# **Center for Landscape Conservation Planning**

Thomas Hoctor, Ph.D. • Michael Volk, PLA • Mary Oakley

### Mission

The Center conducts applied research on the relationship between conservation and land use while providing learning opportunities for students. Results of the Center's research are used to influence public policy through education and direct involvement in the application of relevant science, technology, and planning principles and methods to conservation analysis, planning, and management. A primary goal is research and education regarding the importance of protecting green infrastructure. Green infrastructure promotes the critical concept that ecosystem function, biodiversity, and the health of human communities are inextricably linked.

## **Primary Programmatic Areas**

- Research and planning related to protection of regional ecological networks
- Landscape and biodiversity conservation research and planning
- Green infrastructure research and planning
- Education for students, designers, and planners in principles of landscape ecology, conservation biology, and conservation planning including relevant GIS applications and tools

### **Current Projects**

## The Florida Strategic Plan for Sustaining Military Readiness through Conservation Partnerships

This project is a collaboration between several partners including the U.S. Air Force, Peninsular Florida Landscape Conservation Cooperative (PFLCC), US Fish and Wildlife Service, University of Florida, Florida Natural Areas Inventory, The Nature Conservancy, and the National Wildlife Refuge Association. It identifies a regional natural resources management approach to minimize encroachment threats to Air Force missions, while identifying partner-leveraged conservation opportunities throughout the state. This is intended to be a pilot project, which may be expanded to include other regions and partnerships in the future, Preliminary results indicate that ample opportunities exist to coordinate in protecting conservation and military training and readiness priorities in the regional landscapes surrounding Air Force bases across Florida.

#### Critical Lands and Waters Identification Project (CLIP)

This is an ongoing project in partnership with the Florida Fish & Wildlife Conservation Commission and Florida Natural Areas Inventory that is currently used to inform the Peninsular Florida Landscape Conservation Cooperative and the Cooperative Conservation Blueprint. CLIP identifies Florida's critical environmental resources, including strategic habitat, biodiversity hotspots, aquifer recharge areas and ecological greenways, using the best available science and statewide spatial data to form an iterative GIS database as a decision making tool for statewide and regional conservation and land use planning. CLIP 4.0 was completed in 2016 and is available from the Florida Natural Areas Inventory website: <a href="http://fnai.org/clip.cfm">http://fnai.org/clip.cfm</a>. Additional updates are planned.



### National Wildlife Refuge Association/U.S. Fish and Wildlife Service: Landscape Conservation Design in Southwest Florida and the Florida Big Bend

This project is a cooperative effort between the Center, National Wildlife Refuge Association, and the U.S. Fish and Wildlife Service (USFWS) to advance a new regional planning concept for the USFWS called Landscape Conservation Design (LCD). An LCD involves combining spatially explicit analysis of biodiversity and ecosystem service conservation priorities with stakeholder engagement and outreach to help determine priority strategies and actions. The results of these LCDs are intended to inform regional landscape-scale conservation and land use planning decisions both specifically for National Wildlife Refuges but also related policy processes for other government agencies, NGOs, and private landowners.

## **Other Current and Past Projects**

- Florida Wildlife Corridor Project
- St. Lucie River Watershed Water Farming Demonstration Project
- Planning for Sea-level Rise in the Matanzas Basin
- Planning for Coastal Change in Levy County in Response to Sea-level Rise
- Dynamic Reserve Design in the Face of Climate Change and Urbanization
- Adaptation to Sea-level Rise in Florida: Biological Conservation Priorities
- The Cooperative Conservation Blueprint (CCB)
- Northwest Florida Green Infrastructure Project
- Babcock Ranch Regional Connectivity Study
- Heartland 2060 Ecological Prioritization
- Southwest Florida Water Management District Conservation Land Acquisition Re-assessment
- Greater Ridge Conservation Planning Tool
- Southwest Florida Water Management District Land Use and Management Decision Support System

### **More Information**

Thomas Hoctor, Ph.D. Center Director

tomh@geoplan.ufl.edu

Michael Volk, PLA
Project Coordinator

mikevolk@ufl.edu



http://conservation.dcp.ufl.edu/