



Creating a Statewide Greenways System

For People ... for Wildlife ... for Florida

FLORIDA GREENWAYS COMMISSION REPORT TO THE GOVERNOR

The preparation of this Report was paid for in part with funds from the John D. and Catherine T. MacArthur Foundation, the Surdna Foundation and the Florida Department of Transportation's ISTEA Enhancement Program.

DECEMBER • 1994



“Celebrate Florida”



PRINTED ON RECYCLED PAPER



Florida Greenways Commission

Lt. Governor
Buddy MacKay
Chair

Nathaniel P. Reed
Vice Chair

Mark Benedict
Executive Director

Lester Abberger
Dale Allen
Keith Arnold
Curt Blair
Doug Buck
Lys Burden
Elizabeth Carter
Charles Dusseau
Allan Egbert
John Fitch
Manley Fuller
Larry Harris
Thomas E. Haynes
Robert Howell
Chris Jensen
Dick Kravitz
David Land
Shirley Little
Todd Mansfield
Lenore McCullagh
Sue Noyes
Ethel Palmer
Ben Parks
Earl Peterson
George Percy
Eugene Pettis
Mary Lou Rajchel
Linda Loomis Shelley
Margaret Spontak
Earl Starnes
Donald C. Sullivan
Sally Thompson
Susan Toth-King
Ed Turanchik
Ben Watts
Virginia Wetherell
George Willson
Bernard J. Yokel

The Honorable Lawton Chiles
Governor of Florida
The Capitol
Tallahassee, Florida 32399

December 15, 1994

Dear Governor Chiles:

We are pleased to submit the report of the Florida Greenways Commission, *Creating a Statewide Greenways System: For People...for Wildlife...for Florida*. The Commission's recommendations constitute a balanced approach to conserving our state's natural, recreational, and cultural/historic resources through the creation of a statewide system of greenways. This approach links conservationists, recreationists, and businesses in their communities to protect Florida's "green infrastructure" for the state's sustainable future.

The Commission's vision for Florida represents a new way of looking at our natural systems. Many groups that have disagreed about environmental issues in the past—conservationists and businesses, recreational enthusiasts and agribusinesses—at their heart have many of the same goals for our state. When we acknowledge the interconnectedness of both our goals and our natural systems, it becomes easier to look at how these systems form a green infrastructure that is just as important to conserve and manage as our built infrastructure.

We are proud of what we have accomplished, and grateful to the many partners that made this effort a success. 1000 Friends of Florida and The Conservation Fund, through their joint Florida Greenways Project, contributed staff support without which the Commission could not have functioned. Essential funding was provided by the Surdna Foundation in 1993, the John D. and Catherine T. MacArthur Foundation in 1993 and 1994, and the Florida Department of Transportation's Intermodal Surface Transportation Efficiency Act (ISTEA) Enhancement Program in 1994. The National Park Service Rivers, Trails and Conservation Assistance Program gave freely of its staff's time and expertise, especially during the important public forum process. Of course, the Commission was made up of representatives from 40 public and private agencies and organizations, all of which contributed invaluable resources.

Greenways can help bring our communities and state together by creating a strong sense of place, community and multi-cultural appreciation through the connection of land and communities. We believe the recommendations in this report offer Florida a way to carefully plan a statewide greenways system that interconnects fragmented or isolated elements of our green infrastructure, and that connects people with their natural, historic and cultural heritage.

We thank you for the opportunity to serve on this Commission, and stand ready to help implement our recommendations.

Sincerely,

Buddy MacKay
Chair

Nathaniel P. Reed
Vice Chair

FLORIDA GREENWAYS COMMISSION

POST OFFICE BOX 5948 • TALLAHASSEE, FLORIDA 32314-5948 • (904) 222-6277 FAX (904) 222-1117

Contents

| | |
|--|----|
| MISSION OF THE FLORIDA GREENWAYS COMMISSION | 1 |
| VISION OF FLORIDA'S STATEWIDE GREENWAYS SYSTEM | 1 |
| FOREWORD | 3 |
| INTRODUCTION | |
| Defining Greenways and Greenway Systems | 7 |
| <i>The Origins of the Greenways Movement</i> | 8 |
| Linking Greenways to Florida's Sustainable Future | 11 |
| <i>Conservation Corridors: The International Context</i> | 11 |
| The Benefits of Greenways | 13 |
| <i>The Cross Florida Greenway: A Mid-State Connector for Florida's Statewide System of Greenways</i> | 14 |
| Guidelines for Creating Florida's Greenways System | 17 |
| Creating a Statewide Greenways System: The Commission's Recommended Goals | 19 |
| GOALS AND STRATEGIES FOR CREATING FLORIDA'S STATEWIDE GREENWAYS SYSTEM | |
| Creating an Institutional Framework for Greenways | 21 |
| <i>The Integrated Habitat Network: Reclaiming Phosphate Mining Lands</i> | 27 |
| Creating and Managing Community Greenways | 31 |
| <i>Florida Greenways Prototype Projects</i> | 37 |
| <i>Gainesville: At the Forefront of Florida's Greenways Effort</i> | 39 |
| Conserving Native Ecosystems and Landscapes | 41 |
| <i>The Pinhook Swamp, the Upper Suwannee River and the St. Marys River: Connecting Georgia and Florida</i> | 43 |
| <i>Hillsborough River Greenway: Building Partnerships</i> | 47 |
| Conserving Urban Open Spaces, Working Landscapes, Historical Sites, and Cultural Resources | 51 |
| <i>The Pinellas Trail: Florida's Most Popular Recreational Greenway</i> | 53 |
| <i>West Lake Park and Preserve: Protecting a Mangrove Estuary in an Urban Environment</i> | 55 |
| Providing Access to Florida's System of Greenways | 59 |
| <i>The Central Florida Loop: Taking Advantage of Opportunities</i> | 62 |
| Educating and Involving the Public | 65 |
| <i>Blackwater-Heritage Trail: Highlighting the Value of Citizen Involvement</i> | 67 |
| Funding Florida's Statewide Greenways System | 71 |
| <i>Okeechobee Greenway: A Model for Creative Financing</i> | 74 |
| FLORIDA GREENWAYS: CURRENT STATUS AND FUTURE OPPORTUNITIES | 77 |

BACKGROUND INFORMATION ON THE FLORIDA GREENWAYS COMMISSION

| | |
|---|-----|
| Report on Working Committees and Drafting Teams _____ | 105 |
| Summary of Commission Meetings _____ | 107 |
| Summary of Public Forums _____ | 111 |
| Executive Order 93-40 _____ | 113 |
| Executive Order 93-111 _____ | 117 |
| Executive Order 93-159 _____ | 119 |

APPENDICES

| | |
|--|-----|
| Appendix 1: Summary of State and Regional Greenways Program Assessment _____ | 121 |
| <i>State and Regional Greenways Programs: Description Summary</i> _____ | 123 |
| Appendix 2: Summary of Community Survey and Case Study Results _____ | 127 |
| Appendix 3: Florida Greenways Marketing Plan _____ | 143 |
| Appendix 4: Conservation Lands and Trails in the State of Florida _____ | 149 |
| Appendix 5: Glossary _____ | 177 |
| Appendix 6: Selected References _____ | 185 |

FIGURES AND TABLES

| | |
|--|-----|
| Figure 1: Generic Components of a Greenways System _____ | 9 |
| Figure 2: Proposed Institutional Framework for Greenways _____ | 22 |
| Figure 3: Community Greenways Projects, State of Florida _____ | 33 |
| Figure 4: Statewide Location Map of Commission Case Studies _____ | 35 |
| Figure 5: Conservation Lands and Trails, State of Florida _____ | 79 |
| Figure 6: Florida Game and Freshwater Fish Commission Strategic Conservation Areas _____ | 81 |
| Figure 7: A Concept of Florida's Statewide Greenways System _____ | 85 |
| Figure 8: Conservation Lands and Trails, Northwest Florida Water Management District _____ | 87 |
| Figure 9: Conservation Lands and Trails, Suwannee River Water Management District _____ | 91 |
| Figure 10: Conservation Lands and Trails, St. Johns River Water Management District _____ | 95 |
| Figure 11: Conservation Lands and Trails, Southwest Florida Water Management District _____ | 97 |
| Figure 12: Conservation Lands and Trails, South Florida Water Management District _____ | 101 |
| Figure 13: Statewide Location Map of Florida Greenways Commission Meetings and Public Forums _____ | 108 |
| Table 1: Summary of Community Greenway Project Characteristics _____ | 32 |
| Table 2: Areas in Conservation Lands, State of Florida _____ | 78 |
| Table 3: Miles of Trails, State of Florida _____ | 83 |
| Table 4: Areas in Conservation Lands, Northwest Florida Water Management District _____ | 84 |
| Table 5: Miles of Trails—Northwest Florida Water Management District _____ | 89 |
| Table 6: Areas in Conservation Lands—Suwannee River Water Management District _____ | 90 |
| Table 7: Miles of Trails—Suwannee River Water Management District _____ | 90 |
| Table 8: Areas in Conservation Lands—St. Johns River Water Management District _____ | 93 |
| Table 9: Miles of Trails—St. Johns River Water Management District _____ | 94 |
| Table 10: Areas in Conservation Lands—Southwest Florida Water Management District _____ | 99 |
| Table 11: Miles of Trails—Southwest Florida Water Management District _____ | 99 |
| Table 12: Areas in Conservation Lands—South Florida Water Management District _____ | 100 |
| Table 13: Miles of Trails—South Florida Water Management District _____ | 103 |
| Table 14: Statewide and Regional Greenways Program Initiatives—Survey Results _____ | 122 |
| Table 15: Local and Regional Greenways—Community Survey Results _____ | 128 |
| Table 16: Matrix of Community Action Case Studies _____ | 142 |
| Table 17: Data on Conservation Lands and Trails by Water Management District _____ | 150 |

Florida Greenways Commission

Membership

Lt. Governor Buddy MacKay,

Chair
Tallahassee
(Marcy Palmer, Designee)

Nathaniel P. Reed,

Vice Chair
1000 Friends of Florida
Hobe Sound
(James Murley, Designee)

Lester Abberger

Leadership Florida
Tallahassee

Dale Allen

The Trust for Public Land
Tallahassee
(Will Abberger, Designee)

Keith Arnold

Florida House of Representatives, Dist. 73
Ft. Myers
(Nan Summerall, Designee)

Curt Blair

Florida Land Trust Association
Tallahassee

Doug Buck

Florida Home Builders Association
Tallahassee

Lys Burden

Suwannee Bicycle Association
Tallahassee
(Mary Anne Koos, Designee)

Elizabeth Carter

Florida Canoeing and Kayaking Assoc.
Boynton Beach

Charles Dusseau

Secretary, Florida Department of Commerce
Tallahassee
(Carlene Barrett, Designee)

Allan Egbert

Executive Director, Florida Game and Fresh
Water Fish Commission
Tallahassee
(Brian Barnett, Designee)

John Fitch

The Conservancy Inc.
Naples

Manley Fuller

Florida Wildlife Federation
Tallahassee

Larry Harris

University of Florida, Department of Wildlife
Ecology and Conservation
Gainesville
(Tom Hoctor, Designee)

Thomas E. Haynes

Forest Supervisor, Union Camp Corporation
Green Cove Springs
(Mike Joyner, Designee)

Robert Howell

Northwest Florida Water Management
District
Apalachicola
(Douglas Barr, Designee)

Chris Jensen

Florida Energy Pipeline Association
Tallahassee

Dick Kravitz

Northeast Florida Regional Planning Council
Jacksonville
(Mike Brown, Designee)

David Land

Agribusiness Group, Collier Enterprises
Naples

Shirley Little

Florida Defenders of the Environment
Gainesville
(Tom Ankerson, Designee)

Todd Mansfield

Disney Development Company
Orlando

Lenore McCullagh

St. Johns River Water Management District
Orange Park
(Kraig McLane, Designee)

Sue Noyes

Southern Trail Riders Association
Tallahassee

Ethel Palmer

Florida Trail Association
Clearwater

Ben Parks

Florida Farm Bureau Federation
Tallahassee

Earl Peterson

Florida Division of Forestry
Tallahassee
(William Helm, Designee)

George Percy

Florida Division of Historical Resources
Tallahassee
(Jim Miller, Designee)

Eugene Pettis

South Florida Water Management District
Ft. Lauderdale
(Fred Davis, Designee)

Mary Lou Rajchel

Florida Phosphate Council
Tallahassee
(David Batt, Designee)

Linda Loomis Shelley

Secretary, Florida Department of Community
Affairs
Tallahassee
(Anne Peery, Designee)

Margaret Spontak

St. Johns River Water Management District
Palatka

Earl Starnes

Suwannee River Water Management District
Alachua
(Charles Houder, Designee)

Donald C. Sullivan

Florida Senate, District 22
Seminole
(David Winialski, Designee)

Sally Thompson

Southwest Florida Water Management
District
Tampa
(Rand Frahm, Designee)

Susan Toth-King

Pine Jog Environmental Education Center
Palm Beach

Ed Turanchik

Hillsborough County Commission
Tampa
(Charner Reese, Designee)

Ben Watts

Secretary, Florida Department of
Transportation
Tallahassee
(Frank Carlile, Designee)

Virginia Wetherell

Secretary, Florida Department of
Environmental Protection
Tallahassee
(Jeremy Craft, Designee)

George Willson

The Nature Conservancy
Tallahassee

Bernard J. Yokel

Florida Audubon Society
Casselberry

COMMISSION STAFF

EXECUTIVE DIRECTOR FLORIDA GREENWAYS COMMISSION

Mark Benedict
1000 Friends of Florida

ADMINISTRATIVE ASSISTANT FLORIDA GREENWAYS COMMISSION

Deloris Ovenden
1000 Friends of Florida

GREENWAYS IDENTIFICATION AND MAPPING WORKING COMMITTEE

Bud Cates
*Florida Department of Environmental
Protection*

Gary Evink
Florida Department of Transportation

Marlene Hillis
1000 Friends of Florida

Tom Hactor
University of Florida

Robert Williams
1000 Friends of Florida

Kent Wimmer
1000 Friends of Florida

PROGRAM INTEGRATION WORKING COMMITTEE

Charles Hardee
Florida Affinity, Inc.

Patricia McKay
1000 Friends of Florida

Robin White
*Florida Department of Environmental
Protection*

COMMUNITY ACTION WORKING COMMITTEE

Sheri Coven
Florida Department of Community Affairs

Patricia McKay
1000 Friends of Florida

Ben Starrett
Florida Department of Community Affairs

PARTNERS, AWARENESS AND INVOLVEMENT WORKING COMMITTEE

Carlene Barrett
Florida Department of Commerce

Dennis McKee
Florida Department of Commerce

Anne Nelson
1000 Friends of Florida

FLORIDA GREENWAYS DATABASE AND MAP SERIES

Peggy Carr
University of Florida

Paul Zwick
University of Florida

David Lambert
University of Florida

Erik Lewis
University of Florida

Kim Ogren
University of Florida

MEETING DESIGN AND FACILITATION

Robert M. Jones
*Director, Florida Growth Management
Conflict Resolution Consortium*

Joe Cooley
*National Park Service Rivers, Trails and
Conservation Assistance Program
Atlanta, GA*

FINAL REPORT

Editorial
Anne Nelson
1000 Friends of Florida

Janice Dughi
1000 Friends of Florida

Design, Layout, Illustrations
Dawn McMillan
Florida Department of Community Affairs

Printing
**South Florida Water
Management District**

Acknowledgements

The Florida Greenways Commission wishes to express its appreciation to the following individuals for presenting information to the Commission, either during a formal meeting presentation or at the July 1994 poster session/reception:

Fred Ayer

Florida Department of Environmental Protection
Tallahassee

Ned Baier

Pinellas County
Clearwater

David Barth

Glattig, Jackson & Associates, Inc.
Orlando

Gene Boles

Hillsborough County Planning and Development
Tampa

Robert Boot

British Nature Conservancy and Age Resources, U.K.

Jan Brandt

Apalachee Land Conservancy
Tallahassee

Ben Breedlove

Breedlove, Dennis & Associates, Inc.
Orlando

Peggy Carr

University of Florida
Gainesville

Bud Cates

Florida Department of Environmental Protection
Tallahassee

David Coffey

former City Mayor-Commissioner
Gainesville

Frank Conkling

The John D. and Catherine T. MacArthur Foundation
Palm Beach Gardens

Joe Cooley

National Park Service
Atlanta, GA

Tilford Creel

South Florida Water Management District
West Palm Beach

Duane DeFreese

Brevard County Environmental Endangered Lands Program
Melbourne

Rick Dent

Loxahatchee River Environmental Control District
Jupiter

Tom Dyer

Two Rivers Ranch
Tampa

Scott Emery

Suncoast Greenways Project
Tampa

David Epstein

The Conservation Fund
Palm Beach Gardens

Cristi Flood

Orange County Parks and Recreation
Orlando

Steve Gatewood

Disney Wilderness Preserve
Orlando

David Gluckman

Gluckman & Gluckman
Tallahassee

Russell Grace

Tallahassee/Leon County Planning Department
Tallahassee

Bill Hawkins

Mobil Mining & Minerals
Nichols

Mike Houck

Metropolitan Greenspaces Program
Portland, OR

Charlie Houser

Suwannee River Water Management District
Live Oak

Debbie Kearney

Office of the Governor
Legal Counsel
Tallahassee

Mary Anne Koos

Florida Department of Environmental Protection
Tallahassee

Tyler Macmillan

Northwest Florida Water Management District
Tallahassee

Jim McKinley

Red Hills Conservation Association
Tallahassee

Ed McMahon

The Conservation Fund
Arlington, VA

Forest Michael

Michael & Michael Associates, Inc.
Orlando

Teresa Moore

Maryland Greenways Commission
Annapolis, MD

Jim Muller

Florida Natural Areas Inventory
Tallahassee

Betsy Otto

Openlands Project
Chicago, IL

Beth Porter

National Park Service
Washington, DC

Donna Ruffner

Florida Department of Environmental Protection
Tallahassee

David Sampson

Hudson River Valley Greenway Communities Council
Albany, NY

Sally Scholderer

Pinellas Trails, Inc.
Clearwater

Loring LaB. Schwarz

The Conservation Fund
Sudbury, MA

Beth Shields

The Conservation Fund
Palm Beach Gardens

Bill Spitzer

National Park Service
Washington, DC

William R. Thomas

Orange County Parks and Recreation
Orlando

Walt Timmerman

Florida Park Service
Hobe Sound

John W. Turner

The Conservation Fund
Arlington, VA

The Commission would also like to thank AV Productions, Walt Disney World, Inc. for critical technical assistance in preparing the Commission video and slide presentations. In addition, we would also like to thank the following individuals who provided video footage and/or slides for the Commission's video and slide presentations:

Fred Ayer
Tallahassee

Mark Benedict
Tallahassee

Dan Burden
Tallahassee

Mike Castine/Robert Hutchinson
Alachua Conservation Trust
Gainesville

Florida Department of Commerce, Division of Tourism
Tallahassee

Florida Department of Environmental Protection
Tallahassee

Florida Department of State, Division of Historical Resources
Tallahassee

Mary Beth Head
Two-Head Video
Gainesville

Steve Hull
Sunshine Network
Tallahassee

Mary Anne Koos
Tallahassee

Pinellas County
Clearwater

Rookery Bay National Estuarine Research Reserve
Naples

Tom Ross
Washington, DC

Robert Seidler
Tallahassee

Michael M. Smith
WFTV, Inc.
Orlando

St. Johns River Water Management District
Palatka

U.S. Fish and Wildlife Service
Jacksonville

West Orange Greenway
Orlando



Mission of the Florida Greenways Commission

The Florida Greenways Commission will plan and support a statewide system of greenways linking natural areas and open spaces to benefit Floridians today and in generations to come.

Vision of Florida's Statewide Greenways System

In the 21st century, Florida has a protected system of greenways that is planned and managed to conserve native landscapes, ecosystems and their species; and to connect people to the land and their archaeological, historic and cultural resources.

From Key West to Pensacola, from the Atlantic Ocean to the Gulf of Mexico, people in Florida are within a few minutes of a system of greenways that they can traverse via foot, bicycle, horse or canoe. Some greenways are public lands and others are private lands, and still others are combinations of the two. All are nurtured by public/private partnerships.

Through the efforts of private citizens, local, state and federal governments, private nonprofit organizations, and businesses, Florida has a carefully planned greenways system that interconnects fragmented or isolated elements of green infrastructure, and that connects people with their natural, historic and cultural heritage.

Parks and open spaces are linked, where appropriate, by multi-use corridors that provide opportunities for hiking, bicycling, horseback riding, canoeing, alternative transportation and use by persons with disabilities. Florida's history and geography come alive as users explore old trails, roads, canals, rivers and archaeological sites. Preserved historic homes, museums and monuments along the way provide a link to Florida's roots.

Florida's diverse wildlife species are able to move between feeding and shelter areas within their ranges with

less danger of being killed on roadways or becoming lost in towns or cities. Native landscapes and ecosystems are protected, managed, and restored through strong public and private partnerships. Sensitive riverine and coastal waterways are effectively protected by buffers of green, open space and working landscapes.

Florida's system of greenways has created new enthusiasm for the state's natural, recreational and cultural/his-

toric resources by connecting people to the land. Through a series of rural and urban greenway experiences, children and adults are able to learn about Florida's fragile environment and the benefits of conservation. Greenways create a strong sense of place, community and multi-cultural appreciation by connecting land and communities.

Conservation and recreation groups, public agencies, landowners, companies and dedicated individuals support Florida's greenways system through strong partnerships because of mutual benefits.

Respect for private property rights, local community concerns and public lands are hallmarks of the greenways effort. Local, regional and state resources such as mapping and planning programs are shared and made available to help create community greenways.

Florida's rich system of greenways helps sustain Florida's future by conserving its green infrastructure, by providing continuing economic benefits, by connecting people with their natural, historic and cultural heritage, and by improving the quality of life for people.



What is a Greenway?

A greenway is a corridor of protected open space that is managed for conservation and/or recreation. The common characteristic of greenways is that they all go somewhere. Greenways follow natural land and water features, like ridges or rivers, or human landscape features like abandoned railroad corridors or canals. They link natural reserves, parks, cultural and historic sites with each other and, in some cases, with populated areas. Greenways not only protect environmentally sensitive lands and wildlife, but also can provide people with access to outdoor recreation and enjoyment close to home.



Foreword

The Florida Greenways Commission was created in early 1993 by Governor Lawton Chiles. Chaired by Lt. Governor Buddy MacKay, the Commission brings together people from all over the state to develop a coordinated approach for protecting, enhancing and managing a statewide system of greenways. Commission members represent a wide variety of interests, including conservation/environment, recreation, business/development, forestry/agriculture, community groups, water management districts, regional planning councils, state and local government, educators and citizens. Support for the 40-member Commission is provided in part through funding from the John D. and Catherine T. MacArthur Foundation, the Surdna Foundation and the Florida Department of Transportation's Intermodal Surface Transportation Efficiency Act (ISTEA) Enhancement Program.

- better protect and manage Florida's biodiversity and water resources;
- forge better links between Floridians and the natural Florida; and
- as a result develop more widespread popular support for natural resource conservation.



"Just as we carefully plan the infrastructure our communities need to support the people who live there—the roads, water and electricity—so must we begin to plan and manage Florida's green infrastructure."

—BUDDY MACKAY, *Chair,*
Florida Greenways Commission

The Florida Greenways Commission

The concept of a "green infrastructure" caught on quickly, and was praised by officials at the state and national levels, including William Reilly, former administrator of the U.S. Environmental Protection Agency. "Slowly but surely the vision of a national system of greenways

The Commission was an outgrowth of the Florida Greenways Project, created in 1991 as a joint effort of 1000 Friends of Florida and The Conservation Fund, a national organization committed to advancing land and water conservation in America. One of the Fund's projects is American Greenways, a concept that grew out of President Ronald Reagan's Commission on Americans Outdoors. Florida was chosen by The Conservation Fund as the site of the Fund's second statewide greenways planning effort (Maryland was the first) because of the state's landmark acquisition and growth management programs and its demonstrated commitment to conservation.

With start-up funding from the Surdna Foundation, the goal of the three-year Florida Greenways Project was to look for ways to link existing urban and rural "green" areas like state and national parks and forests, rivers and wetlands systems to create a statewide "green infrastructure." By focusing on connectivity—on links between natural areas and between people and nature—it was hoped that the project could support Florida's statewide conservation efforts by helping to:

comes into focus," Reilly told a Florida conference in 1991. "Florida is a bellwether in advancing, developing, (and) bringing on this new concept."

It quickly became apparent that a statewide coalition was needed to integrate the greenways concept into public programs and private initiatives at the state, regional and local levels. When Governor Chiles created the Florida Greenways Commission, he charged it to look for ways to bring existing programs, organizations and people together under the greenways concept.

Members and staff of the Florida Greenways Commission spent the past year and a half researching and compiling information on successful greenway initiatives, both in Florida and around the country. The commission adopted a *Mission* in September 1993, a *Vision Statement* for the Florida Greenways System in December 1993 (see page 1) and a *Sustainability Rationale* for the System in the fall of 1994, which appears in the next section of this report. It also came up with a series of guidelines—from issues to tools and techniques—that successful greenway projects have in common. From these guidelines the Commission



formulated seven goals for making its vision of a statewide greenways system a reality.

In all its work, the Commission's intent is to develop a statewide greenways system that relies on the voluntary participation of landowners and recognizes the importance of protecting private property rights, especially when promoting greenways through regulatory and growth management programs.

The Commission's Charge

The Governor asked the Commission to join him in recognizing officially 150 state, regional and local greenway projects in 1995, the 150th anniversary of Florida's statehood. He also charged the Commission with:

- assessing the current status of greenway activities within federal, state, regional and local government agencies and private organizations;
- developing a framework to support community greenway initiatives and promote interagency greenway activities;
- identifying statewide greenway issues and goals, and drafting recommended actions for meeting them; and
- holding workshops to get input from citizens and elected officials.

Next Steps

A tremendous amount of work is already being done in Florida to purchase conservation lands and provide opportunities for outdoor recreation. What sets the Florida Greenways Program envisioned by the Commission apart is its emphasis on *connections*, not for their own sake, but as a way of looking at how all the state's conservation and recreation programs, acquisitions and existing sites can work together toward common goals.



The first step in this process is for the 1995 Florida Legislature to create and fund a new Florida Greenways Coordinating Council (FGCC), appointed by the Governor, Speaker of the House and President of the Senate. This new Council would not supplant existing programs or efforts. Instead, it would work to bring them together.

The Council would be charged with building:

- *connections between places* through creation of the statewide greenways system;
- *connections between the tools and techniques* used to create greenways, like mitigation banking and private stewardship;
- *connections between people*, the many agencies, organizations, and individuals working on greenway projects; and
- *connections between action* already going on at the state, regional and local level.

The Florida Greenways Coordinating Council will assume the role of coordinating, educating and providing leadership for greenway efforts. This role is important to building a sustainable future for the State of Florida.

The Coordinating Council, in conjunction with Florida's executive agencies, would be responsible for producing a Five-year Florida Greenways System Implementation Plan that would clearly define Florida's statewide greenways system, and set goals and policies for its implementation. The Council also would be responsible for data-gathering, and producing design specifications for the system.

The current Florida Greenways Commission will exist until the end of 1995. In addition to working with key state agencies, legislative staff and other important public and private partners to lay the groundwork for the Florida Greenways Coordinating Council, the Commission will undertake these additional associated activities during 1995:

1. In cooperation with the Governor and the Sesquicentennial Commission, recognize 150 Florida Greenways



during the state's Sesquicentennial Celebration. The Commission will use the celebration activities as a key tool to begin implementing the *Florida Greenways Marketing Plan* and begin educating Florida's visitors and residents about greenways and Florida's statewide greenways system.

2. Continue developing and refining the Florida Greenways database and map series, with an increased focus on identifying critical, justifiable future system linkages and the addition of more detailed local community data.
3. Production of a *Florida Greenways Community Resource Guide* and a model comprehensive plan amendment to help communities create greenways at the local level. Some workshops also are planned to help local planners and community advocates identify regional, state and federal resources that could help them create local greenways.

About This Report

The results of the Commission's work during the past year and a half form the basis for this report.

This report contains the following sections:

- The *Introduction* defines greenways and greenways systems, describes how the greenways concept can help build a sustainable future for Florida, explains some of the benefits of greenways, and outlines a series of guidelines formulated by the Commission during its 18 months of work.
- *Goals and Strategies for Creating Florida's Statewide Greenways System* contains the Commission's seven goals, and describes the strategies and actions the Commission is recommending to the Governor and Legislature.
- *Florida Greenways: Current Status, and Future Opportunities* includes information on existing conservation lands and trails in Florida and describes some areas where opportunities exist to create new greenways. The section also describes current and potential greenway projects in each of the state's five water management districts.
- *Background Information on the Florida Greenways Commission* includes a number of documents describing the Commission's work.
- The *Appendices* contains more of the Commission's work products as well as a Glossary and selected References for this report.





Defining Greenways and Greenway Systems

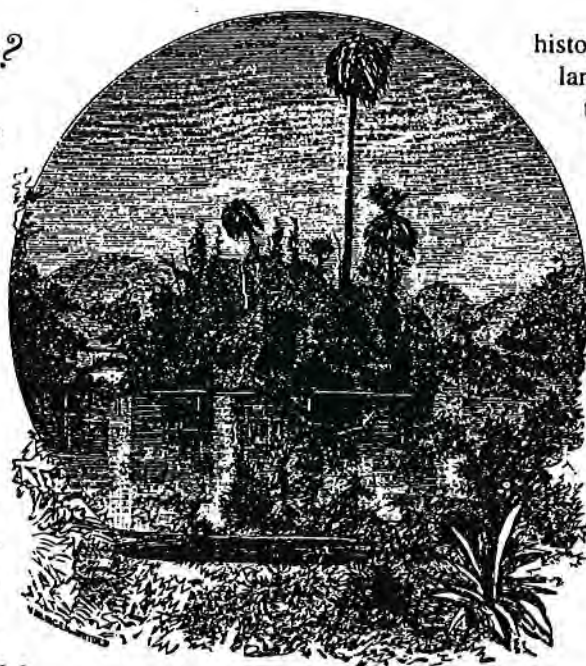
What is a Greenway?

The word greenway brings to mind two images: *green* suggests forests, fish and wildlife, river floodplains, and linear open spaces that generally are greener than adjacent lands; *way* implies a route or path. But greenways are really many colors...blue waterways, earth-colored working landscapes, gray urban corridors. Together they describe corridors that cross a variety of landscapes, ranging from pristine natural areas to landscapes transformed by human habitation.

In his book, *Greenways for America*, Charles Little defines a greenway as:

- A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road, or other route.
- Any natural or landscape course for pedestrian or bicycle passage.
- An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.
- Locally, certain strips or linear parks designated as a parkway or greenbelt.

