

# State of the State

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## Florida's People and Economy

In the last 50 years Florida's population has grown from less than three million people to more than 17 million. Florida ranked fourth in U.S. population (U.S. Census Bureau 2000), but Florida's population density is approximately double that of the most populous state, California. Florida's most densely populated urban areas include Miami, Orlando, Tampa, and Jacksonville. The 2030 population projection for Florida is an 80 percent increase to 28.7 million people (U.S. Census Bureau 2000). Based on this forecast, Florida would rank third in population at that time.

Florida's economy is increasingly recognized as tied to its natural and human-created amenities. Florida's current economic growth is not primarily due to the traditional bases of growth such as agriculture, resource extraction, and manufacturing (Kiker and Hodges 2002). However, despite declines over the past century, agriculture and forestry are still major uses of the landscape and continue to contribute to Florida's economy.

Tourism is the largest industry in Florida and contributes \$53 billion a year to the state's economy. Seventy-one million visitors are drawn to Florida each year from across the United States and many foreign countries. Visitors come to see the many entertainment attractions in Florida and to enjoy Florida's moderate climate and abundant natural resources, including clear waters, world-class beaches, coral reefs, parks, rivers, and lakes.

Wildlife-related recreation in Florida, including fishing, hunting, and wildlife watching activities, accounts for \$7.2 billion spent on trips and equipment. In 2001, over three million persons engaged in fishing and wildlife watching activities in Florida and over 200,000 of the three million participated in hunting. For comparison, total wildlife-based recreation expenditures in the U.S. were in excess of \$96 billion (U.S. Fish and Wildlife Service and U.S. Census Bureau 2002).

Florida's economy and its communities also strongly benefit from money and jobs created by industries based on natural resources, which include a \$17 billion forestry industry, a \$6.6 billion fishing industry, and a \$14.6 billion boating industry. Florida seaports form another important part of the state's economy; the seaports support a \$35 billion cargo and trade industry, with 288,000 jobs, and a \$20 billion cruise ship industry, which embarks almost half of the nation's cruise passengers each year.

## Florida's Climate and Landscape

(Adapted from Hootor 2003)

Florida is an ecologically diverse region ranging in climate from the temperate to the subtropical. It is relatively flat with a maximum elevation in the north of approximately 330 feet (100 meters), and much of the state below elevations of 100 feet (30 meters).

Northern Florida is within the southern temperate zone and consists of broad alluvial riparian habitats, and upland flats and ridges once dominated by longleaf pine communities. The central peninsula consists of broad flatlands once dominated by longleaf and slash pine, dry and wet prairies and sandy ridges with scrub and sandhill communities harboring numerous rare and endemic species (Myers 1990). The southern tip of the peninsula, though heavily modified by development, still contains tropically-influenced hammocks, swamps, rocklands, and marshes of the Big Cypress Swamp, Everglades, and the Florida Keys.

Rivers originating in the southern Appalachians and Piedmont are an important ecological component in north Florida that harbor increasingly rare mollusk and fish species. Lakes are very common in the Florida peninsula, and Lake Okeechobee in south Florida is one of the largest lakes in North America. Numerous springs are also characteristic of the vast limestone regions of north and central Florida. Springs, limestone caves, and sinks support many rare aquatic invertebrates (Deyrup and Franz 1994). Estuarine ecosystems include productive salt marsh communities in the northern half of the state, mangrove communities in the southern half of the peninsula and seagrass communities statewide.

The Gulf of Mexico and Atlantic Ocean significantly influence a climate that is generally warm and humid. Summer thunderstorms are frequent, and lightning-caused fires are an extremely important ecological process that has shaped many upland and wetland communities for millennia (Myers and Ewel 1990). Rains vary from highly seasonal patterns in south Florida with heavy rains occurring mainly in the summer to more even year-round rainfall in northern Florida. North Florida's rainfall is more frequent in winter due to the influence from continental frontal systems (Chen and Gerber 1990).

Freezes occur every year in north Florida but are extremely rare in south Florida. Freeze events have a strong influence on the range of tropical species up the Florida peninsula. Tropical species range farther north along the coasts, which are better buffered from freeze events than interior areas because of the warm waters of the Atlantic and Gulf of Mexico (Harris and Cropper 1992).

