher frog	<u>Rana areolata aesopus</u>
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Threatened Plants

Curtiss milkweed	<u>Asclepias curtissii</u>
Florida bonamia	<u>Bonamia grandiflora</u>
Prickly-apple	<u>Cereus gracilis</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 56. Endangered and threatened species in Pasco County (Miller 1980).

<u>Threatened Mammals</u>	
<u>Common Name</u>	<u>Scientific Name</u>
Shermans fox squirrel	<u>Scirus niger shermani</u>
Florida mouse	<u>Peromyscus floridanus</u>
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>
<u>Threatened Birds</u>	
Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>
<u>Endangered Reptiles</u>	
Short-tailed snake	<u>Stilosoma extenuatum</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata aesopus</u>
<u>Endangered Plants</u>	
Auricled spleenwort	<u>Asplenium auritum</u>
<u>Threatened Plants</u>	
Needle palm	<u>Rhapidophyllum hystrix</u>
Jackson-vine	<u>Smilax smallii</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 57. Endangered and threatened species in Pinellas County (Miller 1980).

<u>Threatened Mammals</u>	
<u>Common Name</u>	<u>Scientific Name</u>
Shermans fox squirrel	<u>Scirus niger shermani</u>
Florida mouse	<u>Peromyscus floridanus</u>
<u>Threatened Birds</u>	
Southern bald eagle	<u>Haliaeetus leucocephalus</u> leucocephalus
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens</u> coerulescens
<u>Endangered Reptiles</u>	
Short-tailed snake	<u>Stilosoma extenuatum</u>
<u>Threatened Reptiles</u>	
Gopher tortoise	<u>Gopherus polyphemus</u>
<u>Threatened Amphibians</u>	
Florida gopher frog	<u>Rana areolata</u> aesopus
<u>Endangered Plants</u>	
Florida golden-aster	<u>Chrysopsis floridana</u>
<u>Threatened Plants</u>	
Curtiss milkweed	<u>Asclepias curtissii</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 58. Endangered and threatened species in Sarasota County (Miller 1980)

Threatened Mammals

<u>Common Name</u>	<u>Scientific Name</u>
Florida mouse	<u>Peromyscus floridanus</u>
Florida black bear	<u>Ursus americanus floridanus</u>
West Indian manatee	<u>Trichechus manatus latirostris</u>

Threatened Birds

Southern bald eagle	<u>Haliaeetus leucocephalus leucocephalus</u>
Audubon's caracara	<u>Caracara cheriway auduboni</u>
Florida sandhill crane	<u>Grus canadensis pratensis</u>
Least tern	<u>Sterna albifrons</u>
Florida scrub jay	<u>Aphelocoma coerulescens coerulescens</u>

Endangered Reptiles

Short-tailed snake	<u>Stilosoma extenuatum</u>
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Threatened Reptiles

Gopher tortoise	<u>Gopherus polyphemus</u>
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Threatened Amphibians

Florida gopher frog	<u>Rana areolata aesopus</u>
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Threatened Plants

Florida bonamia	<u>Bonamia grandiflora</u>
Prickly-apple	<u>Cereus gracilis</u>
Florida coontie	<u>Zamia floridana</u>

Table EIR 59. Developments of regional impact (DRI), binding letters of interpretation, requests for determination for 1973-1980^a (Florida Department of Community Affairs 1980b).

Year and county	Name	Type of development	Remarks and dates
<u>1973</u>			
Hillsborough	U.S. 301 Industrial Park	Industrial	Not a DRI 10-15-73
Pasco	Sherman & Co. (Key Vista)	Residential	DRI 10-15-73
	Suncoast Highland Corp.,	Residential	Not a DRI 11-6-73
	Unnamed mining operation	Mining	Not a DRI 12-19-73
Sarasota	Bent Tree Village	Residential	Not a DRI 12-28-73
<u>1974</u>			
Charlotte	S. Punta Gorda Heights Subdivision, 8th addition	Residential	Not a DRI
	Mobile Home Park	Residential	Not a DRI
Hillsborough	Tampa Terminal	Industrial plant, port	DRI
	Sabal Industrial Park	Industrial park	Not a DRI
	Agrico Chemical Co.	Port	Not a DRI
	W.R. Grace and Co.	Industrial plant	Not a DRI
Lee	Boca Grand Isles	Residential	Not a DRI
Monroe	Island in the Sun	Residential	DRI
Pasco	Residential development	Residential	Not a DRI
	Highland Meadows	Residential	Not a DRI
	Pithlachasootee River Bridge	Bridge	Not a DRI
	Unnamed	Residential	DRI
	Starkey Wellfield	N.D.	Not a DRI
	Cypress Creek	N.D.	Not a DRI

Continued

Table EIR 59. Continued.

Year and county	Name	Type of development	Remarks and dates
Pinellas	Oyster Landing	Port, residential	Not a DRI
	Suncoast Highlands #11	Residential	DRI
	Suncoast Highlands #12, #13	Residential	DRI
	Suncoast Highlands #14	Residential	DRI
	Anclote transmission line	Transmission line	Not a DRI
	Bullard's Bay	Residential	DRI
	Crosswinds Mall	Shopping center	DRI
	Bretton Woods	Residential	Not a DRI
	Bayway Isles	Residential	Not a DRI
	Cooper's Bayou	Shopping center	DRI
Sarasota	Cooper's Bayou Peninsula	Office park, shopping	DRI
	Cooper's Bayou Peninsula	Residential, shopping	DRI
	Sarasota-Bradenton Airport project	Airport	Not a DRI
	Lemon Bay Hospital	Hospital	DRI
	Venice Dolomite Co.	Mining	Not a DRI
	Sarasota-Bradenton Airport	Airport	Not a DRI
	Longwood properties	Residential	Not a DRI
<u>1975</u>			
Charlotte	Audubon Estates	Residential	Not a DRI
Collier	Park Shore boat docks	Port	DRI
DeSoto	Peace River regional water treatment plant	Water treatment	Not a DRI
Hillsborough	Crippenwood and Lake Hiawatha	Residential	Not a DRI
	Hillsborough Regional Office Building	Office	DRI
	Albamar at Nine Eagles	Residential	DRI
	Tampa Dog Track	Attractions	Not a DRI
	Ragg Ranch	Residential	Not a DRI

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Table EIR 59. Continued.

Year and county	Name	Type of development	Remarks and dates
Monroe	Ocean Reef Club, Inc.	Port	Not a DRI
Pinellas	U.S. Home of Florida, Inc.	Residential	Not a DRI
	Cooper's Bayou Development	Residential, shopping	Not a DRI
	Coventry Estates Development	Residential, shopping	Not a DRI
Sarasota	Unnamed shopping center	Shopping	Not a DRI
<u>1976</u>			
Charlotte	Charlotte County Airport and Industrial Park	Airport, industry	DRI
Hillsborough	Albamar Development reconsideration	Residential	Not a DRI
	Tampa Dog Track	Attractions	Not a DRI
	Tampa Port Authority storage facility	Petroleum storage	Not a DRI
	Busch Gardens expansion	Attractions	Not a DRI
Lee	Lochmoor Land and Development, Ltd.	Port facility	Not a DRI
Pinellas	Gulfport City Marina	Port facility	Not a DRI
	Pinellas County solid waste disposal complex	Waste disposal	Not a DRI
Sarasota	Sarasota-Bradenton Airport improvements	Airport	Not a DRI
	Sarasota Kennel Club grandstand replacements	Attractions	Not a DRI
<u>1977</u>			
Charlotte	Holiday Mobil Estates	Residential	Not a DRI
	Mobile Home Subdivision	Residential	Withdrawn
	Lemon Bay Golf and Tennis Club, Inc.	Attractions	Not a DRI
	Arcadia-Charlotte-Beker-Manatee transmission line	Transmission line	DRI

Continued

Table EIR 59. Continued.

Year and county	Name	Type of development	Remarks and dates
Hillsborough	Tampa Harbor deepening project	Port facility	Withdrawn
Lee	Agrico Big Bend Terminal	Port facility	Not a DRI
	Cape Coral Units 75, 74-1, 76, 83-1, 98-1, 90A, 77	Residential	Withdrawn
DeSoto	Estero Woods Village	Residential	Not a DRI
Manatee	Arcadia-Charlotte-Beker-Manatee transmission line	Transmission line	DRI
Manatee	Arcadia-Charlotte, Beker, Manatee Transmission Line	Transmission line	DRI
Pinellas	Countryside N. and S. additions	Office, residential, shopping	N. not a DRI S. DRI
Sarasota	Watergate Center, Ltd.	Office, shopping	Not a DRI
<u>1978</u>			
Charlotte	Charlotte County Airport improvements	Airport	DRI
Hillsborough	Expansion of Rent-a-Car facilities at Tampa International Airport	Airport	Not a DRI
Lee	South Pointe	Residential	Not a DRI
	Mobile home park	Residential	Not a DRI
	Lee County Electrical Cooperative transmission line	Transmission line	Not a DRI
	Cove Marina	Port facility	Not a DRI
Manatee	New Palmetto Marina	Port facility	Not a DRI
Pasco	Anclote Power Plant, new tank	Petroleum storage	Not a DRI
Pinellas	Countryside S. addition	Residential	Not a DRI
	Forest Lakes	Office, residential, shopping	DRI
Sarasota	The Royal Club	Residential	Withdrawn
	Bird Bay Village	Residential	DRI

Continued

Table EIR 59 . Continued .

Year and county	Name	Type of development	Remarks and dates
<u>1979</u>			
Charlotte	Lemon Bay Isles, reconsideration	Residential	DRI
	Lemon Bay Isles	Residential	Not a DRI
Collier	Wiggins Pass Yacht Club	Port facility	Not a DRI
DeSoto	Arcadia Municipal Airport	Airport	Not a DRI
	Craigs Travel and Mobile Park	Residential	Not a DRI
Hillsborough	St. Lucie Catholic Benevolent Association	Office	Not a DRI
	TECO Center	Office	Not a DRI
	Colonial Penn Center, reconsidered	Office	DRI 8-22-79 DRI 11-15-79
	Horizon at Tampa Bay Park	Office	Withdrawn
	Tampa Terminals	Port facility	Not a DRI
	Sheraton Hotel at Busch Gardens	Shopping	Not a DRI
	The Metropolitan Bank Building	Office	Not a DRI
	The Plaza	Office	Not a DRI
Lee	Sanibel Bay Yacht Club	Port facility	Not a DRI
Pinellas	Higgins Plan new tank	Port facility	Withdrawn
	Madeira Beach Municipal Marina	Port facility	Not a DRI
	East Cove Marina	Port facility	N.D.
<u>1980</u>			
Hillsborough	Busch Gardens	Attractions	DRI
	Austin Center West	Office	Not a DRI
	Old Hyde Park Village	Residential	Not a DRI
	Hopewell phosphate project	Mining	DRI
	Office Tower #3	Office	N.D.

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Table EIR 59. Concluded.

Year and county	Name	Type of development	Remarks and dates
Lee	Lee County Jail and Justice Center	Office	Not a DRI
	University of South Florida,		DRI 7-18-80
	Fort Myers	School	Not a DRI 8-14-80
	Lehigh Mobile Home Park	Residential	Not a DRI
	Kelly Greens-JAB Enterprises	Residential	Not a DRI
Pasco	Meadow Oaks	Residential	N.D.
Sarasota	Englewood Village	Shopping	Not a DRI

^a As of 10 October 1980.