Within the landscape, greenways serve at least three major functions: they protect and/or enhance remaining natural, cultural and historical resources; they provide linear open space for compatible human use; and they maintain connectivity—between conservation lands, communities, parks and other recreational facilities, and cultural and



historic sites. Connectivity is a critical landscape characteristic important to the health, well-being, and aesthetic values of human communities and vital to the maintenance of functional native ecosystems.

While the ability of greenways to “link” other resources is important, not every greenway is a connector. Some stand on their own as important linear recreational resources, like trails and bikeways.

What is a Greenways System?

A greenways system is composed of large hubs, links and smaller sites made up of natural, historical, cultural, and recreational features (Figure 1). The hubs anchor the system and provide an origin or destination for people and wildlife moving to or through it. Hubs come in many different sizes, from large protected reserves to smaller regional parks and preserves. Links are the connections that enable the system to work. They range in size and function from large landscape linkages to smaller conservation and recreational corridors. Sites are smaller features that serve as points of origin or destination but are not always linked with hubs or with each other.

Greenways systems can be designed and implemented at many different scales. A local greenways system can encompass natural and cultural features within a single community or county. A regional greenways system might link conservation areas and trails within one or more watersheds. A statewide greenways system can link community and regional greenways systems. Multi-state greenways systems constitute the building blocks for national conservation and recreational strategies.



The Origins of the Greenways Movement

If there is a “father of the modern greenways movement, it is Frederick Law Olmsted. The designer of New York’s Central Park and Brooklyn’s Prospect Park as well as Boston’s “Emerald Necklace,” Olmsted originated the “park and parkway” idea. No single park, Olmsted believed, could provide people with all the beneficial influences of nature. Instead, parks should be linked to one another and to surrounding residential neighborhoods. Today’s greenways movement evolved from that simple concept, first stated 130 years ago.

Of course, many other people and ideas also have influenced greenways. More than 60 years ago the South African Wildlife Society recognized the importance of connections to maintaining the continent’s wildlife. By the 1960s U.S. ecologists also were looking to wildlife corridors to help preserve biological diversity.

In his book, *Greenways for America*, Charles Little notes that landscape architecture professor Philip Lewis’s environmental corridor concept, pioneered in the 1960s, also has found a home in the greenways movement. Now director of the University of Wisconsin’s Environmental Awareness Center, Lewis has been working for the past thirty years on regional landscape-planning theory. He says that “it is the stream valleys, the bluffs and ridges, the roaring and quiet waters, mellow wetlands and sandy soils that combine in elongated designs, tying the land together in regional and statewide corridors of outstanding landscape qualities.”

Little also describes a “quite specific concept that has emerged which pertains directly to the crucial role

that natural-corridor greenway planning can play in the protection of wildlife,” pointing to the work of Dr. Larry Harris, a University of Florida ecologist and member of the Florida Greenways Commission. Harris maintains that decades of land development and increasing isolation of wildlife exacerbated the problem. This fragmentation, Harris says, is what is now taking such a toll on wildlife.

Both of these important concepts—linking parks for recreation, and linking conservation areas to counter habitat fragmentation and benefit biodiversity—are today intertwined as integral parts of the modern greenways movement.

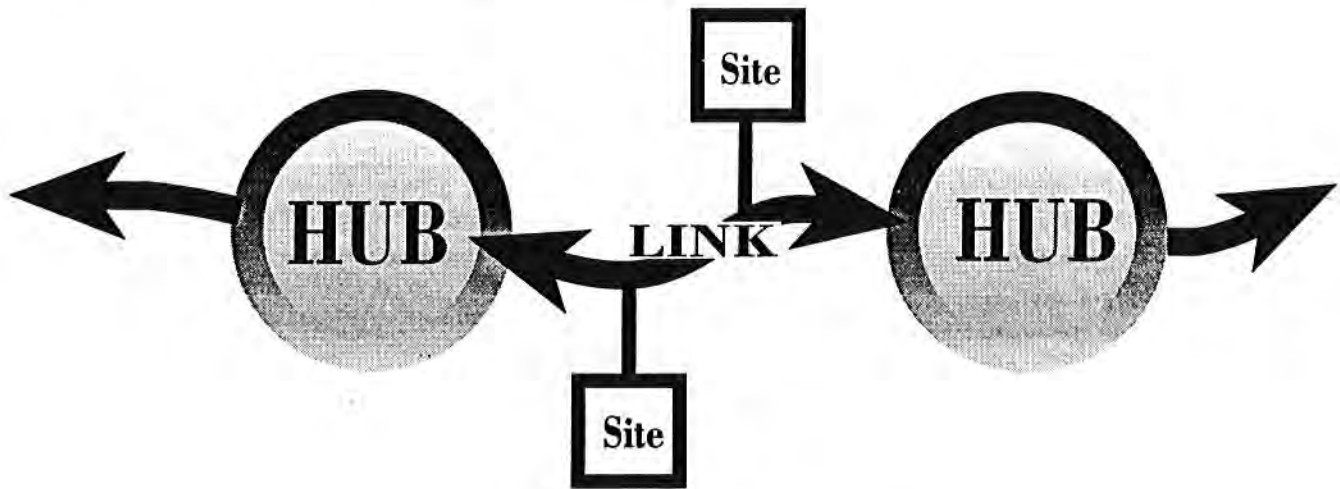
The great appeal of greenways and greenways systems lies in the concept of linkage. Greenways multiply the benefits of existing conservation areas, parks and open spaces—ecologically, recreationally, and aesthetically—by linking them together like beads on a string. The idea had special appeal to the authors of *Americans Outdoors*, the 1987 report of the President’s Commission on Americans Outdoors. “Imagine walking out your front door,” they wrote, “getting on a bicycle, a horse, or trail bike, or simply donning your backpack and, within minutes of your home, setting off along a continuous network of recreation corridors which could lead across the country.”

In fact, the concept of linkage is at the core of the greenways movement: Linking natural areas and recreational corridors, conservationists and recreationists with urban dwellers, and neighborhoods and towns with cities and people of all colors and stations—not just in the use of greenways but in the making of them.





Figure 1
Generic Components of a Greenways System



Greenways Diversity

Greenways can be as wide as a watershed or as narrow as a trail. Some are publicly owned; some are established on private land by easements or other methods that protect valuable natural areas and cultural/historic sites or allow public access along trails. Some are managed only to conserve native ecosystems, and some are purely recreational. Some are “green,” following ridgelines or other upland features, some are “blue,” following rivers and wetlands, and others are more urban in nature.

While categorizing greenways helps us understand their different forms, in reality types blend and overlap. From a conceptual standpoint, it is possible to divide greenways into different types. But in reality, all greenways fall along a continuum of natural and cultural/historical landscape features and functions and associated human uses that depend upon discrete, site-specific factors, management considerations and overall public purpose.

Greenway Landscape Features

Greenways often encompass *natural landscape features*, such as rivers and floodplains, ridgelines, interior or coastal wetland systems, shorelines, beaches and barrier islands. They can also encompass a variety of *altered or human landscape features*, such as historic and archaeological sites, utility and abandoned railroad rights-of-way, canals, dikes, and roadside corridors.

Components of Greenways Systems

A wide variety of building blocks or components make up a greenways system. These include greenways, the links in the system, as well as parks, preserves and cultural/historic sites, which can serve as system hubs.

Greenways

Greenways are the focus of this report. Although best considered as a continuum of features and opportunities, many different types of greenways can go into creating the statewide greenways system. For example:

LANDSCAPE LINKAGES. Large linear protected areas, such as the Pinhook Swamp that connects the Okefenokee National Wildlife Refuge and the Osceola National Forest, provide sufficient areas of space for native plants and animals to flourish while serving as corridors connecting ecosystems and landscapes. Landscape linkages can also provide space for the protection of historic sites. Some provide opportunities for human use like hunting, fishing, canoeing, swimming and hiking.

CONSERVATION CORRIDORS. Less extensive linear protected areas, such as the upper Hillsborough River, serve as biological connecting corridors and, in many cases, also provide outdoor, resource-based recreational opportunities.

GREENBELTS. Protected natural lands or working landscapes, such as the one being planned around Lakeland, surround cities and serve to preserve agricultural produc-



tivity as well as to balance and direct urban and suburban growth.

RECREATIONAL CORRIDORS. Linear open spaces, such as the Pinellas Trail, are the sites of moderate to intense recreational use for residents and visitors.

SCENIC CORRIDORS. Corridors of land, such as the Old St. Augustine Road in Leon and Jefferson counties, Old Bellamy Road in Alachua County, and Old Cutler Road in Dade County, are protected for scenic quality and other aesthetic considerations.

UTILITARIAN CORRIDORS. Linear features, such as powerline and pipeline rights-of-way and canals, whose primary purpose is utilitarian, may also help connect recreational, cultural or natural system features.

TRAILS. Designated routes, such as the Florida Trail, provide access to and appreciation of the values of natural areas, greenspaces and historic sites, present diverse resource-based outdoor recreational opportunities, and enhance the understanding of historical sites and cultural diversity. Trails are different from other links in that they do not exist alone but instead occur in conjunction with other system components.

Although these and other system links are addressed to some extent by existing public and private programs, only the greenways movement focuses specifically on linear connections. Moreover, the greenways movement also focuses on building partnerships to coordinate and expand ongoing public and private efforts.

While greenways that serve as connectors are the focus of this report, every greenway does not have to be part of a larger system. Some greenways stand alone and have discrete beginnings and ends, like the Pinellas Trail. Some, like the proposed Lakeland Greenbelt, encircle urban areas.

Hubs and Sites

Natural, recreational, and cultural/historic hubs and sites are the other critical components of greenways systems. System hubs and sites come in all shapes and sizes, and for that reason serve different purposes in greenways systems. For example:

RESERVES. Large protected areas, such as Everglades National Park/Big Cypress National Preserve, serve as primary sites for conserving biological diversity and natural resources such as fisheries and fresh water. Reserves also can protect important historical and cultural sites and provide some nature-based recreation opportunities.

REGIONAL PARKS AND PRESERVES. Less extensive hubs of regional significance, like the San Felasco Hammock

State Preserve outside Gainesville, or Corkscrew Swamp Sanctuary in Collier County, provide ecological benefits and offer important recreational opportunities.

ECOLOGICAL SITES. Smaller sites, such as Wakulla Springs south of Tallahassee, or Devil's Millhopper State Geological Site outside Gainesville, conserve important or unique natural or geologic features.

CULTURAL/HISTORIC/RECREATIONAL SITES. Community parks or cultural/historical sites provide recreational opportunities, help protect and interpret Florida's cultural/historic heritage, and can often serve as a system origin or destination.



URBAN AREAS. Cities and towns, from large metropolitan areas like Miami or Tampa to small communities like Arcadia or Destin, serve as human hubs for greenways systems.

Many of these features are planned and managed by different national, state and local agencies and organizations, and are not the focus of this report. But whether they are connected by greenways or not, hubs and sites are critical components of a statewide conservation strategy. Every effort must be made to protect their natural, recreational, cultural and historic values and to involve their managers as partners in Florida's system of greenways.

A Statewide System of Greenways

While greenways are important conservation and recreation areas in and of themselves, what sets the greenways concept apart from other initiatives is its emphasis on connections. The Commission's mission is to create a system of greenways for Florida, a green infrastructure as carefully planned and as well funded as our built infrastructure (like electric power and transportation systems). That doesn't mean the state should forge connections for connections' sake alone. Nor does it mean that the focus on conservation land acquisition should shift from protecting large, functioning ecological preserves to protecting greenways. Greenways is not a "connect-the-dots" concept applied without justifiable ecological or human need. But often, connecting greenways and core reserves results in a system that is truly greater than the sum of its parts. A healthy, well-functioning system can support wildlife communities and provide innumerable benefits to Florida's people, as well.



Linking Greenways to Florida's Sustainable Future

As Florida celebrates its 150th year of statehood in 1995, one of its greatest challenges is to build a sustainable future—that is, a future in which the needs of the present generation are met in ways that expand rather than limit the ability of future generations to meet their own needs. The concept of a sustainable future was further defined by the World Commission on Environment and Development in 1987 as follows:

"This Commission believes that people can build a future that is more prosperous, more just, and more secure. Our report, Our Common Future, is not a prediction of ever increasing environmental decay, poverty, and hardship in an ever more polluted world among ever decreasing resources. We see instead the possibility for a new era of economic growth, one that must be based on policies that sustain and expand the environmental resource base."

The importance of sustaining and expanding Florida's environmental resource base—our green infrastructure—to ensure a prosperous economy and a productive society has been articulated by Lt. Governor Buddy MacKay, Chair of the Florida Greenways Commission.

Simply put, the "green infrastructure" is the system of native landscapes and ecosystems that supports native plant and animal species; sustains clean air, water, fisheries, and other natural resources; and maintains the scenic natural beauty that draws people to visit and settle in Florida. A healthy and diverse green infrastructure is, therefore, the underlying basis of Florida's sustainable future.

The rich cultural heritage of the state's first inhabitants, Native Americans, illustrates the close and mutually depen-

Conservation Corridors: The International Context

Conservation corridors have become increasingly important as a strategy in international efforts to preserve biological diversity. The *Global Biodiversity Strategy* published by the United Nations Environmental Program, the International Union for the Conservation of Nature and the World Resources Institute recommends the establishment of corridors as a specific action item within its strategic plan for biodiversity conservation. In its *Caracas Declaration*, the 1992 World Parks Congress urged all nations to "take urgent action to consolidate and enlarge national systems...of protected areas with buffer zones and corridors." Two regional conventions also refer to corridor principles in their text. The European Community's *Habitats Directive* obligates its members to create a "coherent ecological network of special areas of conservation" and encourages them to improve the "ecological coherence" of the network by managing landscape features which, "by virtue of their linear and continuous structure...function as stepping stones...of wild species." And Central America, which forms the biological bridge between North and South America, has called for the establishment of a "regional system of protected areas as an effective Mesoamerican Biological Corridor." At a recent environmental summit in Managua the seven presidents of the region directed their environmental ministries to prepare national corridor plans.

dent connection among the environment, economy and society. But that close connection has not always been maintained. Many of Florida's native landscapes and ecosystems have been degraded or isolated over the years as wetlands have been filled, uplands have been paved and estuaries have been polluted. There is scientific evidence that Florida's green infrastructure cannot be sustained without watersheds,



ridges and other natural corridors that connect its native landscapes and ecosystems. At the same time, there is concern that many Floridians have lost the sense of connection with their rich natural, historic and cultural heritage.

Today, there is an exciting new opportunity to reestablish connections between the state's green infrastructure and its people through Florida's greenways system. The statewide system of greenways can help conserve native landscapes and ecosystems by protecting, maintaining, and restoring natural connecting corridors. And it can reconnect Floridians with their natural, historical and cultural heritage through a system

of trails and other connectors. Furthermore, this system of trails and other connectors can provide recreational and alternative transportation opportunities for many Floridians.

By conserving green infrastructure connections and by connecting people and the land in a manner that re-establishes the close connections between Florida's environment, economy and society, the statewide greenways system can help build Florida's sustainable future. This greenways system has the potential not only to conserve Florida's green infrastructure but also to provide important economic benefits and to improve the quality of life of Florida's citizens.





The Benefits of Greenways

In the book, *Greenways: A Guide to Planning Design and Development*, Loring LaB. Schwarz points out that “any one greenway can hold many and varied values to those who use it or live nearby. It can be a non-polluting commuter route, a horse or bicycle trail, a means to promote stream-water quality or to preserve wildlife habitat, a method of buffering land uses such as residential development or agricultural activity, or a way to safeguard a viewshed or the historic character of an area.”

A statewide system of greenways could have significant ecological, economic and social benefits for Florida. By helping conserve native ecosystems and landscapes, greenways can be an important component of a statewide, regional or local conservation strategy. Water and land pathways along greenways can expand tourism and associated businesses, providing recreational opportunities for residents and visitors, and the opportunity to enjoy Florida’s unique natural environment. Some of the key benefits are described below:

Conservation of Native Ecosystems

Many isolated natural areas can better survive and adapt to changing conditions if they are linked by greenway corridors, just as human communities become more liveable and vital if they too are linked by greenway corridors.

Greenways have important ecological functions that help conserve native ecosystems and landscapes. These include:

- **MAINTAINING SPACE** to sustain the biodiversity of native plant and animal communities;
- **MAINTAINING CONNECTIONS** to allow interchange between native plant and animal communities; and
- **MAINTAINING THE HEALTH** of native ecosystems and landscapes by sustaining their physical, chemical, and biological processes.

A greenway’s design should be based on the best scientific information about corridor requirements for native spe-

cies, especially those considered “keystone” species. Information on critical thresholds for species as well as ecosystem structure and function should be developed in order to determine minimum sizes of greenways and greenspaces.

Interconnected native ecosystems provide a number of other important services. They filter pollutants from the air, water, and soil; aid in cooling streams and soils through shading; protect and enhance the water quality of rivers and lakes; recharge groundwater aquifers; and buffer developed areas from floodwaters, saving lives and property.

Greenways have an especially significant role in connecting watersheds and coastal areas because of the productivity of these native ecosystems and their key role in maintaining Florida’s green infrastructure.



Economic Prosperity

It is imperative to recognize that a vibrant economy is necessary to maintain the financial resources needed to assure environmental quality. As a dynamic and growing state Florida continually faces the critical question of how divergent interests in a community will work together to balance demands for development with the protection of natural resources. Many areas of the country

have found that a system of greenways offers opportunities to support economic growth without sacrificing environmental assets. Developing greenways throughout our state could not only save Florida’s landscapes but also help disadvantaged areas and weaker economies regain much-sought-after stability.

Positive economic effects of greenways accrue in several ways. First, taxable properties that are adjacent to greenways often increase in value and generate greater overall revenue for a community. According to local surveys, homes located near greenways and trails commonly sell for more than similar homes in other area.

Conventional wisdom also tells us that businesses locate where quality of life indicators are high. There is widespread recognition that greenways help communities develop these characteristics and portray this image. Boulder, Colorado,



*The Cross Florida Greenway:
A Mid-State Connector for
Florida's Statewide System of Greenways*

The Cross Florida Greenways State Recreation and Conservation Area is a wonderfully complex and unique collection of natural, cultural and historic features stretching from the St. Johns River to the Gulf of Mexico. When all the pieces are in place, it will be an integrated linear system of scenic and historic areas, rivers, floodplains, lakes, wetlands, ridges and uplands. This 300-yard to one-mile wide corridor contains many rare plants and animal species. It came into public ownership through a fascinating series of events.

In the early part of the century a waterway corridor across Florida was proposed so that ships could move through the state from the Gulf to the Atlantic. Construction began in 1935, but before the canal could be completed, high costs and an increase in the standard size of ships brought a change of thinking—barges could be used instead. So the ship canal became the Cross Florida Barge Canal, and construction began anew in 1964. The canal would require two dams on the Ocklawaha River, one at Rodman and one at Eureka, and a dam on the Withlacoochee River at Inglis. Environmental organizations opposed to the destruction of the Ocklawaha—and its floodplains organized to fight construction. A preliminary injunction against

building the canal was granted by the U.S. District Court in 1971 and became permanent in 1974. In 1990 the state and federal governments took the steps necessary to deauthorize the project, a move that became official on January 22, 1991.

With deauthorization of the canal project came the creation of the Cross Florida Greenways State Recreation and Conservation Area. Under management of the Department of Environmental Protection's new Office of Greenways and Trails, the 110-mile-long corridor has new goals—conservation of its unique system of natural resources and provision of recreational opportunities where appropriate. While some questions remain—whether to return the Ocklawaha River to its natural state is the most controversial—the state is committed to maintaining the greenway in a mostly undisturbed state.

The Cross Florida Greenway is made up of former ship and barge canal lands that bisect the central region of the state, passing through Citrus, Levy, Marion and Putnam Counties. Its approximately 77,000 acres

include three major rivers—the St. Johns,

Withlacoochee and Ocklawaha and two major springs. It will become a major mid-state connector in Florida's statewide greenways system.





and Raleigh, North Carolina, are examples of communities that have successfully attracted new businesses and retained existing businesses based in part on their environmental, recreational and cultural/historic amenities.

Greenways also are magnets for attracting environmentally sensitive development. The Tennessee Riverpark in Chattanooga has demonstrated how a greenway can be used to help a community attract new residential and commercial investment. This river park has helped stimulate more than a quarter-billion dollars worth of new development in downtown Chattanooga.

Finally, small service-oriented businesses gravitate to areas where perceived consumer needs exist. Greenway users often create a demand for services, which in turn stimulates the growth of tourism-based businesses. Overnight accommodations, including bed and breakfasts, rental facilities, restaurants, art galleries and other small enterprises, often spring up in the vicinity of greenway projects.

Long-distance, multiple-use trails, such as the Tallahassee-St. Marks Historic Railroad State Trail south of Tallahassee, attract tourists and residents from surrounding counties and states. Visitors are encouraged to extend their stay in an area with amenities including trails, craft shops and other local market and cultural interests. Extended visitor stays help increase the multiplier effect of tourism dollars in given communities.

Businesses and private citizens alike recognize the relationship between a healthy environment and a prosperous economy. Today environmental concerns are among the highest priorities of every business. Private sector success depends on business' ability to integrate economic and environmental goals and incorporate the values, systems and practices of sustainable development. Greenways offer our business and industrial sectors this opportunity.

Conservation of Historical and Cultural Resources

Archaeological and historical sites can be protected, preserved, interpreted, and connected by greenways. Archaeological and historical sites provide yet another dimension to link people with landscape; they provide a sense of place as well as a sense of origin. These sites can help people understand, interpret, and appreciate how the connections between people and the environment have developed and changed over time. Archaeological and historical

sites provide a direct and unique link between people and the environment.

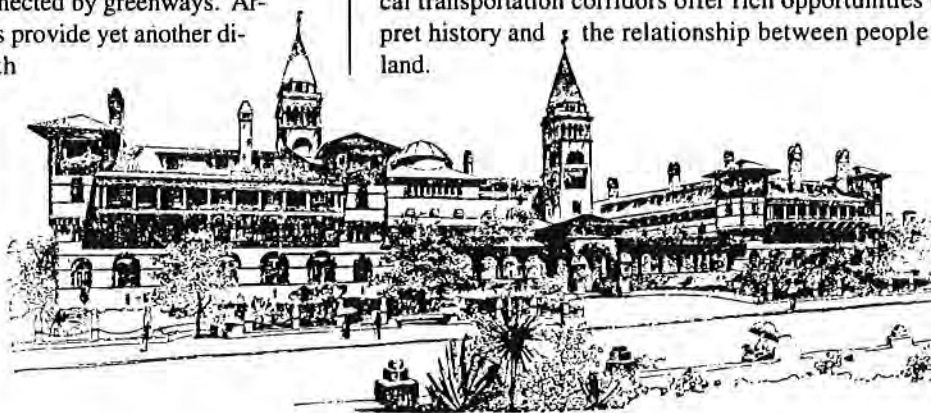
Public Recreation Close to Home

Because greenways lead somewhere and can connect with other greenways that go to still more places, they attract people from all walks of life. In *Ecology of Greenways*, Daniel S. Smith says, "Greenways can tie communities together by linking features such as parks, historic sites, residential areas, and shopping districts and by allowing people to travel from place to place without the noise and rush of automobiles."

A statewide system of greenways will provide many opportunities for public outdoor recreation and wellness activities. Trails can provide places for visitors and resident bicyclists, hikers, walkers, joggers, rollerbladers, horseback riders and physically challenged people to exercise and experience the many natural and cultural wonders of our state. Greenways along rivers, lakes and the coast can also provide access to canoers, kayakers, and sailors. Greenways can serve as sites for passive pursuits, such as picnicking, camping, and wildlife observation. They can even serve as community gathering sites for concerts, festivals, neighborhood cookouts and family reunions. These facilities are often essential in maintaining strong public support because people can enjoy and appreciate what is being conserved.

Outdoor Education

A statewide system of greenways will provide excellent outdoor classrooms where students can learn about native plant and animal species, ecosystems, and ecological processes. Greenways can serve as living laboratories for students and as sites for studying historic, archaeological and cultural resources. Florida is rich in history, containing sites and structures from Florida's Native American people to the early pioneer days of statehood to the boom years of the Roaring Twenties. Greenway connectors that overlap historical transportation corridors offer rich opportunities to interpret history and the relationship between people and the land.





Protecting Working Landscapes

Greenways can be used to protect working landscapes such as farms, groves, and private forest lands. Many of Florida's most cherished landscapes—the citrus groves of Central Florida, Marion County's horse farms, the red hills of Tallahassee, South Florida's ranch lands—are privately owned. The tradition of good land stewardship practiced on these lands may best be perpetually maintained through private ownership.



ORANGE (*Citrus aurantium*).

Greenways along scenic byways can provide the travelling public with a glimpse into the historic past of these lands. Greenways using conservation easements across these lands can allow traditional land uses to continue, while also providing corridors for the movement of wildlife and, where appropriate, people. Since the primary purpose of these lands is not resource preservation but resources used for economic gain, it is often overlooked that these privately owned lands provide valuable environmental benefits, especially if they are managed in an environmentally sensitive manner.

Influencing Urban Form

Greenways can provide important growth management benefits. Areas of protected lands around and through Florida's towns and cities can help shape urban form and mitigate urban sprawl. Greenways can help maintain delineations between urban and rural land uses. Also known as greenbelts, agricultural reserves or buffer lands, privately and publicly owned greenways are valuable growth management tools.

Providing Alternative Transportation

Greenways and trails can serve as alternative transportation routes for commuting to work or school, bicycling or walking to local businesses or restaurants, visiting parks and recreation sites, or sightseeing. Trails often can be designed in conjunction with utility corridors and pipelines. These alternative forms of transportation, if made convenient by greenways, can help reduce air pollution and road congestion.





Guidelines for Creating Florida's Greenways System

While every greenway and every greenways project is unique, successful greenway projects generally have a number of characteristics in common. After a year and a half of studying successful greenways both in Florida and around the country, the Commission identified the following guidelines for creating Florida's greenways system:

- **Greenways generally are composed of natural vegetation or at least vegetation that is more natural than that of surrounding areas.** Greenways formed from natural linear features usually contain functional native plant and animal communities. Greenways along human corridors can vary in their "green-ness" from communities of native vegetation to altered lands with a range of native and exotic species. Some greenways are actually "blue" when they follow waterways or even occasionally "gray" urban recreational areas.
- **Community action is the key to many successful greenways.** Most greenways "happen" at the community level. This is where conservation, recreation, and civic leaders recognize the need and develop the vision for local greenways and greenways systems. Private/public partnerships are formed at the local level where different parties sharing a common interest unite to plan and manage greenways of ecological, recreational and quality-of-life value. Actions at the state and regional levels provide the ecological and recreational, cultural and historic building blocks for the Florida Greenways System. Greenways created at the local level are, however, essential because they provide the links that enable the statewide system to function.
- **Greenways provide connections and thereby foster movement.** Many things can move through greenways, from wildlife, water, and soil nutrients through or along greenways based on natural communities, to people using a wide variety of trails in greenways based on natural or altered landscapes. While most greenways are meant for nonmotorized transportation only, some (like the Suwannee River and the canopy roads of Tallahassee and Leon County) may also accommodate motorized uses.
- **Greenways may cross lands of different ownerships.** A greenway can cross property that is publicly or privately owned. In fact, greenways often consist of both public and private lands. Creation of greenways therefore depends upon establishing cooperative relationships between landowners and users. In many cases, privately-owned greenways are key components of greenways systems.
- **Greenways are protected.** For a linear open space to be classified as a greenway it must be protected, either through public ownership or, working with private landowners, through a variety of methods including fee-simple acquisition and less-than-fee techniques such as conservation easements, management agreements and leases. Private landowners and volunteer organizations are often key protectors of greenways.
- **Greenways are maintained.** It is important to ensure that a greenway's features, once protected, are maintained through public and/or private stewardship. Since much of the landscape has undergone some form of alteration by human activities, greenways maintenance may require restoration. Without maintenance a greenway could become severely degraded. A greenway can be managed by a governmental entity with a budget that covers the costs of maintaining the greenway's natural or restored features and human facilities, or by a private landowner.

Most successful greenways also have one or more volunteer greenway stewardship groups that help maintain greenway features and facilities. The Florida Trail Association is an excellent example of a private group devoted to maintaining trails and greenways—through volunteer efforts—all over the state.
- **Greenways can provide a multitude of functions and benefits.** Greenways and greenway systems can serve many functions and be used in many different ways, but all uses and functions are simply not possible at all locations. As an example, a river's wetland



floodplain, acquired for unique native plant communities, fish and wildlife movement opportunities and protection of water quality and quantity, is not an appropriate site for intensive recreational use and the development of permanent recreational facilities. In the same way an intensively used, inner-city rail-trail may not be an appropriate site for restoring native ecosystems.

- **Greenways uses are based on underlying landscape features.** The appropriate type of use for a greenway must be based on the characteristics, constraints and management objectives of the underlying landscape feature. By adhering to the principle of appropriate use, the quality of greenway resources and greenway experiences can be maintained. Only in this way can the greenways movement conserve the natural, historical and cultural features that form its structure while retaining the public support critical for its continued existence.
- **Many greenways are created by public/private partnerships that use a wide variety of tools and techniques.** Successful greenways are almost always the result of strong partnerships between governmental agencies, private organizations and individuals. Individuals and private organizations can act as essential catalysts for greenway projects, generating public support and using creative ways to raise funds. Elected officials and agency employees offer professional

expertise and bring a diversity of tools and techniques to the table.

- **An institutional framework is vital to a successful statewide greenways program.** Although greenways do "happen" at the community level, there are few successes without state, regional or local governmental involvement. There are many statutory and fiscal priorities pressing the agendas and daily operations of state agencies. Sometimes, peripheral programs get lost. A statewide greenways program needs a focused agency and citizen support vested with the statutory and fiscal responsibility to carry out its mission.
- **The components of a greenways system should not be connected simply for connection's sake but should be connected based on careful planning.** Connections should be based on detailed assessments of potential sites and surrounding features as well as current resource conservation and/or recreational principles. The design and location of future landscape linkages and conservation greenways must be justified based on valid ecological assessments and the principles of conservation biology and landscape ecology. To that same end cultural/historic and recreational greenways must be planned based on a careful documentation of the cultural/historic features to be protected and the recreational needs to be met.



Creating a Statewide Greenways System:

The Commission's Recommended Goals

As Florida continues to grow and change, the importance of coordinated and balanced planning programs to protect the environment and guide development becomes increasingly evident. Creating a statewide system of greenways for Florida is one way to integrate important aspects of the natural and human environments into a statewide system of natural areas, open spaces, trails, cultural and historical resources, and greenways for wildlife and people. The recommendations for creating this system were formulated through a consensus-building process. The system's evolution through a variety of ongoing planning and implementation activities should be guided by the following overriding goals:

- **Create an institutional framework** that supports state and community greenway initiatives and coordinates government and private sector greenway efforts.
- **Stimulate public and private sector awareness, involvement, and action** in creating and managing community greenways and greenways systems.

