

# Peninsular Florida Landscape Conservation Cooperative



## The Purpose

The Peninsular Florida Landscape Conservation Cooperative (PFLCC) is an applied conservation science partnership between federal agencies, the state and non-governmental organizations to benefit wildlife and their habitats. The PFLCC will provide spatially-explicit, scientific analyses and tools that link biological planning, conservation design, conservation delivery, and monitoring and research in an iterative, adaptive cycle to address climate change and other limiting factors at a landscape scale.

## The Habitat

Peninsular Florida encompasses north Florida's prairies and xeric shrub where the endangered Florida scrub-jay lives; the Everglades, one of the world's most unique wetland ecosystems and a World Heritage Site; and the Florida Keys, the biological crossroad between the continental United States and the West Indies.

Water moves slowly across the low-lying, subtropical landscape, spilling from Lake Okeechobee, through sawgrass and around hardwood hammocks. Most of the water drains into the mangrove estuaries of Florida Bay in the Gulf of Mexico.

The historic Everglades covered much of south Florida. About half, or 18,000 square miles, remain after development and federal water-control projects in the past century drained much of the wetlands and decimated populations of wading birds, the Florida panther and the American crocodile.

The Florida Keys is a low-island ecosystem containing the northernmost stands of plant communities dominated by tropical species native to the West Indies, and three globally imperiled habitats: pine rockland, tropical hardwood hammock and mangrove forests. The surrounding waters include America's only living barrier coral reef.

## Adaptation Benefits

Peninsular Florida will face substantial impacts from climate change, particularly from sea level rise and coastal storms. A recent sea level rise model commissioned by The Nature Conservancy predicts by



*Florida Panther by USFWS/Larry Richardson*



*Key deer by John Oberheuer*

2100 water will cover one-third of Big Pine Key, home to the endangered Key deer and heart of the National Key Deer Refuge. That's in the best-case scenario. In the worst case, the island would be almost completely inundated.

Climate change also will exacerbate Peninsular Florida's three immediate conservation challenges: Development pressure from some of the nation's fastest-growing communities; thriving invasive species such as the Burmese python and the water-intensive Australian Melaleuca tree; and decades-old water-control projects meant to tame and drain the Everglades. All three have radically altered the landscape and reduced the abundance of Peninsular Florida's wildlife.

A Peninsular Florida LCC will be able to draw on the best and most specific climate science available from the U.S. Geological Survey's Climate Change Response Center in the Southeast to safeguard wildlife and their habitats. The data and analyses provided by the PFLCC, including land-use trends, species vulnerability, and hydrology, will enable conservation partners to execute Strategic Habitat Conservation, or landscape-scale conservation that focuses on overall species recovery across the entire ecosystem. The LCC will provide the missing science needed to achieve the best results for America's fish and wildlife.

## Organization and Partnerships

The PFLCC will be part of a national network of more than 20 LCCs that have been proposed by the Department of Interior. In Peninsular Florida, the LCC will overlay a web of long-lasting partnerships

between the Service, National Parks, USGS, other federal agencies, the Florida Fish and Wildlife Conservation Commission, the Miccosukee and Seminole Tribes of Florida, non-governmental organizations, universities and other entities.

Those partnerships have been strengthened by the Comprehensive Everglades Restoration Plan, the world's largest environmental restoration project authorized by Congress in 2000. The 30-year, multi-billion dollar effort will ensure reliable water for Florida's growing population, save 69 endangered species, and protect 20 national parks and refuges.



*Florida scrub jay by USFWS*

support to the LCC staff and will help set management priorities. The structure will be designed to solicit input for science products, utilize existing science and technical expertise, and will coordinate individual conservation delivery, monitoring and research efforts toward common goals. The exact process and structure will be developed by the LCC partners to ensure their vision and needs are incorporated.

**Capacity**

The Service, along with USGS and the National Park Service, will provide the backbone of the LCC's science capabilities with initial funding and staff. Essential for success, however, is the expertise and input needed from other federal agencies, the State of Florida, non-profit conservation organizations and other partners.

The PFLCC core team should include a landscape coordinator who will focus on



*Peninsular Florida Landscape Conservation Cooperative Area*

Existing partnerships in the region include the Florida Everglades Restoration Program, Everglades Cooperative Invasive Species Management Area, Florida Keys Invasives Exotics Task Force, the Florida Keys National Marine Sanctuary Advisory Council and the Ocean Conservation Education Action Network.

The PFLCC is intended to be self-governing, with a committee structure and a core staff of six to eight people. Partners will provide guidance and

partnership development and support, and developing and implementing multi-organizational conservation strategies with an emphasis on science-driven decision support tools. The team will also include a science technology coordinator responsible for coordinating with federal, state, and non-governmental organizations' science professionals, as well as a spatial analyst, fisheries/aquatic scientist, ecosystem simulation modeler, population-habitat modeler, hydrologist and a conservation scientist.

**For More Information**

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*American alligator by USFWS/Steve Hillebrand*