Table EIR 60. Developments of Regional Impact, type size and status for fiscal years 1973-74, 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 as of 10 October 1980 (Florida Department of Community Affairs 1980b).

Fiscal year and county	Name	Type	Size	Development order status
<u>FY 1973-74</u>				
Charlotte	Deer Run	Residential	23,548 d.u. ^a	Withdrawn
	Colony Bay Estates	Residential	1,150 d.u.	Pending
Collier	King's Lake	Residential	1,200 d.u.	Approved
	Bridle Path	Residential	1,226 d.u.	Approved with conditions
DeSoto	Deer Run	Residential	28,110 d.u.	Withdrawn
Hillsborough	Lonesome Mine	Mine	18,347 acres	Approved with conditions
	Horatio Corp.	Residential	7,000 d.u.	Withdrawn
	Big Bend Oil storage	Oil	100 tbb1 ^b	Approved with conditions
	Carrolwood Village	Residential	4,919 d.u. ²	Approved with conditions
	Tampa Northwest, Ltd.	Shopping	840,000 ft ²	Approved with conditions
	Wet phosphate rock terminal	Port	216 acres	Approved with conditions
	Eastlake Square Shopping Mall	Shopping	1,050,000 ft ²	Approved with conditions
	Broward Regional Shopping Center	Shopping	1,050,000 ft ²	To be submitted
	Kingsford Tract	Mine	6,933 acres	Approved with conditions
	Brandon Regional Shopping Center	Shopping	527,000 ft ²	Approved with conditions
	Dominion	Residential	16,125 d.u.	Withdrawn
Lee	Sandpiper Cove	Residential	2,560 d.u.	Approved with conditions
	Cypress Lakes Land	Residential	4,190 d.u.	Approved with conditions
	The Villas South	Shopping	1,359,072 ft ²	Approved with conditions
Manatee	Clean fuel processing facility	Oil	11,739 tbb1	Withdrawn
	Offshore and deepwater tanker Terminal	Port		Withdrawn
	Port of Manatee	Oil	1,000 tbb1	Approved with conditions
	Unnamed mining operation	Mine	9,165 acres	Denied

Continued

Table EIR 60. Continued.

Fiscal year and county	Name	Type	Size	Development order status
Monroe	North Largo Yacht Club	Residential	2,747 d.u.	Approved with conditions
	Blue Hammock Yacht Club and Marina	Residential	1,740 d.u.	Approved with conditions
Pasco	Deerfield Village	Residential	2,446 d.u.	Approved with conditions
	Highlands Unit 10	Residential	579 d.u.	Approved with conditions
	Lake Padgett Pines	Residential	8,800 d.u.	Approved with conditions
Pinellas	Bayonett Point Shopping Mall	Shopping	1,189,077 ft ²	Approved with conditions
	Pinellas Park Shopping Mall	Shopping	709,000 ft ²	Approved with conditions
	Eastlake Woodlands	Residential	5,685 d.u.	Approved with conditions
	Centennial	Residential	10,000 d.u.	Approved with conditions
	Lake Tarpon Village	Residential	20,100 d.u.	Approved with conditions
	Carriage Hill Mall	Shopping	740,000 ft ²	Approved with conditions
Sarasota	Beneva Lakes Community	Residential	2,625 d.u.	Denied
	Community Alpha	Residential	2,370 d.u.	Denied
	Unnamed	Residential	3,302 d.u.	Withdrawn
	Clark Road Shopping Center	Shopping	858,000 ft ²	Withdrawn
	Capri Isles #2	Residential	2,200 d.u.	Approved with conditions
	The Meadows	Residential	4,902 d.u.	Approved with conditions
	Arlen Shopping Center	Shopping	766,000 ft ²	Approved with conditions
	Myakka Estates	Residential	19,037 d.u.	Approved with conditions
<u>FY 1974-75</u>				
Collier	Krehling new community	Residential	2,000 d.u.	Approved with conditions
DeSoto	Phosphate mine and beneficiation	Mine	10,700 acres	Approved with conditions

Continued

Table EIR 60. Continued.

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Fiscal year and county	Name	Type	Size	Development order status
<u>FY 1974-75</u>				
Hillsborough	Bloomingdale Project	Residential	6,853 d.u.	Approved with conditions
	Trout Creek Rud	Residential	16,180 acres	Withdrawn
Lee	Agrico Port Supplemental Development	Port	400 acres	Approved with conditions
	Borden Big 4 Phosphate Mine	Mine	5,720 acres	Approved with conditions
	The Estuaries (Rud)	Residential	26,500 d.u.	Approved with conditions
	Beker Phosphate Corp.	Mine	10,971 acres	Approved with conditions
Manatee	Harbor Ventures	Residential	4,900 d.u.	Approved with conditions
	Spoonbill Bay	Residential	1,778 d.u.	Approved with conditions
	Phosphate Mine and Beneficiation	Mine	10,700 acres	Approved with conditions
	Gulf View Square	Shopping	956,000 ft ²	Approved with conditions
Pasco	Sugar Creek	Residential	3,583 d.u.	Approved with conditions
	Sunset Lakes Corporation	Residential	2,555 d.u.	Approved with conditions
	Turtle Lakes Rud Stones Throw	Residential	1,969 d.u. ²	Withdrawn
	North Lake Village	Office	400,000 ft ²	Withdrawn
Pinellas	North Lake Village	Shopping	1,100,000 ft ²	Withdrawn
	Boot Ranch	Residential	4,000 d.u.	Withdrawn
Sarasota	Mayakka Estates Units 5,6,7	Residential	3,906 d.u.	On appeal
	Jacaranda West	Residential	2,958 d.u.	Approved with conditions
<u>FY 1975-76</u>				
Collier	Lely Country Club	Residential	1,115 d.u.	Approved with conditions
	Pelican Bay	Residential	12,000 d.u.	Approved with conditions
Hillsborough	Four Corners Mine	Mine	18,685 acres	Approved with conditions
	Regional Service Center	Office	410,509 ft ²	Approved with conditions

Continued

Table EIR 60. Concluded.

Fiscal year and county	Name	Type	Size	Development order status
<u>FY 1977-78</u>				
Pinellas	Bayborough Campus, University of South Florida	School	5,000 students	Approved with conditions
	Forest Lakes	Residential	5,337 d.u.	Approved with conditions
<u>FY 1978-79</u>				
Charlotte	Charlotte County Airport improvements	Airport		Approved with conditions
Hillsborough	The Quad Block	Office	844 ft ²	Approved with conditions
<u>FY 1979-80</u>				
Collier	The Commons Professional Park	Office	693,000 ft ²	Approved with conditions
Hillsborough	Tampa Bay Park	Shopping	406,000 ft ²	Approved with conditions
	Tampa Palms	Residential	13,497 d.u.	Pending
	Gardineer, Inc.	Industrial	846 acres	Approved with conditions
Lee	Cape Coral Unit #86	Residential	2,468 d.u.	Pending
Manatee	Tara	Residential	4,040 d.u.	Pending
Pasco	The Lakes	Residential	1,621 d.u.	Pending

^a Dwelling units.
^b Thousand barrels.

Table EIR 61. Permanent network stations^a of Southwest Florida by geographical areas (Department of Environmental Regulation, Bureau of Water Management 1979c).

Central area	Streams			
	Station #	Southern area	Station #	Station #
Alafia River upn	24020008	Caloosahatchee River up	28020022	20030212
Alafia River ups	24020019	Caloosahatchee River low	28020006	20020001
Alafia River low	24020003	Fisheating Creek	26010592	20020012
Arbuckle Creek	26010029	Hilsboro Canal	28030500	20020071
Econolockhatchee River	20010130	Miami Canal	28042070	20020079
Hillsborough River	24030059	St. Lucie Canal	28010017	20130004
Horse Creek	25020111	Tamiami Canal	28042071	20030213
Kissimmee River low	26010028			20010002
Little Wekiva River	20010137			19010002
Myakka River	25030403			19010001
Peace River up	25020008			20120006
Peace River mid	25020004			21020035
Shell Creek	25020120			21020031
Shingle Creek	26010016			27010023
Weeki Wachee River run	24040795			23010455

Continued

Table EIR 61. Continued.

Central area	Estuaries			
	Station #	Southern area	Station #	Station #
Banana River	27010550	Biscayne Bay. N.	28040349	19020005
Hillsborough Bay	24030207	Biscayne Bay S.	28040380	19020013
Indian River	27010581	Estero Bay	28020117	27010037
Middle Tampa Bay	24010190	Pennekamp Park	28040975	27010097
Peace River	25020001			
Sebastian River	27020335			
Tampa Bay	24010230			

Central area	Lakes			
	Station #	Southern area	Station #	Station #
Lake Apopka	20020360	Lake Okeechobee N.	26010523	20030373
Lake Butler	26010107	Lake Okeechobee S.	28010702	
Lake Eustis	20020368	Lake Okeechobee E.	26010524	
Lake Griffin	20020381			
Lake Istokpoga	26010502			
Lake Jessup	20010183			
Lake Kissimmee	26010094			
Lake Monroe	20010003			
Lake Reedy	26010201			

Continued

Table EIR 61 . Concluded .

Central area	Lakes			
	Station #	Southern area	Station #	Station #
Lake Thonotasassa	24030029			
Lake Tohopekalga	26010073			
Lake Isala Apopka	23010013			
Lake Washington	20010115			

^a Established in 1973 for the purpose of monitoring water quality in Florida lakes, streams, and estuaries .

Table EIR 62. Treatment capacity needs and costs through the year 2000 (Department of Environmental Regulation, Office of Economic Analysis 1981d).

County	Population ^a growth rate	Growth in design capacity (Mgal/d)	# of new facilities ^b expected	Single ^b plants capital costs (millions \$)	Estimated total ^c capital costs (millions \$)
Charlotte	5.70	10.58	146.00	12.25	55.75
Collier	5.70	13.71	179.00	14.67	70.98
DeSoto	3.30	1.41	13.00	3.01	6.54
Hillsborough	3.90	100.53	207.00	58.71	296.93
Lee	5.70	67.15	398.00	44.33	273.55
Manatee	3.00	13.16	74.00	14.41	53.21
Monroe	3.10	6.78	119.00	3.99	38.47
Pasco	3.90	15.81	141.00	16.20	72.99
Pinellas	3.90	209.09	107.00	97.73	404.41
Sarasota	5.70	39.17	197.00	30.46	151.79
Florida	N.D.	1,366.82	4,243.00	936.04	4,007.72

^a University of Florida Bureau of Economic and Business Research, Population Divisions forecast.

^b Assumes historical mean for each county.

^c Assumes that total capacity as one plant using EPA construction costs curve (cost = 1.77 (design) .696) in 1981 dollars.

Table EIR 63. National and Florida ambient air quality standards^a (Florida Department of Environmental Regulation, Bureau of Air Quality Management 1980e).