- **Design and manage a statewide system of greenways** that provides essential ecological linkages in order to: (1) conserve critical elements of Florida's green infrastructure of native ecosystems and landscapes; and (2) facilitate the ability of these ecosystems to function as dynamic systems and to maintain the evolutionary potential that will allow them to adapt to future environmental changes.
- **Incorporate urban open spaces, working landscapes, historical sites, and cultural resources** into Florida's system of greenways.
- **Design, develop and maintain trails** throughout Florida that provide public access to and promote appreciation, support and conservation of the natural, cultural and historical features of the state's system of greenways.
- **Educate and inform diverse audiences** about the concept of greenways and the statewide system of greenways.
- **Fund the creation and maintenance of Florida's statewide greenways system** utilizing a combination of funding sources.





Creating an Institutional Framework for Greenways

GOAL ONE: *Create an institutional framework that supports state and community greenway initiatives and coordinates government and private sector greenway efforts.*

Governor Chiles recognized in his Executive Order the need to emphasize the many public and private initiatives necessary to make Florida's system of greenways a reality. The importance of this strategy goes beyond determining what *geographic* (i.e. land) connections will be necessary. An equally important question is *how to accomplish* these land connections, both now and in the future. This means that organizational relationships (public and private) must be explored, and the issues that define those relationships must be analyzed and accommodated. These organizations and issues are diverse and complex—they include all levels of government and land-owning private businesses as well as economic, growth management, regulatory and other land-related issues. The diversity and complexity of these relationships must be successfully addressed if the statewide system of greenways is to become a reality.

An institutional framework is key to accomplishing the mission of the Florida Greenways Commission because it envisions the creation and maintenance of ongoing connective relationships among organizations and among people in order to create and maintain a statewide greenways system.

The importance of an institutional framework is that it serves as a focal point and commits human and financial resources to greenway initiatives. In addition it fills in gaps based on how the current structure works or does not work and suggests ways to better coordinate existing programs. There are many programs in Florida that support greenways. The federal government has numerous trail programs on federal lands, our state's land acquisition pro-

grams are among the largest in the country, and many communities have built or are building greenways. In addition, a number of private nonprofit organizations support greenway programs, and many large private landowners engage in wise stewardship practices that protect greenways throughout the state. *Major changes to existing programs are not needed at this time.* However, there are two significant gaps in the authorities and implementation of existing programs which must be addressed by an institutional framework for greenways.

First, *there is currently no legislatively-sanctioned organizational framework responsible for considering how the programs and projects fit together and has the role of actively seeking opportunities to do so through coordination, leadership, service and advocacy.* To fill this gap, we must have a framework that provides for:

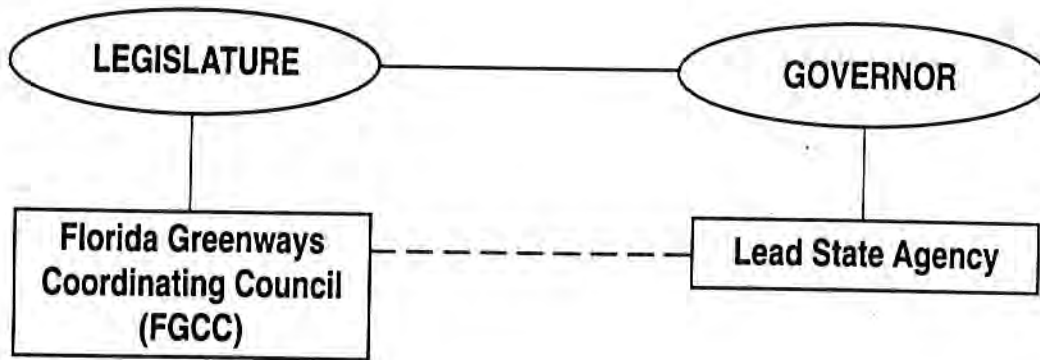
- an ongoing and dynamic statewide greenways planning effort;
- development of significant private sector partnerships;
- a mechanism to ensure coordination among state and regional agencies;
- revision of statutory authorities to permit consideration of greenways in existing programs; and
- development and maintenance of an active database essential to the viability of greenways in Florida.

Second, *in the past there has not been sufficient acknowledgement of the importance of private stewardship of greenspace lands in Florida.* Without the active cooperation and participation of private landowners and business leaders in the greenways effort, many opportunities for linking Florida's existing public lands—especially in urban and developed areas—will simply not be feasible.

The proposed institutional framework includes two parts—a legislatively created Florida Greenways Coordinating Council (FGCC) and designation of the Florida Department of Environmental Protection as the lead state agency. Working together, these two bodies will balance the needs of the public and private sectors, and provide clear lines of responsibility. The FGCC is addressed first



Figure 2
Proposed Institutional Framework for Greenways



in these recommendations because it is the primary new element. It is intended that the FGCC will provide ongoing leadership for Florida's statewide greenways initiative by representing interests from the private sector, conservation, recreation, local communities and public agencies. In contrast, the Florida Department of Environmental Protection's role will focus on promoting better coordination and more effective greenways planning and implementation by existing state authorities and programs. Figure 2 shows the linkages among the FGCC, lead state agency, Legislature and Governor.

Survey of Statewide and Regional Greenway Programs

In the fall of 1993 the Commission circulated a detailed survey to state and regional agencies and organizations. Appendix 1 provides a summary of the survey results. The survey focused on six information areas: the *mission* of the organization as it relates to greenways; whether the organization specifically *plans* for greenways; whether the organization's *regulatory* or *growth management* policies support greenways; whether the organization accomplishes greenways *land acquisition or management* projects; whether *partnerships* (with private partners, for example) are a significant part of the organization's greenway programs; and how the organization promotes *public education* and involvement in its greenway initiatives.

Key Factors

Key factors associated with creating the greenways institutional framework strategy are:

- There is a need to recognize the primary role played by private stewardship in maintaining Florida's

existing and future greenways. Bringing private landowners and businesses into more active partnerships with public agencies and nonprofit groups through voluntary and regulatory processes is crucial to success because many land linkages will involve private land holdings.

- A greenways planning effort is vital to the creation of a statewide greenways system. As part of this planning effort, a dynamic database about connections, both land and process must be developed and maintained.
- Establishment of an institutional framework will not require major changes to existing state programs but will provide a new focus on coordination of existing programs.
- The FGCC and lead state agency should develop a statewide greenways system that relies on the voluntary participation of landowners and recognizes the importance of protecting private property rights.
- Coordination of the diverse interests needed to create a statewide greenways system will require a special type of organizational structure. It will be important that the framework include a component responsible for educating, advocating, and providing leadership to other programs in the following ways. This component should:
 - Act as a catalyst. Its mission should be to make connections among programs and people at all levels. To this end, it should be in a position to take advantage of opportunities.
 - Encourage and strengthen diversity among various types of programs supporting trails and greenways.



- Be organized in a way which requires it to lead, and give credit to others, rather than direct, and take the credit itself.
- Recognize the critical balance and coordinated connection between the development of *grassroots* support in order to spark a project at the local level, and the statewide *structure* of education, advocacy and service needed to support greenway efforts.
- Be organized to take advantage of the creative energies and economic advantages of private business and landowners, and be prepared to use nontraditional means of financing and acquiring land rights for projects.
- Be permanently funded.
- Be accountable to the public on a regular basis through performance standards and certified annual financial audits.

Priority Issues

The Commission identified the following six priority issues which must be addressed to implement the greenways institutional framework strategy:

1. How to lead, educate, and serve a statewide greenways system.
2. How to integrate greenways land management programs.
3. How to develop incentives that would encourage private landowners to participate in Florida's system of greenways.
4. How to deal with liability issues associated with the use of public and private lands.
5. How to develop alternatives to "fee-simple" land acquisition.
6. How to establish and organize citizen groups for voluntary development and maintenance of local greenways.

Strategies and Recommended Actions

Strategy A: Create a Florida Greenways Coordinating Council to advocate, educate, facilitate, and provide technical assistance for the statewide greenways system.

The FGCC's primary role would be to explore opportunities to promote greenway initiatives through technical support, leadership, education, advocacy and other service-oriented efforts. It would serve as a facilitator for the formation of partnerships involving public agencies, landowners, private businesses, environmental and other community-based groups, nonprofits and citizen volunteers.

Created in statute and funded by the Legislature, the FGCC would have 26 members appointed to serve for the four-year period from July 1995 to June 1999. The interests represented on the FGCC would include private business people, landowners, conservationists, recreationists, local government, and the public sector.

Eighteen of the 26 members would be appointed. The Governor, the President of the Senate and the Speaker of the House of Representatives would each appoint four members with at least one from each of the following:

- business and landowner interests;
- conservation interest;
- recreation interests.

The six additional appointments would be made by the Governor, with the concurrence of the President and Speaker, and represent two county governments (one urban and one rural), two city governments, the state's water management districts and a federal land management entity active in Florida. Each appointing authority should consider ethnic and gender balance in addition to the particular interest represented when making appointments. The Governor should designate one of his appointees as chair.

The remaining eight members of the FGCC would be filled by the designated heads of the following governmental agencies: Florida Department of Environmental Protection, Florida Department of Transportation, Florida Department of Community Affairs, Florida Division of Forestry (Department of Agriculture and Consumer Services), Florida Game and Fresh Water Fish Commission, Florida Department of Commerce, Florida Department of Education, and Florida Division of Historical Resources (Department of State).



The FGCC should be assigned for administrative purposes to the Florida Department of Environmental Protection and should have independent staff resources funded through the Florida Department of Environmental Protection budget. The FGCC staff would work solely at the direction of the FGCC. The FGCC could also employ consultants as necessary to fulfill its responsibilities.

The duties and responsibilities of the FGCC would include:

- holding a minimum of four meetings each year;
- holding a minimum of two public hearings in each year to share FGCC activities and take public input regarding future actions;
- assisting the Florida Department of Environmental Protection in the preparation of the Five-Year Florida Greenways System Implementation Plan (hereafter referred to as the Florida Greenways Plan), (see Strategy B, Recommended Action 3);
- developing benchmarks that could be used to measure progress in implementing the statewide system of greenways;
- assisting the Florida Department of Environmental Protection and other state and regional agencies involved in greenways to develop and execute memoranda of understanding that define roles/responsibilities and how each entity will work with the FGCC in developing and implementing the statewide system of greenways; and
- submitting to the Governor and the Legislature by June 1999 a report making specific recommendations on additional actions needed to create and manage Florida's greenways system.

Recommended Actions

1. In 1995 the Legislature should create a FGCC to provide greenways leadership, advocacy and service and to act as a catalyst for greenway initiatives. The FGCC would play a leadership role in greenway activities, should represent diverse interests, and be appointed by the Governor, Speaker of the House of Representatives and President of the Senate. As part of its responsibilities, the Legislature should charge the FGCC with evaluating the advantages and disadvantages of establishing a nongovernmental organization to provide advocacy, education, and technical assistance for the statewide greenways system.
2. By July 1996 the FGCC, working with the lead state agency, should provide technical assistance to local governments.

3. By October 1996 the FGCC and the lead state agency should recommend to the Legislature statutory changes needed to encourage public/private and intergovernmental partnerships.
4. By October 1996 the FGCC and the lead state agency should create a small grants program to provide seed money to local governments and nongovernmental organizations to pursue cooperative greenway opportunities and partnerships. Funds appropriated from General Revenue, however, should not be granted directly to individuals or for-profit entities. Funds assisting projects which involve investment in improvements to or acquisition of real property should be granted only on condition that the investment of state monies is guaranteed to be in the interest of the general public for a certain specific period of time through the use of full fee-simple or less-than-fee agreements.
5. By the end of 1996 the FGCC, working with the lead state agency, should set up a landowner relations program to establish formal and effective lines of communication with landowners, especially timber, ranching and mining interests. The program should help foster partnerships with private landowners in areas where private land could be used for public outdoor recreational use under both informal and formal arrangements.
6. By January 1997 the FGCC should advise the lead state agency on the development of goals, objectives and policies for the statewide system of greenways.
7. Throughout its existence the FGCC should work with the lead state agency to create public/private and intergovernmental partnerships to develop greenway initiatives (projects, education, advocacy).
8. The FGCC in coordination with the lead state agency should initiate an awards program to recognize communities, private businesses, landowners, user groups and individuals for their efforts to support a statewide system of greenways. The Take Pride In America awards program is an excellent model.
9. The FGCC in coordination with the lead state agency should find ways to promote and support the creation of citizen volunteer groups that aid in the creation and maintenance of greenways.



Strategy B: Designate a lead state agency responsible for coordinating and integrating state programs within the institutional framework.

The state agency coordination responsibilities within the institutional framework would be met through designation of the Florida Department of Environmental Protection as the lead state agency. *The agency's primary role would be to create a statewide system of greenways with public lands and to coordinate government agencies with programs which could contribute to the greenways system.* The agency would continue its existing greenways-oriented programs, and should advocate greenway activities with other state agencies. Working closely with the FGCC, the Florida Department of Environmental Protection would take on primary state greenways planning responsibilities, including the preparation of a Florida Greenways Plan and would develop and maintain a database associated with this planning effort. The Florida Department of Environmental Protection also would request appropriations for the FGCC.

Recommended Actions

1. By July 1995 the Legislature should create the Florida Greenways Program and designate the Florida Department of Environmental Protection as the lead state agency. In determining how the greenways effort will be organized within the Department, consideration should be given to how the lead agency for the institutional framework should relate organizationally and programmatically with the ongoing ecosystem management and land acquisition efforts.
2. During 1995 the lead state agency and the Florida Greenways Commission should work to implement the recommendations of this report as approved by the Governor.
3. By July 1995 the lead state agency should seek legislative authorization and funding to complete a Five-Year Florida Greenways Plan. Once completed, the plan would be updated annually. The plan should provide for accomplishing the following elements:
 - a. By December 1995 the lead state agency should identify all existing pertinent data, including information on the existing physical system of greenways;
 - b. By July 1996 the lead state agency should prepare a comprehensive statewide analysis of the biological, physical, economic, recreational,

- historical and transportation data for greenways in Florida;
 - c. By July 1997 the lead state agency should update and refine the Florida Greenways Commission's greenways map series in order to develop a Florida Greenways map atlas;
 - d. The plan should include mechanisms to effectively link the statewide system of greenways to other state, regional and local programs through the state comprehensive plan, agency strategic plans, regional plans, local comprehensive plans, and other similar plans;
 - e. By July 1997 the lead state agency, with input from FGCC, should identify specific actions to implement the statewide system of greenways including responsible entities;
 - f. By December 1997 the lead agency, upon recommendation from FGCC, should adopt the Florida Greenways Plan and submit copies to the Governor, President of the Senate and Speaker of the House.
4. The lead state agency, working with the FGCC, by the end of 1995 should begin negotiating non-binding memoranda of understanding or other forms of written agreement with the various entities having an interest in the development of the statewide system of greenways. The purpose of the agreements would be to formalize cooperative partnerships among state agencies, federal agencies, water management districts, local governments, nonprofit organizations, private landowners and others with regard to the greenway-related responsibilities of those entities, as early as possible in the development of the state institutional framework.
 5. By January 1996 the lead state agency and FGCC should request legislative funding to develop and maintain a Florida Greenways database for planning and management of the statewide system. The database will serve as a state clearinghouse for information about greenways, trails, and Florida's greenways system and should include information on the efforts of private conservation organizations, land trusts and landowners, as well as conservation easements. The request should include appropriate hardware and software to input, store, maintain and periodically update geographic greenways information. This database system should also be designed to be compatible with other data management systems in use among state, regional and local agencies. It should link directly with other sources of data relevant to the state's system of greenway



- and should be capable of making data available at cost to local communities, nonprofit organizations, and other public agencies in order to encourage greenway efforts at all levels.
6. By July 1996 the lead state agency and FGCC should work to identify and fill gaps in the greenways system through selection of projects funded by Preservation 2000 and by the following existing land acquisition programs: Conservation and Recreation Lands, Save Our Rivers, Florida Division of Forestry, Florida Game and Fresh Water Fish Commission, Florida Rails to Trails, Florida Division of Recreation and Parks' Florida Recreation Development Assistance Program, Florida Communities Trust, Florida Department of Transportation' Intermodal Surface Transportation Efficiency Act, the Scenic Highways Program and other appropriate programs.
 7. By July 1996 the lead state agency and FGCC should identify existing statutory impediments to greenways and inconsistencies in state agency implementation and funding programs.
 8. By July 1996 the lead state agency and FGCC should research existing federal agency programs (for example programs within the National Park Service, Environmental Protection Agency, and the U.S. Forestry Service) which may provide greenways planning, education and technical assistance. Additional grants and land exchange programs (such as the National Park Service's Land to Parks Program) should be investigated.
 9. By September 1996 the lead state agency in cooperation with the FGCC and others should develop a conflict resolution process to help governments and land managers resolve conflicts, including those between users and with adjacent landowners.
 10. The lead state agency in cooperation with the FGCC should by December 1996 develop minimum guidelines for the design and management of greenways, including signage and other public information materials (with a distinctive program logo) that are part of the state's system of greenways (see Strategy E of Conserving Native Ecosystems).
 11. By December 1997 the lead state agency in cooperation with the FGCC should develop criteria for recognizing greenway projects as part of Florida's system of greenways. Individual greenway projects could apply to be recognized as a part of the system and as a result receive benefits such as priority funding and technical assistance.
 12. The lead state agency in cooperation with the FGCC should use volunteer organizations whenever possible to support trail construction and maintain and monitor greenways. They should develop a cost sharing program that enables public agencies to provide funding for volunteer partners and provide recognition and awards for effective volunteer service.
 13. The lead state agency and FGCC should work with state and federal Departments of Transportation to make greenways construction allocations an integral, well-funded part of their highway capacity improvements, enhancements, and congestion management programs and scenic highways program currently under development, pursuant to s.335.093, *F.S.*
 14. The lead state agency in cooperation with the Florida Department of Community Affairs and the Florida Department of Commerce should coordinate with the Department of Defense to evaluate the appropriateness of including military bases, especially bases subject to closure, as part of Florida's system of greenways.

Strategy C: Develop incentives to encourage private involvement in greenway initiatives.

A critical part of the effort to create a statewide system of greenways is to substantially increase private sector participation in the greenways process at all levels. The skills, experience and creativity of business and private landowners is especially vital to address the diversity of real estate, financial, economic, regulatory, legal and other issues associated with the development of working relationships among public, private and community partners.

Private sector involvement in the past has primarily been voluntary. This voluntary participation consisted of participation of large landowners in the Florida Game and Fresh Water Fish Commission's Wildlife Management Area Program with few, if any, incentives. Greenways provide an opportunity to renew and strengthen efforts to involve the private sector in creating a statewide greenways system. An outreach program is needed to establish these partnerships.

An issue which raises controversy, but which is a major factor in the willingness of private landowners to participate in greenway efforts, is federal, state, regional and local regulatory permitting. While the issue of regulatory mitigation has been a hot topic for many years, it has become even more so recently with the adoption of the Florida Department of Environmental Protection's mitigation land bank rule and with several large and creative



The Integrated Habitat Network: Reclaiming Phosphate Mining Lands

Florida's busiest and most concentrated mining and ore-processing district lies inland of Tampa Bay in the west central portion of the state. This area, known as the phosphate mining district, occupies large portions of Hillsborough, Polk, Manatee, Hardee and DeSoto Counties. Estimates place the number of acres underlain with economically mineable phosphate ore deposits in these five counties at more than 1.2 million. Mining companies currently own more than 565,000 acres of these known "phosphate ore reserves."

The boundaries of the phosphate district also include the headwaters and approximately half of the watershed of the region's five rivers. The Peace, Alafia, Manatee, Little Manatee and Myakka Rivers all originate within the heart of the district. In addition, many of the state's threatened and endangered plants and animals live in the district's natural and man-made habitats. Perhaps most important, the area lies directly between two important habitat complexes—the Cecil Webb Wildlife Management Area-Fisheating Creek-Myakka River State Park area to the south, and the Green Swamp-Withlacoochee River area to the north. A connection between these two critical conservation areas can be accomplished only through the phosphate district, a move that is currently being planned as a cooperative effort by the Florida Department of Environmental Protection, the Florida Game and Fresh Water Fish Commission, regional and local agencies, and the area's phosphate mining companies.

At the heart of the effort is development of a concept known as the Integrated Habitat Network, a connected system of reclaimed phosphate mining lands that will become an integral part of west-central Florida's greenways system. The Integrated Habitat Network is a comprehensive, district-wide landscape plan designed to protect regional water resources, balance intensive and non-inten-

sive land uses, and replace or protect critical native plant and animal communities. It identifies unmined and reclaimed tributaries and rivers as the nucleus of the network, which will provide the basis for long-term habitat viability. The main goals of the Integrated Habitat Network are to: (1) replace and protect the natural communities which have been disturbed or destroyed by mining activities, (2) maximize habitat quality within the individual communities, (3) maximize connections between and among habitats, and (4) integrate existing and restored native communities into a comprehensive regional landscape plan designed to preserve water quality and quantity.

Under the concept, reclaimed mining lands are separated into two categories: those included in the Integrated Habitat Network, and those outside the network which could be used for intensive or semi-intensive land uses, like agriculture and development. The post-mining development potential of the west central Florida mining district is significant. Within the last decade formerly mined areas in Polk and Hillsborough counties have been converted to shopping centers, light industrial facilities, office complexes, and housing developments. Currently, one power plant is under construction and two larger plants are planned. Several major transportation corridors will soon bisect the district. Agricultural production and marketing research have progressed to the point that field scale production trials are beginning on several hundred reclaimed acres. Increasing statewide population pressures and the resulting need for clean water will place pressure on historically important winter farming areas. The likelihood of agricultural and other development within the phosphate district, combined with the need for environmental revitalization, provides an opportunity for innovative planning never before realized in Florida.



mitigation projects which are considered positive to overall environmental concerns. Four recent projects have successfully created large regional funds for land acquisition, instead of wetlands creation of less significance. These are Disney's Wilderness Preserve (formerly the Walker Ranch), Florida Department of Transportation's Orlando Beltway project and Florida Department of Transportation's Fisheating Creek project. The key to such projects has been expansion of the scope of mitigation to include actions within a defined region, rather than on site or in the immediate vicinity. These concepts are controversial because of the possibility that portions of ecologically valuable lands would be destroyed in the process. But the potential for a larger net gain is significant enough that large mitigation projects should be considered for treatment from a regional and statewide perspective.

The state's current agricultural use assessment provides a limited and temporary reduction of ad valorem tax assessments for certain undeveloped lands. This special assessment is valuable to agricultural and timber land owners. A similar statutory revision is needed to specifically define exemptions for lands which are subject to public use, including lands which are partially owned by the public, under lease or management agreement, or owned and managed for public purposes by a nonprofit organization. Complete exemption during the period of public use—with no recapture of past taxes—should be considered.

Recommended Actions

1. By the end of 1996 the FGCC working with the lead state agency should create an active outreach program to establish the public/private partnerships necessary to create the statewide system of greenways.
2. The FGCC should develop ongoing working relationships, through non-binding written agreements and other appropriate methods, with Florida's forestry, agricultural and development interests with the goal of integrating private conservation and managed land efforts with Florida's greenways system.
3. The lead state agency with input from the FGCC should determine how to create a greater range of opportunities for private landowners to be involved in establishing greenways while meeting regulatory requirements.

4. The lead state agency with input from the FGCC should work with federal, state, water management district, and local agencies to develop public/private partnerships designed to develop creative mitigation projects under existing law that would contribute to the establishment of the statewide system of greenways.
5. The Legislature should specifically define tax benefits for lands which are subject to public use, including lands which are partially owned by the public, under lease or management agreement, or owned and managed for public purposes by a nonprofit organization.
6. The Legislature should provide ad valorem tax exemptions to private landowners who permit public access for components of greenways systems, including hubs and sites, as well as greenway connectors themselves.
7. The lead state agency should research the potential for a tax credit on corporate income tax for businesses providing financial or in-kind support for greenways.
8. The FGCC should explore the feasibility of using a linear tax increment financing district option that would recapture the tax benefit of greenways for maintenance, expansion and improvement of those greenways.

Strategy D: Develop and promote less-than-fee-simple acquisition alternatives that offer a greater range of opportunities for the involvement of private landowners in greenway initiatives.

The topic of "less-than-fee-simple" or alternatives to fee-simple acquisition can include many different types of techniques.¹ Public agencies in other states and the federal government have effectively used less-than-fee tools for land protection. These techniques have received much positive attention over the past several years, but for the most part public land buying agencies in Florida have not made great strides in acquiring rights to land by methods other than fee-simple acquisition. Private nonprofit trusts throughout the nation have protected thousands of acres using less-than-fee-simple techniques.

¹ Some examples of techniques that have been used as alternatives to fee-simple acquisitions are: conservation easements, dedications on plats, restrictions on deeds, sales with lease-back, limited development agreements, business investment agreements such as limited partnerships, transferable and marketable development rights, and donations of remainder interests in land. See, for example, May and Brumback, *Encouraging Land Donations and Bargain Sales: A Report on Less Than Market Value Acquisition Options for Florida's Water Management Districts*, FAU/Flu Joint Center for Environmental and Urban Problems, August 1989.



There are several reasons for the limited use of less-than-fee-simple techniques in the face of almost universal acceptance that these techniques should be used more frequently. First, one of the primary advantages for less-than-fee-simple techniques—their complete flexibility, and ability to be tailored to each situation—is also a significant disadvantage. Use of less-than-fee techniques often requires negotiations about exactly which rights the landowner is willing to give up and the grantee is willing to receive, a process that can take just as long as typical acquisition negotiations.

Second, public agencies find it difficult to acquire less-than-fee-simple interests in property because they have little experience in estimating its value. Valid appraisal techniques have been developed, but are not often used, especially by public agencies. Given these historical difficulties, public programs have preferred to acquire the full bundle of land rights rather than attempt to use less-than-fee, especially where the value of the lesser interest approaches full value. Fee ownership most often provides the highest level of long-term protection and allows the entire property to be managed for public purposes. As a result it is likely to remain the foundation for programs acquiring conservation lands. At the same time, public officials and private citizens continually express interests in using other approaches to land protection.

The above noted challenges with less-than-fee-simple approaches do not lessen the great potential for their future use. Some of the potential benefits of alternatives to acquiring full title to the land include:

- possible reduction of the initial cost of acquiring necessary land interests;
- reduction of the continuing management costs of the public agency;
- continuation of productive private land use; and
- maintenance of the local government property tax base.

The following should be considered in using less-than-fee-simple alternatives for greenways:

- Less-than-fee techniques, such as conservation easements, limited development agreements, purchases of marketable development rights, and the like, are most useful in developing a protection program for a defined resource or set of resources. That is, it is crucial that the resource to be protected, including its geographic extent, be well defined prior to designing the less-than-fee technique to be used. Less-than-fee techniques work well *in the context of a well planned program of resource protection* wherein it is possible to design a specific technique

for individual lands and landowners in the resource area.

- Any significant use of these techniques must tap into the talent of attorneys, biologists, land management professionals, landscape architects, planners and other appropriate experts as needed for specific projects. Less-than-fee techniques are not only time and labor intensive, they also require considerable professional expertise and time to create. Thus *private sector assistance is often necessary* and should be planned and budgeted.
- Less-than-fee programs should focus on donations and bargain sale acquisitions, coupled with intensive community education about the resources to be protected. In other words, for this type of program to work in the long run, strong community understanding of the importance of the resource is vital. In addition, good education can instill in landowners a critical non-monetary motivation: to protect environmentally sensitive family lands for the good of the community. Finally, as part of any donation program, it is important to provide good information to landowners about the income and estate tax benefits of charitable giving. This often requires spending time with the landowner's attorney and accountant.

Recommended Actions

1. The lead state agency, working with the FGCC and interested private landowners, should develop and encourage the implementation of less-than-fee alternatives to fee-simple techniques tailored to appropriate specific resources and resource areas.
2. The FGCC should actively promote the use of conservation easements to establish greenways.
3. The FGCC should work with private partners to develop long-term management and use agreements which provide access to greenways while protecting natural resources and private property rights.
4. The FGCC should explore donations, bargain sales and estate planning for potential charitable donors as ways to gain less-than-fee interests in greenway corridors.



Strategy E: Address liability issues associated with the use of greenways and trails on public and private lands.

Private stewardship of land is key to the success of the statewide system of greenways. Florida is still a beautiful place to live largely as a result of past and present wise stewardship decisions by private landowners. Also, many private landowners hold the "land links" necessary to complete important parts of the greenways system and protect important ecological resources remaining in our state. Finally, the resolution of greenway issues involves a complex and diverse blend of skills and creativity. The private sector may be able to better provide some of that expertise.

Several public agencies currently make use of private land under management agreements, leases, or some other appropriate arrangement. For example, hundreds of thousands of private acres are included in the Wildlife Management Areas program administered by the Florida Game and Fresh Water Fish Commission. One reason landowners have traditionally permitted public use of private lands is a statutory limitation on the liability of the landowner for injuries to private persons using those lands—in effect, an extension of the state's sovereign immunity² to those lands. However, the statutes extending sovereign immunity to private lands are currently limited in that some public use programs are covered,³ while others are not. Also, statutes extending sovereign immunity to private lands do not include legal defense, an element which many landowners view as the most important part of any liability protection system. The costs of legal defense in liability cases can easily exceed the final liability judgment. Thus even where private landowner protection exists, there is a significant disincentive to participation in public use programs, especially for small and medium-sized landowners.

Florida's system of sovereign immunity as it relates to greenway lands (public lands, and private lands under pub-

lic use) should undergo comprehensive study and revision. The statutes relating to sovereign immunity and waivers of it are inconsistent and piecemeal. Given the vision of how trails and greenways will be used in the future and that many greenways will be rural and not intensively managed at all times, it would be appropriate to consider increasing public agency liability protection (i.e. reducing or eliminating the waiver of sovereign immunity) for greenways. This is an issue which calls for additional study.

Because of the state's limited waiver of sovereign immunity for its programs, state agency liability is actually considerably greater than that of private landowners, sometimes for the same tracts of land. Also, the growing number of public agencies holding land has resulted in inconsistent treatment of the various public agencies in regard to liability for tort claims on both public land and private land under public use.