## Florida's Wildlife

Florida's wildlife is a mixture of southern temperate, neotropical, and southwestern species. Sea level rise and fall have been a dominating biogeographic force. For example, the Florida scrub-jay, Florida mouse, eastern diamondback rattlesnake, and gopher tortoise are all closely related to species found in western North America, as a result of semiarid habitat that stretched into Florida

during the much lower sea levels of the early Pleistocene periods (Webb 1990). Tropical species have colonized Florida by flying across the Gulf of Mexico or by riding Gulf Stream currents and include numerous plants, wading bird species, and raptors such as the snail kite and short-tailed hawk (Rodgers et al. 1996). In fact, Florida is a premier birding destination due to the various tropical species that can only be seen or are best seen here (Kale and Maehr 1990). Temperate species include the red-cockaded woodpecker, and various amphibians, fish, and mollusk species (Gilbert 1992; Moler 1992; Deyrup and Franz 1994; Rodgers et al. 1996).

Florida has 755 known native terrestrial vertebrates including frogs, snakes, lizards, mice, and birds (Florida Fish and Wildlife Conservation Commission, 1999; Florida Fish and Wildlife Conservation Commission, 2002a; Moler 1999; Deyrup and Franz, 1994). In addition, at least one-thousand marine fish species inhabit Florida's nearshore waters, which encompass about one fourth of all the fish species known in the western hemisphere north of the equator. Florida has approximately 30,000 species of terrestrial invertebrates and thousands more in aquatic and marine systems (Whitney et al. 2004). Several species of marine vertebrates including whales, dolphins, sea turtles, and the Florida manatee inhabit Florida's waters.

Eleven vertebrate species and/or subspecies are believed to have been extirpated or driven to extinction since the arrival of Europeans in Florida, including the red wolf, Caribbean monk seal, bison, Goff's pocket gopher, Chadwick beach cotton mouse, pallid beach mouse, ivory-billed woodpecker, Carolina parakeet, passenger pigeon, dusky seaside sparrow, and Bachman's warbler.

## **Endemic Species**

An endemic species is a native species that is limited to a particular geographical area. Florida has 147 or more endemic vertebrate species and subspecies, including three mammal species and 38 subspecies, nine birds with distinct ranges and 17 with overlapping ranges, 16 or more reptiles, 10 or more amphibians, and 11 fishes (+16 in single stream systems whose upstream reaches are in Georgia and Alabama) (Muller et al. 1989).

The number of endemic marine invertebrates is unknown, but there are 410 known terrestrial and freshwater invertebrates, including seven mollusks; 28 crabs and relatives; six stone flies and relatives; six dragonflies, damselflies, and relatives; 42 grasshoppers, crickets, and relatives; one mayfly; 193 beetles and relatives; 14 caddisflies and relatives; and 17 butterflies and moths (Muller et al. 1989).

## **The Condition of Our Resources**

### **Land Use**

The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) conducts a National Resources Inventory (NRI) approximately every five years. This report is a key resource on the status, condition, and trends of soil, water, and land. According to the 1997

National Resources Inventory (NRCS 2000) the total surface area of Florida is 37,535,030 acres (15,189,888 hectares), including water areas (Figure 2.). The vast majority of the state is characterized as nonfederal rural lands ('nonfederal' referring to all lands in private, municipal, state, or tribal ownership).

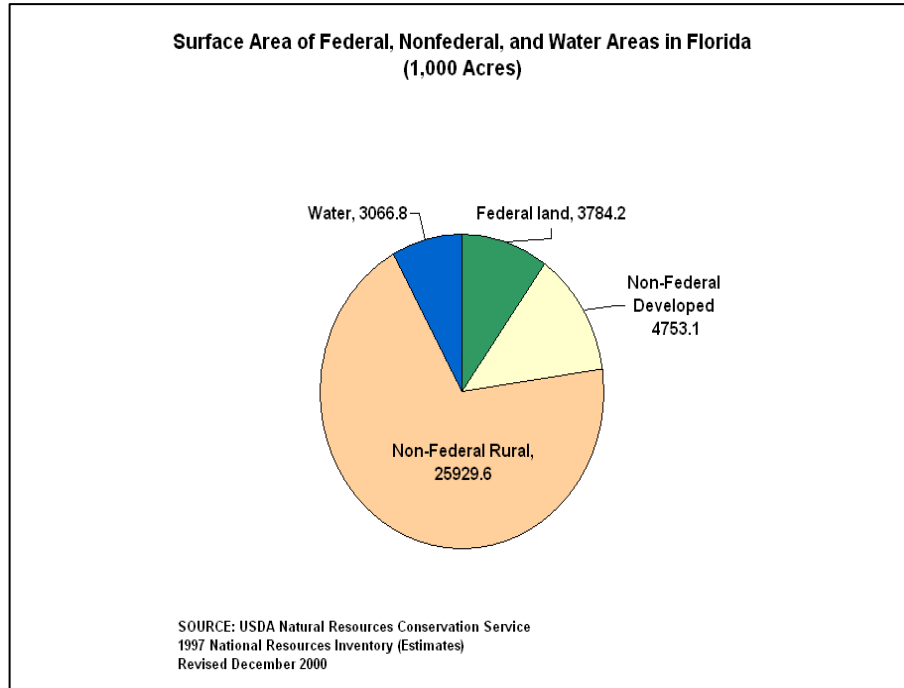


Figure 2. Surface Area of Federal, Non-Federal, and Water Areas in Florida (NRCS 2000).