Pollutant	Time frame	Primary standards	Secondary standards ^b	Florida standards
Particulate matter	annual (geometric mean ^c)	75 ug/m ³ ^c 260 ug/m ³	60 ug/m ³ 150 ug/m ³	60 ug/m ³ 150 ug/m ³
	24-hour			
Sulfur oxides	annual (arithmetic mean ^d)	80 ug/m ³ (0.03 ppm) ^e	150 ug/m ³ (.02 ppm) ³	150 ug/m ³ (0.02 ppm)
	24-hour	365 ug/m ³ (0.14 ppm)	260 ug/m ³ (0.1 ppm) ³	260 ug/m ³ (0.1 ppm) ³
	3-hour ^b		1300 ug/m ³	1300 ug/m ³ (0.5 ppm)
Carbon monoxide	8-hour ^b	10 ug/m ³ (9 ppm) ³	(same as primary)	(same as primary)
	1-hour ^b	100 ug/m ³ (35 ppm)	(same as primary)	(same as primary)
Nitrogen dioxide ^f	annual (arithmetic mean)	100 ug/m ³ (0.05 ppm)	(same as primary)	(same as primary)
Photochemical oxidants ^g	1-hour ^b	235 ug/m ³	(same as primary)	160 ug/m ³ (0.08 ppm)
Hydrocarbons ^h (nonmethane)	3-hour (6 to 9 a.m.)	160 ug/m ³ (0.24 ppm)	(same as primary)	(same as primary)

^aThe air quality standards and a description of the Federal Reference Methods (FRM) were published on April 30, 1971, in 42 CFR 410, recodified to 40 CFR 50 on November 25, 1972. The new FRM for nitrogen dioxide was published on December 1, 1976, as 40 CFR 50.

^bNot to be exceeded more than once a year.

^cGeometric mean is a measure of central tendency. It is the nth root of the product of n individual data values recorded during the given period.

^dArithmetic mean is the most common measure of the central tendency. It is the sum of the data collected during the given period divided by the number of observations in the same period.

^eParts per million.

^fChemiluminescence has been established as the FRM and the sodium arsenite and triethanolamine guaiacol sulfite (TGS) methods have been identified as equivalent methods.

^gThe FRM measures O₃ (ozone).

^hThe hydrocarbon HC standard is a guide to devising State implementation plans to achieve the oxidant standard. The HC standard does not have to be met if the oxidant standard is met.

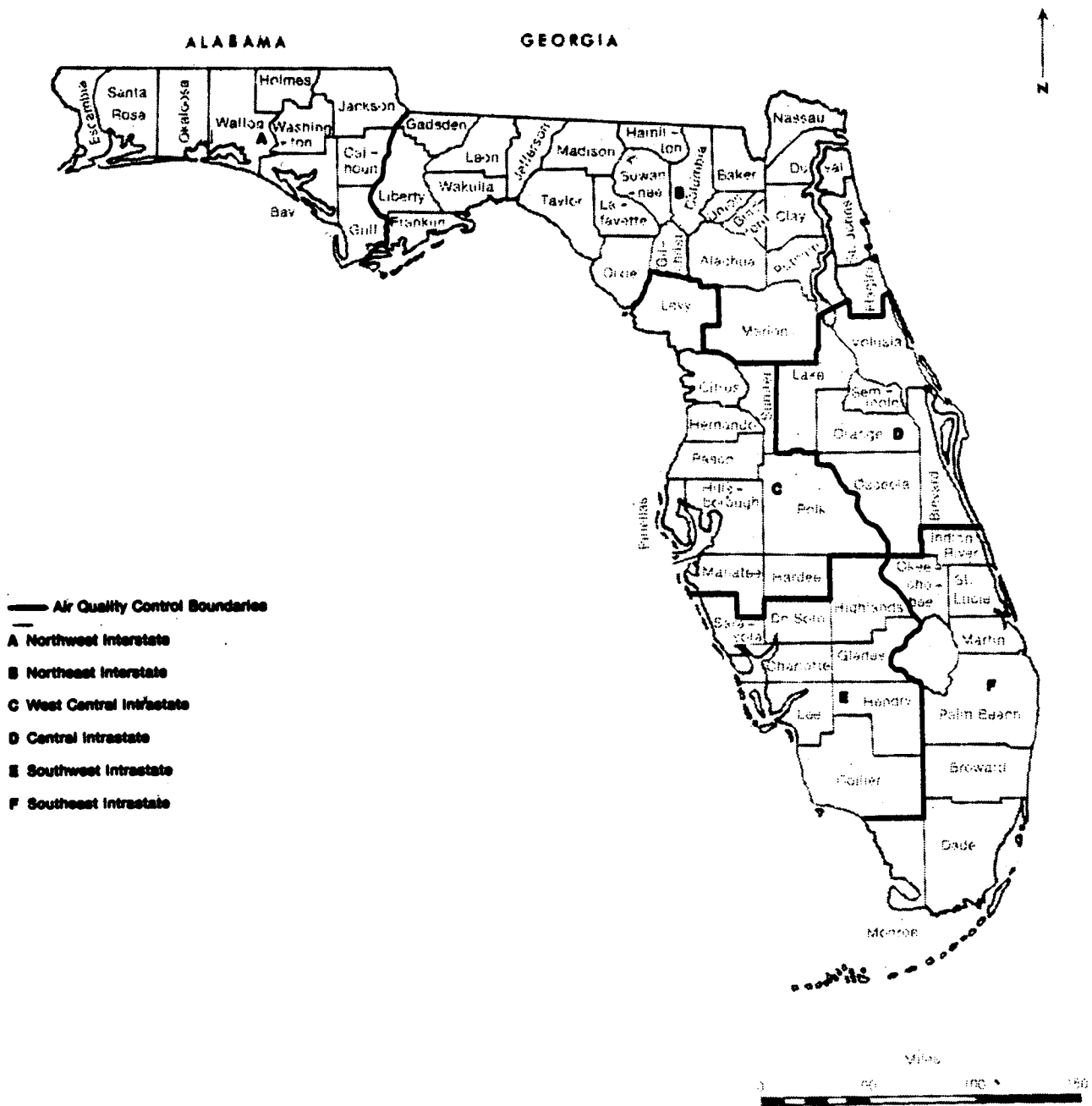


Figure 16. Federal air quality control regions (Florida Power and Light Co. 1979).

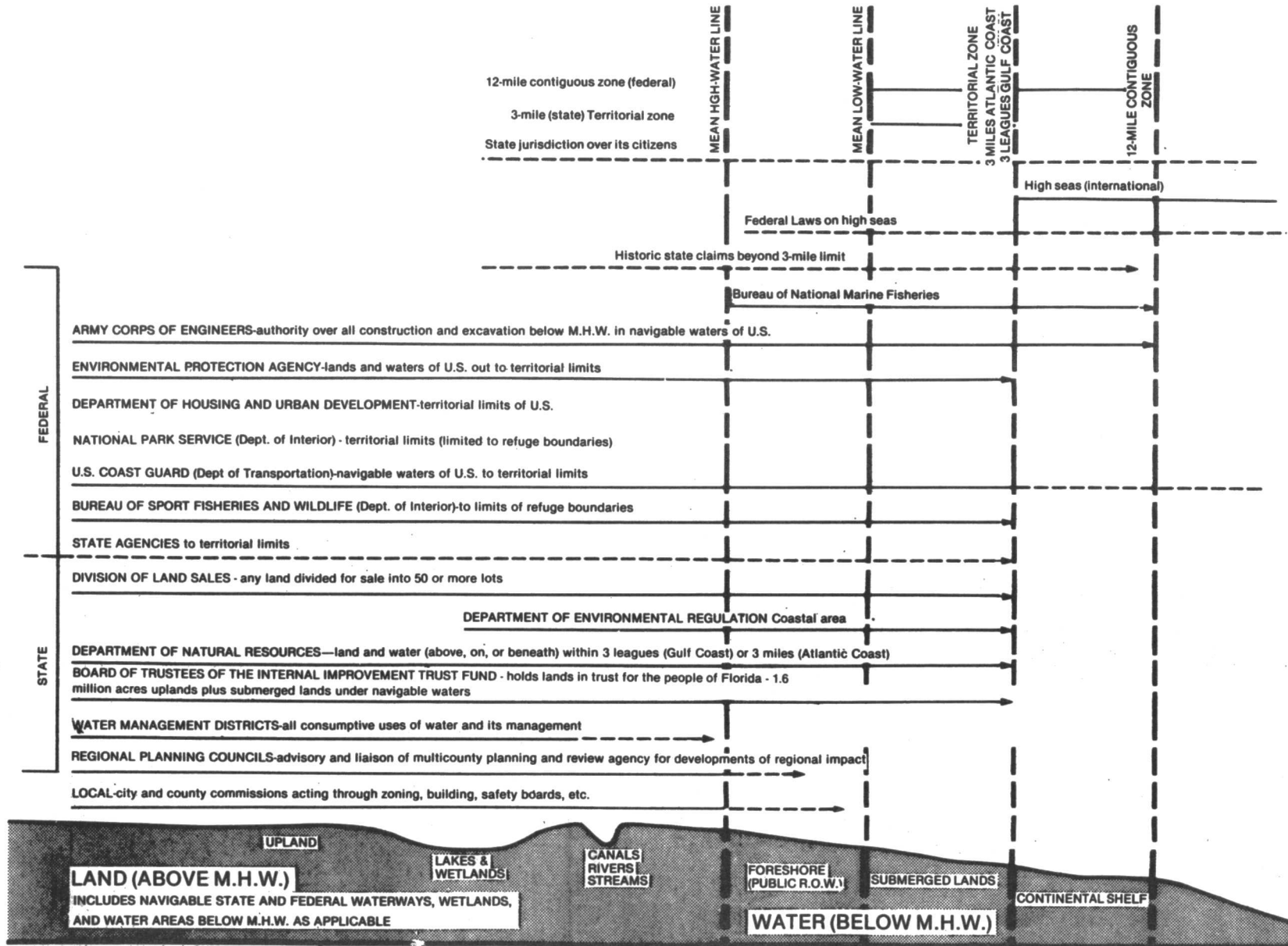


Figure 17. Schematic showing jurisdictional agency interrelationships in coastal areas (Veri et al. 1975).