Recommended Actions

1. By 1996 the lead state agency and FGCC should develop a liability protection proposal for consideration by the Legislature which would improve statutory protection, especially in the area of general liability for all private landowners who allow public use of their land.
 - a. The liability protection proposal should increase public agency coverage and be broad enough to provide the same coverage for all state programs as well as those at regional and local levels.
 - b. The liability protection proposal should provide for appropriate state-provided defense of private landowners for negligent acts or omissions.
2. By 1998 the Legislature should establish a low-cost statewide liability insurance pool that local governments could access to lessen potential liability expenses.

² In fact, the limitation on liability extended to private landowners is broader than that available to state agencies. By statute, Section 768.28, F.S., the state has for its agencies waived sovereign immunity to the extent of certain dollar liability amounts. The state is self-insured up to those amounts, and provides legal defense for its agencies in most cases through the Division of Risk Management.

³ State programs which can currently offer statutory liability protection to private landowners who permit public use include the State Park System, the Wildlife Management Area program and the water management district lands program.



Creating and Managing Community Greenways

GOAL TWO: *Stimulate public and private sector awareness, involvement, and action in creating and managing community greenways and greenways systems.*

Greenways not only provide connections between native ecosystems, landscapes, parks, historic sites, and residential areas but they provide a means of connecting people to their surrounding landscape. This connection provides people with a "sense of place." Having a sense of place creates a public value, helps people collectively feel responsible for their surrounding environment, and makes people feel as if their community is distinct. It is this community pride that encourages people to preserve urban greenspaces, restore river floodplains, link community parks, and become active in greenway initiatives.

In June 1993 the first National Greenways Leadership Roundtable was held in Florida. The meeting brought together 25 greenway advocates from around the country to share information, develop recommended actions for successful greenways planning, and talk about ways to foster a nationwide greenways system. One particular session focused on common strategies in successful greenway efforts. The group identified broad public support and early involvement by community leaders as well as partnerships between conservationists, recreationists, business people and civic groups as essential ingredients for success. It is critical that a broad cross section of citizens become involved in the planning and development of community greenways for their efforts to be successful.

In recognition of the need for community involvement Governor Chiles charged the Florida Greenways Commission to assess the current status of greenway activities around the state, identify statewide greenway issues and goals, and then draft recommended actions for meeting them. Particular attention was given to greenway partnerships between local and state governments, private interests, nonprofit organizations, and citizens, as well as local government efforts where local

government comprehensive plans have been used to encourage the development of greenways.

During the past eighteen months the Commission has explored ways to stimulate, identify and encourage community-based greenway initiatives. The Commission found that community greenway projects are driven primarily by citizens at the grassroots level who are often motivated by a strong leader from the private sector. However, community greenways also require support by elected officials and partnerships between landowners, environmentalists, historic preservationists, recreationists, the business sector, and other community interests. Actions to stimulate local government, civic, community and business sector awareness and involvement in creating and managing community greenways will help provide the foundation of Florida's system of greenways.

Survey of Community Greenway Initiatives

To assess the current status of greenway activities around the state, the Commission sent surveys to more than 600 local governments and community groups as well as regional planning councils and local land trusts. As of November 1994, 172 surveys had been returned. Of these, 121 respondents identified 113 proposed, under construction or existing local greenway projects (see Figure 3).

The most commonly identified geographic feature was a rail/utility/road corridor. Upland forest/grassland and wetlands were also common greenway features. The most commonly identified function was the provision of trails (e.g., pedestrian, bicycling, equestrian), followed by protection and restoration of native habitats, and protection of open space. Table 1 provides a summary of the greenway characteristics identified in the survey.

Most respondents indicated that their local government comprehensive plans support the protection of native habitat systems, the provision of recreation and open space and the conservation and preservation of natural areas and/or recreational trails and trail systems. Most also indicated that their greenways were supported by many partner agencies and organizations from both the public and private sector.



Additional sources of funding were the most frequently cited "need" for greenway programs. The current funding source identified most often was Preservation 2000, including Florida Communities Trust, followed by local government general revenue, Save Our Rivers, the Conservation and Recreational Lands (CARL) program, and the Intermodal Surface Transportation Efficiency Act (ISTEA). Other needs identified included improved inter-governmental cooperation, better communication and incentives, the establishment of local greenways information and education programs, and better management and maintenance programs. Obstacles identified included lack of funding, public resistance or opposition, development pressures and fear of crime. For a more complete discussion of community funding, see Goal 7, Strategy D, on page 76.

(See Appendix 2 for a description of survey and case study methods and a complete tally of the survey results.)

Community Greenway Case Studies

The Commission selected six greenways (see Figure 4) as case studies to develop more in-depth information regarding the critical aspects of creating successful local greenways:

- The Gainesville-Hawthorne Rail-Trail and Hogtown Creek Greenway, two existing greenways in Alachua County, page 39;

Table 1
Summary of Community Greenway Project Characteristics

| Geographic Features | | Functions and Uses | |
|------------------------------|----|--------------------------------|----|
| Rail, Utility, Road corridor | 76 | Trail | 82 |
| Wetland | 66 | Protect/Restore Native Habitat | 70 |
| Upland forest/grassland | 60 | Protect Open Space | 69 |
| Shoreline | 40 | Protect Water Quality/Quantity | 56 |
| River corridor | 37 | Protect Species Movement | 52 |
| Canal/Intercoastal Waterway | 32 | Land Use Buffer | 34 |
| Other | | Canoe/Kayak | 11 |
| Stream/Creek | 5 | Scenic Road | 10 |
| Swamp | 2 | Other | |
| Estuary | 2 | Recreation | 3 |
| Median | 1 | Fishing | 2 |
| Recreation Field | 1 | Park | 2 |
| Residential Lot | 1 | Environmental Education | 2 |
| Sinkhole | 1 | Road Divider | 1 |
| Canal | 1 | Pedestrian Access | 1 |
| Barrier Island | 1 | Picnicking | 1 |
| Ravine | 1 | Preservation | 1 |
| Wellfield | 1 | Landscaping/Scenic Beauty | 1 |
| Easement | 1 | Water Storage | 1 |
| Marsh Filter | 1 | Eco-tourism | 1 |
| | | Transportation | 1 |



- The Hillsborough River Greenway, a river-based project in Hillsborough County, page 47;
- The Pinellas Trail, a popular recreational greenway in Pinellas County, page 53;
- West Lake Park and Preserve, a partially completed mangrove protection project in Broward County, page 55;
- The Blackwater-Heritage Trail, a rail-trail in Santa Rosa County, page 67; and

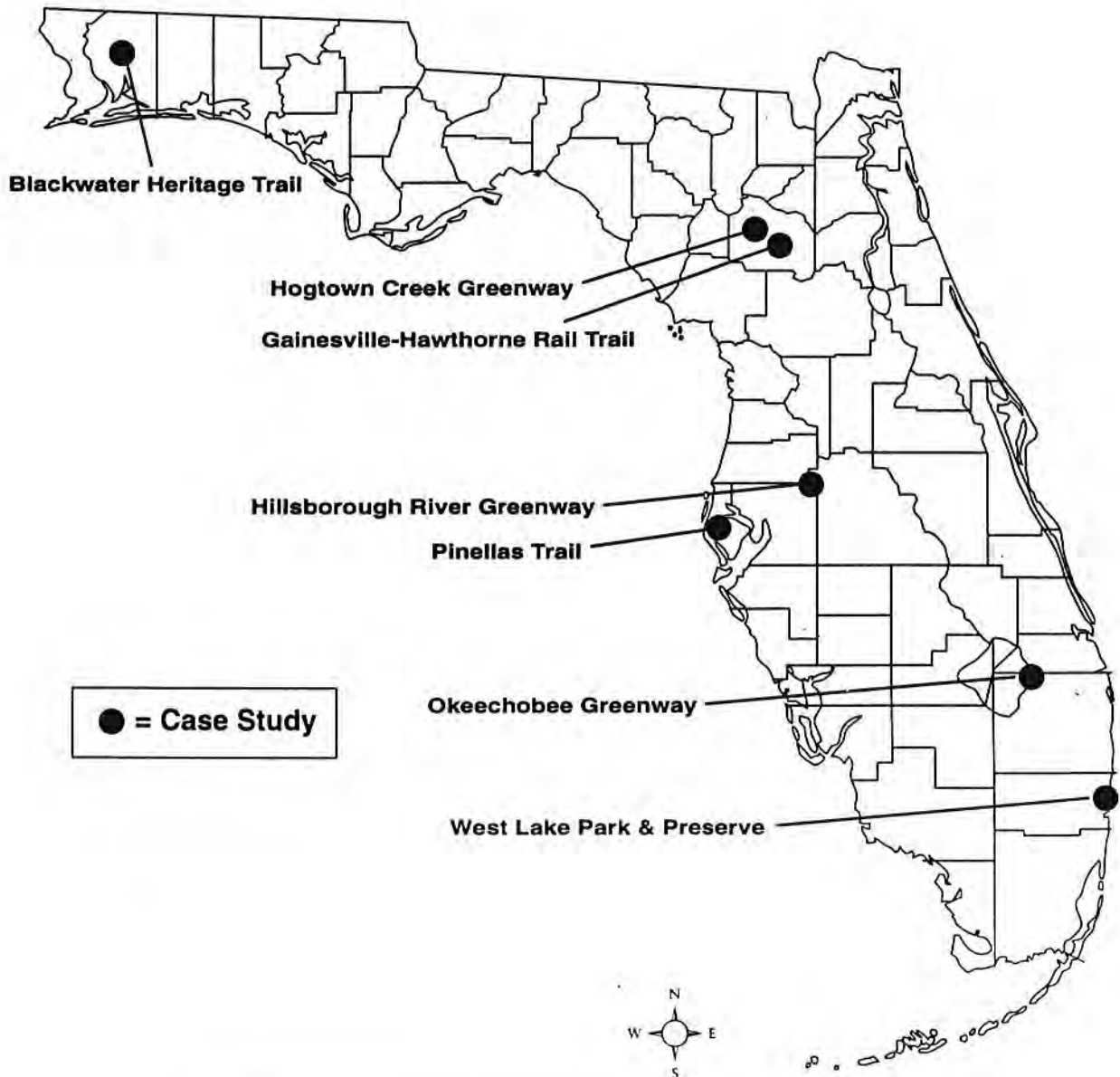
- The Okeechobee Greenway, a proposed lakeside project in Martin County, page 74.

Key Factors

Community-level participation is critical if Florida's system of greenways is to become a reality. To encourage this participation, we must:

- create partnerships between public and private interests;

Figure 4
Statewide Location Map of Commission Case Studies





- establish a broad coalition of citizens, including private landowners, local businesses, and grassroots environmental groups in support of greenway initiatives;
- minimize conflicts associated with private property rights and public access;
- educate the general public and local community leaders about the benefits of greenways; and
- bring together diverse population groups around a common greenways link.

Local governments are essential participants as well. They have an ideal opportunity to integrate greenway initiatives into their communities through the comprehensive planning process. By doing so, they can:

- ensure the preservation of local natural areas, historic sites, and open spaces;
- foster the use of river corridors, recreational trails, and other natural areas and open spaces to link community parks;
- encourage alternative modes of transportation;
- help revitalize existing urban areas;
- promote local passive recreation opportunities; and
- enhance community quality of life.

Priority Issues

The case studies demonstrate a range of issues that must be addressed to help stimulate community-based greenway initiatives, including:

- the importance of private sector support and strong community involvement;
- the need for technical assistance in the form of state, regional and local planning tools; and
- the need for additional innovative funding options (see Goal 7, Strategy D, on page 76).



Strategies and Recommended Actions

Strategy A: Facilitate and encourage private sector support and strong community involvement in local greenway initiatives.

Helping people understand the benefits provided by greenways is key to the success of greenway initiatives, and critical to fostering public/private partnerships. Although the Gainesville-Hawthorne Rail-Trail and Hogtown Creek Greenway had the support of local elected officials who took the lead in establishing them, widespread community support is still being cultivated through public/private partnerships, and implementation of the city's comprehensive plan. There is still a small but vocal minority which, in spite of numerous efforts to address its concerns, continues to question the community's greenway implementation efforts.

Strong and continued citizen support is the hallmark of all successful community greenways. The activities of the community-based citizen organizations like the Blackwater Heritage Trail, Inc. and Pinellas Trail, Inc. attest to the incredible benefits that can be reaped through public support for community greenways. Both of these nonprofit organizations sponsor special trail events, raise additional funds for trail amenities and help educate the community about the benefits of their trails. Private sector support for establishing greenways also builds community partnerships that transcend traditional interest group lines. An excellent example is the Hillsborough River Greenways Task Force, an action-oriented group with stakeholders from diverse private and public sector interests.

To encourage community involvement, the individuals responsible for promoting a greenways effort must educate not only themselves but others as well. Greenways are often developed out of a desire to preserve an area of environmental quality, set aside an area for recreation, promote alternative transportation, or improve overall quality of life. Communities need an established set of guidelines or a framework that will get local greenway projects under way, facilitate the formation of private/public partnerships, and educate the community about the benefits (economic, conservation, and recreation) of greenways. To that end, the following recommended actions are provided:



Florida Greenways Prototype Projects

One of the principal goals of the Florida Greenways Project of 1000 Friends of Florida and The Conservation Fund is to demonstrate how creating greenways and greenways systems can provide a focus for communities' conservation and outdoor recreation activities. To this end 1000 Friends of Florida has embarked on four *prototype projects* that demonstrate the tools, techniques and partners involved in successful community greenway initiatives.

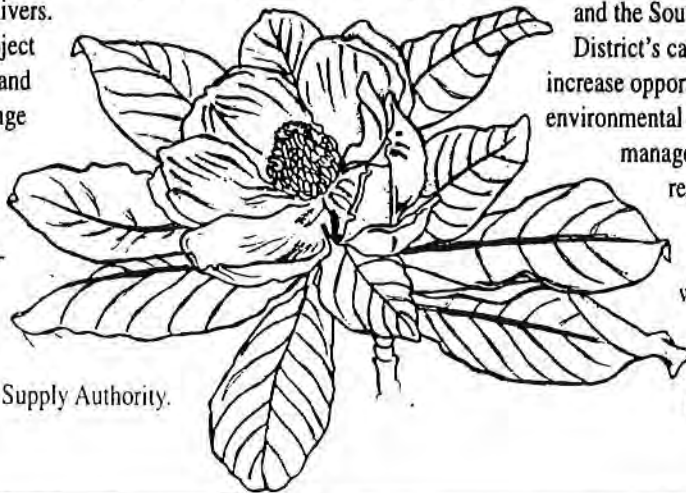
Loxahatchee Greenways

Florida Greenways' first local prototype, Loxahatchee Greenways, based in northern Palm Beach and southern Martin counties, was unveiled in 1992. Funded through a contract between the John D. and Catherine T. MacArthur Foundation and The Conservation Fund, the Loxahatchee prototype is designed to create a regional greenways system connecting large natural areas like Jonathan Dickinson State Park, the Pal-Mar lands, DuPuis Reserve, and Corbett Wildlife Management Area.

Suncoast Greenways

The goal of Florida Greenways' Suncoast project is to create a river-based wildlife corridor and recreational greenways system in west central Florida. The system will encompass not only the protection of existing floodplain resource areas but also the restoration and creation of corridor connections where they have been interrupted through past activities such as mining and development. The project's initial study concentrates on portions of the Hillsborough, Alafia, Little Manatee and Peace Rivers.

Start-up funding for the project came from a National Fish and Wildlife Foundation challenge grant matched by funds from Hillsborough County, the Florida Department of Environmental Protection, CF Industries, Cargill Fertilizer, Inc. and the West Coast Regional Water Supply Authority.



More than 30 partners representing state, regional and local agencies and citizen organizations, phosphate companies and power and water utilities are involved in the project.

Apalachee Greenways

Florida Greenways' Apalachee Greenways prototype focuses on lands surrounding Tallahassee in a six-county area of north Florida and south Georgia. The project is looking at the region's natural and cultural resources, examining potential greenway connections and scenic corridors, and identifying potential conflicts due to the area's rapid growth. One of the project's first activities was development of a greenways plan for the St. Marks and Wakulla Rivers that includes an analysis of surface water quality as well as recommendations for encouraging economic development through ecotourism. The Red Hills Conservation Association, the Apalachee Land Conservancy, the Northwest Florida Water Management District and numerous local governments are partners in the Apalachee project. This project has been funded by the Elizabeth Ordway Dunn Foundation, Waste Management Inc.-Florida Group, and the Florida Coastal Management Program.

Broward County Urban Rivers Greenway

1000 Friends of Florida is working with Broward County, local governments, the South Florida Water Management District, and a number of local private foundations to plan a water-based greenways system in urban Broward County. The project centers on the New River, the Intercoastal Waterway and the South Florida Water Management District's canal system. Its objectives: to increase opportunities for outdoor recreation, environmental education and natural resources management in this intensely urbanized region of the state. The project is unusual in that it focuses on the human-built and natural waterways that connect conservation, recreation, historic and cultural sites to create a greenways system.



Recommended Actions

1. Following its publication in 1995, local governments, community greenway proponents and private interests should utilize the *Florida Greenways Community Resource Guide* as a handbook or starting point for identifying, creating and maintaining community greenways (see Goal 6, Strategy A).
2. Community leaders and local greenway activists should work in collaboration with local Chambers of Commerce, economic and tourism organizations, school districts, public arts and historic preservation agencies, and neighborhood associations to educate the local community on the socio-economic values and benefits of greenways (e.g., ecotourism, heritage tourism, scenic byways).
3. Communities should use greenways to stimulate the local economy through the development of tourist-related activities such as boat and bike rentals, bed and breakfasts, horseback riding facilities, and preservation of historic sites.
4. Communities should explore designating "Greenway Preservation Districts" similar to Historic Preservation Districts.
5. Communities with established greenways should document the economic benefits of the greenways to the community.
6. Communities with greenways that function as alternative transportation routes (e.g. Pinellas Trail) should explore awarding concurrency credit.

Strategy B: Foster the promotion and creation of community greenways and greenspaces using local, regional and state planning tools and programs.

Local government comprehensive plans and state and regional land acquisition programs offer some of the best opportunities for stimulating local greenway initiatives. This is exemplified by the City of Gainesville's greenway network. The city's Comprehensive Plan contains goals and policies which have significantly bolstered the promotion and creation of greenways in the Gainesville area.

The plan's Recreation Strategy contains a map entitled "Recreational Greenways," which shows environmentally sensitive lands, regional and local nature parks, creeks, parks near greenway corridors, designated greenways, and rail and utility corridors. The strategy also contains an inventory of parks and other features along potential green-

way corridors, as well as a goal calling for the establishment, preservation of, and access to environmentally significant open spaces.

The Conservation Strategy establishes Gainesville's Greenway Network as the guiding vision for environmental conservation. The City's local greenways ordinance requires dedication or reservation of a greenways corridor for development containing a designated greenway. The City's Creek Protection Ordinance prohibits development within 35 feet of the centerline of Hogtown Creek, and restricts or prohibits some forms of urban development within 35 to 150 feet of the creek.

Water management district planning and land acquisition programs also provide windows of opportunity for promoting greenway initiatives. Greenways and greenways systems could be encouraged through these programs by identifying conservation easements, tapping into water management district resources, staying apprised of their land acquisition activities, and looking for community greenspaces that have the potential to connect to water management district lands. The water management districts could also be encouraged to promote multiple uses of floodplains, waterbody buffers, and wetlands areas to accommodate greenways and greenways systems.

The state's eleven regional planning councils are now drafting strategic regional policy plans pursuant to Section 186.507, *F.S.*, and Rule 27E-5, *F.A.C.* The new statutory language requires the councils to map natural resources of regional significance and address their needs through goals and policies. This presents another opportunity to encourage and stimulate greenway initiatives.

Finally, there are several programs at the state level that can facilitate community greenway initiatives. These include the:

- Florida Communities Trust within the Florida Department of Community Affairs,
- Florida Department of Environmental Protection's Land Acquisition Program and Office of Greenways and Trails,
- Florida Game and Fresh Water Fish Commission's Wildlife Management, Land Acquisition, and Wildlife Habitat Geographic Information System, Programs,
- Florida Department of Agriculture and Consumer Services Division of Forestry's Cooperative Forestry Assistance Programs,
- Florida Department of Transportation's Planning and Environmental Management Programs, and
- Florida Department of State's Historic Preservation Grants Program.



Gainesville: At the Forefront of Florida's Greenways Effort

Gainesville was one of the first Florida communities to develop a vision and plan for a city-wide greenways system. Two projects that exemplify Gainesville's commitment to greenway, as well as the challenges faced in gaining community support are summarized below.

Gainesville Hawthorne Rail-Trail

The 17-mile Gainesville Hawthorne Rail-Trail has been in existence since 1991. The trail runs from downtown Gainesville to the town of Hawthorne, linking Boulware Springs Park, Paynes Prairie Preserve, Prairie Creek, Newnans Lake, and Lochloosa Wildlife Management Area. This trail is an abandoned rail corridor, characterized by upland forest, grasslands, and wetlands. Surrounding areas have been preserved to protect and restore native habitats and to preserve species movement. The trail itself is used for hiking, bicycling and equestrian activities.

Partners include the City of Gainesville, Alachua Conservation Trust, Alachua County, the Florida Department of Environmental Protection, the St. Johns River Water Management District, Florida Department of Transportation, Friends of Morningside and the Alachua County League of Women Voters. Efforts are under way to extend the trail paving project to link Boulware Springs Park to the Gainesville Greenways Network. Strong leadership by local elected officials, a local government comprehensive plan supporting greenways, and strong private sector involvement through the Alachua Conservation Trust have helped to make this greenway a reality.

The Gainesville-Hawthorne Rail-Trail clearly depicts the delicate balance between public access and protection of sensitive environmental resources. Its location at the northern rim of Paynes Prairie continues to be a contested issue, as do proposed plans to shift the trail

from its current location along the abandoned rail bed further north and away from the Paynes Prairie State Preserve. Public access to this unique part of Florida continues to be the subject of much debate.

Hogtown Creek Greenway

The Hogtown Creek Greenway is a 1,819-acre, 7-mile linear corridor that follows Hogtown Creek and portions of its floodplain. The greenway extends from N.W. 23rd Boulevard to Lake Kanapaha in the City of Gainesville and portions of Alachua County. The Hogtown Creek Greenway is characterized by wetlands, river shorelines, river corridors, stream beds, and associated floodplain. The primary impetus for this greenway came from the support of local elected officials and a strong commitment to implementing portions of the City's comprehensive plan. The primary objective of this greenway is to protect, restore and preserve the remaining ecologically sensitive and important landscape features within the Hogtown Creek floodplain. The greenway also provides structured and controlled access to the floodplain through a comprehensive system of trails and other public facilities.

In 1992 the City of Gainesville with assistance from the Alachua Conservation Trust applied for a Florida Communities Trust Preservation 2000 grant to fund the acquisition. The project was ranked number one by Florida Communities Trust and received \$1,575,000. The City committed to \$1,500,000 and an additional \$75,000 was secured from Alachua County to equal the 50 percent match required by Florida Communities Trust. Partners also included the Alachua Conservation Trust and various community groups. Although the specifics of the Hogtown Creek Greenway are still being actively debated, city officials and greenway supporters are working hard to address the concerns of private landowners and other residents. When complete, the Hogtown Creek Greenway will link more than ten existing local parks.



Communities should familiarize themselves with these programs and look for ways to use state resources, whether technical or financial, to foster local greenways activity.

Recommended Actions

1. Communities should use existing policies in the local government comprehensive plan to begin identifying potential sites for greenways and greenways systems, particularly in the Conservation, Recreation and Open Space, Future Land Use and, where applicable, Coastal Management elements.
2. Communities should consider developing an optional greenways strategy or plan amendment to facilitate the incorporation of greenways into the local government comprehensive plan.
3. Communities should seek technical assistance from the lead state agency, FGCC, water management districts, regional planning councils, local governments and the state programs listed above to initiate and support community greenway activities, as guided by the *Florida Greenways Community Resource Guide*.
4. Local governments, community leaders and local greenway activists should work closely with regional planning councils and water management districts to integrate greenways into the planning tools and programs of these regional agencies.
5. Communities that have established greenways should be encouraged to provide technical assistance to other communities.



Conserving Native Ecosystems and Landscapes

Goal Three: *Design and manage a statewide system of greenways that provides essential ecological linkages in order to: (1) conserve critical elements of Florida's green infrastructure of native ecosystems and landscapes; and (2) facilitate the ability of these ecosystems and landscapes to function as dynamic systems and to maintain the evolutionary potential that will allow them to adapt to future environmental changes.*

Florida has a rich biological heritage that includes more than 600 terrestrial and freshwater vertebrate species and approximately 3,500 species of vascular plants. About 115 of the vertebrate species and nearly 300 of the vascular plants occur nowhere else. Only California and Hawaii have more threatened and endangered species than Florida. Florida is also home to 81 types of ecological communities, 13 of which occur only in our state. These range from the increasingly fragmented and rare Florida Scrub to sandhill ridges, pine flatwoods and cypress swamps. This variety and variability within and among living populations, species of organisms and ecosystems gives our state its rich heritage of biodiversity.

Urbanization, road construction, and conversion to agriculture have all reduced the integrity of Florida's natural biodiversity and our ability to conserve it with traditional methods. While technology gives us the ability to produce "petri-dish panthers," continued land development threatens the open spaces in which they could be reintroduced.

At present approximately 30 percent of Florida's land area is agricultural, 13 percent is urban, and 56 percent is forested or "semi-natural." Much of the forested land is made up of tree farms or has been modified for other forms of human use. Much of the state's conservation land is dedicated to uses in addition to that of conserving biological diversity, such as water management, and human recreation. Most worrisome of all is the loss of ecological integrity that comes from the continued fragmentation of native landscapes and the increased isolation of parks and preserves within human-dominated surroundings. For example, our once grand and nationally-renowned longleaf pine sandhill forests are now reduced to only 800,000 acres, primarily in small and/or fragmented patches and in highly degraded condition.

Habitat fragmentation plays a prominent role in the loss of Florida's biological diversity. As fragmentation progresses, habitat patches become smaller and more isolated. Florida is losing one percent of forest area each year, more than twice the rate of deforestation in Brazil. Just in the past 50 years Florida has lost more than 8 million acres of forest and wetland communities. The presence of a healthy forest products industry in Florida during this period has kept fragmentation and losses to the land uses from being much greater.

Fragmented landscapes and the patchwork of current conservation lands favor generalist plant and animal species such as raccoons, opossums, coyotes, crows and jays, while large and/or wide-ranging species are heavily discriminated against. Native ecological relationships and processes have been drastically altered, and the state's top predators (Florida panthers, red wolves, 12-foot alligators) have been eliminated or severely reduced in number. Along with increasing numbers of smaller mammals such as raccoons, a variety of domestic pets radiate from urban centers, leading to the proliferation of diseases such as rabies and Lyme's disease. These same generalist species and domestic species not only prey on game bird nests but also jeopardize scores of ground-nesting species such as turtles and songbirds.



Current Strategies for Protecting Biodiversity

Florida has for many years worked to conserve its biodiversity by protecting, managing, maintaining and restoring natural areas. These efforts range from large-scale acquisition of land to voluntary actions by private landowners and businesses, to regulatory actions associated with environmental statutes and growth management.

There are currently two major strategies for conserving living organisms and their ecosystems: a "coarse-filter" approach that focuses on identifying and conserving entire native ecosystems, and a "fine-filter" approach that focuses on individual species and their habitats. Traditionally, public support for individual species (such as the bald eagle and the California condor) and the local nature of most conservation programs have favored use of the "fine-filter" approach. But shifting to a more proactive, "coarse-filter" approach would provide a more effective and comprehensive result. A statewide system of greenways offers Florida the potential to help restore and maintain important interactions among communities and across landscapes through this "coarse filter" approach, while decreasing some of the socio-economic conflicts in the "fine-filter" approach.

Integrated Conservation Systems: The Role of Greenways

One of the best hopes for protecting and restoring natural patterns of plant and animal life and the ecosystems that support them is the creation of a statewide, integrated conservation system. This integrated system would build upon the conservation of threatened or endangered ecosystem types, "hotspots" of endangered species, and underutilized habitats, and connect them through a system of greenways that transcends landscapes. When considered from a statewide view, the system would showcase Florida's biological resources, facilitate their interconnection, and emphasize the sense of place that is quickly disappearing for many Floridians.

In theory, comprehensive landscape planning optimizes connectivity by linking certain preserves, parks and buffers comprised of appropriate land uses into an integrated conservation system. The goal is to protect and manage an overall landscape that effectively protects biological diversity while supporting other compatible and productive land uses in a sustainable manner. Although native ecological communities are the standard for protecting biological diversity, altered ecosystems can also contribute in special ways. For example, lands devoted to less

intensive forms of agriculture and silviculture or rangelands provide habitat for wildlife that constitutes prey for species such as the Florida panther. Indeed, because such land uses often occur in large tracts and can be effectively managed, they can contribute habitat values that may not be achieved in any other manner. Similarly, agriculture land uses can buffer ecological preserves and other public conservation areas from the effects of more intensive urban land uses. Therefore, such integrated conservation systems could result in gradient patterns from full protection to intensive use. Ideally, connected reserve lands would be surrounded by compatible agricultural activities such as silviculture and ranching, which would then grade into more intensive agricultural land uses. In combination, preserve lands relieve pressure on the private sector to worry about each and every species while at the same time private lands allow the all-too-small preserves to function as refuges for species such as the panther.

Native ecosystems and landscapes also contain non-living components that are important for greenways. Archaeological sites, which are often best preserved in native ecosystems, are the only record of millennia of human history. These remains are now thoroughly integrated in native ecosystems where they provide special environmental conditions of elevation, drainage, and soil that contribute to the variety and distribution of plant and animal communities. Such sites do not diminish the concept of pristine native ecosystem; rather, the protection of the pristine ecosystem also carries with it the ethical obligation to preserve these sites that are inextricably part of ecosystems.

Greenways can provide the connections for this integrated conservation system. Greenways that serve as ecological connectors are often referred to as conservation corridors or landscape linkages. Conservation corridors are smaller linear features, such as the Upper Hillsborough River, that facilitate the movement of animals, plants and their genes into other populations. Landscape linkages are larger areas that maintain vital ecological processes and in some cases provide critical habitat for rare threatened or endangered species. The Pinhook Swamp project, a land acquisition effort that will connect Osceola National Forest to Okefenokee National Wildlife Refuge, is an example of a landscape linkage.

Forests that occur along the banks of a river, lake or pond represent another critically important form of linkage. When properly designed, these riparian corridors, such as the one along the Wekiva River, not only protect water quality and natural sites including floodplain wetlands, artesian springs and spring runs but also facilitate connectivity across the landscape and quite probably help guide animal movement. A similar argument can be made for some ridge-top corridors. Taken together, riparian and ridge-top corridors can form much of the structure of a statewide greenways system.



