



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 27, 2002

RECEIVED
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BY: _____

Mr. Jay Slack, Field Supervisor
US Fish and Wildlife Service
South Florida Ecological Service Office
1339 20th Street
Vero Beach, FL 32960

50-335/389

SUBJECT: REQUEST FOR LIST OF PROTECTED SPECIES WITHIN THE AREA UNDER
EVALUATION FOR THE ST. LUCIE PLANT LICENSE RENEWAL

The Nuclear Regulatory Commission (NRC) is evaluating an application submitted by Florida Power and Light Company for the renewal of the operating licenses for its St. Lucie Plant, Units 1 and 2. The NRC is preparing a supplement to its "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (NUREG-1437) for this proposed license renewal, for which we are required to evaluate potential impacts to threatened and endangered species. A member of my staff, Dr. Michael T. Masnik, visited your Vero Beach, Florida office on December 17, 2001, and had preliminary discussions related to the FPL application for license renewal with Mr. Charles Kelso of your staff.

The proposed action would include use and continued maintenance of existing facilities and transmission lines and would not result in new construction or disturbance. The St. Lucie Plant and the associated transmission corridor that is under review as part of the license renewal application is located in St. Lucie County, Florida. The transmission corridor is approximately 11 miles long and varies from 660 to 813 feet in width. The plant uses once-through cooling water from the Atlantic Ocean to remove waste heat from the facility. Ocean water is drawn through three offshore intake structures into an intake canal that leads to the plant. The heated water is discharged back to the Atlantic Ocean through offshore diffusers. The Atlantic Ocean in the vicinity of the plant is considered part of the aquatic environment of interest.

To support the environmental impact statement preparation process and to ensure compliance with Section 7 of the Endangered Species Act, the NRC requests a list of species and information on protected, proposed, and candidate species and critical habitat that may be in the vicinity of the St. Lucie Plant and its associated transmission lines.

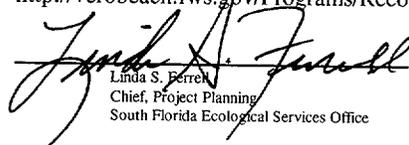
Also, we would like confirmation that the South Florida Ecological Service Office will serve as the U.S. Fish and Wildlife Service's point of contact for Endangered Species Act compliance, including any Section 7 consultation that may be needed, for the St. Lucie Plant.

U.S. Fish and Wildlife Service
1339 20th Street
Vero Beach, Florida 32960
561-562-3909 Fax 561-562-4288



Service Record Number 2002-4008

Enclosed find a complete list and discussion of federally listed species and their habitats, in the future please visit our web page at:
http://verobeach.fws.gov/Species_lists/countyfr.html or
<http://verobeach.fws.gov/Programs/Recovery/vbms5.html>.


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Chief, Project Planning
South Florida Ecological Services Office

3-15-02
Date

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ST. LUCIE PLANT

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3209 Virginia Avenue
Ft. Pierce, FL 34981-5596

Multi-Species Recovery Plan

Now Available on the
Internet!

**U. S. Fish & Wildlife Service Unveils South Florida
Multi-species Recovery Plan**
May 18, 1999



Bruce Babbitt, Secretary, Department of the Interior and Sam Hamilton, Regional Director, U.S. Fish & Wildlife Service Southeast Region, presided over a landmark signing ceremony for the **Multi-species Recovery Plan** at the recent South Florida Restoration Science Forum in Boca Raton Florida. This event marked a major step toward South Florida Ecosystem restoration and the recovery of threatened and endangered species in South Florida.

[Executive Summary](#)
(220KB)

[Department of Interior News Brief](#) as a .pdf file

[Introduction](#)
(463KB)

[The South Florida
Ecosystem](#)
(1.5mMB)

[The Ecological
Communities](#)

[The Species](#)

[Implementation](#)
(103KB)

[Appendices](#)

All documents on these pages are available as .PDF files. PDF files can be downloaded and read using Adobe Acrobat Reader.

This software is free and is available from Adobe Inc.