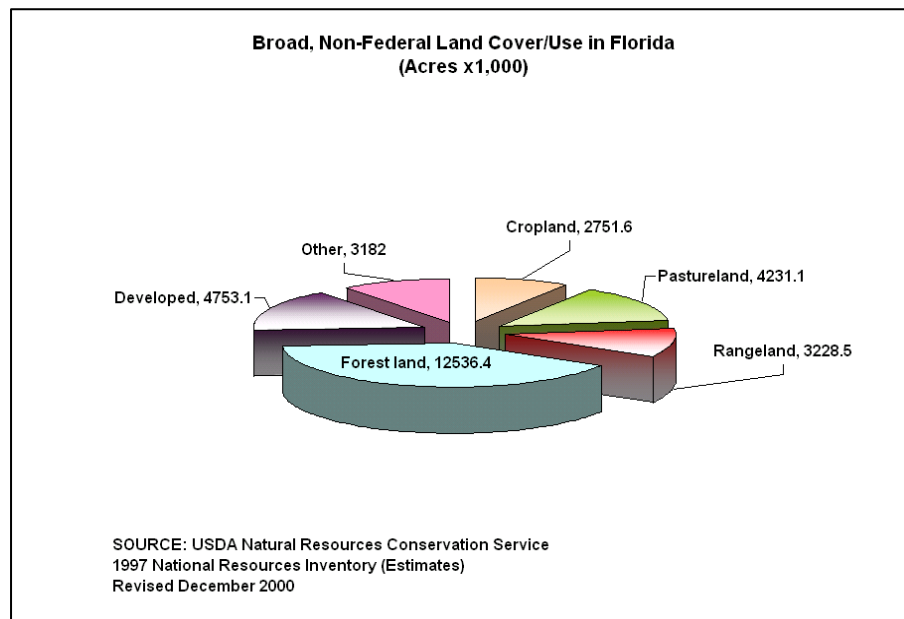


Figure 3. Broad, Non-Federal Land Cover/Use in Florida (NRCS 2000).

## Protected Species

In Florida, there are 57 animals federally listed as endangered or threatened species, or experimental non-essential by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (16 U.S.C. 1531 to 5143). In Florida, the whooping crane is the only experimental non-essential designated animal. Additionally, there are 24 recovery plans for animals in Florida. A recovery plan typically addresses a single species, but in Florida some plans include multiple species; for example, beach mice species are grouped together into a single recovery plan and the South Florida Multi-Species Recovery Plan covers 15 species (USFWS 1999). Threatened and endangered animal and plant information is available on the USFWS web site at <http://endangered.fws.gov/wildlife.html#Species>.

The Florida Fish and Wildlife Conservation Commission (FWC) lists 118 state endangered, threatened, and species of special concern animals. Four of these have approved management plans: the red-cockaded woodpecker, the flatwoods salamander, the Miami blue butterfly, and the Panama City crayfish (though final action on the classification of the crayfish has not occurred). These species management plans can be viewed at <http://wildflorida.org/imperiled/plans.htm>. The number of state and federally protected animals ordered by taxonomic group can be found in Table 1.

Table 1. Summary of Official Lists of Florida's Endangered Species, Threatened Species and Species of Special Concern.

Status Designation	Fish	Amphibians / Reptiles	Birds	Mammals	Invertebrates	Total
<b>FWC</b>						
Endangered	3	6	8	20	4	41
Threatened	2	10	10	4	0	26
Special Concern	10	13	18	6	4	51
Subtotal	15	29	36	30	8	118
<b>USFWS<sup>a</sup></b>						
Endangered	2	5	5	18	6	36
Threatened	1	8	5	2	4	20
XN <sup>b</sup>	0	0	1	0	0	1
Subtotal	3	13	11	20	10	57

<sup>a</sup> United States Fish and Wildlife Service

<sup>b</sup> Experimental Non-Essential

## Game Species

Game species include animals found in Florida's terrestrial, freshwater, and marine ecosystems that are hunted or fished. Florida's game species are migratory game birds including ducks, geese, common moorhen, coots, snipe, rails, woodcock, mourning doves and white-winged doves, and resident game birds, including quail and wild turkeys. Resident game mammals include

deer, gray squirrels, wild hogs and rabbits. The American alligator is not a game species, but it is harvested.