The Pinhook Swamp, the Upper Suwannee River and the St. Marys River: Connecting Georgia and Florida

The Okefenokee Swamp is one of the largest contiguous wetland systems in the southeastern United States, extending for approximately 438,000 acres. This expansive wetland system, which straddles the boundary between southeastern Georgia and northeastern Florida, comprises the headwaters of the Suwannee River and a portion of the headwaters of the St. Marys River. The Okefenokee National Wildlife Refuge, currently consisting of 396,000 acres of the overall swamp extent, was established in 1937 to permanently protect the swamp's biological communities. More recently, 354,000 acres of the refuge were designated as a National Wilderness Area.

To the south, in Florida's Columbia and Baker counties, lies the Osceola National Forest. Established in 1932, the Osceola National Forest is a mosaic of pine flatwoods, high pinelands, and cypress/hardwood swamps comprising 185,000 acres. Between the Okefenokee Swamp and the Osceola National Forest lies the area known as the Pinhook Swamp. The Pinhook, as well as its less-well-known yet adjacent wetlands, is actually a part of the southern extension of the Okefenokee system into Florida.

The Osceola-Pinhook-Upper Suwannee-St. Marys-Okefenokee system is a significant natural resource area in north Florida and south Georgia. It is home to the southern mink, river otter, beaver, bobcat, and Florida black bear. Its open prairies provide habitat for a small breeding population of sandhill cranes, as well as foraging areas for herons, egrets, ibises and wood storks. The area also is being used in the experimental Florida Panther recovery program.

Covering 90,000 acres in Baker and Columbia counties, the Pinhook Swamp is one of Florida's largest ecological greenways, forming a critical wildlife and watershed link between the Osceola National Forest in north Florida and Georgia's Okefenokee Swamp National Wildlife Refuge. Until recently, the 15-mile link was privately owned. But in 1988, under the leadership of then U.S. Senator Lawton Chiles and



his former staff aide, Carol Browner, The Nature Conservancy began buying significant tracts in the swamp, and has so far purchased more than 43,000 acres on behalf of the U.S. Forest Service. Ultimately, 90,000 acres of this critical habitat will be protected and managed by the U.S. Forest Service.

Another prominent linkage to the Pinhook Swamp and the Osceola National Forest is the Upper Suwannee River corridor which flows across the Florida peninsula from the Okefenokee Swamp in Georgia for 245 miles before it empties into the Gulf of Mexico. The Suwannee River Water Management District protects over 15,000 acres and 65 miles of riverfront in the upper river basin. Current acquisition plans call for completion of a continuous riparian corridor totaling 27,000 acres and 112 riverfront miles to the Florida-Georgia state line. The District has also identified for acquisition a link between the Suwannee River and Pinhook Swamp on 14,000 acres in Sandlin Bay. The north Florida phosphate industry may play a direct role in acquiring these lands under a reclamation/mitigation agreement with the Florida Department of Environmental Protection. Two major tributaries, Deep Creek and Falling Creek, proposed for acquisition as a part of the Suwannee Buffers CARL project will form important riparian connections between Osceola National Forest and the Suwannee River.

The eastern watershed linkage of the Osceola-Pinhook-Okefenokee Swamp ecosystem is the St. Marys River. This river flows easterly for some 126 miles as the border between Florida and Georgia. Unlike the Suwannee River which has been the recipient of years of protection work by the Save Our Rivers and CARL programs, the St. Marys River is nearly all in private ownership. The St. Johns River Water Management District has secured a priority site in Nassau County east of U.S. 1 at Boulogna. Conservation easements and less-than-fee simple techniques may work best for the present array of private landowners for long-term conservation.



The goal for integrated conservation systems is to protect, restore and manage landscapes to conserve natural ecological processes and evolutionary forces. Preserves, parks, working landscapes and the ecological corridors that connect them represent critical components in any viable integrated conservation plan. "Buffers" between intensive urban development and conservation lands are also important parts of an integrated conservation system. A statewide system of greenways, linking preserves, parks and working landscapes, will help conserve the state's biodiversity by assisting in the creation of an effective statewide integrated conservation system.

Key Factors

A statewide system of greenways is key to ensuring a viable statewide integrated conservation system for a number of reasons:

- Florida's green infrastructure forms the basis of the state's sustainable environmental, social, and economic future.
- Florida's green infrastructure provides countless social and economic benefits that range from freeze and flood mitigation to potable water supply and wastewater cleansing, the perpetual supply of food and fiber, scenic landscapes for recreation and tourist industries, and the genetic elements needed to develop pharmaceuticals and other commercial products.
- A statewide system of greenways adds a critical element to the state's green infrastructure because it helps interconnect native ecosystems for the present and future, and connects people with their natural heritage.
- Sustaining Florida's natural biological heritage requires conserving and sometimes restoring some minimum effective level of spatial connectivity of ecosystems and landscapes.

The following are key factors upon which the need for a statewide system of greenways is based:

- Statewide representation of native ecosystems is necessary to sustain natural diversity and to provide sufficient space for important ecological processes to occur. Natural, managed and restored areas interconnected by greenways are often needed to maintain viable subpopulations of native plants and animals and associated ecological processes.

- Sustaining native ecosystems and landscapes depends upon conserving the genetic variability that allows species and natural systems to adjust and adapt to changes over time in a manner that perpetuates their existence and the valuable services they perform. An effective statewide system of greenways is critical for the species and native ecosystems that constitute Florida's natural heritage.
- Certain naturally occurring events such as hurricanes, fire and floods play critically important ecological roles that lead to the evolution, adaptation, and uniqueness of Florida's native landscape features. Greenways are a cost-effective means of absorbing these events and dissipating their effect across the landscape when management so dictates.
- Bioregional and long-range management approaches must span sufficiently long time periods to allow succession and evolution to occur in response to natural catastrophes such as hurricanes.
- Florida's native landscape includes non-biological components such as geological features and archaeological sites that are incorporated in the soil substratum. Protection of these features often is commensurate with protection of the native ecosystems.

Priority Issues

The three priority issues for conserving native ecosystems and landscapes are:

- How to determine and achieve necessary ecologically-based connections.
- How to use a scientifically-based landscape approach, including developments in science and society to guide the ongoing process of identifying and implementing greenways for the betterment of Florida's future.
- How to achieve compatibility between conservation of native species, ecosystems and other important components and uses (e.g., conservation and interpretation of archaeological/historic/cultural resources, trails, outdoor recreation) of a statewide system of greenways.



Strategies and Recommended Actions

Strategy A: Identify and conserve an integrated, statewide system of greenways that encompasses the full range of Florida's native ecosystems and landscapes.

In the past there has been a tendency to treat ecological systems as discrete units in which land was subdivided and on which property lines were drawn. Management plans often were developed based only on the intrinsic characteristics of the site and sometimes on the narrow objectives of the manager. This approach has led to increasingly fragmented and degraded landscapes unable to support native biological diversity or the needs of people. Advances in ecological sciences and a growing environmental awareness have led to important changes in how we perceive our natural heritage and conserve natural resources.

Increasing acceptance of Aldo Leopold's land ethic—that we as humans are members of a greater community that includes soils, waters, plants, and animals—signifies a major change in our relationship to the land. Because people's well-being is based not only upon the health of the land but also its native ecosystems and because we have an ever-growing power to affect these, people have an ethical responsibility to protect biodiversity and ecological processes. This imperative has led one leading landscape ecologist from Harvard University to define this ethical responsibility as follows:

Simply stated, in land use decisions and actions, it is unethical to evaluate an area in isolation from its surroundings or from its development over time. Ethics impel us to consider an area in its broadest spatial and temporal perspectives (Forman 1987).

Only a comprehensive approach to conservation applied at the scale of the regional landscape can embody this philosophy and the associated science of natural resources planning and management. Integrated land-use planning conserves biological diversity while managing natural resources and providing for economic sustainability. The focus on regional landscapes bridges the gap between our tendency to manage ecological systems as discrete units and the need to plan and manage landscapes.

A comprehensive regional approach is key to creating an effective statewide system of greenways and to ensuring that connectivity (the opposite of fragmentation) is enhanced. Conservation corridors and landscape linkages are critical components of integrated conservation systems.

The ecological value of greenways will only be realized when they serve as effective connectors within a larger system composed of biological reserves, multiple-use conservation areas, working landscapes, and buffers. These integrated conservation systems will become increasingly necessary for the effective conservation of native biological diversity as Florida's human population and built environment continue to grow. This green infrastructure can help conserve our natural heritage while providing recreational opportunities and sustainable economic activities.

The fact that Florida contains the United States' only Caribbean landscapes and subtropical ecosystems gives us an example of our unique opportunities and responsibilities. We must protect globally unique systems at the same time we are inviting tourists to visit our white-sand beaches, coral reefs, and subtropical moist forests.

Natural systems such as the coral reefs and the Everglades sit side-by-side with Florida's present and future urban population centers, giving us both an opportunity and a challenge. Our system of greenways will link countless people, both Floridians and tourists, with nature and with outdoor recreation.

Recommended Actions

1. The lead state agency in cooperation with the FGCC should work with public and private landowners to create a statewide system of greenways. This system should be designed based on the best available scientific data as an integrated conservation system where the whole is greater than the sum of its parts.
2. The lead state agency in cooperation with other federal and state resource agencies and water management districts should identify and conserve existing or potential biological reserves that can serve as core ecosystems and landscapes and be linked by a statewide system of greenways.
3. The lead state agency in cooperation with other federal and state resource agencies and water management districts should identify and conserve scientifically justifiable landscape linkages that not only constitute unique and/or valuable ecosystems but also will enhance the ecological viability and manageability of presently isolated biological reserves.
4. The lead state agency in cooperation with other federal and state resource agencies and water management districts should identify and conserve scientifically justifiable ecological corridors such as river floodplains, ridgelines, and other linear landscape features for the movement of plants and animals and, where appropriate, the protection of water resources.



5. The FGCC and lead state agency in cooperation with other federal and state resource agencies and water management districts should work with the owners of private forests, agricultural areas, and other working landscapes to design and undertake land stewardship activities that benefit the statewide system of greenways and enhance public conservation lands.
6. The State of Florida should use a regional landscape approach to restore and maintain essential connectivity among native communities and diverse ecological systems and processes.
7. The lead state agency in cooperation with other federal and state resource agencies and water management districts should utilize an integrated conservation system approach to protect the integrity of Florida's native ecosystems over the long term while focusing on effectively conserving native biological diversity and associated ecological processes as well as preserving archaeological sites that are part of Florida's native ecosystems and landscapes.
8. The lead state agency should develop an integrated flexible approach to ecological conservation that uses tools such as planning, land acquisition, mitigation, easements, cooperative agreements, stewardship incentives/assistance (including restoration assistance and guidance), environmental education, and regulation (when necessary) to create a statewide system of greenways. The chosen protection method for a component of the system should be agreeable to the landowner and consistent with the principles, goals, and guidelines of Florida's system of greenways.

Strategy B: Utilize Florida's rivers, springs, lakes, and other inland and coastal aquatic features as strategic building blocks in the statewide greenways system.

The state's coastal and inland aquatic features encompass a wide variety of native ecosystems including lakes, estuaries, rivers, and associated wetlands. Florida's rivers, streams, and other surface water bodies serve as natural landscape features that help guide the movement of animals, plants and water and provide connectivity across the landscape. Florida's aquatic features provide natural buffers from adjacent land uses, benefiting the state's natural and human communities.

Many of Florida's conservation areas have been acquired and managed at great public expense to protect aquatic ecosystems, provide flood protection, ensure that

clean water is available for human use and consumption, and maintain recreational opportunities. The conservation of many critical habitats and a variety of Florida's native plants and animals depends upon the maintenance and, where necessary, the restoration of natural water movement across the landscape. Human access to and use of this water frequently depends on surface and subsurface flows across and under the landscape. Numerous tools are now available to help conserve the state's vital aquatic resources. At the forefront is watershed planning which offers significant opportunities to connect and protect these important native ecosystems through a well integrated landscape approach.

The state's coastal and inland aquatic features represent key building blocks in Florida's integrated conservation system. Together, they provide important native ecosystems and natural linkages that will help tie Florida's greenways system together and enable it to function.

Recommended Actions

1. The lead state agency should work with the state's five water management districts to develop comprehensive river basin/surface water protection programs as a critical element in the design and implementation of the statewide greenways system.
2. The lead state agency in cooperation with the FGCC should work with local governments to incorporate watershed/river basin and associated surface water management efforts into their comprehensive planning activities.
3. The lead state agency in cooperation with the state's five water management districts should maintain and update the Florida Rivers Assessment and associated database.
4. The lead state agency should work with the staff and agencies of the Florida Coastal Zone Management Program to identify and incorporate appropriate coastal features (e.g., beaches, estuaries, estuarine research reserves, aquatic preserves) into the statewide system of greenways. Both entities should provide technical assistance to local governments to assist them in implementing design standards and guidelines.
5. The lead state agency in cooperation with the state's five water management districts should utilize volunteers to expand statewide waterways monitoring and Adopt-a-River programs.
6. The lead state agency and FGCC should help establish and support local waterway protection efforts including voluntary greenbelts, setbacks, and



Hillsborough River Greenway: Building Partnerships

The Hillsborough River Greenway is a proposed river-based wildlife and recreation corridor located in Hillsborough and Pasco Counties. In 1993, as a part of a larger regional greenways conservation effort, a unique public-private coalition, the Hillsborough River Greenways Task Force, kicked off a two-year effort with a special emphasis on the permanent protection of the natural resources of the Upper Hillsborough River Basin-Green Swamp Corridor. This coalition was

formed to offer recommendations to minimize increasing developmental threats to natural resources of the Upper Hillsborough River. The effort was spearheaded by the owner of the largest tract of privately owned land in the area, Hillsborough County, The Nature Conservancy and 1000 Friends of Florida.

The proposed greenway will help protect the water quality of the Hillsborough River which provides 75



percent of Tampa's drinking water. The greenway also will protect critical wildlife linkages, extend the Outstanding Florida Water designation, provide needed recreational trail opportunities, and allow governments, businesses and other private interests to take a comprehensive approach to river corridor protection.

The Task Force has committed to work with all the groups interested in conserving the resources along the Hillsborough River, including the Hillsborough County City-County Planning Commission, the Hillsborough River Interlocal Planning Board,

phosphate and utility companies and transportation agencies. The Task Force will be finalizing its recommendations by the end of December 1994. Task Force members hope to continue this type of community consensus-building to establish more river-based greenways in the region, including a greenway along the lower Hillsborough River from Fletcher Avenue to the mouth of the river.



best management practices.

7. The lead state agency and FGCC should use the Hillsborough River Greenways Task Force and the six existing Ecosystem Management Area Implementation Plans as models for demonstrating the importance of greenways planning to comprehensive watershed/river basin protection programs.

Strategy C: Link regional landscapes through Florida's system of greenways, including lands ranging from native ecosystems that are publicly owned to highly managed forestry and agricultural properties that are privately owned.

Many wide-ranging wildlife species such as the Florida panther and black bear cannot be conserved and managed within isolated preserves or conservation areas. Similarly, important ecological processes such as fire, flood and wind are most beneficial to management when they can move effectively across the landscape.

Spatial integration of conservation lands into a regional conservation system is therefore important. This spatially integrated system should have two distinct functions. It should: (1) facilitate the continued occurrence of the natural ecological processes that are needed to maintain ecosystem integrity; and (2) mitigate and/or prevent the occurrence of nuisance wildlife and damaging disturbances from fire and flood on privately owned and managed property. To accomplish this, the statewide system of greenways must be planned and designed to maximize land use compatibility in order to conserve biodiversity and maintain ecosystem integrity while minimizing negative impacts to private lands.

Recommended Actions

1. The lead state agency and FGCC should work with existing agencies, programs and landowners to plan, create and manage green buffers that will minimize the impact of natural disturbances such as fire on the human-built environment.
2. The lead state agency should work with the Florida Department of Transportation and utilities to accommodate existing or new greenways in their planning and, when possible, modify existing infrastructure to reduce wildlife mortality and other ecological conflicts.

3. The lead state agency should develop ecosystem management plans that can accommodate the interests of both the private and public sectors while minimizing land management conflicts.

Strategy D: Utilize the best information available about the requirements of Florida's native ecosystems and landscapes to plan and manage the statewide system of greenways.

Knowledge about Florida's native systems is advancing at a rapid rate, and agency-sponsored research is increasingly recognized as a critical element in responsible stewardship of the state's natural resources. Databases such as the Florida Natural Areas Inventory, satellite digital data mapped and interpreted by the Florida Game and Fresh Water Fish Commission, and accelerated research on the most appropriate timing of prescribed fire regimes and forest pest and disease control, are examples of programs that provide valuable, scientifically credible information. Florida's native ecosystems and landscapes are increasingly besieged by invasions of exotic species. Information about how these aggressive parasites, predators, pests and competitors threaten the viability of native communities and biological reserves is essential. Florida's system of greenways can be sustained only if the requirements and critical thresholds of its native ecosystems and landscapes are understood and if the system, and its ecological components, are planned and managed accordingly. The following recommendations address the need to use the most up-to-date information possible when making decisions about Florida's system of greenways.

Recommended Actions

1. Decisions on the location and characteristics of landscape linkages, conservation corridors and other components of Florida's system of greenways should be based on scientifically credible data and up-to-date principles of conservation biology and landscape ecology.
2. The lead state agency, FGCC and partner agencies, organizations, companies and individuals, should use adaptive management approaches to monitor, maintain, and, where appropriate, restore ecological connectivity between significant native ecosystems and landscapes.
3. Nomination of lands for inclusion in Florida's system of greenways should depend in part on how urgently



they need to be conserved and the scientific validity of the ecological connections they can provide.

4. Nomination of lands for inclusion in Florida's system of greenways should give special consideration to native landscapes and ecosystems not currently protected by existing programs.
5. The lead state agency and FGCC, in cooperation with partner agencies and water management districts, should design the statewide system of greenways, where scientifically justifiable, to close gaps and link Florida's current and future conservation lands, especially aquatic systems and fragmented upland communities.
6. Whenever possible the greenways system should be designed to encompass native riparian ecosystems as a natural landscape template in order to maximize the ecological benefits of the statewide system of greenways.
7. The size and other characteristics of landscape linkages and conservation corridors should be based on up-to-date ecological research and ecosystem management considerations.
8. Where greenways are planned to accommodate human access, their size and management should not only provide for compatible uses, but should also meet the spatial and temporal needs of native plants and animals.

Strategy E: Address native ecosystem conservation/human use compatibility issues by developing minimum greenway design and management guidelines.

High-speed power boating and manatee conservation, free-ranging bison and cattle ranching, unprotected beehives and bear conservation are examples of incompatible uses of the same land or water. By contrast, wilderness hiking and endangered species preservation, canoeing and maintenance of fish migration routes, and hunting and industrial forest management are examples of highly compatible uses of the same land. While soft-surface nature trails cannot withstand the pressure of heavy human use, hard-surface nature trails often impact natural system functions. Protection of archaeological and historical resources is compatible with nearly all other conservation uses of native ecosystems and landscapes.

Compatibility of uses is one of the single most pressing issues facing the development of a statewide green-

ways system that meets native ecosystem and landscape conservation goals while providing direct human-use benefits to Florida's residents and visitors. Compatibility issues can be best addressed utilizing a gradient approach, where the most intensive human activities are physically separated from the most important conservation areas. With a gradient approach, the level of human use and associated facilities development is carefully matched to a site's ecological characteristics and capacity to sustain human use. The major tool for addressing compatibility issues is the development of minimum greenways design and management guidelines.

Recommended Actions

1. The lead state agency and FGCC in cooperation with other federal and state resource agencies and water management districts should formulate and adopt minimum characteristics or qualifying attributes for greenways that will be a part of the statewide system of greenways.
2. The lead state agency and FGCC in cooperation with other federal and state resource agencies and water management districts should formulate and adopt standard goals, objectives and policies to guide the planning and management of greenways within Florida's greenways system and to address compatibility issues as they arise.
3. The lead state agency and FGCC in cooperation with other federal and state resource agencies and water management districts, should develop, clearly define, and use standard terminology for all components of the statewide system of greenways.
4. The lead state agency and FGCC in cooperation with other federal and state resource agencies and water management districts, should formulate and adopt minimum design and management guidelines for all greenways within Florida's system of greenways.
5. The lead state agency and FGCC in cooperation with other federal and state resource agencies and water management districts, should prepare, distribute, and update periodically a document describing the goals, objectives, policies, guidelines and terminology for the statewide greenways system.



Strategy F: Undertake and/or support the research and monitoring efforts necessary to effectively plan and manage the native ecosystems and landscapes within Florida's system of greenways.

Florida has a number of examples of why integrated conservation planning is so important. Effective protection of the West Indian Manatee—North America's longest-ranging large inland mammal—cannot be accomplished without integrated planning. To base the manatee's long-term conservation on a system of small refuges that are not connected is shortsighted in the extreme.

As human pressures increasingly fragment Florida's native ecosystems and landscapes, the erosion of biological integrity and diversity will increase. Conversely, there is not enough information on the critical elements necessary to effectively plan and manage the ecological components of the statewide system of greenways. Research is urgently needed to fine-tune design criteria, management guidelines, and critical thresholds for the native ecosystems and landscapes.

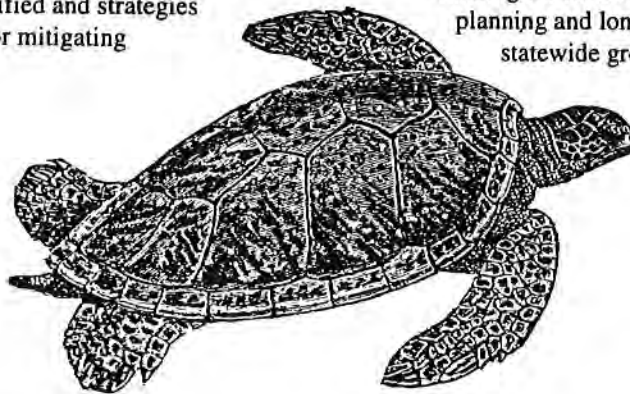
Scientific research needs can be summarized as follows:

1. More information is needed about the historical forces that have influenced the development of our current native ecosystems and biological communities.
2. More information is needed to develop stringent criteria for effectively designing and managing greenways. We need to know more about the characteristics of functional greenways that will meet the movement and habitat requirements of target species and that will ensure ecosystem processes at the landscape level.
3. More information is needed about the impacts of human use on natural resources, especially in regard to planning and managing greenways. Compatible uses should be identified and strategies developed for avoiding or mitigating potential impacts.

4. More information is needed to define critical thresholds of human use in order to avoid ecological degradation. Planners, managers, and decision-makers will need the best scientific information available to help ensure that Florida's system of greenways will meet its ecosystem conservation goals. Monitoring of protected components will help refine scientific design criteria.

Recommended Actions

1. The lead state agency in cooperation with federal and state resource agencies, universities, and water management districts should undertake or support research that addresses ecosystem and landscape processes, their requirements and critical thresholds, and relevant management practices.
2. The lead state agency in cooperation with federal and state resource agencies, universities, and water management districts should undertake or support research to achieve better understanding of the design criteria and conservation needs for species living within and/or moving through landscape linkages and conservation corridors.
3. The lead state agency in cooperation with federal and state resource agencies, universities, and water management districts should undertake or support research on how to develop and manage compatible colocation of recreational facilities and activities while effectively conserving sensitive ecosystems and landscapes.
4. The lead state agency in cooperation with federal and state resource agencies, universities, and water management districts should design a monitoring system to evaluate the conservation requirements and effectiveness of management for native ecosystems and landscapes within Florida's system of greenways.
5. The Legislature should provide a dedicated source of funding for research and monitoring relating to the planning and long-term management of the statewide greenways system.





Conserving Urban Open Spaces, Working Landscapes, Historical Sites, and Cultural Resources

GOAL FOUR: *Incorporate urban open spaces, working landscapes, historical sites, and cultural resources into Florida's system of greenways.*

The vast majority of Florida is a human-altered landscape. Ranging from open rangeland and farm fields to large cities and small towns, these lands can make a significant contribution to greenways. They are vital to the statewide system of greenways and a sustainable Florida for the 21st century. The statewide greenways system should include urban open spaces where people live, work, and play and rural landscapes that produce food, timber, and other renewable natural resources. These lands represent modified natural systems that still maintain important environmental functions. With thoughtful care and management, these lands can serve many of the needs of society on a sustainable basis.

Urban and working landscape components of the statewide greenways system have a number of common characteristics. First, they are usually dominated by a mosaic of privately-owned land and may have a long tradition of private land stewardship. This ownership and management pattern lends itself best to cooperative public-private conservation techniques. These lands harbor many of Florida's most significant cultural and historic resources including historic districts, sites of historic settlement, archeological sites, and the agricultural landscapes that contributed to the state's early and continuing economic prosperity. These lands may be more accessible to the public; urban greenways in particular are generally the most accessible to the largest number of people. Finally, these lands—the distinctively Florida historic urban forms and working landscapes—make a vital contribution to the sense of place that is Florida.

These components of Florida's greenways system fall into four main categories:

- **urban open spaces**—the remaining open spaces, plazas, boulevards, neighborhood and community parks, waterfronts, and linear corridors found in cities and towns, both large and small, and other urbanized areas;
- **working landscapes**—privately-owned rural lands of all types that have been modified by the hand of man and continue to be managed on a productive basis, including farmland of all types, privately-managed timber land, reclaimed mine land, and other privately owned rural lands maintained in a predominately open and undeveloped state;
- **historical sites**—archaeological and historic sites, both urban and rural, which may also occur in pristine natural settings; and
- **cultural resources**—festivals and events that reinforce cultural diversity as well as museums, visitor centers, environmental education centers, and other interpretive facilities.

The urban open spaces, working landscapes, historical sites, and cultural resource components of Florida's system of greenways are critical to linking and providing buffers for the environmentally sensitive components of the system. They also provide places where people can begin to understand and appreciate the past, present, and future relationship between people and the land.

To accomplish its broad purpose of benefiting native ecosystems and species, people, and Florida's quality of life, the statewide system of greenways should encompass a broad variety of landscape types and functions.

The statewide system of greenways should include greenways in and through urban areas to effectively link Florida's urban residents to the natural and cultural landscape, and to provide close-to-home recreational opportunities for the largest number of Floridians. Urban green-



ways have the greatest potential to contribute to the quality of life of Florida's diverse ethnic and racial populations.

The statewide system of greenways should incorporate working landscapes to preserve the rural character of Florida, protect the natural and cultural resources of these areas, and provide buffer lands for native ecosystems and regional and statewide connectors between core ecological preserves.

To contribute to the protection, preservation, and appreciation of Florida's heritage, the statewide system of greenways should include cultural resources of all types—archaeological and historic sites as well as educational and interpretive facilities.

To succeed in incorporating private lands and to engender the participation of the public and private sectors, the statewide system of greenways must recognize and accommodate the existing ownership, uses, and economic functions of the lands it encompasses. To foster public support, the greenways system should rely on the values and understanding of our citizens and visitors. Criteria for greenway projects cannot be restricted to ecological values alone, but must also incorporate such concepts as economic benefit, neighborhood revitalization, ethnic identity, cultural diversity, and preservation of rural life styles.

Key Factors

Key factors that were taken into consideration in developing this strategy include:

- Landscapes other than native ecosystems can contribute a broad range of environmental as well as cultural benefits to society if incorporated into Florida's system of greenways.
- Urban open spaces, working landscapes, historical sites, and cultural resources should be incorporated into the statewide greenways system because of their recreational, historic, cultural, and scenic qualities, and their ability to protect rural character and contribute to the revitalization of urban areas.
- The incorporation of privately owned lands into the statewide system of greenways should be accomplished in ways that encourage landowners to contribute to greenways. One important tool for protecting such lands will be enhanced economic incentives for private landowners.

"We need to bring open space to people, instead of expecting them to journey to find it. That's where greenways are contributing."

—GILBERT M. GROSVENOR, *Vice Chairman
President's Commission on American Outdoors*

- The inclusion of urban open spaces will maximize greenways accessibility, recreational opportunities, economic benefits and alternative transportation options.

- Cultural diversity will be recognized by incorporating archaeological and historical resources that reflect ethnic cultural identities.

Priority Issues

The priority issues for this strategy are:

- How to get people into the greenways equation, particularly in urban areas where the majority of the state's population lives and works and where open space needs are most acute.
- How to ensure the cooperation of private landowners who hold and manage large swaths of rural lands that are not pristine native ecosystems, but are critically important to Florida's greenways system for linkages and for maintaining Florida's sense of place.
- How to meld protection of historic sites and cultural resources, which are important in and of themselves for preserving the state's heritage and attracting heritage tourism, with Florida's greenways system.

Strategies and Recommended Actions

Strategy A: Identify, protect, and manage appropriate urban open spaces and corridors as integral components of Florida's system of greenways.

Making greenway connections to Florida's cities is critical to achieving a better balance between man and nature and is integral to creating a sustainable Florida for future generations. The environmental benefit of preserving large swaths of rural land for ecological connectors to protect native ecosystems in Florida is well understood. Perhaps less well recognized is the need for urban greenways and their potential to help address many of the problems facing Florida's cities.



City parks once were considered the hallmark of a liveable city. Many of Florida's city parks are crumbling for lack of maintenance, operating, and program funds and are even being converted to other uses. As demands on local budgets have grown over the past decade, urban parks and recreation areas have fared poorly. Florida's inner-city neighborhoods and urban youth are particularly under-served. In fast growing metropolitan areas, development is outpacing efforts to conserve open lands and cultural resources for public use. While urban parks and greenways alone cannot solve urban problems, they are critical to the health of our cities and growing metropolitan areas and to the quality of life in Florida.

- Urban greenways promote public health and safety by encouraging physical fitness and providing positive alternatives to violence and crime, especially among young people.
- For the many urban dwellers who lack the leisure time and disposable income to reach remote wilderness areas, urban greenways offer respite from the rigors of city life and the only means to appreciate the beauty of a scenic landscape or learn about the natural world.
- Protected greenways build a spirit of community by saving unique elements of our natural and cultural heritage for public enjoyment, and bringing people of different ages, race, incomes, and cultural backgrounds into common pursuits.
- Greenways are vital to sustainable economic development in urban areas; they attract business and tourism,

The Pinellas Trail: Florida's Most Popular Recreational Greenway

The Pinellas Trail is a 47-mile-long rail-trail that passes through eight incorporated cities, from St. Petersburg to Tarpon Springs, along the west coast of central Florida.

The Pinellas County Bicycle Advisory Committee first proposed using the railroad corridor as a bicycle path in 1984, but it was not until 1989 that the Pinellas County Board of County Commissioners appropriated \$1.5 million for the first 15-mile segment. By that time, a grassroots movement to support the concept of a linear park had gained significant public approval due to media work by the County and extensive community outreach by Pinellas Trails, Inc. A one-percent sales tax referendum to address Pinellas County's infrastructure needs was approved by voters in 1989, and the County provided an additional \$5.27 million toward the greenway from this levy. More than \$150,000 in private donations raised by Pinellas Trails, Inc. was used to fund trail amenities, including bicycle racks, covered benches and mileage markers. ISTEA funds were used to construct pedestrian overpasses.