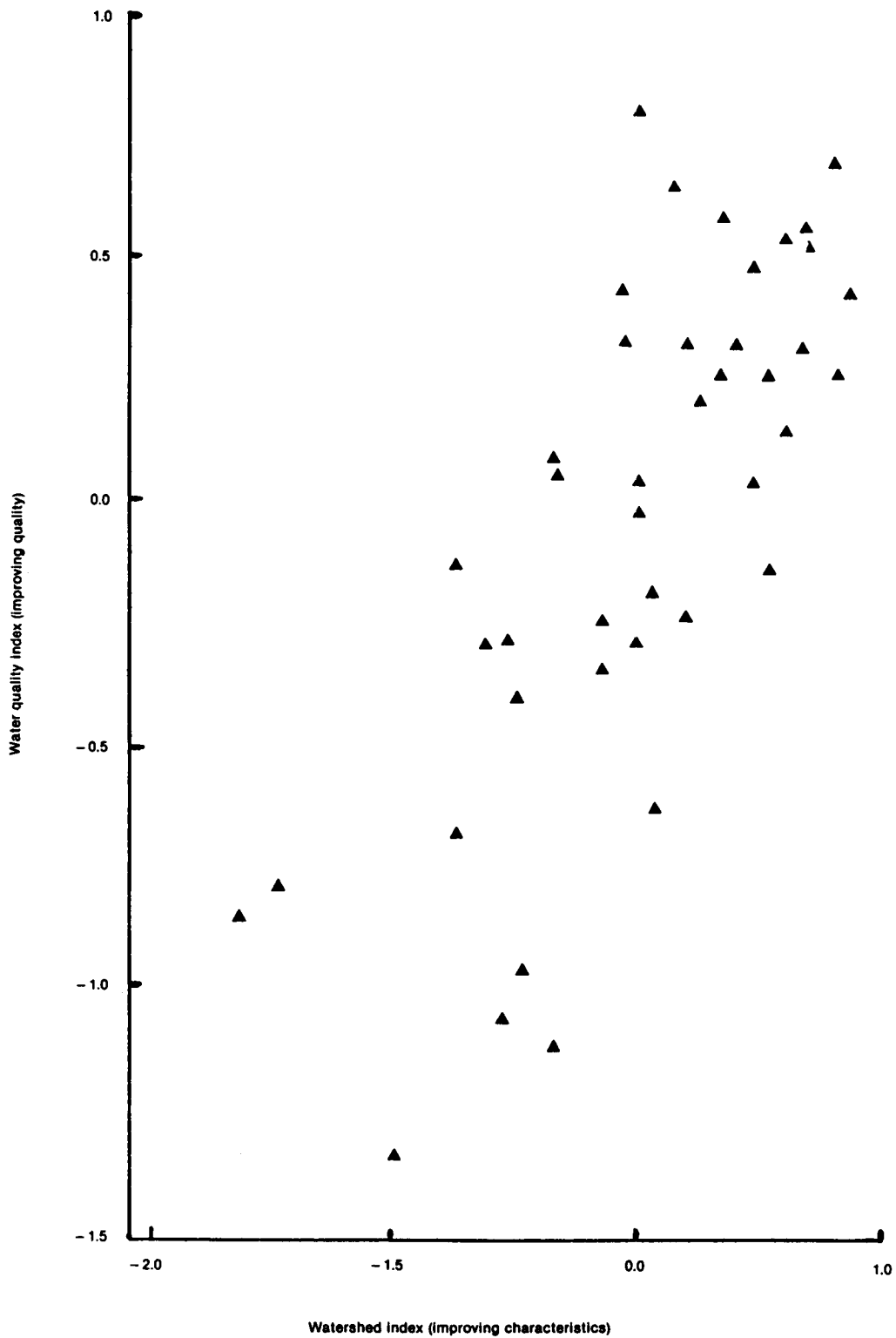


Figure 18. Water quality index versus watershed characteristics index for 42 Permanent Network Station watersheds (correlation coefficient = .74) (Florida Department of Environmental Regulation 1979).

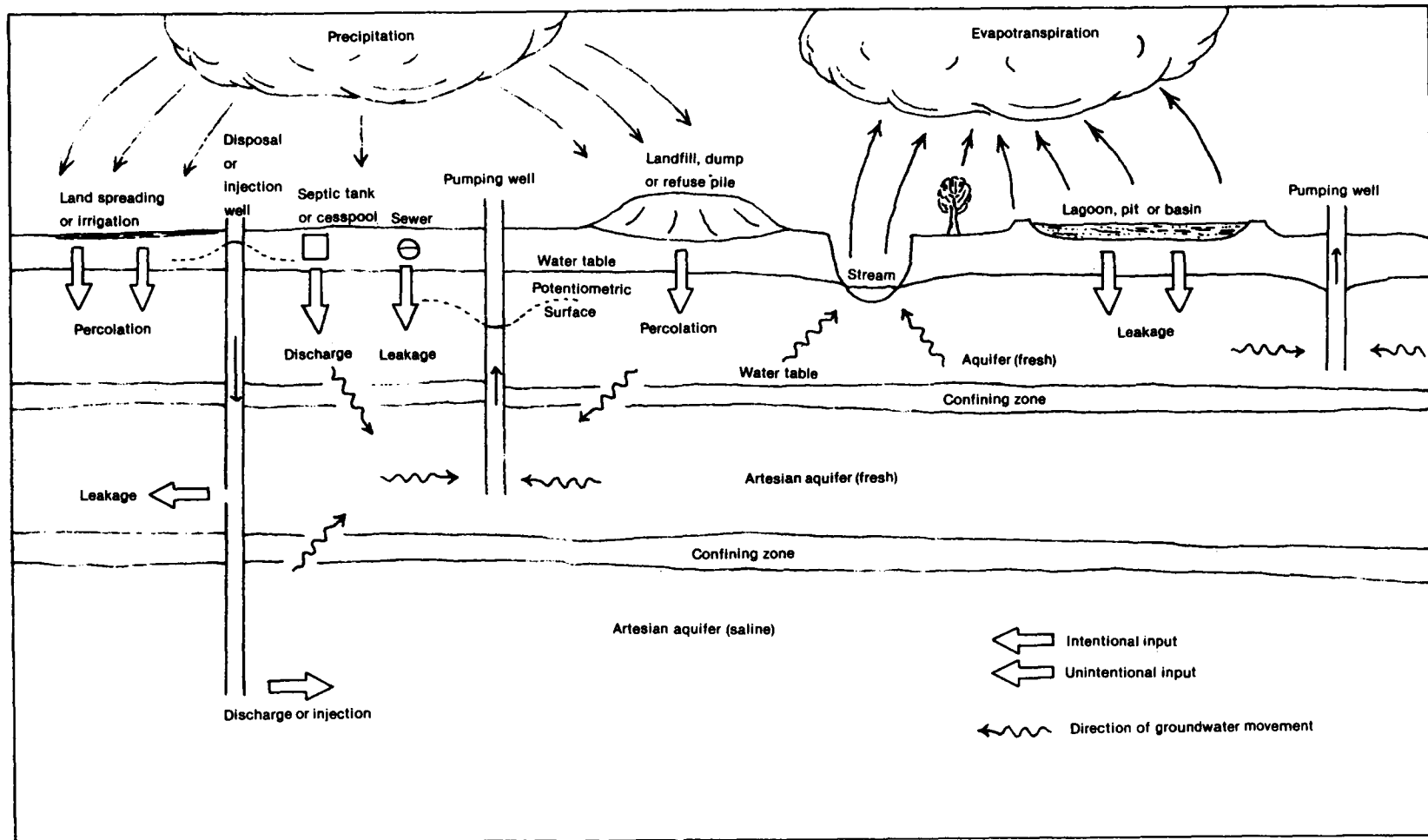


Figure 19. Contamination of the groundwater by waste disposal practices (Environmental Protection Agency 1977).

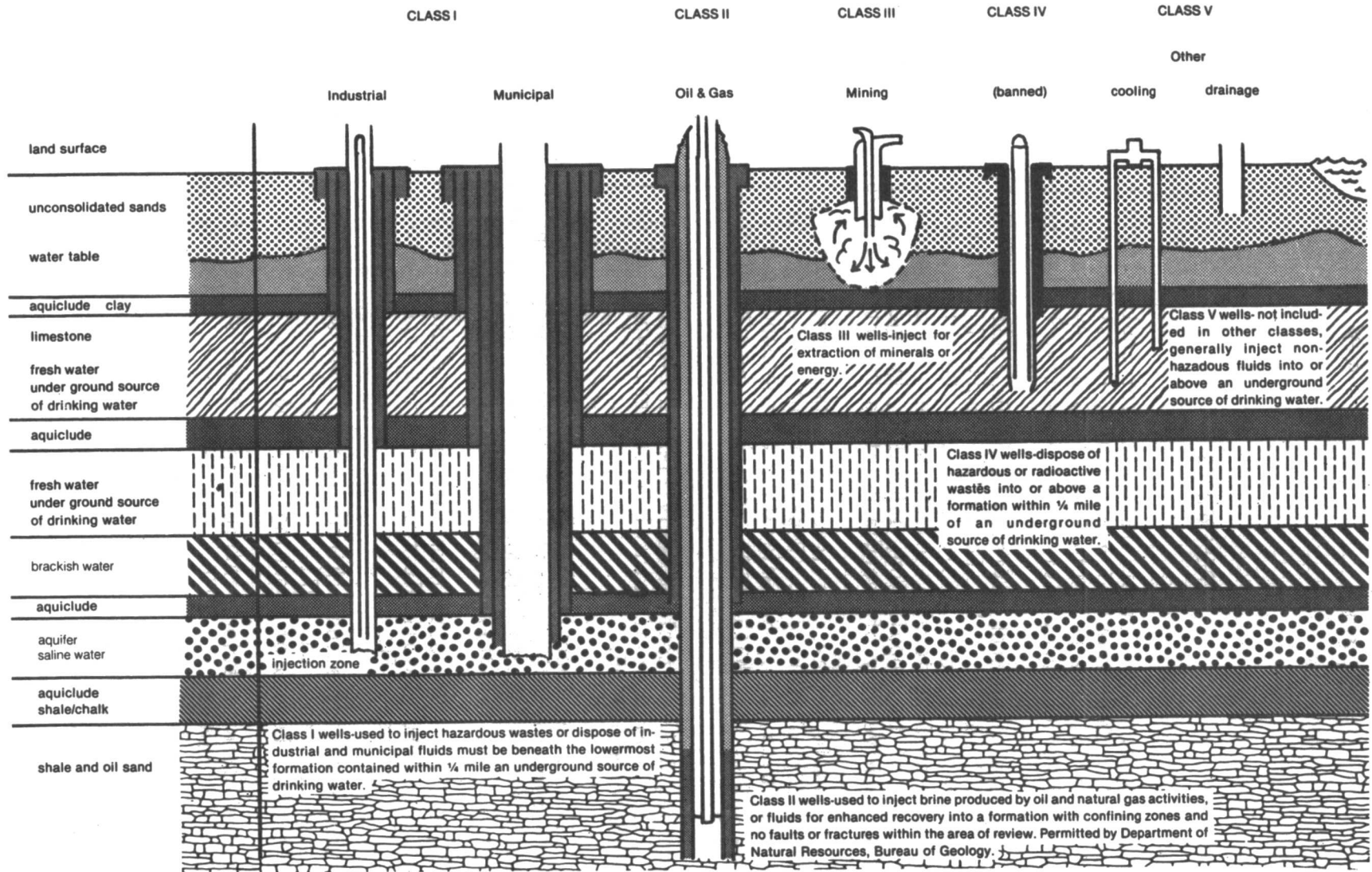


Figure 20. Underground injection control program classification of wells (Florida Department of Environmental Regulation 1981d).