The general status of terrestrial game species in Florida is closely tied to habitat conditions and availability. Some species have relatively narrow habitat requirements such as those dependent upon frequently burned grassland communities. The northern bobwhite, for example, has declined 66 percent throughout its range between 1980 and 1999 (Dimmick et al. 2002). The fox squirrel has declined and is no longer listed as a game species.

Migratory game bird numbers are highly influenced by habitat quality and availability on the breeding grounds, which for most species occur outside Florida, although three species of ducks commonly nest in Florida. However, loss and degradation of suitable habitat in Florida has likely contributed to declining numbers of many of the more than 20 species of migratory waterfowl that over-winter here.

Abundant freshwater and saltwater fishing opportunities have contributed to Florida's designation as the "Fishing Capital of the World" (<http://fishingcapital.com/>), aided by 700 world-record fish catches (seven times more than any other state). Popular marine game fish species include common snook, red drum and spotted sea trout. From Florida's three million acres of freshwater lakes and 12,000 miles (19,312 kilometers) of streams and rivers, over 250 different species of freshwater fishes have been collected. This includes several rather rare native fishes as well as 73 species not native to the United States.

## **Nongame Wildlife**

The status of nongame wildlife in Florida was determined from the ranking of 668 native vertebrate taxa according to biological vulnerability (Millsap et al. 1990). This includes 126 freshwater fish species. The vertebrate ranking system initiated a long-term planning effort to identify and prioritize taxonomic, survey, population monitoring, research, management, habitat protection, and education projects needed to conserve vertebrate wildlife taxa that might be at risk of extirpation (Enge et al. 2003). As a result, Florida has a preliminary list of 224 recommended conservation tasks:

- 24 projects have been identified for interior scrub and sandhill taxa, primarily sand swimming reptiles, the Florida scrub-jay, and several mammals.
- 36 projects address the interior prairie region, primarily the Florida grasshopper sparrow, sandhill crane, whooping crane, crested caracara, and short-tailed hawk.
- 19 projects apply mostly to the Key deer and endemic rodents of south Florida rockland habitats.
- 52 projects are identified for amphibians, reptiles, and fishes inhabiting northwest Florida streams and wetlands.

- 72 tasks have been identified for coastal taxa: seaside sparrows, marsh wrens, declining Neotropical migrants, mangrove-nesting songbirds, larids, shorebirds, rails, wading birds, rodents of coastal uplands and tidal marshes, salt marsh snakes, diamondback terrapins, American crocodiles, and nesting sea turtles.
- 21 conservation tasks have been identified for imperiled bat species which were not covered under the five regions/habitats.

In addition, Florida wildlife managers have adopted a feral and free-ranging cat policy to protect all native wildlife. Florida has management guidelines in place for Florida burrowing owls in urban areas, ospreys nesting on man-made structures, gopher tortoises on lands slated for development, and a conservation strategy for the black bear.

Recently, Florida has made advances in assessing the needs of native non-game, imperiled freshwater fish species. *The Florida Imperiled Fish Species Investigation* surveyed for the presence, distribution, and relative abundance of Florida's imperiled fishes and to establish sites suitable for a long-term monitoring program (Bass et al. 2004).

Conservation actions directed towards nongame wildlife benefit from a Nongame Wildlife Trust Fund established in 1983 by the Florida Legislature, resulting in the 1984 initiation of the Nongame Wildlife Program for the Florida Game and Fresh Water Fish Commission (now Florida Fish and Wildlife Conservation Commission). The program's intent is to maintain or restore the richness and natural diversity of Florida's native nongame wildlife and establish an integrated and coordinated approach to the management and conservation of nongame (Florida Game and Fresh Water Fish Commission and Nongame Wildlife Advisory Council 1984). Over the years a variety of program accomplishments have included (1) establishment of nongame conservation priorities, (2) sponsored research, (3) survey and population monitoring, (4) urban wildlife management, (5) nongame technical assistance including guidance for conservation lands acquisition, (6) species and habitat management, (7) conservation education including Project Wild, (8) protected species coordination, and (9) wildlife viewing initiatives. The base revenue for the trust fund is provided through used-car original title fees and vehicle speeding fines. Current revenue from these sources approximates \$6 million dollars annually. Even with these funds, and although the nongame program has had successes, Florida, like many states, continues to have significant unmet species and habitat needs.