The trail's first segment opened in 1990, and by the end of 1992, the Pinellas County Parks Department estimated that 953,000 people had used the trail, with 1.5 million expected in 1993. The trail is ranked as one of the top five of its kind in the nation by the Rails-to-Trails Conservancy.

enhance property values, and serve as low-cost alternatives to perpetual spending on flood control, transportation systems, and criminal justice.

- Urban greenways can provide important environmental benefits including filtering pollutants from air, water, and soil; helping cool streams and urban areas by shading; protecting and enhancing the water quality of rivers, lakes, and groundwater aquifers; and buffering developed areas from floodwaters.

More than 90 percent of Floridians live in the state's metropolitan areas. As Florida's urban areas continue to grow, a way must be found to meet the escalating need for parks and open space in the cities where people spend the majority of their time.

Several national studies have documented the need for urban open space. The 1962 Outdoor Recreation Resources Commission's report, *Outdoor Recreation for Americans*, found that most people do not have the means to derive any consistent benefit from large public open space holdings in rural and remote areas. The report recommended that parks and nature be brought closer to people.

Sixteen years later, in 1978, the *National Urban Recreation Study* revealed

that urban open space needs remained unmet and were in fact getting worse. The report documented an increasing disparity between public funding for urban parks and recreation and assistance provided to suburbs and other outlying areas.

In 1987 the President's Commission on Americans Outdoors concluded that our nation's greatest open space needs are in urban communities. The report identified the special recreation and open space needs of the aged, the disabled, people of color, the poor, and other population



groups that tend to be concentrated in cities. Perhaps most importantly the President's Commission identified the tremendous potential for greenways to meet urban open space needs and provide public recreation close to home.

America's and Florida's most successful recreation-based greenways projects are predominantly urban. Portland, Oregon's 40-mile Loop links parks and open space to Portland's metropolitan area. Washington, D.C.'s C&O Canal and Towpath is most heavily used in urban Georgetown and the suburbs of Maryland. Riverwalks in San Antonio, Texas, and Chattanooga, Tennessee, have reclaimed urban waterfronts in the heart of these cities.

The Florida Greenways Commission's case studies that appear in the boxes throughout this report illustrate the success and benefits of urban greenways in Florida. Florida's most successful recreational greenways project—in terms of public use and acceptance—is the Pinellas Trail. Located in the state's most densely populated county, the Pinellas Trail traverses urban residential neighborhoods and commercial districts. Last year the Trail was used by an estimated 1.5 million people.

When complete, Gainesville's Hogtown Creek Greenway will restore an urban stream corridor, eliminating litter, dumping, and soil erosion, reintroducing native vegetation, and protecting almost the entire creek floodplain from development. West Lake Park and Preserve has provided a valuable outdoor classroom for the urban residents of Broward County. The Hillsborough River Greenways project includes identification of recreational routes, the addition of an urban riverwalk along the downtown Tampa waterfront, and incorporates the existing Bayshore Boulevard promenade.

Florida has recognized the need to preserve native ecosystems, and provided funding to acquire many important natural sites. The statewide greenways system has the opportunity to create an expanded vision for sustainability in Florida—one that addresses not only native ecosystems and habitat protection, but also the urgent need of open space for people in Florida's cities.

Recommended Actions

1. The Florida Department of Community Affairs, Florida Department of Transportation, the regional planning councils, the water management districts and the FGCC should encourage, promote, and provide technical assistance for detailed greenways planning and mapping in Florida's urban, suburban, and metropolitan areas.
2. The lead state agency and FGCC should sponsor research to document the benefits of urban greenways with regard to the following subjects: crime prevention, direct and indirect economic benefits, infrastruc-

ture savings, and increases in adjacent property values and property tax increases.

3. The lead state agency and FGCC in cooperation with the urban and regional planning departments of Florida's universities should research and document the cumulative greenways, open space, and recreational deficiencies and needs of Florida's urban, suburban, and metropolitan areas.
4. The lead state agency and FGCC in cooperation with the urban and regional planning departments of Florida's universities should conduct research and develop strategies that contribute to the improvement of public safety and the security of private property for urban greenways.
5. The Florida Department of Community Affairs and FGCC should provide technical assistance to state agencies, water management districts, local governments, and nonprofit organizations to help them understand and use urban land protection tools.
6. The FGCC should foster partnerships with other organizations concerned with urban revitalization including the Florida League of Cities, the Urban League, economic development councils, community redevelopment agencies, affordable housing advocates, and environmental justice organizations.
7. The Florida Department of Community Affairs and FGCC should explore the potential for partnerships with state affordable housing programs as a mechanism to help fund urban greenways protection.
8. The lead state agency and FGCC should support and promote strategies to make better use of the state-wide Land and Water Conservation Fund as a funding source for urban open space and greenways.
9. The FGCC and lead state agency should work with residential developers to incorporate bicycle and pedestrian trails within large developments and to link internal trail systems with the larger state greenways system.

Strategy B: Identify the opportunities for incorporating working landscapes that contribute to conservation into Florida's system of greenways in ways that respect private property rights and interests.

An important part of the character of Florida are the many kinds of rural landscapes that reflect human use of the environment, whether the use is recent, ongoing, or



West Lake Park and Preserve: Protecting a Mangrove Estuary in an Urban Environment

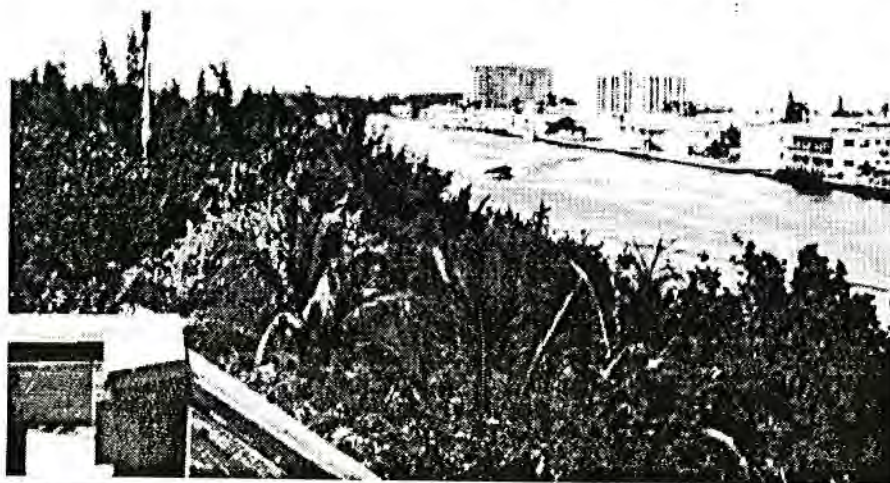
This 1,100 acre park and preserve is located on the eastern edge of the City of Hollywood, just south of Port Everglades and Frank U. Lloyd State Park. The preserve consists of 1,039 acres, and the community park is approximately 61 acres. More than 120 species of birds and 90 species of fish have been identified in the preserve, including osprey, least tern, wood stork, and snook. Manatees frequent the preserve's waters.

West Lake Preserve is the largest remaining mangrove estuarine habitat in Broward County. It was purchased as a wildlife sanctuary and preserve, educational facility, and natural resource recreational site. The lake itself has been designated as an Outstanding Florida Water. The future Anne Kolb Nature Center will allow structured and controlled public access to the environmentally sensitive portions of the preserve.

Purchase of the property began in 1978 with a Broward County referendum which raised \$7.5 million. In 1983 the preserve was ranked first on the state's Conservation and Recreation Lands (CARL) purchase list, and in 1986 the remaining acreage was purchased with CARL funds. Partners in the project include the State of

Florida, City of Hollywood, and Broward County, as well as a number of community groups and citizens who helped plant hundreds of mangrove seedlings in the preserve.

West Lake Park and Preserve comprises 1,100 acres of mangrove estuarine habitat in the middle of a highly urbanized area. While this may not be a typical greenway model, it is an example of partners working together to take advantage of an outstanding conservation opportunity. Although it is an urban setting, West Lake was preserved more for its natural resource benefits than its recreational opportunities. Much of the exotic Australian Pine has been removed, disturbed areas have been restored, and mangroves are propagating at a surprisingly successful rate. Because of West Lake's estuarine location, land-based trails connecting it to nearby parks are possible. Canoes, kayaks and boats connect it to other conservation areas, and there is ample opportunity to hike within the park's boundaries. West Lake Park and Preserve is the pendant on the necklace of parks tied together by the rivers and canals of the proposed Broward County Urban Rivers Greenway.





long past. It is important to protect these rural landscapes because they contribute to a sense of place and provide an alternative to the rapid change that is so characteristic of our urban areas. Working landscapes and rural open spaces include the forests, fields, groves, pastures, reclaimed mine land, and other commodity-oriented lands that are neither native ecosystems nor urban areas. Protection of farms and rural ways of life, and their associated landscapes that help provide the rural sense of place, can be a function of Florida's system of greenways.

Florida's phenomenal growth in the past several decades has led to massive conversion of rural lands to residential and commercial uses. For the private landowner, such decisions are primarily economic ones; rural, productive lands whose market value is determined by nearby urban growth are destined to be sold for more intensive land use. Greenways planning should encourage the maintenance of the benefits of rural lands: their ecological functions such as water recharge, flood control, and native species habitat; their attractive views for citizens and tourists from highways, roads, and trails; and their support of food, forest and animal production.

The orange groves of central and southern Florida, the horse farms of Marion County, the phosphate mines of west central Florida, and the pine plantations of north Florida are working landscapes and part of the state's economic base. Greenways planning should include such lands, while maintaining or enhancing the rural economy. Current traditional and productive uses of working lands should be continued and recognized for their contribution to Florida's system of greenways. These lands, usually privately owned, can maintain their productive viability and economic value while providing valuable views and experiences for greenways system users.

Agriculture and silviculture have historically been an integral part of Florida's landscape. In fact, many examples of Florida's highly valued ecosystems can be found on privately owned agriculture and silviculture lands.

Participation of agriculture and silviculture in the Florida Greenways Program depends directly upon whether participation allows the farmer, rancher, and forester to remain economically viable. There must be economic incentives. With the necessary economic incentives, private landowners will want to maintain or enhance the natural assets of their property. Greenways should not disrupt agriculture or silviculture operations on private lands. The ability to maintain a thriving farm and timber industry and create greenways on private lands depends on cooperative efforts between landowners and public interests.

Similarly, mined and reclaimed mined lands can also provide greenway values. Once mined, the land is reclaimed into useful land forms. Reclaimed lands are a versatile contribution to rural and urban Florida, providing

acreage for agriculture, grazing, timbering, and other development. In addition, certain reclaimed areas, particularly those adjacent to or part of riverine systems, provide viable habitat for many diverse species and can serve as important connectors between natural areas. Mining and reclamation provide a unique and often unrecognized opportunity to enhance greenways systems if supported by appropriate incentives and cooperative efforts.

Recommended Actions

1. The lead state agency should work with local communities to acquire less-than-fee-simple interest in rural lands to protect the values that are important to Florida's system of greenways while supporting continuation of traditional and productive uses.
2. The FGCC should work with agricultural interest groups and landowners using appropriate incentives to incorporate pastures, groves, fields, and other productive lands into greenways planning and to find ways that greenway users can contribute to the continuation of such land uses.
3. The FGCC should work with forest interest groups and landowners using appropriate incentives to incorporate woodlots, pine plantations, and hardwood forests in greenways planning, and to find ways that greenway users can contribute to the continuation of such land uses.
4. The lead state agency and FGCC should work with the Florida Division of Historical Resources to incorporate historic landscapes and landscape features into greenways planning and interpretation to demonstrate the continually evolving relationship between land and people.
5. The FGCC in cooperation with interest groups and landowners should identify the opportunities, constraints, and benefits offered by incorporating privately-owned landscape components into the statewide greenways system.
6. The FGCC and lead state agency should develop a draft agreement for private land stewardship that provides incentives to landowners.
7. The Florida Legislature should consider offering ad valorem tax incentives to private landowners willing to participate in private stewardship agreements.
8. The lead state agency in cooperation with the Florida Division of Forestry and the Soil Conservation Service should develop a program to offer guidance and assistance for restoration of altered lands as an incentive to private landowners.



- The Florida Department of Transportation should coordinate its new efforts to establish a Florida scenic highway program with greenways activities.

Strategy C: Incorporate historical resources into Florida's system of greenways.

Nearly all lands in Florida have been modified to some degree by people over the past 12,000 years of human habitation. For more than 95 percent of that time Florida was occupied by Native Americans who left no written records; most of what we know of the people and environment of this time results from investigations of archaeological sites. These are the places on the land where people lived in the past. These archaeological remains are now incorporated into landscapes of all types, and they are an important source, often the only source, of evidence about past ways of life.



Since the time of European contact in the sixteenth century, Floridians have continued to leave their mark on the land. The tangible reminders of our past few centuries include not only archaeological sites but also more visible and recognizable features that make up our built environment: houses, stores, forts, earthworks, bridges, old roadways—large numbers of structures and features from Florida's past that contribute to our heritage and our current sense of place. Places such as the Castillo de San Marco and the surrounding historic district in St. Augustine, the Lake Jackson Mounds in Tallahassee, the Cape Florida Lighthouse, and Mt. Royal on the St. Johns River which so impressed Florida explorer William Bartram in the eighteenth century, are significant historical features that have a prominent place in contemporary Florida. Greenways could be planned to retrace historic trails and roads such as the Bellamy Road, the Military Trail, the King's Highway, and the DeSoto Trail. These places and historic transportation routes define Florida's history and illustrate the state's past.

Historical resources are important greenway components because they have educational, scientific, and recreational value. Historical resources reflect what Florida was like at all moments in time up to the present, and can

convey better than any other means a sense of time as well as place. Each archaeological and historical site is part of a finite pool of resources. Once destroyed, these resources cannot be replaced—they are absolutely non-renewable.

Over the past several decades Florida has developed a strong historic preservation system. The historic preservation program is based on public-private partnerships and cooperation to accomplish inventory, assessment, recording,

protection, and interpretation of historical sites of all types. Information on more than 85,000 archaeological and historical sites is currently available and can be used not only to ensure protection of such sites, but also to interpret them and make them more accessible to

the public. Incorporating historical resources into Florida's greenways system enriches the user's experience. It offers opportunities to protect and interpret sites for Floridians to enjoy now and in the future.

Recommended Actions

- The lead state agency should coordinate greenways planning efforts with the Florida Division of Historical Resources to determine opportunities for incorporating archaeological and historical sites in greenways.
- The lead state agency in cooperation with the Florida Division of Historical Resources should coordinate greenways planning with local and statewide historical organizations to determine opportunities for incorporating archaeological and historical sites in greenways.
- The lead state agency should develop methods and economic incentives for ensuring accessibility to historical resources along trails and encourage development of historical trails and greenways.
- The lead state agency should work with the Florida Division of Historical Resources to develop methods for protection and interpretation of historical sites on greenways, including economic incentives to encourage the incorporation of privately owned lands.



Strategy D: Incorporate cultural resources and opportunities into Florida's system of greenways.

Today, as in the past, Florida enjoys a diverse multiplicity of ethnic groups and cultures. The richness of Florida's heritage stems in large part from the vibrant mix of cultures that left their distinctive architectural styles and unique changes upon the landscape. Today this diversity continues to mold the character of Florida's communities and the built environments. The statewide greenways system must incorporate living cultural resources as well as archaeological and historical sites. The system should include festivals and events that reinforce cultural diversity as well as museums, visitor centers, environmental centers, and other interpretive elements that help Floridians learn more about themselves and each other.

Greenways that incorporate cultural diversity offer opportunities to build new relationships. Greenway users will have greater access to communities and cultural events that are different than their own, and Florida's system of greenways can gain the broader support of groups and individuals who might not otherwise participate. Partnerships between cultural organizations and greenway organizations can be mutually beneficial as they cooperate to

develop and achieve common goals.

Events such as historical reenactments, recognitions of the Chautauqua Trail, market days, folk and music festivals, food festivals, crafts fairs, county fairs, outdoor concerts, among many others, can be a focus of greenways planning and use. While these are periodic rather than continuous attractions, they are often held in common locations that should be accessible by greenways.

Recommended Actions

1. The lead state agency should work with local and statewide cultural organizations to determine opportunities for incorporating cultural facilities and events into the statewide greenways system.
2. Communities should link greenways planning efforts with existing local cultural institutions to form partnerships for greenways development.
3. The lead state agency and communities should plan greenway routes to access locations traditionally used for cultural events.
4. Communities should plan greenway events to coincide with other local events.



Providing Access to Florida's System of Greenways

GOAL FIVE: *Design, develop and maintain trails throughout Florida that provide public access to and promote appreciation, support and conservation of the natural, cultural, and historical features of the state's system of greenways.*

To truly benefit Florida's residents and visitors, the state's system of greenways must be accessible. In fact, the Commission's vision calls for every Floridian to be within a few minutes of a system of greenways that can be traversed via foot, bicycle, horse and canoe. That access often will come through trails. Trails provide a way of getting to the lands and waters of Florida's system of greenways, but they also do much more. They provide people of all abilities a wide variety of recreational, educational, social, wellness and alternative transportation opportunities and experiences.

Trails link people with the natural and cultural environments and can foster new enthusiasm for the state's natural, recreational, cultural and historic resources. As defined by the National Park Service, trails are linear corridors on land or water, with protected status and public access for recreation or transportation. Trails can have many forms—narrow, winding wilderness paths, primitive woods roads, converted rail and canal corridors, beach and other water-based trails along rivers, streams and coastlines. If they fall within protected corridors, trails are greenways. Trails provide a wealth of opportunities: enjoying natural areas and greenspaces; pursuing resource-based outdoor recreation; participating in environmental education; and appreciating historical and cultural sites. Trails also are an effective tool for managing public access to sensitive resources. In many cases, they provide excellent opportunities for conservation and recreation groups,

public agencies, landowners, companies, and dedicated individuals to work together on greenway projects. These partnerships are critical to protecting greenways and the trails which may pass through them.

Trails provide access to special places that help create a strong sense of place and community in Florida. David Lillard, editor of *American Hiker* magazine, described the hikers' and trail club volunteers' commitment to the places through which the trail passes. "To the hiker, a trail is not a medium for pursuit of a 'trail use.' It is a passageway to special places. Typically, the places themselves have been protected by legions of hikers and volunteers, using an ever-evolving toolbox in their efforts. They protect the land, water, wildlife, ecosystems and the trails that pass through them ..."

Trail users throughout Florida share this commitment to meld trails into the natural environment and their communities. All recreational uses must be compatible with protecting sensitive natural and historical areas and with the stewardship goals of the landowner or manager.

Key Factors and Priority Issues

There are many key factors and priority issues associated with the creation of trails throughout Florida, ranging from balancing recreational use with resource conservation to identifying and conserving important connections in the statewide system of greenways. They include the following:

- Trails can provide a forum for governments and private parties to work together to accomplish conservation and recreation goals. Creating and managing trails throughout the state requires collaboration among different levels of government, organizations, individuals, and businesses.
- An institutional structure is needed that actively fosters trail conservation and management through public and private partnerships.
- Adequate funding is needed to acquire, develop, conserve, and manage the statewide greenways system.



- The Florida Greenways Plan should include a trails element that identifies trail opportunities, where trails or trail access are needed and how community trails fit into the statewide greenways system. This plan should be integrated into the planning processes of local, regional, state, and federal agencies to conserve Florida's greenways system. Taken together, the existing Florida Recreational Trails System and National Trails System provide a beginning point for the trails element of the statewide greenways plan.
- Transportation, utility, canal and other human-made corridors offer opportunities for trails, trails access and trail connectors. Private landowners and some public agencies hesitate to allow public trails on their lands for a variety of reasons: liability exposure, trespassing, illegal dumping, property damage, loss of privacy, and conflicts with existing land uses and management practices. Obstacles to public trails on these lands may be overcome through compensation, incentives, education, management of users, ensuring landowners' management goals are given priority, and through recognizing trail opportunities in public land management plans. Trails must be good neighbors by allowing appropriate crossings, minimizing conflicts with adjacent uses and management practices, and controlling public access to and from adjacent lands.
- To maintain the future sustainability of the areas through which trails pass, trails must be planned, developed and managed to minimize conflicts between user groups, to minimize disturbance of sensitive natural, historical and cultural areas, and to respect the needs of trail neighbors. This can be accomplished by adopting trail development standards and initiating a process for recognizing specific trails as part of Florida's system of greenways.

Strategies and Recommended Actions

Strategy A: Establish an institutional framework that actively fosters and promotes trail conservation and access.

Florida's institutional structure for fostering and promoting trail conservation and access to public lands, historical and cultural sites is disjointed and inadequate to support the state's outstanding trail opportunities. The current system relies upon the efforts of many separate agen-

cies, land managers and user groups to develop and manage individual trails. Additional support is needed to build coalitions or provide incentives for public-private partnerships to support trail protection and management. The Florida Recreational Trails Council, an advisory body to the Florida Department of Environmental Protection, has stated it would be interested in becoming a vehicle for broader greenways coordination, leadership and advocacy.

The greenways database developed by the Florida Greenways Commission is the most comprehensive database of the state's existing and proposed trail opportunities. Refining and maintaining this database is critical to coordinating trail efforts and recognizing opportunities statewide. Coordination is essential if our individual trails are to be interconnected throughout the state, linking public and private conservation lands and communities.

Only a few Florida communities include trails in their local comprehensive plans and require their protection through land development regulations. Local and regional agencies are beginning to recognize the many opportunities for trails within their own jurisdictions. Unfortunately, it is very common in the state's high-growth regions for trails to be destroyed or fragmented by residential and commercial development and by construction of new roads and limited access highways. In many cases, trails could be incorporated into development plans or at a minimum accommodated with overpasses or crossings if developers and community planners were aware of trail opportunities and their value to the community's quality of life.

Recommended Actions

1. The lead state agency in cooperation with FGCC should be responsible for coordinating statewide trail activities and working to remove obstacles to creating, maintaining and protecting trails.
2. The lead state agency should serve as the state's clearinghouse for information regarding trail-related programs and activities, provide trail-related technical assistance, and work in close cooperation with the state's many trail-related organizations.
3. The lead state agency should coordinate with and use the Department of State's Florida Master Site File and the Florida Natural Areas Inventory and use the Florida Rivers Assessment and the State Comprehensive Outdoor Recreation Plan to maintain an up-to-date computer database with essential information on historical and cultural resources to aid in planning, managing and promoting state and local trails. This database would be supplemented through information provided by private historical and cultural interest groups.



4. The lead state agency should coordinate with the Florida Division of Historical Resources to maintain updated information on important museums, living history programs, folk or historic festivals, regular historical reenactments, and similar institutions and recurring events.
5. The lead state agency should enter into agreements with other government agencies to coordinate their trail acquisition, planning and management activities.
6. The FGCC should seek adequate representation of the vital past roles of today's minorities by consultation with knowledgeable representatives and interest groups.
7. The FGCC should encourage the creation of a coalition of landowners and environmental, historical, and trails organizations in order to conserve biodiversity and protect historical sites while completing the statewide greenways system.
8. The FGCC in cooperation with state and local agencies should develop a model comprehensive plan amendment that local governments could adopt to conserve trails in their communities. The amendment could include a map of proposed trails adopted in the local comprehensive development plan, requirements in the land development code for setbacks, dedication of right-of-way, restrictions on clearing vegetation and intrusions into the corridor, and incentives for landowners to conserve trails.
9. The lead state agency in conjunction with FGCC should coordinate with the Youth Conservation Corps and similar organizations to develop and maintain trails.
10. The lead state agency and Florida Department of Transportation should work together to establish and protect trails by linking project acquisition with development funds.
11. The lead state agency in coordination with other public agencies should inventory and publish county maps of public lands and publicly-held conservation easements that could contribute or provide access to the statewide system of greenways.
12. The lead state agency should promote establishing connecting and side trails to national recreation, historic and scenic trails. For example, the Florida National Scenic Trail travels the length of the state, and there are many excellent opportunities for other trails to link this national trail with communities throughout Florida.
13. The lead state agency and FGCC should propose amendments to federal and state laws to create incentives that encourage private landowners to voluntarily conserve trails and allow public trails to cross their property, provide access to recreational users in emergency situations, or allow access to isolated sites of public interest. These incentives may include direct payments, tax abatements similar to the Bluebelt Amendment, legal representation, liability insurance, technical assistance and other forms of compensation.

Strategy B: Identify trails for protection through local, regional, state, and federal planning.

Trails are not adequately recognized, protected or integrated in local, regional, state and federal planning. There is no statewide greenways plan that guides efforts to conserve trails through the many programs funding public land acquisition and development. Florida has the tools—land acquisition, planning, growth management, and dedicated citizens—to develop the nation's most extensive and most used trails system. A coordinated statewide effort is needed to make the statewide greenways system a reality.

Recommended Actions

1. The lead state agency and FGCC should coordinate with the Florida Recreational Trails Council to ensure that the Florida Greenways Plan includes a trails element to guide efforts to conserve trails and trail access.
2. The lead state agency should ensure that the Florida Greenways Plan and Florida's State Comprehensive Outdoor Recreation Plan are complementary and that each furthers the goals and objectives of the other.
3. The lead state agency should provide detailed, periodically updated maps of existing, planned and proposed trails to federal, state, regional and local governments and other interested private citizens, landowners and organizations so they may include these trail opportunities in their planning efforts.
4. The state should require trail projects funded by state and federal programs (such as the Land and Water Conservation Fund, ISTEPA Enhancement funds, Florida Historic Preservation Trust Fund, Florida Recreational Development Assistance Program, Florida Communities Trust, and the Florida Rails-to-Trails Acquisition Program) to further specific goals of the Florida Greenways Plan and Florida's State



The Central Florida Loop: Taking Advantage of Opportunities

The Central Florida Loop is a proposed 200-mile-long greenway and loop trail system linking existing and proposed conservation and recreation lands in north-central Florida. The loop takes advantage of several locally and state managed trails created from abandoned railroads, as well as the Cross Florida Greenway, Ocala National Forest and Florida National Scenic Trail, and the Ocala-Wekiva greenway. The Central Florida Loop will link communities in Orange, Lake, Sumter, Pasco, Hernando, Citrus, Marion, Volusia, and Seminole counties with Florida's scenic natural lands.

It also is an important component of the state-wide trail system, linking with other greenways and trails to communities in Polk, Hillsborough, Pinellas, Putnam and Osceola counties.

The original idea for a continuous Central-Florida Loop came from community-level trail activists, who recognized the tremendous recreational opportunities that would result from linking the area's many existing and proposed trails. Once the idea was born, the Loop's basic components emerged as new opportunities were brought to light over several years. In the final analysis, the Loop will be a success only if local communities work with one another and with state and federal agencies to protect a number of individual segments.

Many segments are already protected. These include the West Orange Trail, Cady Way Rail-Trail, Minneola and Clermont Rail-Trails, the General James A. Van Fleet State Trail, the Withlacoochee State Trail and State Forest, the Cross Florida Greenway, the Florida National Scenic

Trail in the Ocala National Forest, and the Ocala-Wekiva greenway. These segments have been protected using funding from Florida's Preservation 2000 land acquisition programs, Florida Department of Transportation's ISTEA Enhancement program, special appropriations from local governments, the ongoing budgets of many local, state and federal agencies, and through the efforts of volunteer organizations who help build and maintain the trails.

There are many opportunities to connect these existing segments into one continuous trail. The rail-trail could be extended west from the West Orange Trail to meet the



Minneola and Clermont rail-trails and then on through Groveland, Mascotte, and Mabel where the General James A. Van Fleet State Trail heads south through the Withlacoochee State Forest. Following the abandoned railroad west to Trilby, the trail could join the Withlacoochee State Trail which heads north to Dunnellon. Florida Depart-

ment of Environmental Protection's Office of Greenways and Trails is working to acquire a greenway connection between the Withlacoochee State Trail and the Cross Florida Greenway, making the northern connection with the Ocala National Forest and the Florida National Scenic Trail. The trail from Trilby to the Ocala National Forest would likely be designated as part of the Florida National Scenic Trail. Greenway connections using abandoned railroads and public conservation lands are also being explored to connect the Ocala-Wekiva greenway with a northern extension of the West Orange Trail through Winter Garden, Ocoee, Winter Park, Orlando, Clarcona, Apopka, Altamonte Springs and Lake Mary, a move that would complete the full loop.



Comprehensive Outdoor Recreation Plan. This will link the major sources of greenways and trail funding to the state's adopted outdoor recreation and greenway plans.

Strategy C: Integrate linear facilities (transportation, utility, canal and other human-built corridors) where appropriate as human-use connectors and/or access to Florida's system of greenways.

Florida is crossed by thousands of miles of linear facilities, connecting our communities and passing through or by public lands. These corridors contain pipelines, water and sewer lines, fiber optic lines, electric transmission lines, drainage canals and levees, roads and railroads. Where natural connections do not exist, these corridors may provide the only opportunity for creating links and/or providing access to Florida's statewide system of greenways. Often, they constitute the only greenway opportunities in highly developed urban and suburban areas. These opportunities have not been systematically explored in Florida. Partnerships should be developed to take advantage of those circumstances where gaps in the statewide trails system can be bridged by using or following existing or proposed rights-of-way. Their use as greenways will depend on cooperative arrangements with providers of linear facilities as well as agencies responsible for public rights-of-way.

The state and a number of communities have been very successful in using one such opportunity—converting the rights-of-way of former railroad corridors to trails shared by many types of recreational users. In addition to providing trail routes, many abandoned railroad corridors are shared with utilities and roads as a secondary or adjoining use. These shared rights-of-way serve as models that demonstrate how to minimize management and use conflicts by following a management hierarchy. Rail-trails are managed primarily for recreation, with all other uses generally secondary to this purpose. In the same way, rights-of-way managed for utilities could include trails as a secondary but complementary use.

Recommended Actions

1. The FGCC should build public-private partnerships to use existing and future linear facilities as connecting links within and providing access to the statewide greenways system, where appropriate. Owners and managers of linear facilities should be educated about the potential recreational and conservation benefits of

trails and their involvement in planning, developing and managing trails should be solicited.