REFERENCES

- Bellamy, T.R.; Knight, H.A. Forest statistics for South Florida 1970. Asheville, NC: U.S. Department of Agriculture, Forest Service; July 1970; Forest Service Resource Bulletin SE-16. 35 p. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- Bowles, G.K. (Economic Research Division, U.S. Department of Agriculture, Washington, DC); Beale, C.L. (Economic Research Division, U.S. Department of Agriculture, Washington, DC); Lee, E.F. (Department of Sociology and the Institute of Behavioral Research, University of Georgia, Athens, GA). Net migration of the population, 1960-1970, by age, sex, and color. Athens, GA: University of Georgia Printing Department; 1975; 147 p.
- Bowles, G.K. (Economic Research Division, U.S. Department of Agriculture, Washington, DC); Tarver, J.D. (Department of Sociology, Oklahoma State University, Tulsa, OK). Net migration of the population, 1950-1960, by age, sex, and color. Washington, DC: U.S. Government Printing Office; 1965; 164 p.
- Curry, D.; Tootle, C.H. Petroleum activities in Florida 1980. Tallahassee, FL: Florida Department of Natural Resources, Bureau of Geology; 1980; Information circular 95.
- Curry, L.D. (Oil and Gas Coordinator, Bureau of Geology, Florida Department of Natural Resources). Oil and gas information packet. Unpublished document, ca. 1980. Available from: Florida Department of Natural Resources, Bureau of Geology Library, Tallahassee, FL.
- Exxon Company, U.S.A. 1980 petroleum information packet. Houston, TX: Exxon Company; July 1980. Available from: Florida Department of Natural Resources, Tallahassee, FL.
- Federal Aviation Administration. Airport operations summary SO form 7230-19-1. Unpublished document, ca. 1971. Available from: Florida Department of Transportation, Bureau of Planning, Tallahassee, FL.
- Federal Aviation Administration. Airport operations summary SO form 7230-19-1. Unpublished document, ca. 1976. Available from: Florida Department of Transportation, Bureau of Planning, Tallahassee, FL.
- Federal Aviation Administration. Airport operations summary SO form 7230-19-1. Unpublished document, ca. 1981. Available from: Florida Department of Transportation, Bureau of Planning, Tallahassee, FL.
- Florida Chamber of Commerce. Directory of Florida Industries, 1980. Tallahassee, FL: Florida Chamber of Commerce; 1981.

- Florida Coastal Coordinating Council. Florida coastal zone land use and ownership. Tallahassee, FL: Florida Coastal Coordinating Council; November 1970.
- Florida Department of Administration, Division of State Planning, Bureau of Comprehensive Planning. State of Florida, coastal plains area public investment plan. Tallahassee, FL: Florida Department of Administration; June 1976.
- Florida Department of Administration, State Energy Office. Florida energy resources. Tallahassee, FL: Florida Department of Administration; September 1978; 65 p.
- Florida Department of Agriculture, Division of Forestry. Florida forest statistics. Unpublished data, 1977. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- Florida Department of Agriculture, Division of Forestry. Florida forest statistics. Unpublished data, 1980. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Field crops summary 1919-1967. Tallahassee, FL: Florida Department of Agriculture; ca. 1967; 22 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Field crops summary 1977. Tallahassee, FL: Florida Department of Agriculture; ca. 1977; 34 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Citrus summary 1979. Tallahassee, FL: Florida Department of Agriculture; ca. 1979a; 49 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Dairy summary 1979. Tallahassee, FL: Florida Department of Agriculture; ca. 1979b; 26 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Field crops summary 1979. Tallahassee, FL: Florida Department of Agriculture; ca. 1979c; 14 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Livestock summary 1979. Tallahassee, FL: Florida Department of Agriculture; ca. 1979d; 50 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.
- Florida Department of Agriculture, Division of Marketing, Bureau of Crop and Livestock Reporting. Vegetable summary 1979. Tallahassee, FL: Florida Department of Agriculture; ca. 1979e; 70 p. Available from: Florida Crop and Livestock Reporting Service, Orlando, FL.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Bay County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979a.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Collier County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979b.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. DeSoto County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979c.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Escambia County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979d.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Franklin County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979e.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Gulf County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979f.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Lee County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979g.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Manatee County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979h.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Okaloosa County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979i.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Pasco County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979j.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Santa Rosa County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979k.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Walton County economic data. Tallahassee, FL: Florida Department of Commerce; January 1979l.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Charlotte County economic data. Tallahassee, FL: Florida Department of Commerce; January 1980a.

Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Florida county comparisons: 1980. Tallahassee, FL: Florida Department of Commerce; October 1980b.

- Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Hillsborough County economic data. Tallahassee, FL: Florida Department of Commerce; January 1980c.
- Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Monroe County economic data. Tallahassee, FL: Florida Department of Commerce; January 1980d.
- Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Pinellas County economic data. Tallahassee, FL: Florida Department of Commerce; January 1980e.
- Florida Department of Commerce, Division of Economic Development, Bureau of Economic Analysis. Sarasota County economic data. Tallahassee, FL: Florida Department of Commerce; January 1980f.
- Florida Department of Commerce, Division of Employment Security. Basic labor market information. Unpublished charts, ca. 1980. Available from: Florida Department of Commerce, Tallahassee, FL.
- Florida Department of Commerce, Division of Tourism. Florida's visitors: 1976. Tallahassee, FL: Florida Department of Commerce; ca. 1977a; 10 p.
- Florida Department of Commerce, Division of Tourism. Quarterly reports of the Division of Tourism: 1976. Unpublished statistics, ca. 1977b. Available from: Florida Department of Commerce, Tallahassee, FL.
- Florida Department of Commerce, Division of Tourism. Florida's visitors: 1979. Tallahassee, FL: Florida Department of Commerce; ca. 1980a; 10 p.
- Florida Department of Commerce, Division of Tourism. Quarterly reports of the Division of Tourism: 1979. Unpublished statistics, ca. 1980b. Available from: Florida Department of Commerce, Tallahassee, FL.
- Florida Department of Commerce, Division of Tourism. Florida's visitors: 1980. Tallahassee, FL: Florida Department of Commerce; ca. 1981a; 10 p.
- Florida Department of Commerce, Division of Tourism. Quarterly reports of the Division of Tourism: 1980. Unpublished statistics, ca. 1981b. Available from: Florida Department of Commerce, Tallahassee, FL.
- Florida Department of Community Affairs, Bureau of Land and Water Management. Binding letters of interpretation, requests for determination as of 10 October 1980. Unpublished records, ca. 1980a. Available from: Florida Department of Community Affairs, Tallahassee, FL.
- Florida Department of Community Affairs, Bureau of Land and Water Management. DRI status as of 10 October 1980. Unpublished records, ca. 1980b. Available from: Florida Department of Community Affairs, Tallahassee, FL.
- Florida Department of Education. Florida educational directory: 1949. Tallahassee, FL: Florida Department of Education; 1949; 87 p.
- Florida Department of Education. Florida educational directory: 1959. Tallahassee, FL: Florida Department of Education; 1959; 126 p.

- Florida Department of Education. Florida educational directory: 1970-71. Tallahassee, FL: Florida Department of Education; 1970; 262 p.
- Florida Department of Education. Florida educational directory: 1974-75. Tallahassee, FL: Florida Department of Education; 1974a; 284 p.
- Florida Department of Education. Profiles of Florida school districts: profile 3. Tallahassee, FL: Florida Department of Education; 1974b; 167 p.
- Florida Department of Education. Florida educational directory: 1975-76. Tallahassee, FL: Florida Department of Education; 1975; 266 p.
- Florida Department of Education. Profiles of Florida school districts: profile 5. Tallahassee, FL: Florida Department of Education; 1976; 185 p.
- Florida Department of Education. Profiles of Florida school districts: profile 6. Tallahassee, FL: Florida Department of Education; 1977; 227 p.
- Florida Department of Education. Florida educational directory: 1978-79. Tallahassee, FL: Florida Department of Education; 1978a; 324 p.
- Florida Department of Education. Profiles of Florida school districts: profile 7. Tallahassee, FL: Florida Department of Education; 1978b; 226 p.
- Florida Department of Education. Profiles of Florida school districts: profile 8. Tallahassee, FL: Florida Department of Education; 1979; 200 p.
- Florida Department of Education. Profiles of Florida school districts: profile 9. Tallahassee, FL: Florida Department of Education; 1980; 200 p.
- Florida Department of Education, Division of Community Colleges, Bureau of Research and Information Systems. Unpublished enrollment data, ca. 1980. Available from: Department of Education, Tallahassee, FL.
- Florida Department of Environmental Regulation, Division of Environmental Programs, Bureau of Coastal Zone Planning. Statistical inventory of key biophysical elements in Florida's coastal zone. Tallahassee, FL: Florida Department of Environmental Regulation; March 1978.
- Florida Department of Environmental Regulation, Bureau of Water Management. State water quality management plan, executive summary, agriculture non-point source element. Tallahassee, FL: Florida Department of Environmental Regulation; September 1979a; 24 p.
- Florida Department of Environmental Regulation, Bureau of Water Management. State water quality management plan, point source load allocations. Tallahassee, FL: Florida Department of Environmental Regulation; May 1979b.
- Florida Department of Environmental Regulation, Bureau of Water Management. State water quality management plan, water quality assessment. Tallahassee, FL: Florida Department of Environmental Regulation; May 1979c.
- Florida Department of Environmental Regulation, Bureau of Water Management. State water quality management plan, water quality and mining. Tallahassee, FL: Florida Department of Environmental Regulation; September 1980a.

- Florida Department of Environmental Regulation, Bureau of Drinking Water and Special Programs. Florida surface impoundment assessment, final report, executive summary. Tallahassee, FL: Florida Department of Environmental Regulation; January 1980b.
- Florida Department of Environmental Regulation. Geographic information system data base; user manual [computer printout of data from aerial photographs]. Tallahassee, FL: Florida Department of Environmental Regulation; 1980c.
- Florida Department of Environmental Regulation. The Florida coastal management program, State hearing draft. Tallahassee, FL: Florida Department of Environmental Regulation; August 1980d; 445 p.
- Florida Department of Environmental Regulation, Bureau of Air Quality Management Florida 1979 air quality statistical report. Tallahassee, FL: Florida Department of Environmental Regulation; April 1980e; No. DER BAQM 80-006. 200 p.
- Florida Department of Environmental Regulation, Solid Waste Management Program. Directory of solid waste facilities. Tallahassee, FL: Florida Department of Environmental Regulation; 1981a.
- Florida Department of Environmental Regulation. Hazardous waste inventory 1981. Tallahassee, FL: Florida Department of Environmental Regulation; 1981b.
- Florida Department of Environmental Regulation. Manual of State regulatory and review procedures for land development in Florida. Tallahassee, FL: Florida Department of Environmental Regulation; 1981c.
- Florida Department of Environmental Regulation, Office of Economic Analysis. Economic impact statement for the proposed revisions to Chapter 17-6 Florida Administrative Code. Tallahassee, FL: Florida Department of Environmental Regulation; May 1981d.
- Florida Department of Health and Rehabilitative Services. Annual statistical report: 1968-1969. Tallahassee, FL: Florida Department of Health and Rehabilitative Services; ca. 1969.
- Florida Department of Health and Rehabilitative Services. Annual statistical report: fiscal year 1975-76. Tallahassee, FL: Florida Department of Health and Rehabilitative Services; ca. 1976.
- Florida Department of Health and Rehabilitative Services. Annual statistical report: fiscal years 1977-78, 1978-79. Tallahassee, FL: Florida Department of Health and Rehabilitative Services; ca. 1979.
- Florida Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles. Tags and revenue. Tallahassee, FL: Florida Department of Highway Safety and Motor Vehicles; 1979; 81 p.
- Florida Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles. Tags and revenue. Tallahassee, FL: Florida Department of Highway Safety and Motor Vehicles; 1980.