<http://www.adobe.com/acrobat/>

The Multi-species Recovery Plan is one of the first and most far reaching ecosystem plans developed by the Service. It serves as a blueprint to recover 68 threatened and endangered species, and to restore and maintain biodiversity of native plants and animals in the 23 natural communities throughout about 26,000 square miles of the 19 southernmost counties in Florida.

The final document is available from the Fish & Wildlife Service Reference Service. The CD-ROM copy is provided free of charge. Other formats include photocopy and microfiche, however, please contact the Reference Service to determine applicable duplication and mailing charges. You can order your copy by e-mailing your request to the Reference Service, calling their toll free number (800)582-3421, or mailing your request to:

Fish & Wildlife Service Reference Service
5430 Grosvenor Lane
Suite 110
Bethesda, MD 20814.

Listed Species in St. Lucie County

(updated June 2000)

Species	Federal status	Habitat
Southeastern beach mouse <i>Peromyscus polionotus niveiventris</i>	T	Beach dune/Coastal strand
West Indian manatee <i>Trichechus manatus</i>	E (CH)	Mangrove, Seagrass, Nearshore reef
Audubon's crested caracara <i>Polyborus plancus audubonii</i>	T	Mesic temperate hammock, Mesic pine flatwoods, Hydric pine flatwoods, Dry prairie, Wet prairie
Bald eagle <i>Haliaeetus leucocephalus</i>	T	High pine, Scrubby high pine, Maritime hammock, Mesic temperate hammock, Pine rockland, Scrubby flatwoods, Mesic pine flatwoods, Hydric pine flatwoods, Dry prairie, Wet prairie, Freshwater marsh, Seepage swamp, Flowing water swamp, Pond swamp, Mangrove, Saltmarsh, Seagrass
Everglade snail kite <i>Rostrhamus sociabilis plumbeus</i>	E (CH)	Hydric pine flatwoods, Freshwater marsh, Pond swamp
Florida scrub-jay <i>Aphelocoma coerulescens</i>	T	Scrub, Scrubby flatwoods
Red-cockaded woodpecker <i>Picoides (= Dendrocopos) borealis</i>	E	High pine, Mesic pine flatwoods, Hydric pine flatwoods
Wood stork <i>Mycteria americana</i>	E	Hydric pine flatwoods, Wet prairie, Freshwater marsh, Seepage swamp, Flowing water swamp, Pond swamp, Mangrove, Saltmarsh, Seagrass
American alligator <i>Alligator mississippiensis</i>	T (S/A)	Hydric pine flatwoods, Wet Prairie, Freshwater marsh, Seepage swamp, Pond Swamp, Mangrove, Hydric pine flatwoods, Wet prairie, Seepage swamp, Flowing water swamp, Pond swamp
Eastern indigo snake <i>Drymarchon corais couperi</i>	T	High pine, Tropical hardwood hammock, Scrubby high pine, Beach dune/Coastal strand, Maritime hammock, Mesic temperate hammock, Pine rockland, Scrubby flatwoods, Mesic pine flatwoods, Hydric pine flatwoods, Dry prairie, Cutthroat grass, Freshwater marsh, Seepage swamp, Flowing water swamp, Pond swamp, Mangrove
Green sea turtle <i>Chelonia mydas (incl. Agassizi)</i>	E	Beach dune/Coastal strand, Seagrass, Nearshore reef
Leatherback sea turtle <i>Dermochelys coriacea</i>	E	Beach dune/Coastal strand, Seagrass, Nearshore reef
Loggerhead sea turtle <i>Caretta caretta</i>	T	Beach dune/Coastal strand, Seagrass, Nearshore reef
Four-petal pawpaw <i>Asimina tetramera</i>	E	Scrub
Fragrant prickly-apple <i>Cereus eriophorus var. fragrans</i>	E	Scrub, Scrubby flatwoods
Johnson's seagrass <i>Halophila johnsonii</i>	T (CH)	Seagrass
Lakela's mint <i>Dicerandra immaculata</i>	E	Scrub
Tiny polygala <i>Polygala smallii</i>	E	High pine, Scrub, Pine rockland, Scrubby flatwoods