### **Endangered Ecosystems**

In an assessment of risk to ecosystems in the United States, seven southeastern states (Florida, Georgia, North Carolina, South Carolina, Virginia, Alabama, and Tennessee) made the "extreme risk" category based on number of endangered ecosystems, percentage of imperiled species by state, and development pressures. The highest ranking endangered ecosystem in the United States is the south Florida landscape. Seven additional Florida ecosystems were also identified in the list of the top 21 endangered ecosystems nationally (Noss and Peters 1995) (*priority order shown in parentheses*):

- South Florida landscape (1)
- Longleaf pine and savanna (3)
- Eastern grasslands, savanna, and barrens (4)
- Coastal communities in the lower 48 states (7)
- Large streams and rivers in the lower 48 states (11)
- Cave and Karst systems (12)
- Florida scrub (15)
- Southern forested wetlands (21)

## **Conservation Planning**

Florida is a national leader in conducting detailed species assessments and adopting systematic, landscape-based reserve designs to protect connectivity and ecological processes. Two of the most significant conservation planning efforts for statewide biodiversity are described below. The FWC's Closing the Gaps Project was initiated in 1990 with the goal of identifying the minimum amount of land in Florida that, if protected, would ensure the long-term persistence of most elements of Florida's biodiversity. The initial assessment and strategy, or first phase, was reported in *Closing the Gaps in Florida's Wildlife Habitat Conservation System* (Cox et al. 1994). Strategic Habitat Conservation Areas and Regional Biodiversity Hotspots were identified (Figure 4.). A second phase, completed in 1998, included assessing the habitat conservation needs of 125 additional species of wildlife (Cox and Kautz 2000). A third phase, anticipating completion in 2006, is for creating an updated species' potential habitat models based on the 2003 land cover map (Stys et al 2004) and re-evaluating the Strategic Habitat Conservation Areas.