- Florida Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles. Mobile home registrations. Unpublished data, 1981. Available from: Florida Department of Highway Safety and Motor Vehicles, Tallahassee, FL.
- Florida Department of Natural Resources, Division of Administration. Unpublished data on boat registrations, 1980. Available from: Florida Department of Natural Resources, Tallahassee, FL.
- Florida Department of Natural Resources, Coastal Coordinating Council. Statistical inventory of key biophysical elements in Florida's coastal zone. Tallahassee, FL: Florida Department of Natural Resources; May 1973. Available from: Tampa Bay Regional Planning Council, St. Petersburg, FL.
- Florida Department of Natural Resources, Division of Law Enforcement, Bureau of Support Services. Summary of oil spill investigations from 1 January 1975 to 31 August 1980. Unpublished document, 1980. Available from: Florida Department of Natural Resources, Tallahassee, FL.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1970. Tallahassee, FL: Florida Department of Natural Resources; ca. 1971.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1971. Tallahassee, FL: Florida Department of Natural Resources; ca. 1972; 64 p.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1972. Tallahassee, FL: Florida Department of Natural Resources; ca. 1973; 62 p.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1973. Tallahassee, FL: Florida Department of Natural Resources; ca. 1974; 64 p.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1974. Tallahassee, FL: Florida Department of Natural Resources; ca. 1975; 34 p.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1975. Tallahassee, FL: Florida Department of Natural Resources; ca. 1976; 32 p.
- Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1976. Tallahassee, FL: Florida Department of Natural Resources; ca. 1977; 30 p.

Florida Department of Natural Resources, Division of Marine Resources, Bureau of Marine Science and Technology. Summary of Florida commercial marine landings: 1980. Unpublished document, ca. 1981. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Natural Resources, Division of Recreation and Parks. Park attendance for various fiscal years. Unpublished document, 1980a. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Natural Resources, Division of Recreation and Parks. Properties under the jurisdiction of the Division. Unpublished document, 1980b. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Natural Resources, Division of Recreation and Parks. Public facility inventory. Unpublished computer printout, 1980c. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Natural Resources, Division of Recreation and Parks. Demand, supply, and need statistical summary for selected outdoor recreational activities, 1980-1985-1990. Unpublished document, 1980d. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Natural Resources, Division of Resource Management, Bureau of Coastal Zone Planning. Florida regional coastal zone management atlas: region 2, Northwest Florida. Tallahassee, FL: Florida Department of Natural Resources; September 1975a.

Florida Department of Natural Resources, Division of Resource Management, Bureau of Coastal Zone Planning. Florida regional coastal zone management atlas: region 8, Tampa Bay. Tallahassee, FL: Florida Department of Natural Resources; September 1975b.

Florida Department of Natural Resources, Division of Resource Management, Bureau of Geology. Oil and gas drilling permits, 1973-1980. Unpublished records, 1980. Available from: Florida Department of Natural Resources, Tallahassee, FL.

Florida Department of Professional Regulation. Current health profession employment statistics. Unpublished computer printout, ca. 1981. Available from: Florida Department of Professional Regulation, Tallahassee, FL.

Florida Department of Public Welfare, State Welfare Board. Twenty-fourth annual report: 1 July 1960 - 30 June 1961. Tallahassee, FL: State Welfare Board; 1962.

Florida Department of State, Bureau of Historic Sites and Properties. Number of assigned historical sites by county as of 4 November 1980. Unpublished document, 1980. Available from: Florida Department of State, Tallahassee, FL.

- Florida Department of Transportation. Florida road mileages as of 31 December 1971. Unpublished document, 1972; 1 p. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida aviation system plan. Tallahassee, FL: Florida Department of Transportation; 1976a.
- Florida Department of Transportation. Florida road mileages as of 31 December 1975. Unpublished document, 1976b; 1 p. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida State rail plan: executive summary and technical report. Tallahassee, FL: Florida Department of Transportation; March 1978a.
- Florida Department of Transportation. Florida waterport systems study. Tallahassee, FL: Florida Department of Transportation; 1978b. 8 Vol.
- Florida Department of Transportation. Florida port tonnage. Unpublished document, 1979. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida airports: operational-commercial history summary. Unpublished computer printout, 1980a. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida pipeline mileages. Unpublished chart, 1980b. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida pipeline volumes per day and annually. Unpublished document, 1980c. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Total revenue freight carried by class I railroads in Florida. Unpublished document, 1980d. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida road mileages as of 31 December 1979. Unpublished document, 1980e; 1 p. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Airport inventory and inspection record. Unpublished computer printout, 1981a. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation. Florida railroad track mileage. Unpublished document, 1981b; 1 p. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Department of Transportation, Division of Transportation Planning. Average daily traffic counts. Unpublished records, ca. 1981c. Available from: Florida Department of Transportation, Tallahassee, FL.

- Florida Department of Transportation, Division of Transportation Planning. Roadway characteristics [taken from straight line diagrams]. Unpublished records, ca. 1981d. Available from: Florida Department of Transportation, Tallahassee, FL.
- Florida Electric Power Coordinating Group. 1980 ten-year plan, State of Florida: electrical generating facilities, demand and energy, fuels. Florida Electric Power Coordinating Group; September 1980; 76 p. Available from: Florida Public Service Commission, Tallahassee, FL.
- Florida Game and Fresh Water Fish Commission. An analysis of hunting licenses by county, by series. Unpublished document, ca. 1980a. Available from: Florida Game and Fresh Water Fish Commission, Tallahassee, FL.
- Florida Game and Fresh Water Fish Commission. An analysis of fishing licenses by county, by series. Unpublished document, ca. 1980b. Available from: Florida Game and Fresh Water Fish Commission, Tallahassee, FL.
- Florida Game and Fresh Water Fish Commission. Legal status of endangered and potentially endangered species in Florida: 1 October 1980. Tallahassee, FL: Florida Game and Fresh Water Fish Commission; ca. 1980c; 5 p.
- Florida Power and Light Company, Office of Environmental Affairs. Atlas of environmental jurisdictions in Florida. Miami, FL: Florida Power and Light Company; July 1979.
- Florida Public Service Commission, Research and Management Studies Department. Statistics of the Florida electric industry: 1960-1977. Tallahassee, FL: Florida Public Service Commission; September 1979; 205 p.
- Florida Public Service Commission, Research and Management Studies Department. Statistics of the Florida electric industry: supplement 1978. Tallahassee, FL: Florida Public Service Commission; August 1980; 89 p.
- Florida Public Service Commission. Comparative cost statistics: regulated utilities, electric, gas, telephone, rail, water, sewer. Tallahassee, FL: Florida Public Service Commission; January 1981; 67 p.
- Florida Resources and Environmental Analysis Center, Florida State University. Water resources study: Northwest Florida Region. U.S. Army Corps of Engineers, Mobile District Office; July 1978; 122 p. Available from: U.S. Army Corps of Engineers, Mobile District Office, Mobile, AL.
- Florida State Board of Conservation, Salt Water Fisheries Division. Summary of Florida commercial marine fish landings: 1955. Tallahassee, FL: Florida State Board of Conservation; 1956; 40 p.
- Florida State Board of Conservation, Salt Water Fisheries Division. Summary of Florida commercial marine landings: 1960. Tallahassee, FL: Florida State Board of Conservation; 1961; 32 p.
- Florida State Board of Conservation, Salt Water Fisheries Division. Summary of Florida commercial marine landings: 1965. Tallahassee, FL: Florida State Board of Conservation; 1966; 61 p.

- Florida Statistical Abstract 1962. Tallahassee, FL: Florida Department of State, Council on Economic Development; 1962; 175 p. Available from: Florida Department of State, Secretary of State, State Library, Tallahassee, FL.
- Florida Statistical Abstract 1976. Gainesville, FL: University of Florida, Bureau of Economic and Business Research; 1976; 643 p. Available from: The University Presses of Florida, Gainesville, FL.
- Florida Statistical Abstract 1977. Gainesville, FL: University of Florida, Bureau of Economic and Business Research; 1977; 652 p. Available from: The University Presses of Florida, Gainesville, FL.
- Florida Statistical Abstract 1978. Gainesville, FL: University of Florida, Bureau of Economic and Business Research; 1978; 646 p. Available from: The University Presses of Florida, Gainesville, FL.
- Florida Statistical Abstract 1979. Gainesville, FL: University of Florida, Bureau of Economic and Business Research; 1979; 653 p. Available from: The University Presses of Florida, Gainesville, FL.
- Florida Statistical Abstract 1980. Gainesville, FL: University of Florida, Bureau of Economic and Business Research; 1980; 695 p. Available from: The University Presses of Florida, Gainesville, FL.
- Herndon, R.C.; Teaf, C. Hazardous waste incidents in the State of Florida. Tallahassee, FL: Florida Department of Environmental Regulation; May 1978; 48 p.
- Industrial Development Research Council. Industrial development reports. Atlanta, GA: Conway Publications; bi-monthly reports from 1977 through mid-1980. Available from: Conway Publications, Atlanta, GA.
- Knight, H.A.; McClure, J.P. Florida's timber 1970. Asheville, NC: U.S. Department of Agriculture, Forest Service; February 1971; Forest Service Resource Bulletin SE-20. 48 p.
- Larson, G. Florida's timber. Asheville, NC: U.S. Department of Agriculture, Forest Service; May 1961; Forest Survey Release No. 57. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- Leach, S.D. Source, use and disposition of water in Florida, 1975. Tallahassee, FL: U.S. Geological Survey; April 1978; Water Resources Investigation 78-17. 90 p.
- Leach, S.D.; Healy, H.G. Estimated water use in Florida, 1977. Tallahassee, FL: U.S. Geological Survey; 1980; Water Resources Investigation 79-112. 76 p.
- McNulty, J.K.; Lindall, W.N., Jr.; Sykes, J.E. Cooperative Gulf of Mexico estuarine inventory and study, Florida: phase I, area description. Washington, DC: U.S. Government Printing Office; November 1972; NOAA Technical Report NMFS CIRC-368. 126 p. Available from: Tampa Bay Regional Planning Council, St. Petersburg, FL.

- Miller, J.C. Determination of potentially suitable areas for hazardous waste treatment, storage and disposal facilities in the State of Florida. Tallahassee, FL: Florida Department of Environmental Regulation; August 1980; 96 p.
- Moe, M.A., Jr. A survey of offshore fishing in Florida. St. Petersburg, FL: Florida State Board of Conservation Marine Laboratory; January 1963; Professional papers series no. four. Available from: Florida Department of Natural Resources, Tallahassee, FL.
- National Marine Manufacturers Association. The boating business: 1979. Chicago, IL: National Marine Manufacturers Association; ca. 1980; 28 p.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1956. Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1961; Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1966; Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1971; Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1976; Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- National Oceanic and Atmospheric Administration. Local climatological data, monthly summary. Asheville, NC: National Climatic Center; 1981; Available from: Library, Florida Department of Environmental Regulation, Tallahassee, FL.
- New England River Basins Commission; U.S. Department of the Interior; RALI Program. Fact book - onshore facilities related to offshore oil and gas development. Boston, MA; New England River Basins Commission; 1976; 300 p.
- Northwest Florida Water Management District. Water resources management plan. Tallahassee, FL: Northwest Florida Water Management District; 1980; Vol. 1. 196 p.
- Pride, R.W. Estimated use of water in Florida, 1970. Tallahassee, FL: Florida Department of Natural Resources, Division of Interior Resources, Bureau of Geology (for the U.S. Geological Survey); August 1973; Information circular no. 83. 31 p.