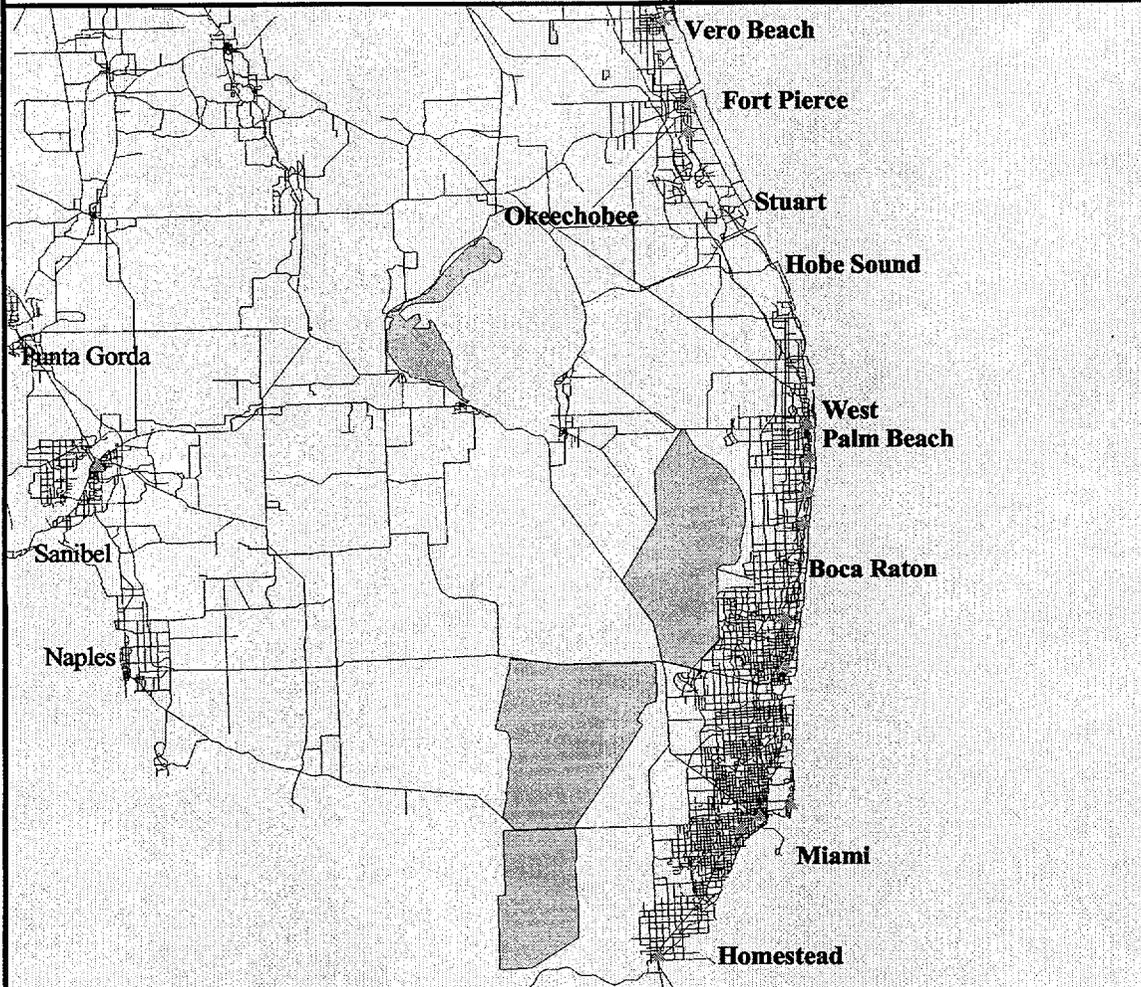
Critical Habitat for the Everglade snail kite

(*Rostrhamus sociabilis plumbeus*)

as defined in the Code of Federal Regulations 50 Parts 1 to 199,
revised as of October 1, 2000.