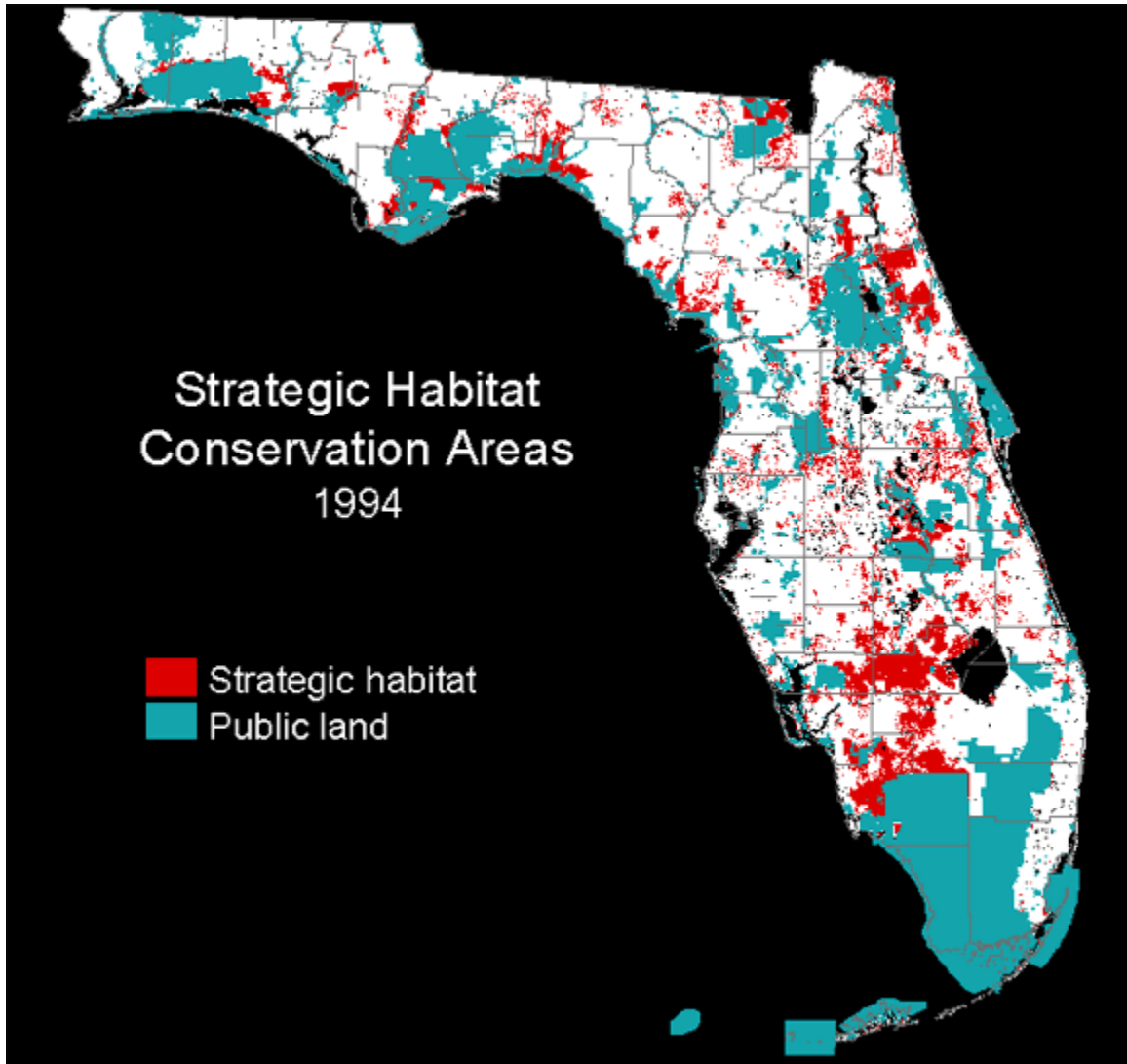


Figure 4. Strategic Habitat Conservation Areas from *Closing the Gaps in Florida's Wildlife Habitat Conservation System* (Cox et al. 1994).

The University of Florida's Ecological Network Project (Hoctor et al. 2000) was completed in 1999 and identified a statewide system of landscape hubs, linkages, and conservation corridors (Figure 5.). The project's goal was to use a regional landscape approach to design an ecologically functional Statewide Greenways System that: (1) conserves critical elements of Florida's native ecosystems and landscapes, (2) restores and maintains essential connectivity among diverse native ecological systems and processes, (3) facilitates the ability of these ecosystems and landscapes to function as dynamic systems, and (4) maintains the evolutionary potential of the biota of these ecosystems and landscapes to adapt to future environmental changes. For more information visit Florida Statewide Greenways Planning Project at <http://www.geoplan.ufl.edu/projects/greenways/finalreport.html>.