- Pritchard, P.C.H., editor. Rare and endangered biota of Florida. Gainesville, FL: University Presses of Florida; 1978; five volumes. Available from: Florida Game and Fresh Water Fish Commission, Tallahassee, FL.
- Sheffield, R.M. Forest statistics for Northwest Florida, 1979. Asheville, NC: U.S. Department of Agriculture, Forest Service; April 1980; Forest Service Resource Bulletin SE-52. 33 p. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- Snyder, N.L.; Knight, H.A. Forest statistics for Central Florida, 1970. Asheville, NC: U.S. Department of Agriculture, Forest Service; September 1970; Forest Service Resource Bulletin SE-17. 35 p. Available from: Florida Department of Agriculture, Division of Forestry, Tallahassee, FL.
- South Florida Regional Planning Council. Environmental review processes in transportation planning. Miami, FL: South Florida Regional Planning Council; 1977.
- Southwest Florida Regional Planning Council. Areawide water quality management program, section 208. Fort Myers, FL: Southwest Florida Regional Planning Council; August 1978.
- Southwest Florida Regional Planning Council. Agenda item no. 7. No publication data available. 18 June 1981. Available from: Southwest Florida Regional Planning Council, Fort Myers, FL.
- Tampa Bay Regional Planning Council. Technical report: land use, support services, ownership, population and economics. St. Petersburg, FL: Tampa Bay Regional Planning Council; 30 June 1976.
- Tampa Bay Regional Planning Council. Areawide water quality management plan for the Tampa Bay region. St. Petersburg, FL: Tampa Bay Regional Planning Council; June 1978.
- Teaf, C.; Allen, T. Hazardous waste incidents in the State of Florida. Tallahassee, FL: Florida Department of Environmental Regulation; September 1980; 51 p.
- U.S. Army Corps of Engineers. Waterborne commerce of the United States, calendar year 1960, Part 2, waterways and harbors, Gulf Coast, Mississippi River Systems and Antilles. Fort Belvoir, VA: U.S. Army Corps of Engineers, Water Resources Support Center; 1962. Available from: Florida Department of Transportation, Tallahassee, FL.
- U.S. Army Corps of Engineers. Waterborne commerce of the United States, calendar year 1965, Part 2, waterways and harbors, Gulf Coast, Mississippi River Systems and Antilles. Fort Belvoir, VA: U.S. Army Corps of Engineers, Water Resources Support Center; 1967. Available from: Florida Department of Transportation, Tallahassee, FL.
- U.S. Army Corps of Engineers. Waterborne commerce of the United States, calendar year 1970, Part 2, waterways and harbors, Gulf Coast, Mississippi River Systems and Antilles. Fort Belvoir, VA: U.S. Army Corps of Engineers, Water Resources Support Center; 1972. Available from: Florida Department of Transportation, Tallahassee, FL.

- U.S. Army Corps of Engineers. Waterborne commerce of the United States, calendar year 1975, Part 2, waterways and harbors, Gulf Coast, Mississippi River Systems and Antilles. Fort Belvoir, VA: U.S. Army Corps of Engineers, Water Resources Support Center; 1977. Available from: Florida Department of Transportation, Tallahassee, FL.
- U.S. Army Corps of Engineers. Project maps book 1979. Mobile, AL: U.S. Army Corps of Engineers; 1979.
- U.S. Army Corps of Engineers. Waterborne commerce of the United States, calendar year 1978, Part 2, waterways and harbors, Gulf Coast, Mississippi River Systems and Antilles. Fort Belvoir, VA: U.S. Army Corps of Engineers, Water Resources Support Center; 1980. Available from: Florida Department of Transportation, Tallahassee, FL.
- U.S. Department of Commerce, Bureau of the Census. Census of housing: 1950. Vol. 1, Part 2. Washington, DC: U.S. Government Printing Office; 1953a.
- U.S. Department of Commerce, Bureau of the Census. Census of the population: 1950. Vol. 2, Part 10. Washington, DC: U.S. Government Printing Office; 1953b; 607 p.
- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1954. Vol. 1, Part 18. Washington, DC: U.S. Government Printing Office; 1957a; 666 p.
- U.S. Department of Commerce, Bureau of the Census. City and county data book: 1956. Washington, DC: U.S. Government Printing Office; 1957b; 565 p.
- U.S. Department of Commerce, Bureau of the Census. County business patterns 1956: Part 6. Washington, DC: U.S. Government Printing Office; 1958; 432 p.
- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1959. Vol. 1, Part 29. Washington, DC: U.S. Government Printing Office; 1960; 261 p.
- U.S. Department of Commerce, Bureau of the Census. County business patterns 1959: Part 6B. Washington, DC: U.S. Government Printing Office; 1961; 284 p.
- U.S. Department of Commerce, Bureau of the Census. City and county data book: 1962. Washington, DC: U.S. Government Printing Office; 1962a; 669 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 7. Washington, DC: U.S. Government Printing Office; November 1962b; 90 p.
- U.S. Department of Commerce, Bureau of the Census. Census of housing: 1960. Vol. 1, Part 3. Washington, DC: U.S. Government Printing Office; 1963a.
- U.S. Department of Commerce, Bureau of the Census. Census of the population: 1960. Vol. 1, part 11. Washington, DC: U.S. Government Printing Office; 1963b; 1,112 p.

- U.S. Department of Commerce, Bureau of the Census. County business patterns 1965: Florida. Washington, DC: U.S. Government Printing Office; 1966a; 105 p.
- U.S. Department of Commerce, Bureau of the Census. Housing authorized in permit-issuing places: 1965. Washington, DC: U.S. Government Printing Office; 1966b; 294 p.
- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1964. Vol. 1, Part 29. Washington, DC: U.S. Government Printing Office; 1967a; 455 p.
- U.S. Department of Commerce, Bureau of the Census. City and county data book: 1967. Washington, DC: U.S. Government Printing Office; 1967b; 673 p.
- U.S. Department of Commerce, Bureau of the Census. County business patterns 1970: Florida. Washington, DC: U.S. Government Printing Office; 1971a; 126 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 461. Washington, DC: U.S. Government Printing Office; June 1971b; 75 p.
- U.S. Department of Commerce, Bureau of the Census. Housing authorized by building permits and public contracts: 1970. Washington, DC: U.S. Government Printing Office; 1971c; 378 p.
- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1969. Vol. 1, Part 29. Washington, DC: U.S. Government Printing Office; 1972a; 528 p.
- U.S. Department of Commerce, Bureau of the Census. Census of housing; 1970. Vol. 1, Part 2. Washington, DC: U.S. Government Printing Office; 1972b.
- U.S. Department of Commerce, Bureau of the Census. Census of the population: 1970. Vol. 1, Part 11. Washington, DC: U.S. Government Printing Office; 1973a; 2,698 p.
- U.S. Department of Commerce, Bureau of the Census. City and county data book: 1972. Washington, DC: U.S. Government Printing Office; 1973b; 1,020 p.
- U.S. Department of Commerce, Bureau of the Census. Census of minerals industries 1972. Washington, DC: U.S. Government Printing Office; 1973c.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 517. Washington, DC: U.S. Government Printing Office; May 1974; 76 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 642. Washington, DC: U.S. Government Printing Office; December 1976a; 4 p.
- U.S. Department of Commerce, Bureau of the Census. Housing authorized by building permits and public contracts: 1975. Washington, DC: U.S. Government Printing Office; 1976b; 390 p.

- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1974. Vol. 1, Part 9. Washington, DC: U.S. Government Printing Office; 1977a; 395 p.
- U.S. Department of Commerce, Bureau of the Census. County business patterns 1975: Florida. Washington, DC: U.S. Government Printing Office; 1977b; 138 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 657. Washington, DC: U.S. Government Printing Office; May 1977c; 16 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 709. Washington, DC: U.S. Government Printing Office; September 1977d; 149 p.
- U.S. Department of Commerce, Bureau of the Census. City and county data book: 1977. Washington, DC: U.S. Government Printing Office; 1978; 956 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 810. Washington, DC: U.S. Government Printing Office; September 1979a; 99 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 869. Washington, DC: U.S. Government Printing Office; November 1979b; 5 p.
- U.S. Department of Commerce, Bureau of the Census. County business patterns 1978: Florida. Washington, DC: U.S. Government Printing Office; 1980a; 145 p.
- U.S. Department of Commerce, Bureau of the Census. Current population reports, series P-25, No. 873. Washington, DC: U.S. Government Printing Office; February 1980b; 98 p.
- U.S. Department of Commerce, Bureau of the Census. Housing authorized by building permits and public contracts: 1979. Washington, DC: U.S. Government Printing Office; 1980c; 381 p.
- U.S. Department of Commerce, Bureau of the Census. Census of agriculture: 1978. Washington, DC: U.S. Government Printing Office; 1981a.
- U.S. Department of Commerce, Bureau of the Census. Census of population and housing: advance report: 1980. Washington, DC: U.S. Government Printing Office; 1981b.
- U.S. Department of Commerce, Bureau of Economic Analysis. Northwest Florida industrial water supply requirements. Mobile, AL: U.S. Army Corps of Engineers, Mobile District; February 1979; 44 p.
- U.S. Department of Energy, Economic Regulatory Administration, Office of Utility Systems. The national power grid study, Vol. 1. Washington, DC: U.S. Government Printing Office; 1980; 77 p.