Florida. Areas of land (predominantly marsh), water, and airspace, with the following components (Tallahassee Meridian): (1) St. Johns Reservoir, Indian River County: T33S R37E SW1/4 Sec. 6, W1/2 Sec. 7, Sec. 18, Sec. 19; (2) Cloud Lake Reservoir, St. Lucie County; T34S R38E S1/2 Sec. 16, N1/2 Sec. 21; (3) Strazzulla Reservoir, St. Lucie County: T34S R38E SW1/4 Sec. 21; (4) western parts of Lake Okeechobee, Glades and Hendry counties, extending along the western shore to the east of the levee system and the undiked high ground at Fisheating Creek, and from the Hurricane Gate at Clewiston northward to the mouth of the Kissimmee River, including all the *Eleocharis* flats of Moonshine Bay, Monkey Box, and Observation Shoal, but excluding the open water north and west of the northern tip of Observation Shoal, north of Monkey Box, and east of Fisheating Bay; (5) Loxahatchee National Wildlife Refuge (Central and Southern Florida Flood Control District Water Conservation Area 1), Palm Beach County, including Refuge Management Compartments A, B, C, and D, and all of the main portion of the Refuge as bounded by Levees L-7, L-39, and L-40; (6) Central and Southern Florida Flood Control District Water Conservation Area 2A, Palm Beach and Broward Counties, as bounded by Levees L-6, L-35B, L-36, L-38, and L-39; (7) Central and Southern Florida Flood Control District Water Conservation Area 2B, Broward County, as bounded by Levee L-35, L-35B, L-36, and L-38; (8) Central and Southern Florida Flood Control District Water Conservation Area 3A, Broward and Dade Counties, as bounded by Florida Highway 84, Levees L-68A, L-67A (north of Miami Canal), L-67C (south of Miami Canal), L-29, and L-28, and a line along the undiked northwestern portion of the Area; (9) that portion of Everglades National Park, Dade County, within the following boundary: Beginning at the point where the Park boundary meets Florida Highway 94 in T54S R35 Sec. 20, thence eastward and southwest along the Park boundary to the southwest corner of Sec. 31 in T7S R37E, thence southwestward along a straight line to the southwest corner of Sec. 2 in T58S R35E, thence westward along the south sides of Sec. 3, 4, 5, and 6 in T58S R35E to the Dade-Monroe county line, thence northward along the Dade-Monroe county line to the Park boundary, thence eastward and northward along the Park boundary to the point of beginning.

General locations of the designated critical habitat for the Everglade snail kite.