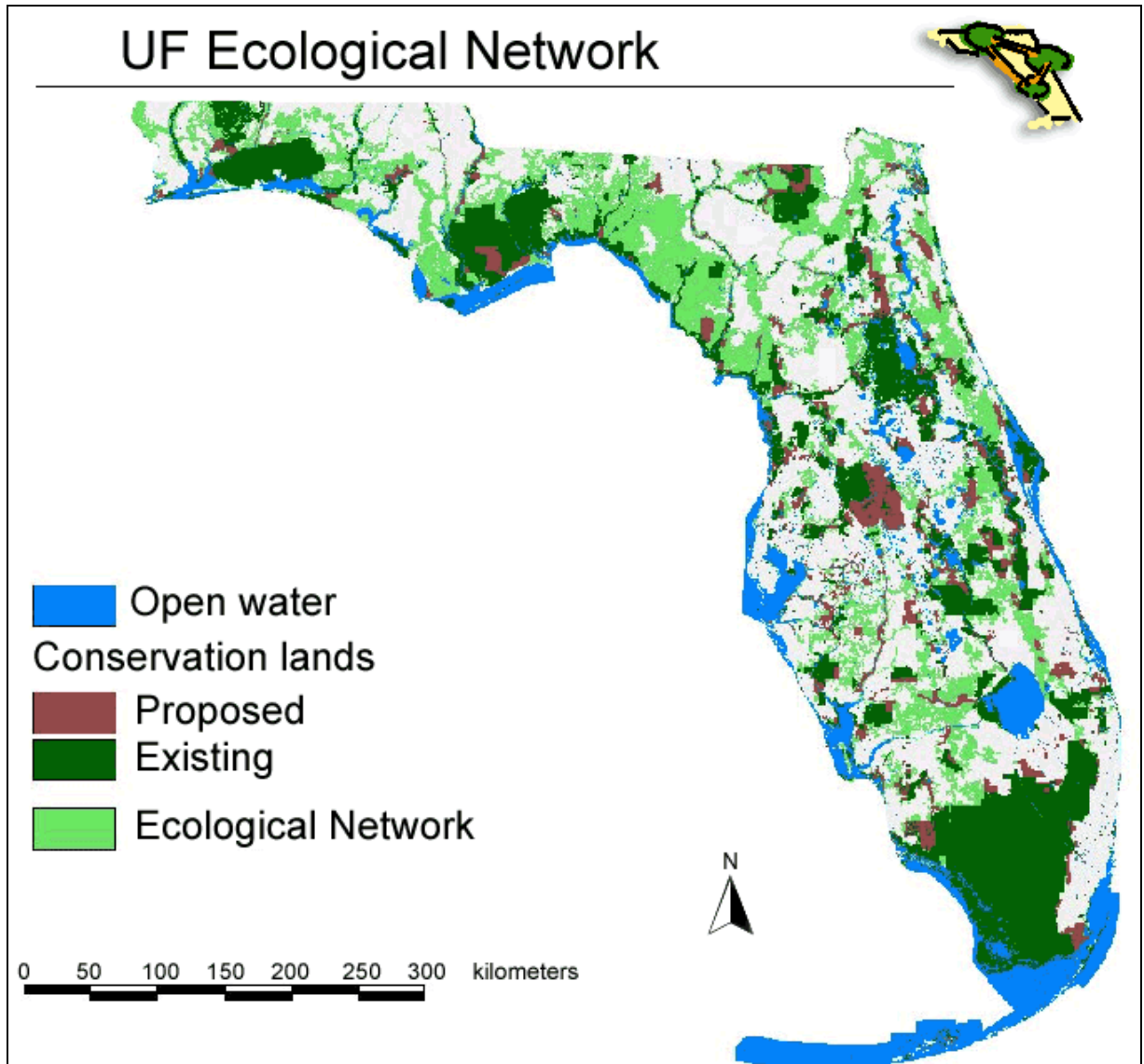


Figure 5. Map of Proposed Priority Conservation Areas, University of Florida Ecological Network Project (Hector et al. 2000).

## Geographic Information Systems

To facilitate conservation planning, Florida has Geographic Information System (GIS) data sets that include the location of ecological communities, Strategic Habitat Conservation Areas, regional biodiversity hotspots, areas of conservation interest, potential natural areas, rare natural plant communities, land use, existing and proposed conservation lands, private lands larger than 300 acres (130 hectares), roadless areas, road densities, Aquatic Preserves, Outstanding Florida Waters, shellfish harvesting waters, Wild and Scenic Rivers, National Estuarine Research Reserves, coastal barrier lands, 100 year floodplains, areas of significant aquifer recharge, vegetation, plant and animal occurrences, soils, Landsat ETM+ and SPOT imagery.

The GIS data sets can be obtained from sources such as the Florida Department of Environmental Protection, the FWC, Florida Natural Areas Inventory (FNAI), Florida's Water Management Districts, and The Nature Conservancy's Florida Chapter. The University of Florida's Geoplan Center is the GIS data repository for the state at <http://www.geoplan.ufl.edu/>.

## **Land Protection**

Florida has one of the world's largest conservation land-buying programs. The Florida Forever program, which commenced in 2001, is a ten-year \$3 billion land and water resource acquisition program (<http://www.dep.state.fl.us/lands/acquisition/FloridaForever/default.htm>). Appropriations are funded through the cash proceeds from the sale of a series of bonds and cash transfers from General Revenues. Florida Forever succeeded its groundbreaking predecessor Preservation 2000, Florida's previous ten-year \$3.2 billion land acquisition program that protected over one million acres of natural resources.

Currently, potential acquisitions are evaluated, prioritized, and progress measured by the FNAI's *Florida Forever Conservation Needs Assessment* (Knight et al. 2000) process. The state's conservation needs are also progressively re-evaluated as GIS layers are updated. More information is available at <http://www.fnai.org/FLForever.cfm>.

Florida Natural Areas Inventory also maintains a comprehensive, up-to-date source of boundaries and information for conservation lands in Florida. Currently more than 1,200 individual managed areas are documented (Jue et al. 2001). All federal and state conservation lands are documented in the database; some local government lands in counties with land acquisition programs are also included.

## **Critical Areas for Terrestrial Conservation**

The FWC's *Closing the Gaps* report (Cox et al. 1994) identified 4.82 million acres (1.94 million hectares) (approximately 13 percent of the land area of Florida) as Strategic Habitat Conservation Areas. These are privately owned lands, which are the focus of on-going land conservation efforts using land-use planning, land acquisition, conservation easements, and other tools. The University of Florida's Ecological Network Project (Hector et al. 2000) identified 11 million acres (27.5 percent of the state) that need added protection.

The FWC's species ranking system identified five geographic regions or discrete habitat types as priority conservation areas because many imperiled taxa occurred there: interior scrub and sandhill habitats; interior dry prairie region; South Florida pine rockland and rockland hammocks; northwest Florida streams and wetlands; and coastal communities (Enge et al. 2003).

## Critical Areas for Freshwater Conservation

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has identified 582 World Heritage sites that it considers of “outstanding universal value” <http://www.unesco.org/whc/nwhc/pages/home/pages/homepage.htm>. In the United States, there are 22 of these sites; one of these, Everglades National Park, is located in Florida. The Everglades, or “River of Grass” as the Seminoles called it, is formed by a river of fresh water six inches (15 centimeters) deep and 50 miles (80 kilometers) wide that flows slowly across an expanse of sawgrass marshes, pine forests, and mangrove islands. More than 300 species of birds live in the park as well as alligators, manatees, and Florida panthers. The Everglades is the subject of what has been described as the world’s largest restoration effort. The Comprehensive Everglades Restoration Plan (CERP) provides a framework and guide to restore, protect, and preserve the water resources of central and southern Florida, including the Everglades. It includes 16 counties over 18,000 square miles (46,000 square kilometers) (See [http://www.evergladesplan.org/about/rest\\_plan.cfm](http://www.evergladesplan.org/about/rest_plan.cfm)).