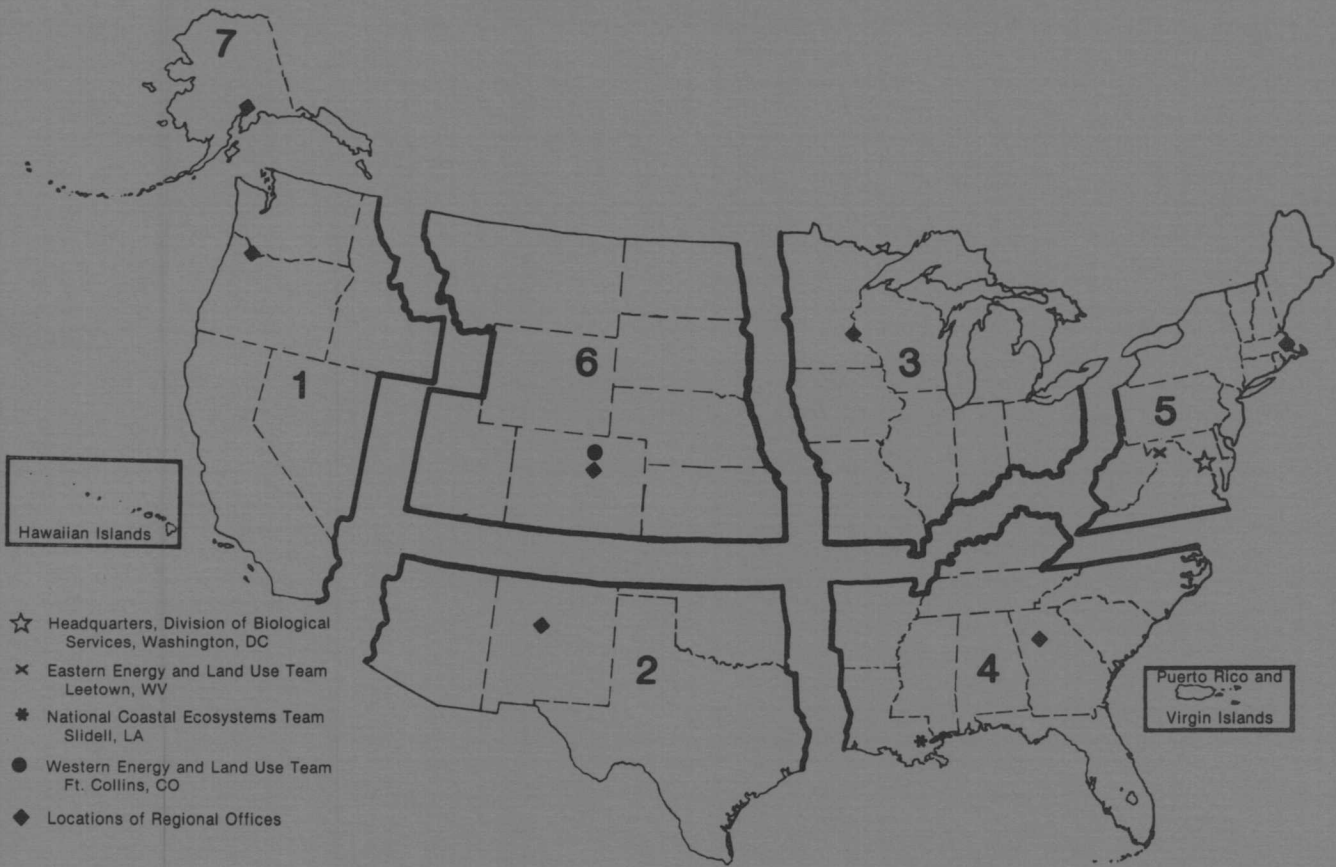
- U.S. Department of Energy, Energy Information Administration. Steam-electric plant construction costs and annual production expenses: 1975. Washington, DC: U.S. Government Printing Office; 1977.
- U.S. Department of Energy, Energy Information Administration. Gas turbine electric plant construction costs and annual production expenses: 1975. Washington, DC: U.S. Government Printing Office; 1978a; 103 p.
- U.S. Department of Energy, Energy Information Administration. Statistics of privately-owned electric utilities in the United States: 1976. Washington, DC: U.S. Government Printing Office; 1978b; 1,509 p.
- U.S. Department of Energy, Energy Information Administration. Gas turbine electric plant construction costs and annual production expenses: 1977. Washington, DC: U.S. Government Printing Office; 1979a; 104 p.
- U.S. Department of Energy, Energy Information Administration. Statistics of privately-owned electric utilities in the United States: 1977. Washington, DC: U.S. Government Printing Office; 1979b; 1,409 p.
- U.S. Department of Energy, Energy Information Administration. Statistics of publicly-owned electric utilities in the United States: 1978. Washington, DC: U.S. Government Printing Office; 1979c; 164 p.
- U.S. Department of Energy, Energy Information Administration. Steam-electric plant construction costs and annual production expenses: 1978. Washington, DC: U.S. Government Printing Office; 1980; 199 p.
- U.S. Department of Energy, Office of Utility Systems. The national power grid study, Vol. 1. Washington, DC: U.S. Government Printing Office; 1978.
- U.S. Department of Energy. Statistics of interstate natural gas pipeline companies: 1976. Washington, DC: U.S. Government Printing Office; ca. 1978.
- U.S. Department of Energy. Statistics of interstate natural gas pipeline companies: 1977. Washington, DC: U.S. Government Printing Office; ca. 1979.
- U.S. Department of Energy. Statistics of interstate natural gas pipeline companies: 1978. Washington, DC: U.S. Government Printing Office; ca. 1980.
- U.S. Department of Energy. Statistics of interstate natural gas pipeline companies: 1979. Washington, DC: U.S. Government Printing Office; ca. 1981.
- U.S. Department of Health, Education, and Welfare, Public Health Service. Health manpower: a county and metropolitan area data book. Rockville, MD: Public Health Service; 1971a; 164 p.
- U.S. Department of Health, Education, and Welfare, Public Health Service. LPN's 1967: an inventory of licensed practical nurses. Washington, DC: U.S. Government Printing Office; 1971b; 101 p.
- U.S. Department of Health, Education, and Welfare, Public Health Service. Licensed optometrists in Florida: 1973. Washington, DC: U.S. Government Printing Office; 1974; 134 p.

- U.S. Department of the Interior, Bureau of Land Management. Draft environmental impact statement for OCS lease sale 66 and A66. New Orleans, LA: U.S. Department of the Interior; 1980. Available from: U.S. Government Printing Office, Washington, DC.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1955. Vol. 3. Washington, DC: U.S. Government Printing Office; 1958; 1,220 p.
- U.S. Department of the Interior, Bureau of Mines. The mineral industry of Florida. Washington, DC: U.S. Government Printing Office; 1960.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1960. Vol. 3. Washington, DC: U.S. Government Printing Office; 1961; 1,161 p.
- U.S. Department of the Interior, Bureau of Mines. The mineral industry of Florida. Washington, DC: U.S. Government Printing Office; 1965.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1965. Vol. 3. Washington, DC: U.S. Government Printing Office; 1967; 928 p.
- U.S. Department of the Interior, Bureau of Mines. The mineral industry of Florida. Washington, DC: U.S. Government Printing Office; 1970.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1970. Vol. 3. Washington, DC: U.S. Government Printing Office; 1972; 807 p.
- U.S. Department of the Interior, Bureau of Mines. The mineral industry of Florida. Washington, DC: U.S. Government Printing Office; 1975.
- U.S. Department of the Interior, Bureau of Mines. Economic impact of the phosphate industry on selected Florida counties, Florida and the United States. Washington, DC: U.S. Government Printing Office; September 1978a. Available from: Florida Resources and Environmental Analysis Center, Florida State University, Tallahassee, FL.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1975. Vol. 2. Washington, DC: U.S. Government Printing Office; 1978b; 847 p.
- U.S. Department of the Interior, Bureau of Mines. Minerals in the economy of Florida. Pittsburgh, PA: Publications Department, Bureau of Mines; 1978c; 18 p. .
- U.S. Department of the Interior, Bureau of Mines. Minerals in the economy of Florida. Washington, DC: U.S. Government Printing Office; 1979.
- U.S. Department of the Interior, Bureau of Mines. Minerals yearbook: 1979. Vol. 3. Washington, DC: U.S. Government Printing Office; 1981.
- U.S. Department of the Interior, Heritage Conservation and Recreation Service. National Register of historic properties, 18 March 1979. Federal Register 45(54):17451-17452.
- U.S. Department of the Interior, U.S. Geological Survey. Map of the State of Florida. No publication data available; 1967. Available from: U.S. Geological Survey, Tallahassee, FL.

- U.S. Department of the Interior, Geological Survey, Conservation Division. OCS statistics. Washington, DC: U.S. Government Printing Office; ca. 1981; Open file report 80-864.
- U.S. Environmental Protection Agency. Draft areawide environmental impact statement; Central Florida phosphate industry. Atlanta, GA: U.S. Environmental Protection Agency; ca. 1978. Available from: Tampa Bay Regional Planning Council, St. Petersburg, FL.
- U.S. Federal Energy Regulatory Commission, Office of Electric Power Regulation. Power pooling in the Southwest region. Washington, DC: U.S. Government Printing Office; August 1980; 191 p.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1955. Washington, DC: U.S. Government Printing Office; ca. 1956a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1955. Washington, DC: U.S. Government Printing Office, ca. 1956b.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1955. Washington, DC: U.S. Government Printing Office; ca. 1956c.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1960. Washington, DC: U.S. Government Printing Office; ca. 1961a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1960. Washington, DC: U.S. Government Printing Office; ca. 1961b.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1960. Washington, DC: U.S. Government Printing Office; ca. 1961c.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1965. Washington, DC: U.S. Government Printing Office; 1966a; 175 p.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1965. Washington, DC: U.S. Government Printing Office; ca. 1966b.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1970. Washington, DC: U.S. Government Printing Office; 1971a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1970. Washington, DC: U.S. Government Printing Office; 1971b.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1970. Washington, DC: U.S. Government Printing Office; 1972a.

- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1971. Washington, DC: U.S. Government Printing Office; 1972b.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1970. Washington, DC: U.S. Government Printing Office; 1972c; 171 p.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1971. Washington, DC: U.S. Government Printing Office; 1972d; 145 p.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1972. Washington, DC: U.S. Government Printing Office; 1973a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1972. Washington, DC: U.S. Government Printing Office; 1973b.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1972. Washington, DC: U.S. Government Printing Office; ca. 1973c; 145 p.
- U.S. Federal Power Commission. Statistics of interstate natural gas pipeline companies: 1972. Washington, DC: U.S. Government Printing Office; ca. 1973d.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1973. Washington, DC: U.S. Government Printing Office; ca. 1974a; 145 p.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1973. Washington, DC: U.S. Government Printing Office; 1974b.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1973. Washington, DC: U.S. Government Printing Office; ca. 1974c.
- U.S. Federal Power Commission. Statistics of interstate natural gas pipeline companies: 1973. Washington, DC: U.S. Government Printing Office; ca. 1974d.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1974. Washington, DC: U.S. Government Printing Office; ca. 1975a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1974. Washington, DC: U.S. Government Printing Office; ca. 1975b.
- U.S. Federal Power Commission. Steam-electric plant construction costs and annual production expenses: 1974. Washington, DC: U.S. Government Printing Office; ca. 1975c; 145 p.

- U.S. Federal Power Commission. Statistics of interstate natural gas pipeline companies: 1974. Washington, DC: U.S. Government Printing Office; ca. 1975d.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1975. Washington, DC: U.S. Government Printing Office; ca. 1976a.
- U.S. Federal Power Commission. Statistics of publicly-owned electric utilities in the United States: 1975. Washington, DC: U.S. Government Printing Office; ca. 1976b.
- U.S. Federal Power Commission. Statistics of interstate natural gas pipeline companies: 1975. Washington, DC: U.S. Government Printing Office; ca. 1976c.
- U.S. Federal Power Commission. Statistics of privately-owned electric utilities in the United States: 1976. Washington, DC: U.S. Government Printing Office; 1977.
- University of Florida, Bureau of Economic and Business Research, Division of Population Studies. Age, race, and sex components of Florida's population. Gainesville, FL: The University Presses of Florida; April 1979; Bulletin 47. Available from: University of Florida, Bureau of Economic and Business Research, Gainesville, FL.
- University of Florida, Institute of Food and Agricultural Sciences. Agricultural growth in an urban age. Gainesville, FL: University of Florida, Institute of Food and Agricultural Sciences; ca. 1975.
- Veri, A.; Jenna, W.; Bergamaschi, D. Environmental quality by design: South Florida. Miami, FL: University of Miami Press; September 1975.
- Whitfield, W.K., Jr. Mining of submerged shell deposits: history and status of regulation and production of the Florida industry. St. Petersburg, FL: Florida Department of Natural Resources, Marine Research Laboratory; 1975; Fla. Mar. Res. Publ. 11. 49 p. Available from: Florida Department of Natural Resources, Tallahassee, FL.
- Wood, R.; Fernald, E. The new Florida atlas. Tallahassee, FL: Trend Publications; 1974. Available from: Florida Resources and Environmental Analysis Center, Florida State University, Tallahassee, FL.
- Zellers-Williams, Inc. Evaluation of the phosphate deposits of Florida using the minerals availability system: final report. Lakeland, FL: June 1978.



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DEPARTMENT OF THE INTERIOR U.S. FISH AND WILDLIFE SERVICE



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.