General Area



Distance: Miles

0 10 20 30 Miles



Legend

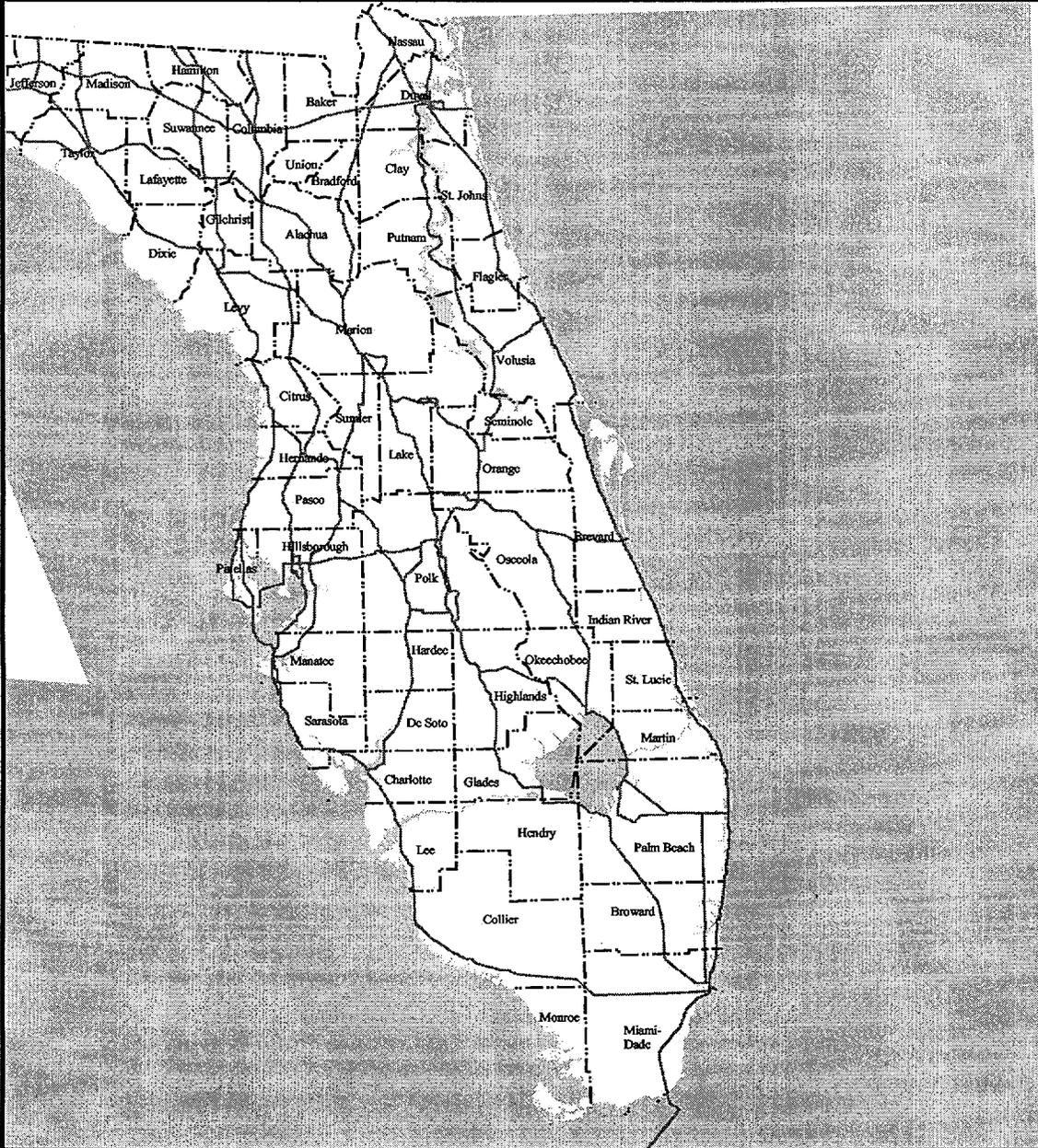
- City/Town
- Major Road/Highway
- Critical Habitat

Use Constraints: This map is intended to be used as a guide to identify the general areas where critical habitat has been designated. Refer to the narrative description published in the Code of Federal Regulations (CFR) 50 Parts 1 to 199 (a copy of this text is printed on the reverse of this map).

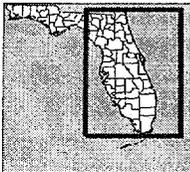
Critical Habitat for the **Florida manatee** (*Trichechus manatus*)
as defined in the Code of Federal Regulations 50 Parts 1 to 199,
revised as of October 1, 2000.

Crystal River and its headwaters known as King's Bay, Citrus County; the Little Manatee River downstream from the U.S. Highway 301 bridge, Hillsborough County; the Manatee River downstream from the Lake Manatee Dam, Manatee County; the Myakka River downstream from Myakka River State Park, Sarasota and Charlotte Counties; the Peace River downstream from the Florida State Highway 760 bridge, De Soto and Charlotte Counties; Charlotte Harbor north of the Charlotte-Lee County line, Charlotte County; Caloosahatchee River downstream from the Florida State Highway 31 bridge, Lee County; all U.S. territorial waters adjoining the coast and islands of Lee County; all U.S. territorial waters adjoining the coast and islands and all connected bays, estuaries, and rivers from Gordon's Pass, near Naples, Collier County, southward to and including Whitewater Bay, Monroe County; all waters of Card, Barnes, Blackwater, Little Blackwater, Manatee, and Buttonwood Sounds between Key Largo, Monroe County, and the mainland of Dade County; Biscayne Bay, and all adjoining and connected lakes, rivers, canals, and waterways from the southern tip of Key Biscayne northward to and including Maule Lake, Dade County; all of Lake Worth, from its northernmost point immediately south of the intersection of U.S. Highway 1 and Florida State Highway A1A southward to its southernmost point immediately north of the town of Boynton Beach, Palm Beach County; the Loxahatchee River and its headwaters, Martin and West Palm Beach Counties; that section of the intracoastal waterway from the town of Seawalls Point, Martin County to Jupiter Inlet, Palm Beach County; the entire inland section of water known as the Indian River, from its northernmost point immediately south of the intersection of U.S. Highway 1 and Florida State Highway 3, Volusia County, southward to its southernmost point near the town of Sewalls Point, Martin County, and the entire inland section of water known as the Banana River and all waterways between Indian and Banana Rivers, Brevard County; the St. Johns River including Lake George, and including Blue Springs and Silver Glen Springs from their points of origin to their confluences with the St. Johns River; that section of the Intracoastal Waterway from its confluences with the St. Marys River on the Georgia-Florida border to the Florida State Highway A1A bridge south of Coastal City, Nassau and Duval Counties.