2. The lead state agency should encourage trail development on existing and proposed linear facilities where other alternatives for locating trails are not available, where appropriate. For example, through the siting process trails could be constructed and maintained in a right-of-way as an added public benefit. In lieu of providing routes or trails, a fund could be established to help communities develop greenways and trails as was done in New York State.
3. The lead state agency in cooperation with FGCC should work with owners and managers of linear facilities (for example, utility companies) to plan new corridors that avoid additional fragmentation of ecosystems and landscapes and incorporate trails.
4. The lead state agency in cooperation with FGCC should work with providers of linear facilities to develop standards for facilities that cross greenways and trails and for greenways and trails that cross or share facilities.
5. The Florida Department of Transportation and metropolitan planning organizations should incorporate trails into future right-of-way planning and highway development, including designated scenic highways and high speed rail corridors.
6. The Florida Department of Transportation in coordination with metropolitan planning organizations and the lead state agency should inventory and publish county maps of the public road rights-of-way, bike routes and paths that could be used as human-use connectors and/or access to the statewide system of greenways.
7. The lead state agency in cooperation with FGCC should work with Florida's water management districts and local drainage and flood-control districts to incorporate canals, levees and rights-of-way into Florida's system of greenways.
8. The lead state agency in cooperation with FGCC should work with Florida's inland navigation districts to incorporate Florida's intracoastal system into the Florida greenways system.

Strategy D: Develop a process for recognizing and/or designating trails as part of Florida's system of greenways.

A process for recognizing and/or designating individual trails as part of Florida's system of greenways is



needed to ensure that the lands and waters used for trails are protected and users are afforded a high quality experience. The process should include developing the Florida Greenways Plan as well as minimum guidelines for design and maintenance and procedures for recognizing, designating or certifying individual trails. The Florida Greenways Plan should include maps showing the statewide vision as well as detailed planning maps. The plan will help establish priorities for trail protection. Guidelines will address trail design and management criteria for different types of trails to ensure that the public enjoys safe trails and that sensitive resources are conserved. The process also will ensure trails meet minimum design and management guidelines; encourage partnerships in trails development and management; provide recognition for individual trails and those partners involved; and raise public awareness of the conservation and recreational benefits of trails. The process should be designed to be sensitive to private landowners to encourage voluntary inclusion of their lands as part of Florida's system of greenways.

Recommended Actions

1. The lead state agency in cooperation with public and private land managers and FGCC should develop a process for recognizing or certifying individual trails as part of Florida's system of greenways. The process should require that all trails included in the statewide greenways system be consistent with minimum design and management guidelines, consider long-term maintenance and management, and provide a mechanism for ensuring trails continually meet minimum standards.
2. The lead state agency in coordination with other land managing agencies and FGCC should develop trail design and management guidelines that address how trails can be used, located, constructed, signed, maintained, managed, and secured in ways that are compatible with ecosystem conservation objectives and the stewardship goals of the landowner or manager.



Educating and Involving the Public

GOAL SIX: *Educate and inform diverse audiences about the concept of greenways and the statewide system of greenways.*

From financial support to trail building, community involvement—and thus community education—is key to making the Commission's vision a reality. Successful greenways promote themselves. Citizens from neighboring communities who visit a well-planned, developed and managed greenway often leave wondering how they can create a greenway in their own community. The objective is to inform Florida's citizens about greenway benefits so they will be inspired to create them in their own communities.

Environmental education generally has three stages:

- **awareness**, during which people learn that the issue exists, are aware that it is out there, but have no depth of knowledge;
- **knowledge/understanding**, during which people gain a broader understanding of the issue, how it affects them, and what needs to be done about it; and
- **action**, during which people decide the issue is important enough to act on.

While the first two stages are important, it is the third—motivating people to take action—that greenway public education activities should work toward.

State government has a definitive role to play in marketing greenways. Florida is the fourth most populous state in the nation, and will continue to be a growth state well into the 21st century. The quality of life for future Floridians cannot be maintained or improved unless the state is able to manage the impacts of this growth. The education of all Floridians is critical to maintaining the delicate relationships among all forms of life and their environments.

Florida's Environmental Education Act has already created a strong environmental education effort at the state, regional and local levels. These activities generate a continuing awareness of our responsibility to preserve the earth's capability to sustain life in the most healthy, enjoyable and productive environment possible. Environmental

education must encourage an understanding of natural systems, natural, historical and cultural resources and how human beings interact with them so that all Florida's citizens can become better stewards of the environment. Greenways can enhance these efforts by providing opportunities for exciting, first-hand learning experiences. These hands-on experiences will enrich the teaching of a broad range of environmental education topics. Using greenways as outdoor classrooms provides environmental education with a meaningful focus for creating awareness of our fragile environment and the future of the Florida it sustains.

A strong, well articulated vision can help address concerns and garner support from individual and private landowners, special interest groups, politicians and the press. Public awareness is the key to overcoming barriers and organizing public support.

Members of the Florida Greenways Commission identified key audiences and developed a comprehensive marketing plan (see Appendix 3). The strategies and recommended actions in this section relate to the priority issues identified by the Commission—breaking down barriers in greenways creation (through the education and involvement of landowners and community planners), involving non-traditional groups in greenway projects, and better integrating greenways into statewide education curricula.

Assessment Results

Both the community survey and the case study interviews conducted by the Commission identified what the primary obstacles or barriers to greenways creation and management have been and what tools have been most effective in communicating with key audiences.

The primary obstacles identified in the surveys were crime concerns, political opposition, development patterns, private property rights, road projects, funding and long-term maintenance. The need for more public education on greenways was mentioned by several of the greenway planning groups. The variety of communication methods used by successful greenway partners is described in the various case studies outlined in the boxes throughout this report.

Particular attention should be given to the Pinellas Trail case study where organizers have developed an advi-



sory group, acquired over \$8 million in county government funds and \$200,000 in private donations, and is ranked as one of the top urban rail-trails nationwide. Many of the strategies used to effectively promote this urban recreational greenway could be adapted and used to build strong public support for rural greenways.

Key Factors and Priority Issues

A number of key factors and issues were identified as critical to the success of a greenways education/public awareness program:

- Public awareness efforts should use and build on existing programs at the state, regional and local levels to maximize efforts and minimize required funding.
- Current trends and interests in history, environmental protection, alternative transportation, outdoor recreation, heritage and eco-tourism provide excellent opportunities for greenway planners.
- A wide variety of tools including such items as a video presentation, speaker's bureau, newsletter and "how-to" manual need to be used to effectively spread the word about greenways.
- Barriers and problems should be addressed early in the planning process through a well-planned education/public awareness program. Each of the obstacles identified in the surveys and interviews needs to be addressed in a greenways education/public awareness program. Concerns and solutions to those problems will be included as part of the various marketing tools.
- Greenways should be integrated into primary and secondary education curricula. Building on current successful efforts through state agencies and local school systems is the best approach to expanding environmental education to include greenways. Greenways provide an exciting, informal education tool that can bring subjects like science and history to life.
- Nontraditional groups should be involved in greenways creation and management. By including urban areas in greenways planning, more nontraditional groups will become interested in the greenways concept. Such greenway projects need to build in safety, beautification or urban redevelopment, and functional linkages to schools, work, shopping and recreation.

Strategies and Recommended Actions

Strategy A: Develop and implement a comprehensive education program for informing and educating the general public about greenways and the statewide greenways system.

One of Governor Chiles' charges to the Commission was to join him in recognizing officially 150 state, regional and local greenway projects in 1995 as a part of the state's sesquicentennial celebration. The celebration provides an excellent opportunity to hold a number of greenway-related events that will help involve the public in the greenways movement. The celebration also provides a good opportunity for kicking off a comprehensive greenways education program for Florida.

Recommended Actions

1. Develop greenway events and activities in conjunction with the state's sesquicentennial celebration in 1995, including official recognition of 150 Florida greenways.
2. The Governor should proclaim a Florida Greenways Month beginning in 1995.
3. The FGCC should develop a plan to hold greenway events and activities in conjunction with Florida Greenways Month in 1995 and thereafter.
4. A *Florida Greenways Community Resource Guide* should be published to help local officials and greenway advocates create greenways in their communities.
5. The FGCC and lead state agency should implement the *Florida Greenways Marketing Plan* that appears in Appendix 3.
6. The FGCC should sponsor an annual conference to help local governments and citizens plan and manage community greenways and access available funding.



Strategy B: Involve educational groups in planning, developing and implementing student/teacher education programs that promote awareness, appreciation and understanding of greenways and how they aid in sustaining vital native ecosystems and landscapes.

The Florida Environmental Education Act has created strong environmental education efforts at the state, regional and local levels. Greenways can enhance those efforts by providing exciting, hands-on informal science education experiences that can supplement teaching in a broad range of environmental education topics. They can provide a focus for teaching about Florida's sustainable future.

Recommended Actions

1. The lead state agency and FGCC should work with the Florida Advisory Council on Environmental Education (FACEE), the State Committee for Environmental Education (SCENE), the Environmental Education Foundation, Inc. and the Florida Department of Education to integrate greenways into new and existing curricula that stress the benefits of sustaining Florida's natural systems.
2. The FGCC and/or lead agency should create a greenways education coordinator position modeled after the Florida Game and Fresh Water Fish Commission's non-game educators.
3. The lead state agency should select key greenway sites that can serve as test areas and sites for teacher in-service workshops.
4. The lead state agency and FGCC should research and apply for small grants through the Environmental Protection Agency, Department of Education,

Blackwater-Heritage Trail: Highlighting the Value of Citizen Involvement

This greenway is located in Santa Rosa County and portions of the city of Milton. A rail-corridor conversion, the Blackwater-Heritage Trail is approximately 8.5 miles long and averages 100 feet in width for a total of about 96.5 acres. It runs along the old U.S. Navy Railroad from Milton to Whiting Field Naval Air Station. The trail preserves a transportation right-of-way and provides non-motorized access to Blackwater River State Forest, the Blackwater River State Park, the Old Spanish Trail, Santa Rosa Industrial Park and Airport, and Whiting Field. Future plans include development of the historical and cultural assets associated with the trail, including a railroad museum.

Key to the success of this project was the tireless advocacy of the local Blackwater-Heritage State Trail, Inc. Local planning and trail interests brought the proposal for this greenway to the Florida Department of Natural Resources (now the Florida Department of Environmental Protection) in 1987. With the help of the National Park Service, the deed for the land was turned over to the State Park System.

Maintenance of the trail is accomplished totally by a voluntary Blackwater-Heritage Trail Citizen Support Organization. This is the only citizen-based organization solely responsible for managing and operating a unit of the Florida State Park System.

Funding for the trail has come from a variety of sources, including ISTEA, which provided \$900,000 for trail construction and development, as well as from the state's Rails-to-Trails Program and Preservation 2000 funding. The City of Milton loaned city equipment to remove oil-stained soil from the trail area. Additional funding was raised by recycling the salvaged steel rails, cross ties, and ballast rock from the old railroad bed.

Innovative aspects of this greenway include the use of an abandoned military railroad corridor; strong citizen advocacy; and citizen-based trail maintenance responsibilities.

National Science Foundation and state agencies and foundations that could fund the design and production of school materials.

5. The lead state agency should conduct pilot teacher workshops in at least three areas to share curriculum and encourage greenways support from educators and students. Workshops should count towards required teaching credits.
6. The lead state agency should produce and distribute teacher packets through environmental fairs, exhibitions and statewide teacher conferences.
7. The FGCC should distribute the Florida Greenways video to every school district.



Strategy C: Educate the business community and landowners about the impacts of greenways to address concerns and foster support of greenway programs and projects.

Businesses can become valuable partners in the statewide greenways effort. Not only can they provide financial and technical resources, they can provide private greenways as links to a greater system. Utilities, agricultural interests, forestry companies and mining operations represent some of the key industry groups that have great potential to locate greenways on their properties. Their active participation will greatly enhance the greenways system.

Individual landowners whose property may be included in a greenway and landowners adjacent to proposed greenways may be concerned about safety and security, liability, property values, maintenance, environmental impacts and long-term funding. Many of the concerns that have been voiced before greenways were developed have not been realized after the projects were completed. In fact, property values often go up and security is improved. Access to greenways can make properties more marketable and improve the quality of life in urban areas.

Recommended Actions

1. The FGCC should encourage the development of effective partnerships among federal, state and local governments and the private sector to help provide opportunities for creating and managing greenways.
2. The FGCC and lead state agency should conduct a study to determine the economic benefits of greenways on local economies and at the state level.
3. The FGCC should develop and distribute to targeted corporations a greenways packet discussing the broad range of tools available, including tax benefits of land or easement donations.
4. The FGCC should develop and distribute informational materials that tell the story of successful greenway projects, along with regular speaker's bureau presentations.
5. The FGCC should develop information that focuses on sensitive and controversial projects and how barriers were overcome.
6. The FGCC should create a network of landowners who were originally opposed but have had positive experiences with greenways and are willing to meet

with landowners in communities developing new greenways.

7. The FGCC should use under-utilized resources, like the Soil Conservation Service, agricultural extension agents, county agricultural agents, and community garden clubs, to get the word out about greenways.
8. The *Community Resource Guide* recommended under Strategy A on page 89 should include tips on how to involve landowners, how to listen and be responsive to their concerns, how to present solutions for recurring issues, and how to handle the media when conflicts occur.

Strategy D: Encourage local public land managers and comprehensive planners to incorporate the concept of greenways and greenway linkages in open space/natural area planning and regulation.

Florida has more than 450 local and municipal governments that control land use through comprehensive plans, land development regulations and other local rules and regulations. Twenty of Florida's governments have active land acquisition and management programs. These local entities can influence the success of greenways through their planning and land management programs.

Recommended Actions

1. The FGCC should provide information to local governments, municipal managers and the various intergovernment organizations and encourage them to adopt a greenways philosophy and incorporate the concept of greenways into their local plans.
2. The FGCC should present the concept of greenways to the American Planning Association (local and state chapters).
3. The FGCC should set up individual meetings with targeted cities and counties to make greenway presentations.
4. The *Community Resource Guide* developed by the FGCC and lead state agency should include tips for local governments on how to involve landowners, how to listen and be responsive to their concerns, how to present solutions for recurring issues, and how to handle the media when differences occur.



Strategy E: Encourage under-represented groups to become more active in greenways and persuade greenway leaders to include urban and rural areas in greenways planning.

Many groups are under-represented in organizations focusing on environmental issues. In addition, the majority of greenways and land acquisition programs focus on rural lands. Greenway leaders must be sure to make their efforts relevant to all ethnic and income groups in both urban and rural areas. Urban greenways can provide alternative transportation to work and play, improve community appearances and land values, offer youth and adult recreation opportunities and even create safety zones when effectively implemented. There are a number of models for successful urban greenways that have connected low-income urban residents with necessary services and recreational amenities.

Recommended Actions

1. The FGCC in conjunction with the lead state agency should promote different kinds of greenways,

including community gardens, safety boulevards and functional linkages for transportation through factsheets focusing on these particular uses.

2. The lead state agency and FGCC should educate communities about using urban redevelopment funds to identify abandoned or rundown corridors and turn them into greenways.
3. The lead state agency and FGCC should encourage cultural diversity on state and local greenway planning groups. Further, they should ensure that under-represented groups are invited to workshops and events.
4. Communities should involve neighborhood groups, civic associations, religious organizations and other key groups in greenway projects, with a focus on neighborhood beautification and development of recreational resources for the youth. Participation by these groups in the small grants program should be encouraged.
5. The lead state agency and FGCC should spotlight an urban greenway that serves a culturally diverse community during the greenways celebration and Florida Greenways Month.



Funding Florida's Statewide Greenways System

GOAL SEVEN: *Fund the creation and maintenance of Florida's statewide greenways system using a combination of funding sources.*



Florida's existing programs for land acquisition and its support of community conservation and recreation initiatives put the state clearly at the forefront of the greenways movement. The Preservation 2000 program alone makes Florida a national leader in conservation land acquisition. Add to those funds 20 community-based environmental lands acquisition programs, conservation and recreation lands already in public ownership, the Florida Department of Transportation's ISTEA funding, and numerous public and private efforts to provide trails and other human use opportunities, and Florida stands out in the United States as realistically having the ability to create an integrated, statewide system of protected natural areas and greenways.

Even though we have all these wonderful programs and have made significant process in protecting key ecological lands and providing for appropriate human use, a number of needs exist that must be overcome in order to accomplish our conservation and recreation goals. At the head of these needs are the planned completion of Preservation 2000 funding in five years, insufficient funding for the development and maintenance of trails and urban open spaces, and not enough funds to effectively manage acquired conservation lands and address ongoing recreational facilities operation and maintenance costs.

The public/private effort under way to create a statewide system of greenways and an institutional framework to support the system will accomplish two important things. It will provide a means to help address needs and garner new support for existing programs. Greenways are

naturally "people-friendly." People who are interested in greenways also tend to take an interest in other conservation and recreation programs, which can mean more support for existing programs. The creation of a greenways system also can provide a mechanism to bring more non-governmental partners into existing programs through the voluntary participation of landowners and in-kind support from private businesses. The Florida Greenways Coordinating Council (FGCC) and its efforts to create a statewide system of greenways give the state the potential to increase the coordination of existing pro-

grams and add a greater means for accountability. The greenways initiative adds a multi-modal component to existing programs because it explores ways to better integrate the state's conservation, recreation and transportation lands and programs. These positive benefits can only be accomplished through the proposed institutional framework for greenways and the new programs associated with it that are recommended in this report.

A key finding of the Commission's 18 months of work was that Florida's current programs provide most of the necessary building blocks for a statewide greenways system. What is needed is an effective mechanism to coordinate their efforts and funding to acquire, develop and manage greenways system components of all types, including hubs, sites and connectors. Existing programs need to be "tweaked" to accomplish the goals and recommendations of this report. Meeting this goal and addressing its recommended actions are essential to making the Commission's vision of a statewide system of greenways a reality.

Key Factors

- A statewide system of greenways will need funding for the following:
- Acquisition of the greenways system's land and water base, including hubs and sites as well as greenway connectors of all types.



- Construction of facilities and access points, where compatible with management objectives and justified by need.
- Resource management activities as well as the operation and maintenance of facilities.
- Support of Florida's institutional framework for greenways.
- Programs associated with the FGCC.
- Existing state and water management district funding will need to be supplemented by:
- Innovative funding from local governments and special districts.
- Direct and in-kind support contributed by private business and citizen-support organizations.

Priority Issues

The four priority issues for funding Florida's statewide greenways system are:

- How to use existing state and water management district funding sources to support the statewide greenways system without affecting existing programs.
- How to obtain funding for the greenways institutional framework, including staffing and program support.
- How to promote and obtain innovative direct and/or in-kind funding from local governments, special districts, private businesses and citizen-support organizations.
- How to fund community greenway projects.

Strategies and Recommended Actions

Strategy A: Use and enhance existing funding sources, where appropriate, to meet the need for acquisition of greenways system components of all types, as well as facilities, resource management and operations and maintenance needs of the statewide greenways system.

Florida's existing conservation and outdoor recreation programs can provide the building blocks for the statewide

system of greenways. Preservation 2000 programs have already acquired key components of the proposed greenways system. These components include:

- environmentally endangered lands acquired by the Conservation and Recreation Lands (CARL) program and its predecessor, the Environmentally Endangered Lands (EEL) program;
- important water resource areas, including river floodplains and wetland systems, protected through the Save Our Rivers (SOR) Program of the state's five water management districts;
- local conservation lands and open spaces purchased through the Florida Communities Trust (FCT);
- abandoned railroad corridors and lands for the Florida National Scenic Trail acquired by the Rails-to-Trails program; and
- wildlife management, state forest and park inholdings, and other lands protected using Preservation 2000 funding.

These programs will continue to play a critical role in acquiring key components and, where appropriate and justified, filling in existing gaps in the statewide greenways system.

A number of additional existing state programs can make significant contributions to the creation of Florida's greenways system. The Florida Department of Transportation's ISTE (Intermodal Surface Transportation Efficiency Act) Enhancement Program and Scenic Highways Program have great potential for providing key trail facilities and making critical human linkages within the statewide system. ISTE funds are currently being used to plan, design and construct greenways and trails throughout Florida. The Florida Recreational Development Assistance Program (FRDAP) at the Florida Department of Environmental Protection provides financial assistance for community recreational facilities, while the Florida Department of State's Division of Historical Resources helps support the preservation of important historic/archaeological sites as well as the creation of historic and cultural trails.

There unfortunately are some current recognized needs in these existing programs. These include:

- the necessity of funding Preservation 2000 on a year-to-year basis and after the currently planned completion of that program in the year 2000;
- low levels of funding for critical resource management activities on lands purchased by the state and its water management districts;



- insufficient funding for acquisition and development of greenways system components of all types, including hubs, sites and connectors; and
- insufficient funding for the operation and maintenance of trails and other recreational facilities.

The FGCC, lead state agency and other supporters of Florida's greenways initiative can assist conservation and recreation interests working to address these needs through the creation of a statewide greenways system and the recognition of projects proposed as components of the system.

Recommended Actions

1. The FGCC and lead state agency should work with public and private partners to support funding of Preservation 2000.
2. The FGCC and lead state agency should work with public and private partners to establish a long-term funding source to carry on greenways system acquisition, development and maintenance including natural, cultural/historic and recreational hubs and sites as well as greenway connectors of all types.
3. The FGCC and lead state agency should seek additional funding for the acquisition, construction, development and maintenance of hubs, sites and connectors of all types that are a part of the statewide greenways system.
4. The FGCC and lead state agency should seek ways to supplement existing sources for funding resource management activities for conservation lands.
5. The FGCC and lead state agency should work with program staff to better link CARL, SOR and FCT funding to the purchase of lands critical to the completion of Florida's statewide greenways system.
6. The FGCC and lead state agency should work with the Florida Department of Community Affairs to achieve full funding of the Florida Communities Trust in order that it may implement its entire statutory mission, which includes funding for land acquisition and technical assistance to protect and manage urban greenways and open space.
7. The FGCC and lead state agency should encourage Florida Department of Transportation districts and metropolitan planning organizations to consider allocating more than the minimum 10 percent of Surface Transportation Program funds from ISTEA transportation enhancement activities to fund the acquisition or development of greenways and trails that are a part of the statewide greenways system

(including urban greenways) and that function as alternative transportation routes.

8. The FGCC and lead state agency should consider developing CARL, SOR, FCT and ISTEA program incentives (e.g. higher ranking) for communities or private partners that provide matching funds for projects that would contribute to the completion of a statewide greenways system.

Strategy B: Provide sufficient new funding for the institutional framework and associated technical assistance, education, and other planned programs.

The institutional framework proposed in Goal 1 is specifically formulated to use existing programs to the greatest extent possible. This is based on a recognition that Florida already has most of the programs it needs to create greenways. The only thing lacking is a dynamic mechanism for coordinating these programs and projects.

The Florida Greenways Commission and the work leading to its establishment has been supported by a combination of private and public funds. Private foundations have provided support to the Florida Greenways Program of 1000 Friends of Florida and The Conservation Fund for the past three and a half years. In 1994 the Florida Department of Transportation's ISTEA Enhancement Program also provided funding to the Commission, including funding for the creation of the Florida Greenways database and map series. The Florida Department of Transportation has agreed to fund the Commission in 1995 as a part of the Florida Department of Environmental Protection's approved ISTEA Enhancement Project to develop the Florida Greenways Plan.

Sufficient new funding is needed to continue Florida's statewide greenways initiative, the work of the Florida Greenways Commission and its successor, the FGCC, and the greenways system implementation tasks recommended in this report. Specifically, funding will be needed for:

- the FGCC, for support of members' travel and meeting expenses, staffing, administrative and operational costs;
- the FGCC programs recommended in this report, including greenways recognition, seed grant awards, technical assistance, public education and involvement activities and associated greenway marketing tasks; and
- the lead state agency, for additional costs associated with its new greenways coordination role and recommended lead agency program tasks (i.e.



Okeechobee Greenway: A Model for Creative Financing

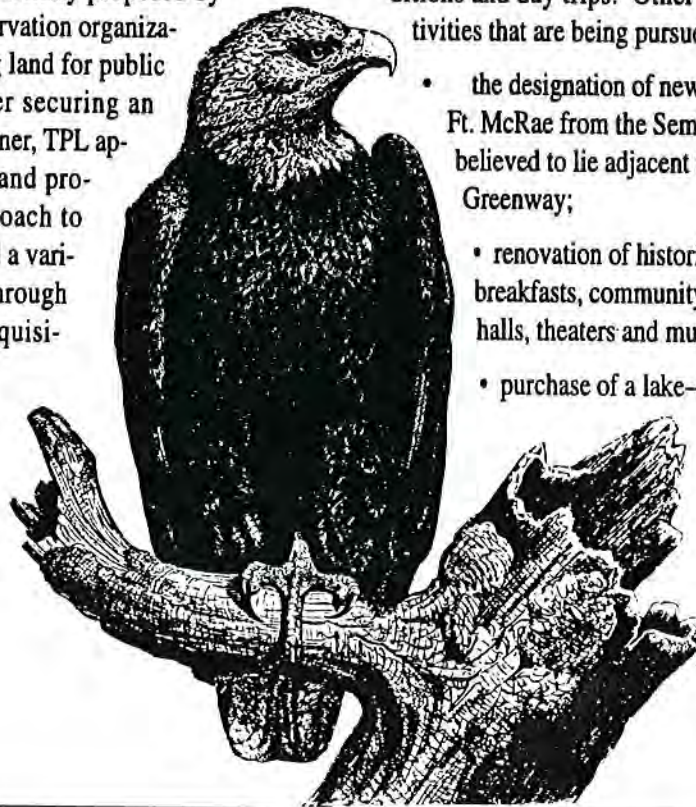
The Okeechobee Greenway, which stretches for five miles along the east side of Lake Okeechobee just north of Port Mayaca, will serve as a canopied alternative routing for the Florida National Scenic Trail which runs for 115 miles along the top of the Herbert Hoover Dike surrounding Lake Okeechobee. This proposed greenway is characterized primarily by hammock forest and is inhabited by a variety of wildlife, including American bald eagles.

The most innovative aspect of this greenway is the manner in which the partners—the Trust for Public Land (TPL), Martin County, the Florida Communities Trust, and the Florida Department of Transportation—combined their expertise and funds to acquire the property. The greenway was initially proposed by TPL, a national land conservation organization dedicated to acquiring land for public use and enjoyment. After securing an agreement with the landowner, TPL approached Martin County and proposed a multi-party approach to this greenway that involved a variety of funding sources. Through its Lands For You land acquisition program, Martin County raised \$119,000, which it combined with \$100,000 from Rails-to-Trails to come up with the 20 percent match

needed to secure funding from the federal transportation enhancement program. The County received a total of \$670,000 through ISTEA which, combined with the first two awards, equaled the 50 percent match needed for Florida Communities Trust Preservation 2000 dollars. Florida Communities Trust awarded \$769,000, for a grand total of \$1,658,000. Completion of the Okeechobee Greenway is expected in Fiscal Year 1995–96.

Martin County expects the Okeechobee Greenway to become part of an overall economic revitalization for rural communities that surround Lake Okeechobee. It is expected to serve as a canopied alternative to the shadeless dike trail for backpacking and bicycling expeditions and day trips. Other related eco-tourism activities that are being pursued include:

- the designation of new historical sites such as Ft. McRae from the Seminole War era, which is believed to lie adjacent to the Okeechobee Greenway;
- renovation of historical buildings for bed and breakfasts, community centers, town meeting halls, theaters and museums; and
- purchase of a lake-side parcel for construction of a boat ramp and park in Martin County.





preparation of the Florida Greenways Plan, continued development and maintenance of the Florida Greenways database, greenways system research and monitoring) that cannot be covered by current agency staffing and programs.

Recommended Actions

1. By February 1995 the lead state agency and the Governor's Office should submit a proposed annual work plan and budget for the Florida Greenways Program for review by the Florida Greenways Commission and the Natural Resources and Appropriations committees in both houses of the Legislature. The plan should detail specific lead agency staff responsibilities and timelines for accomplishing this report's recommendations. The budget should give the Florida Department of Environmental Protection the resources necessary to be an effective lead state agency and to carry out additional tasks recommended in this report and any implementing legislation. The budget should include funding for the FGCC, its staff, and start-up of technical assistance and private partner outreach activities.
2. By October 1995 the lead state agency and FGCC should identify and request the Legislature to adopt a stable state funding source for Florida Greenways programs (e.g. seed grants) to help public and private initiatives create, manage and publicize Florida's greenways system. The Florida Legislature should be asked to consider creating a Florida Greenways Trust Fund with a dedicated revenue source to fund these programs.
3. By July 1996 the lead state agency and FGCC should explore and identify other potential governmental funding sources.
4. By October 1996 the FGCC and lead state agency should initiate a seed grant program to fund grassroots and community efforts to develop and manage greenways and trails, stimulate user group initiatives and public/private partnerships, and leverage other funds or in-kind contributions. The American Greenways DuPont Awards Program, the cost-share program of the USDA Forest Service, and the Florida Recreational Development Assistance Program are excellent models. The Legislature should mandate that all requests for grant assistance be reviewed and recommended by the FGCC in a public meeting. Recommendations of the FGCC should be forwarded to the lead state agency for timely implementation.

Strategy C: Develop and use new, innovative direct and in-kind funding sources to support creation of the statewide greenways system.

While state funding is important, the state should not be expected to provide complete funding for all greenways system development and maintenance needs. Local governments, special districts, the private sector, and local citizens' direct and in-kind dollars will be critical to linking all parts of the statewide greenways system.

Fortunately, much work is already being done at the community level, through government, business and citizen involvement as documented by the Commission's community action survey and case studies. For example, 20 of Florida's local governments have passed bond referenda to buy environmentally sensitive lands which are key parts of local and regional greenways systems. Many volunteer support organizations already are directly involved in creating and maintaining parts of the statewide greenways system through the provision of in-kind services and innumerable volunteer hours. The Florida Trail Association and its 14 chapters build and maintain parts of the Florida Trail as well as associated, non-connected trails on many of Florida's public lands. The Florida Canoe and Kayak Association and its affiliates adopt rivers and streams throughout Florida, undertaking periodic monitoring activities and river clean-ups.

Although these funding sources cannot replace existing dollars going to acquire the systems' land and water base, they can make significant contributions in other critical operational aspects of the greenways system, such as resource management, facilities construction and maintenance. The proposed funding structure for the statewide greenways system would not be complete without recommendations to build upon these tremendous efforts to date.

Recommended Actions

1. By July 1996 the FGCC should explore, identify and initiate cultivation of private sector funding sources. These efforts should focus on:
 - a. supplemental funding for the implementation of the state greenways program by the lead state agency and FGCC.
 - b. local funding for community greenway initiatives that could subsequently be used as models for cultivating private funding in other communities.
2. By December 1996 the FGCC and lead state agency should explore and be prepared to provide specific



recommendations on new, innovative funding methods including:

- a. The use of an infrastructure sales tax as an alternative source of funding.
 - b. The concept of establishing a linear tax increment financing provision in statute as an additional funding option for local governments.
3. By July 1997 the FGCC and lead state agency should explore and be prepared to offer recommendations on funding options to assist and serve as an incentive for increased, direct and in-kind funding sources to support citizen groups' involvement in creation and maintenance of the statewide greenways system.
 4. The FGCC and lead state agency should explore innovative ways to fund the ongoing operation and maintenance of greenways system facilities. These could include the issuance of annual greenways system use permits (similar in concept to hunting and fishing licenses), day-use and camping fees and concession revenues.