In recent years, several aquatic assessments have been undertaken by conservation organizations, each addressing freshwater biodiversity conservation at different scales. The World Wildlife Fund conducted a conservation assessment of freshwater ecoregions of North America (Abell et al. 2000). The Nature Conservancy (TNC) assessed small-scale watersheds across the country (Master et al. 1998), and subsequently identified priority areas within four freshwater ecoregions in the southeast (Smith et al. 2002). These efforts identify the southeastern United States as a key region for freshwater conservation efforts. Florida fits into this regional perspective as follows:

- Florida’s freshwater resources ranked as one of 15 globally outstanding ecoregions. Florida is recognized for its diverse aquatic habitats, from springs, to extensive freshwater swamps and marshes, and the intact Suwannee River.
- The Apalachicola River and Florida Gulf are outstanding aquatic resources and priorities for conservation as identified by Abell et al. (2000).
- Seven of the 327 key small watershed areas identified across the country by Master et al. (1998) are found in Florida.

Florida’s *Freshwater Aquatic Habitat and Species Conservation Planning* (Hoehn 1998) project found that the greatest number of imperiled fish species occur in the Escambia River drainage of northwestern Florida, and designated 126 of 256 sub-basins as Sub-basins of Management Concern.

## Marine Conservation

Unlike terrestrial and freshwater aquatic environments in Florida, the marine environment is in public ownership so acquisition and land owner incentive-type programs are not available and management and conservation of these habitats and the fish and wildlife species they support

present different challenges. Marine based conservation efforts are in their infancy compared to terrestrial and freshwater efforts. Comprehensive mapping and characterization of marine habitats is underway but has not been completed statewide. Detailed comprehensive statewide assessments of large-scale patterns of environmental processes, ecosystem dynamics, and linkages between terrestrial systems and coastal habitats are lacking. Data on point and non-point source pollution impacts in coastal waters is largely unknown as is the long-term effectiveness of restoration programs and technologies. Basic life history and species distribution information is unknown for many species. Identification, prioritization and conservation of critical marine habitats will require public awareness and support, and interdisciplinary collaboration and coordination among the private and public sectors. Linking societal and economic benefits of Florida's marine fish and wildlife and their habitats is key to their successful conservation.

Additionally, Florida is home to 41 Aquatic Preserves, three of the nation's 26 National Estuarine Research Reserves, and one of the largest underwater refuges in the world. To further protect the near-shore waters of the Florida Keys, the state and federal governments designated the Florida Keys National Marine Sanctuary as a "no discharge zone" and established the Tortugas Ecological Reserve, one of the world's largest marine reserves. With more than 8,400 miles of shoreline and habitats ranging from the tropical coral reefs in the keys to the productive oyster reefs of Apalachicola Bay, Florida is truly unique in the variety and productivity of its marine resources.

Florida continues to be one of the most rapidly growing states in the nation. During the last decade the state's population increased by over 23 percent. Florida's rapid growth places increased pressures on marine resources. The most widespread impacts are often the least apparent, such as a decline in water quality or loss of seagrass or other habitat. Clearly, Florida must make forward-looking, informed management decisions to protect critical resources and balance competing demands for limited resources.

When Congress passed the Oceans Act of 2000, it acknowledged the importance of the oceans to this country. The U.S. Commission on Ocean Policy was created to establish findings and develop recommendations for a new comprehensive national ocean policy. This resulted in the 2004 report, *U.S. Commission on Ocean Policy's Ocean Blueprint for the 21<sup>st</sup> Century*. The report supports a science-driven, ecosystem-based management approach and makes specific recommendations for actions needed to conserve marine resources while considering the complex interrelationships among the ocean, land, air, and all living creatures, including humans, and the interactions among multiple activities that affect entire systems. This ecosystem-based approach to managing marine resources is the basis of the U.S. Ocean Action Plan and the newly formed Gulf of Mexico Alliance.

Further recognizing the significance of marine ecosystems and their importance to Florida's economy and environmental quality, the Florida Oceans and Coastal Council was established by the 2005 Florida Legislature to focus ocean and coastal research activities and establish a statewide ocean research plan (See [http://www.dep.state.fl.us/secretary/news/2005/06/0608\\_03.htm](http://www.dep.state.fl.us/secretary/news/2005/06/0608_03.htm)). This council also coordinates public and private coastal and ocean research for more effective coastal management. To begin laying the groundwork for future ecosystem-based management in Florida, an interdisciplinary project has recently begun to synthesize and catalog existing physical, biological, and human-use information for Florida's marine waters.