General locations of the designated critical habitat for the Florida manatee.



General Area



Distance: Miles

0 30 60 90 120 Miles



Legend

-  Highways
-  Critical habitat

Use Constraints: This map is intended to be used as a guide to identify the general areas where Florida Manatee critical habitat has been designated. Refer to the narrative description published in the Code of Federal Regulations (CFR) 50 Parts 1 to 199 (a copy of this text is printed on the reverse of this map).

Federally Listed and Candidate Species, and Designated Critical Habitats Occurrences in South Florida by County

Sources: Multi-species recovery plan for south Florida and Candidate status review, species may occur in suitable community types in counties that are not checked.

County		Miami-Dade	Broward	Palm Beach	Martin	St. Lucie	Indian River	Osceola												Okeechobee	Polk	Highlands	Glades	Hendry	Hardee	DeSoto	Sarasota	Charlotte	Lee	Collier	Monroe		
Mammals (except whales)																																	
E	Florida panther	✓	✓	✓				✓													✓	✓	✓	✓				✓	✓	✓	✓		
SA	Puma (=mountain lion)	✓	✓	✓																	✓	✓	✓	✓				✓	✓	✓	✓		
E	Key deer																														✓		
E	Key Largo cotton mouse																														✓		
E	Key Largo woodrat																														✓		
E	Lower Keys rabbit																														✓		
E	Rice rat (=silver rice rat)																														✓		
CH	Rice rat (=silver rice rat)																														✓		
T	Southeastern beach mouse					✓	✓														✓		✓			✓	✓	✓	✓	✓	✓		
E	West Indian manatee	✓	✓	✓	✓	✓	✓													✓			✓			✓	✓	✓	✓	✓	✓		
CH	West Indian manatee	✓		✓	✓	✓	✓																			✓	✓	✓	✓	✓	✓		
Birds																																	
T	Audubon's crested caracara			✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E	Bachman's warbler																				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
T	Bald eagle	✓		✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E	Cape Sable seaside sparrow	✓																													✓	✓	
CH	Cape Sable seaside sparrow	✓																													✓	✓	
E	Everglade snail kite	✓	✓	✓		✓	✓	✓													✓	✓	✓	✓						✓	✓	✓	
CH	Everglade snail kite	✓	✓	✓		✓	✓	✓																							✓	✓	
E	Florida grasshopper sparrow																				✓	✓	✓	✓								✓	
T	Florida scrub-jay			✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E	Ivory-billed woodpecker																															✓	
E	Kirtland's warbler																															✓	
T	Piping plover				✓																										✓	✓	
E	Red-cockaded woodpecker			✓	✓	✓		✓														✓	✓	✓				✓	✓	✓	✓	✓	
T	Roseate tern	✓																														✓	
XN	Whooping crane																																✓
E	Wood stork	✓	✓	✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

✓ = Species occurs in county; E=Endangered; T=Threatened; C=Candidate; CH=Critical habitat designated; XN=Nonessential experimental population; SA=Similarity of Appearance

County		Miami-Dade	Broward	Palm Beach	Martin	St. Lucie	Indian River	Osceola													Okeechobee	Polk	Highlands	Glades	Hendry	Hardee	DeSoto	Sarasota	Charlotte	Lee	Collier	Monroe						
Reptiles																																						
E	American crocodile	✓	✓																														✓	✓	✓			
CH	American crocodile	✓																																	✓	✓	✓	
SA	American alligator	✓	✓	✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
T	Atlantic salt marsh snake						✓																															
T	Bluetail (=blue-tailed) mole skink							✓														✓	✓	✓														
T	Eastern indigo snake	✓	✓	✓	✓	✓	✓	✓													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E	Green sea turtle	✓	✓	✓	✓	✓	✓																														✓	
E	Hawksbill (=carey) sea turtle	✓	✓	✓	✓																																✓	
E	Kemp's (=Atlantic) ridley sea turtle																																				✓	
E	Leatherback sea turtle	✓	✓	✓	✓	✓	✓																														✓	
T	Loggerhead sea turtle	✓	✓	✓	✓	✓	✓																														✓	
T	Sand skink							✓														✓	✓														✓	
Invertebrates																																						
C	Highlands tiger beetle																					✓	✓															
E	Schaus swallowtail butterfly	✓																																				✓
T	Stock Island tree snail																																					✓
Plants																																						
E	Crenulate lead-plant	✓																																				✓
C	Blodgett's silverbush	✓																																				✓
E	Four-petal pawpaw			✓	✓	✓																																
T	Florida bonamia							✓														✓	✓														✓	
C	Florida brickell-bush	✓																																				
E	Fragrant prickly-apple					✓																																
C	Big Pine partridge pea																																					✓
E	Deltoid spurge	✓																																				
C	Pineland sandmat	✓																																				
C	Wedge spurge																																					
T	Garber's spurge	✓																																				
E	Pygmy fringe-tree							✓														✓	✓															✓
C	Cape Sable thoroughwort																																					
E	Florida golden aster																										✓											
E	Florida perforate cladonia			✓	✓																	✓	✓															
T	Pigeon wings																					✓	✓															

✓ = Species occurs in county; E=Endangered; T=Threatened; C=Candidate; CH=Critical habitat designated; XN=Nonessential experimental population; SA=Similarity of Appearance

County		Miami-Dade	Broward	Palm Beach	Martin	St. Lucie	Indian River	Osceola												Okeechobee	Polk	Highlands	Glades	Hendry	Hardee	DeSoto	Sarasota	Charlotte	Lee	Collier	Monroe		
E	Short-leaved rosemary																				✓	✓											
Plants (cont.)																																	
E	Avon Park harebells																				✓	✓											
E	Okeechobee gourd			✓																✓													
C	Florida prairie clover	✓																										✓	✓		✓		
E	Beautiful pawpaw																																
E	Garrett's mint																																
E	Scrub mint																																
E	Lakela's mint					✓																											
C	Florida pineland crabgrass	✓																															
T	Scrub buckwheat							✓													✓	✓											
E	Snakeroot																																
E	Small's milkpea	✓																															
T	Johnson's seagrass	✓	✓	✓	✓	✓	✓																										
E	Highlands scrub hypericum																				✓	✓											
C	Florida indigo																															✓	
E	Beach jacquemontia	✓	✓	✓																													
E	Scrub blazing star																				✓	✓											
C	Sand flax																															✓	
C	Carter's small-flowered flax	✓																															
E	Scrub lupine	✓																			✓												
E	Britton's beargrass							✓													✓	✓											
C	Florida semaphore cactus																															✓	
T	Papery whitlow-wort							✓													✓	✓											
E	Key tree-cactus																															✓	
E	Lewton's polygala							✓													✓	✓											
E	Tiny polygala	✓	✓	✓	✓	✓																											
E	Wireweed																																
E	Sandlace																									✓							
E	Scrub plum																																
E	Wide-leaf warea							✓																									
E	Carter's mustard																				✓	✓											
E	Florida ziziphus																				✓	✓											

✓ = Species occurs in county; E=Endangered; T=Threatened; C=Candidate; CH=Critical habitat designated; XN=Nonessential experimental population; SA=Similarity of Appearance

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SOUTH FLORIDA ECOLOGICAL SERVICES OFFICE
1339 20TH STREET
VERO BEACH, FLORIDA 32960-3559

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

DCD