Strategy D: Develop innovative methods for funding community greenways.

To stimulate greenway activity at the local level, communities must make the best use of available funding and pursue innovative funding mechanisms. Martin County is a model for this kind of innovative thinking. Using local funds and money from Rails-to-Trails, the county was able to secure the match required by Florida Communities Trust, and was then able to use the sum of those dollars to meet the federal Intermodal Surface Transportation Efficiency Act (ISTEA) matching requirements. This funding partnership between the local government, Florida Communities Trust, and ISTEA was the first of its kind.

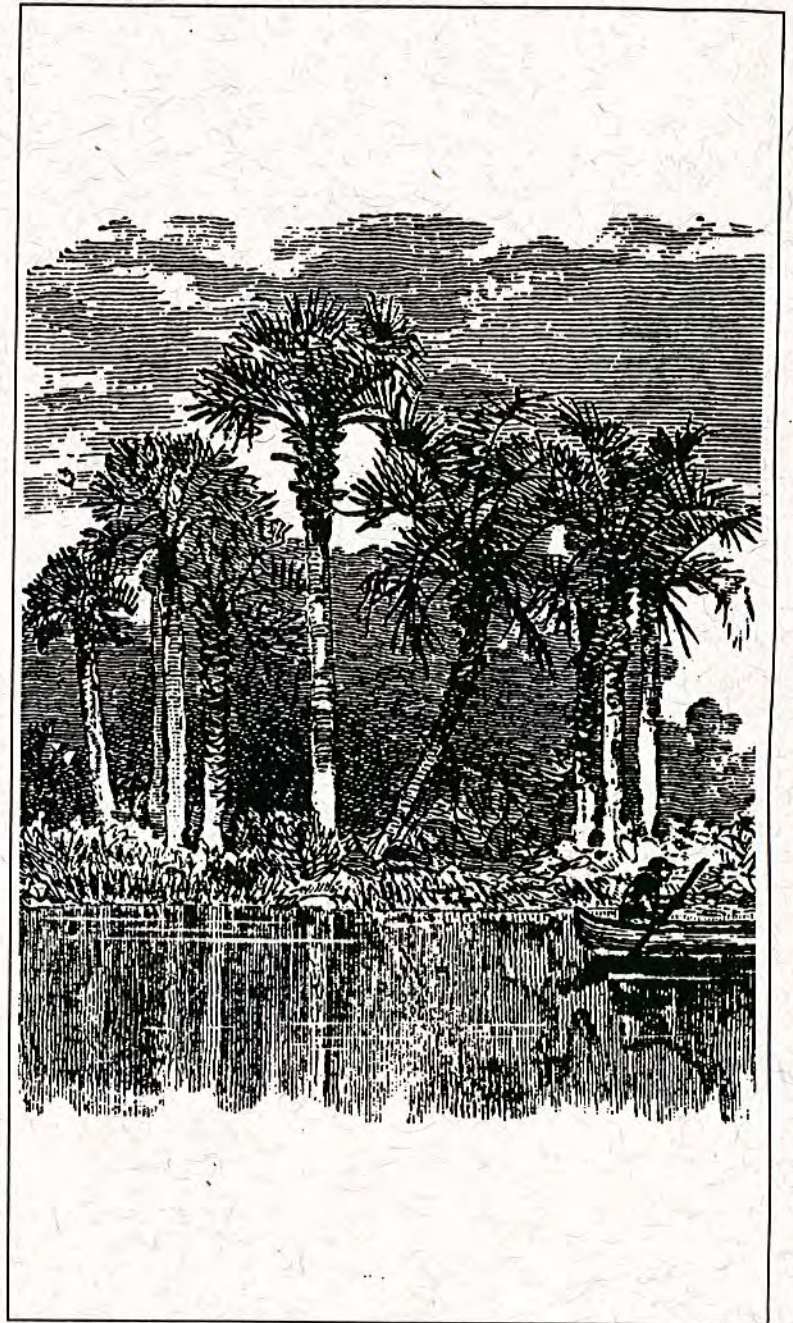
However, community greenways involve much more than the simple issuance of general obligation bonds or purchase of the land. While funding acquisition and capital improvements are key components, a second and

equally important component is the funding of ongoing operation and maintenance of greenways.

Local governments should encourage the use of donations, dedications, and conservation easements to supplement their open space, recreation and/or greenways systems. Donations should always be reviewed for appropriateness within the local system. Dedications of land, cash and the other assets should be used to fund both acquisition and maintenance. To help communities identify and make the best use of potential funding sources and encourage innovative funding partnerships, the Commission recommends the following:

Recommended Actions

1. Communities should pursue a combination of funding sources at the state, regional and local level to support greenway initiatives.
2. Communities should pursue Preservation 2000, Rails-to-Trails and Historic Preservation Trust Fund and other state monies to support local greenway initiatives.
3. Communities should pursue ISTEA and water management district land acquisition funds and other regional monies to support local greenway initiatives.
4. Communities should pursue general obligation bonds, recreational impact fees, and use of general revenue (property taxes) and other local monies to support local greenway initiatives.
5. Communities should support development of new funding resources for greenways and encourage, facilitate and coordinate donations of land and related scenic and conservation easements.
6. Communities should establish a greenways fund to collect and manage monies dedicated for acquisition, operation and maintenance of sites, trails and corridors.
7. Communities should cooperate with their local tourist development councils to build recreational facilities that are part of the statewide system of greenways.



*Florida Greenways:
Current Status and Future Opportunities*





Florida Greenways: Current Status and Future Opportunities

The state and federal government, water management districts, local governments and nongovernmental organizations have all purchased, developed and managed conservation lands, trails and cultural/historic sites in Florida. These resources will form the basis for the development of the Florida's greenways system. In fact, Florida's opportunity to consider a statewide greenways system is a direct result of the significant number, size, diversity and distribution of these assets.

An understanding of the status of existing conservation lands, recreational trails and cultural/historical sites has been essential to the development of a vision and a concept for Florida's greenways system. Included in this section are a description of the resources of statewide significance and the resources found within the geographical boundaries of each water management district. Appendix 4 contains the conservation lands and trails data summarized in this section.

Components of Statewide Significance

While every acre of conservation land and every mile of trail is important to Florida's greenways system, there are specific lands, trails and sites that have statewide and national significance. This distinction has usually been made because of size, length, pivotal location or historical significance. In this section, resources are described in terms of their ecological value and their cultural, historical and recreational value. Though conservation lands are specifically ascribed to the ecological resource sections, many of these lands contain large and often relatively undisturbed historical and archaeological resources. For example Fort Gadsden is found within the boundaries of the Apalachicola National Forest.

Figure 5 depicts the state's existing and proposed conservation lands and trails. National Register historic sites and the state's intrastate highway system. (i.e., the road network owned and maintained either directly or through memoranda of agreement by the Florida Department of Transportation). This map was plotted from a digital GIS

database developed by the University of Florida to support the work of the Commission. It represents the University's best effort to compile information about the state. Since the database is continually being updated with new acquisitions and proposals, any map plotted from it will always be slightly out of date. For a conservation land or a trail to be considered "proposed," it must have been recommended by some entity other than the Florida Greenways Commission, prior to the efforts of the Commission or outside the realm of its operation.

Figure 6 represents the Strategic Habitat Conservation Areas identified by the Florida Game and Fresh Water Fish Commission through their study "Closing the Gaps in Florida's Wildlife Habitat Conservation System," 1994. These data have been plotted in conjunction with the existing and proposed conservation areas, demonstrating areas of commonality.

Ecological Resources

There are six aggregations of publicly-owned lands that form the largest ecological "hubs" in the state:

- Blackwater River State Forest/Eglin Air Force Base Complex,
- Apalachicola National Forest/St. Marks National Wildlife Refuge Complex,
- Okefenokee/Pinhook Swamp/Osceola National Forest Complex,
- Ocala National Forest/Cross Florida Greenway/Lake Woodruff National Wildlife Refuge/Wekiva River Complex,
- Big Cypress/Corkscrew Regional Ecosystem Watershed/Rookery Bay/Ten Thousand Islands Complex, and
- Everglades/Florida Bay Complex.

In some cases, these "hubs" currently lack the connectors that would allow them to function as integrated pieces, but in almost every case these connections are currently proposed for acquisition.



At least twelve other groups of public lands form smaller, but equally significant ecological "hubs," including:

- Nassau-St. Johns Marshes/Timucuan National Ecological and Historic Preserve/Talbot Islands,
- Camp Blanding/Jennings State Forest/Goldhead Branch State Park,
- Lower Suwannee Refuges,
- Chassahowitzka National Wildlife Refuge,
- Merritt Island National Wildlife Refuge,
- Upper St. Johns River Complex,
- Avon Park Bombing Range/Lake Wales Ridge,
- Green Swamp/Hillsborough River/Withlacoochee River Complex,
- Tampa Bay,
- Myakka River State Park/Charlotte Harbor/C.M. Webb Complex,
- Lake Okeechobee, and
- Loxahatchee/Jonathan Dickinson/J. W. Corbett/DuPuis Complex.

There are at least five important ecological linkages that exist or are in the process of acquisition/restoration. These include:

- **St. Johns River** – linking the Upper St. Johns River Complex with the Ocala National Forest Complex and the Nassau-St. Johns Marshes/Timucuan National Ecological and Historic Preserve/Talbot Islands;
- **Big Bend Coast** – anchored on the west by Apalachicola Bay National Estuarine Research Reserve this archipelago of federal and state coastal parks, preserves and refuges buffers the Big Bend region and its seashore marsh, grass beds and rivers for more than 200 miles to the east to Pasco County;
- **Suwannee River** – linking the Okefenokee/Pinhook Swamp/Osceola National Forest Complex with the Lower Suwannee Refuges and the Big Bend coast;
- **Hillsborough River** – linking the Green Swamp with Tampa Bay; and
- **Kissimmee River** – linking the Kissimmee Chain of Lakes with Lake Okeechobee.

Table 2: Area in Conservation Lands—State of Florida

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area Within State of Florida |
|--|----------------------|----------------------|---|
| EXISTING FEDERAL | | | |
| Military Bases | 724,114.27 | 1,131.43 | 1.99 |
| National Forest | 1,252,204.86 | 1,956.57 | 3.43 |
| National Parks, Preserves, Reserves, Seashores, & Monuments | 1,710,661.69 | 2,672.91 | 4.69 |
| National Wildlife Refuges | 332,350.14 | 519.30 | 0.91 |
| <i>Total Existing Federal Areas</i> | 4,019,330.96 | 6,280.20 | 11.02 |
| EXISTING STATE | | | |
| Aquatic Preserves* | 1,259,855.76 | 1,968.52 | 3.45 |
| Conservation Easements | 792,312.79 | 1,237.99 | 2.17 |
| Greenways | 63,468.68 | 99.17 | 0.17 |
| State Forests | 524,387.00 | 819.35 | 1.44 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas | 338,371.01 | 528.70 | 0.93 |
| Wildlife Management Areas | 420,614.17 | 657.21 | 1.15 |
| <i>Total Existing State Areas</i> | 2,139,153.65 | 3,461.27 | 6.07 |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 817,534.08 | 1,277.40 | 2.24 |
| EXISTING LOCAL | | | |
| All Local Areas** | 41,782.91 | 65.29 | 0.11 |
| EXISTING PRIVATE | | | |
| Private Preserves | 77,601.58 | 121.25 | 0.21 |
| EXISTING OTHER | | | |
| Indian Reservations | 191,663.32 | 299.47 | 0.53 |
| Other | 172,930.98 | 270.20 | 0.47 |
| <i>Total Existing Other Areas</i> | 364,594.30 | 569.68 | 1.00 |
| Total Existing Conservation Lands | 7,459,997.48 | 11,775.08 | 20.67 |
| All Proposed (Federal, State, WMD, & Local) | 2,706,639.51 | 4,229.12 | 7.42 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS | 10,166,637.00 | 16,004.21 | 28.09 |

* Area in Aquatic Preserves not included in any totals

** All Local Areas were included when supplied by local governments

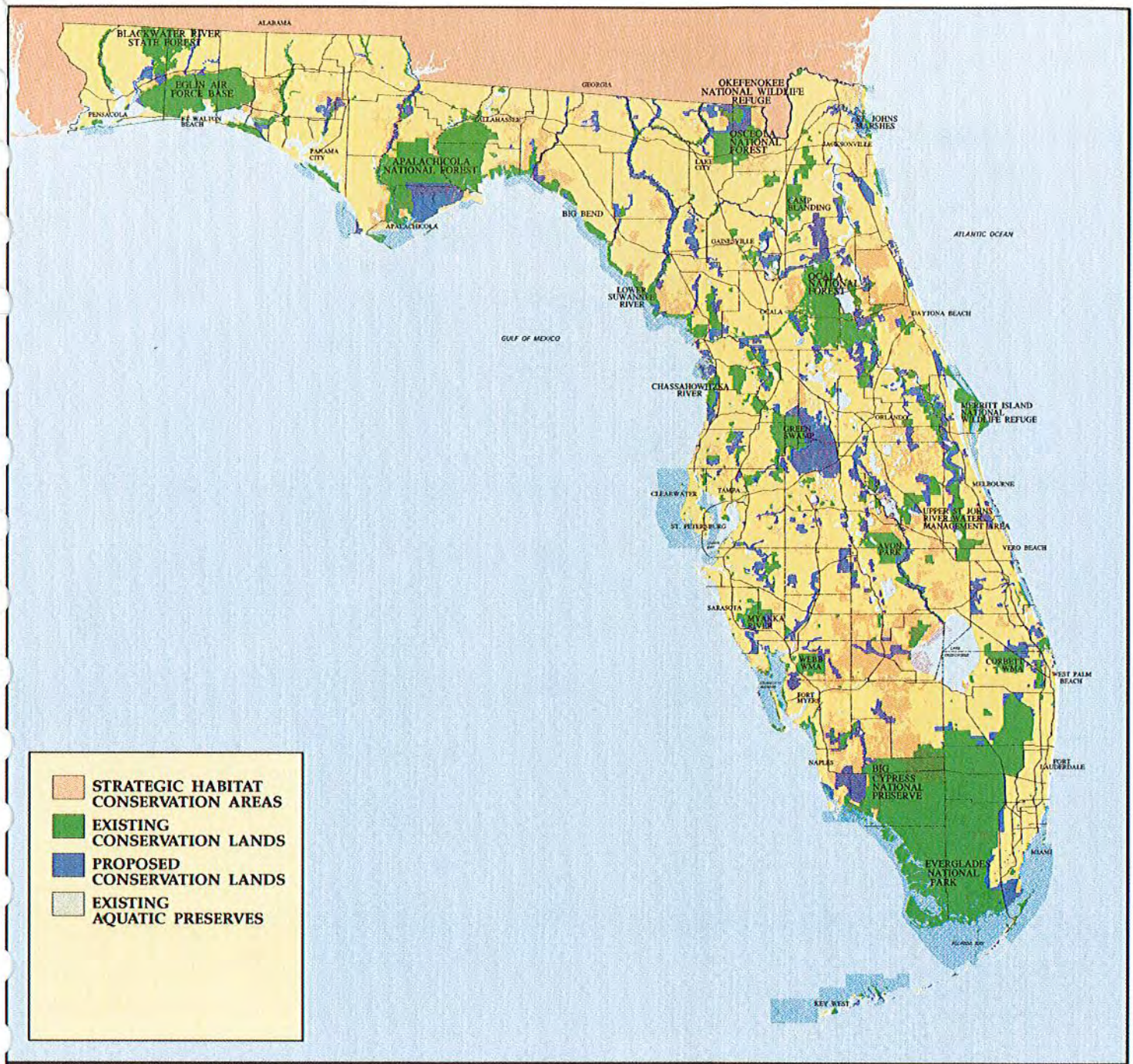


FIGURE 6

**FGFWFC
STRATEGIC HABITAT
CONSERVATION AREAS**

Creating A Statewide
Greenways System
For People...For Wildlife...For Florida

FLORIDA GREENWAYS COMMISSION

Department of Landscape Architecture
and the GeoPlan Center,
Department of Urban and Regional Planning
UNIVERSITY OF FLORIDA, DECEMBER 1994



Table 2 summarizes Florida's existing and proposed ecological resources, as defined by ownership and management characteristics of conservation lands. This summary is based on the latest version of the GIS digital database developed specifically to support the Commission's planning efforts.

Cultural, Historical and Recreational Resources

Florida's most important cultural assets are its major communities. These communities, when envisioned as "hubs" of cultural and recreational activity, can be conceived of as destinations along trail routes or alternative transportation routes linking them. While all communities should be tied into Florida's greenways system, major urban areas will be particularly critical. These include Pensacola, Fort Walton Beach/Panama City, Tallahassee, Jacksonville, Lake City, Gainesville, Ocala, Daytona Beach/Palm Coast, Orlando, Tampa/St. Petersburg/Clearwater/Sarasota, Melbourne/Vero Beach/Fort Pierce, West Palm Beach/Fort Lauderdale/Miami, and Fort Myers/Naples.

There are 88,000 recorded historical resources in Florida. Of these some 18,000 are archaeological sites and the balance are historic structures and other features of the built environment. Among these are historic St. Augustine and Castillo de San Marcos, Miami's Art Deco District and the Historic District in Pensacola. Outstanding sites of Florida's original native people include the shell mounds of the southwest coast, large ceremonial mounds throughout the state and such very early sites as Windover and Little Salt Spring, many thousands of years old. Every part of the state presents historical resources that can contribute to a system of greenways.

Florida's largest trail is the Florida National Scenic Trail which will be 1300 miles long when complete. Linking the Everglades with the Gulf Islands National Seashore in Escambia County and continuing northward into Alabama, this trail will become the recreational spine of the Commission's proposed statewide greenways system. Currently there are approximately 500 miles of the Trail, in 15 segments, extending from the Gulf Islands National Seashore to Big Cypress National Preserve.

Another linear recreational feature is the proposed Central Florida Loop Trail, which will include a portion of the Florida National Scenic Trail, the Cross Florida Greenway and the Withlacoochee State Trail. Other important linear recreational components include the numerous canoe/kayaking trails found along Florida's many rivers and the growing system of rail trails found throughout the state. Table 3 provides a summary of the length of existing and proposed trails in the state by type.

Future Opportunities

In addition to the vision statement provided at the start of this report, the Commission agreed on the importance of creating a visual image that represents the concept of a statewide system of greenways for Florida. This concept is depicted in Figure 7. It is composed of two sub-systems that combine to form a single integrated system: 1) a system of ecological hubs, sites and linkages, and 2) a system

Table 3
Miles of Trails—State of Florida

| Trail Designation | Miles |
|---|-----------------|
| Hiking | 914.02 |
| Multiple Use | 670.35 |
| Interpretive | 27.95 |
| Canoe/Kayak | 1,547.53 |
| Equestrian | 342.29 |
| <i>Total Existing</i> | <i>3,502.14</i> |
| <i>All Proposed</i> | <i>1,017.15</i> |
| Total Existing & Proposed Trails | 4,519.29 |

of recreational/cultural hubs, sites and linkages. Since the concept has been developed at the state scale, it tends to represent or include components identified as having statewide significance. The addition of webs of shorter trails or smaller conservation lands and corridors to the framework represented in Figure 5, would give an even more complete picture of the greenways system concept conceived by the Commission.

The system of ecological features includes the existing and proposed conservation lands, larger and smaller existing and proposed linkages, plus some additional linkages. These include a connection from the St. Marys River/Okefenokee/Pinhook Swamp/Osceola National Forest Complex to Camp Blanding, the Etoniah Creek CARL proposal and the Ocala National Forest/Cross Florida Greenway/Wekiva River Complex; a connection between the Lower Suwannee Refuge and the Chassahowitzka National Wildlife Refuge; a connection between Merritt Island National Wildlife Refuge and the St. Johns River Complex; a connection between Lake Okeechobee and the Loxahatchee/Jonathan Dickinson/J. W. Corbett/DuPuis Complex; a connection between Lake Okeechobee and the Myakka River State Park/Charlotte Harbor/C.M. Webb Complex; and a connection between the Green Swamp and



the Myakka River State Park/Charlotte Harbor/C.M. Webb Complex along the Peace River Corridor.

The system of cultural/recreational features includes Florida's major communities linked to and through the state's major trail feature, the Florida National Scenic Trail. The proposed Central Florida Loop Trail is also included in the concept graphic.

In places, components of the ecological sub-system and the cultural/recreational sub-system will exist independently. In other places, they will be adjacent and may be highly dependent upon one another. The cultural/recreational components not only link communities with communities, but with ecological hubs, to provide healthful, resource-based recreation and environmental education opportunities.

Components of Regional Significance

A more detailed assessment of the existing resources and future opportunities is provided for each water management district. The water management district boundaries are well-known and provide a useful regional framework for organizing these descriptions. Each regional de-

scription includes three sections: Ecological Resources; Cultural, Historical and Recreational Resources; and Future Opportunities, as did the description of components of statewide significance.

Northwest Florida Water Management District

Ecological Resources

In addition to the two complexes of conservation lands identified as having primary statewide significance, northwest Florida (Figure 8) has many smaller sites important to Florida's greenways system. These include Torreya State Park and The Nature Conservancy Preserves along the Apalachicola River, the Topsail Hill area in South Walton County, the large plantations of the Red Hills region, forest industry lands and a number of barrier island parks and preserves including Gulf Islands National Seashore, St. Andrews State Park, St. Vincent's Island National Wildlife Refuge and St. George Island State Park.

Among the regionally significant landscape linkages being proposed are connections along the Apalachicola River between smaller parks and preserves, the greenway

Table 4: Area in Conservation Lands – Northwest Florida Water Management District

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area within District Boundaries |
|--|---------------------|----------------------|--|
| EXISTING FEDERAL | | | |
| Military Bases | 508,327.43 | 794.26 | 7.05 |
| National Forest | 652,578.50 | 1,019.65 | 9.05 |
| National Parks, Preserves, Reserves, Seashores, & Monuments | 11,854.39 | 18.52 | 0.16 |
| National Wildlife Refuges | 75,679.95 | 118.25 | 1.05 |
| <i>Total Existing Federal Areas</i> | 1,248,440.27 | 1,950.69 | 17.32 |
| EXISTING STATE | | | |
| Aquatic Preserves* | 265,754.78 | 415.24 | 3.69 |
| Conservation Easements | 0.00 | 0.00 | 0.00 |
| Greenways | 0.00 | 0.00 | 0.00 |
| State Forests | 273,290.76 | 427.02 | 3.79 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas | 69,154.70 | 108.05 | 0.96 |
| Wildlife Management Areas | 8,821.49 | 13.78 | 0.12 |
| <i>Total Existing State Areas</i> | 351,266.95 | 548.85 | 4.87 |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 148,682.56 | 232.32 | 2.06 |
| EXISTING LOCAL | | | |
| All Local Areas** | 1,577.94 | 2.47 | 0.02 |
| EXISTING PRIVATE | | | |
| Private Preserves | 13,693.24 | 21.40 | 0.19 |
| EXISTING OTHER | | | |
| Indian Reservations | 0.00 | 0.00 | 0.00 |
| Other | 17,092.19 | 26.71 | 0.24 |
| <i>Total Existing Other Areas</i> | 17,092.19 | 26.71 | 0.24 |
| Total Existing Conservation Lands | 1,780,753.15 | 2,782.43 | 24.70 |
| All Proposed (Federal, State, WMD, & Local) | 348,830.28 | 545.05 | 4.84 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS | 2,129,583.43 | 3,327.47 | 29.54 |

* Area in Aquatic Preserves not included in any totals

** All Local Areas were included when supplied by local governments



FIGURE 7

A CONCEPT OF FLORIDA'S STATEWIDE GREENWAYS SYSTEM

Creating A Statewide Greenways System
For People...For Wildlife...For Florida

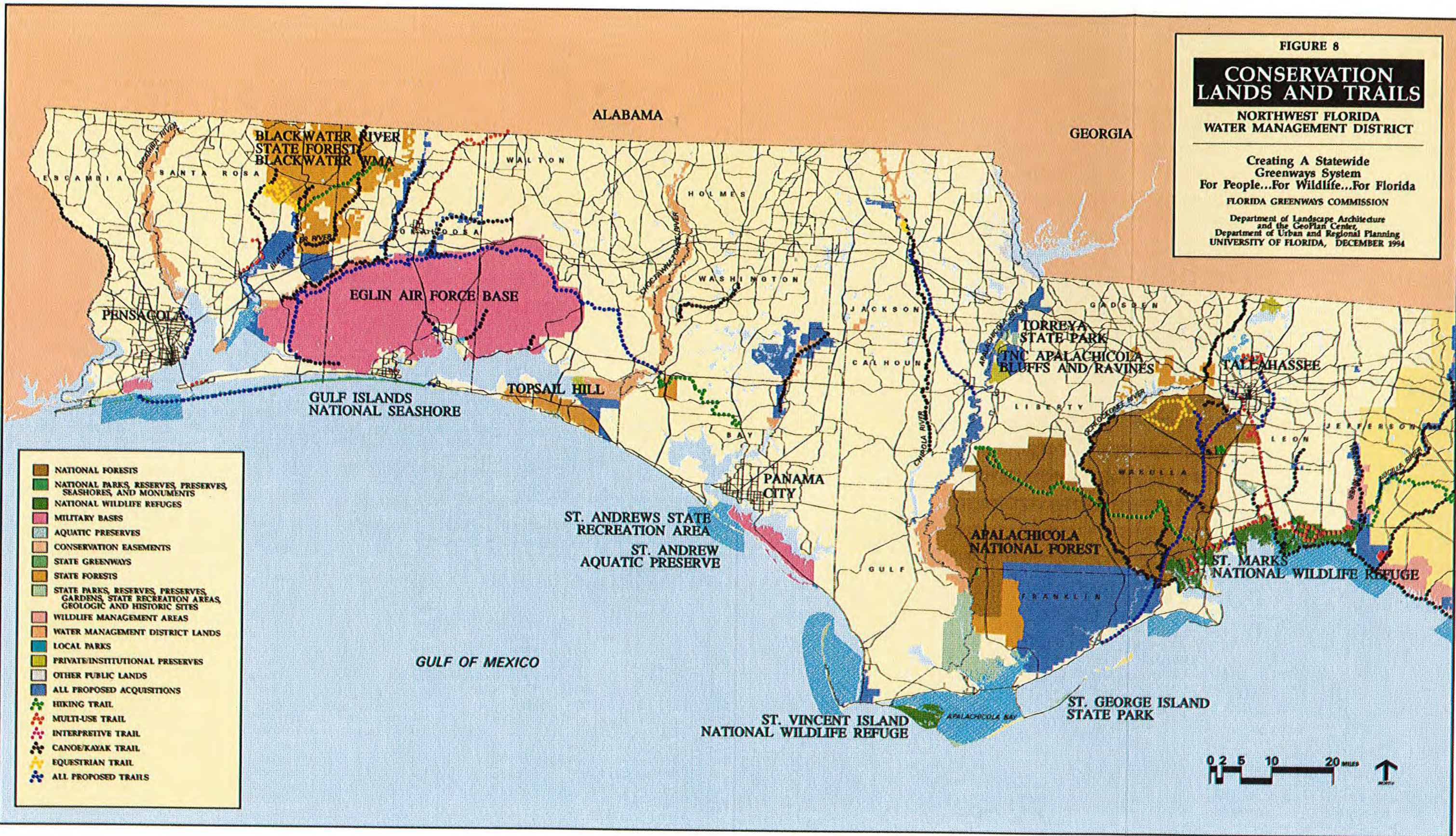
FLORIDA GREENWAYS COMMISSION

Department of Landscape Architecture
and the GeoPlan Center,
Department of Urban and Regional Planning
UNIVERSITY OF FLORIDA, DECEMBER 1994

FIGURE 8
CONSERVATION LANDS AND TRAILS
 NORTHWEST FLORIDA
 WATER MANAGEMENT DISTRICT

Creating A Statewide
 Greenways System
 For People...For Wildlife...For Florida
 FLORIDA GREENWAYS COMMISSION

Department of Landscape Architecture
 and the GeoPlan Center,
 Department of Urban and Regional Planning
 UNIVERSITY OF FLORIDA, DECEMBER 1994



- NATIONAL FORESTS
- NATIONAL PARKS, RESERVES, PRESERVES, SEASHORES, AND MONUMENTS
- NATIONAL WILDLIFE REFUGES
- MILITARY BASES
- AQUATIC PRESERVES
- CONSERVATION EASEMENTS
- STATE GREENWAYS
- STATE FORESTS
- STATE PARKS, RESERVES, PRESERVES, GARDENS, STATE RECREATION AREAS, GEOLOGIC AND HISTORIC SITES
- WILDLIFE MANAGEMENT AREAS
- WATER MANAGEMENT DISTRICT LANDS
- LOCAL PARKS
- PRIVATE/INSTITUTIONAL PRESERVES
- OTHER PUBLIC LANDS
- ALL PROPOSED ACQUISITIONS
- HIKING TRAIL
- MULTI-USE TRAIL
- INTERPRETIVE TRAIL
- CANOE/KAYAK TRAIL
- EQUESTRIAN TRAIL
- ALL PROPOSED TRAILS





system of South Walton County, and linkages between parks and protected areas north and south of Tallahassee. Table 4 summarizes information about existing and proposed conservation lands in northwest Florida.

Cultural, Historical and Recreational Resources

The Northwest Florida Water Management District contains two of Florida's oldest and largest cities, Pensacola and Tallahassee, as well as a number of newer and rapidly growing urban areas along its Gulf coastline. With the exception of Tallahassee, the region's inland communities are primarily small and have experienced relatively slow but steady growth. Many of the northwest Florida communities have important historic and cultural contributions to make to a statewide greenways system.

Existing and proposed trails in northwest Florida, other than the Florida National Scenic Trail, include many canoe/kayak trails along its rivers, the highly popular Tallahassee-St. Marks Historic Railroad State Trail, the proposed Gopher, Frog and Alligator Rail Trail from Tallahassee to Carrabelle, and the system of trails being proposed as part of the South Walton County/Topsail Hill plan. Significant historic sites include Fort Walton Temple Mound, as well as Mission San Luis de Apalachee – a seventeenth century Spanish/Indian town, and Florida's Historic Capitol, both in Tallahassee. A summary of the existing and proposed trails for the district are found in Table 5.

Table 5
Miles of Trails
Northwest Florida Water Management District

| Trail Designation | Miles |
|---|---------------|
| Hiking | 116.51 |
| Multiple Use | 128.58 |
| Interpretive | 0.70 |
| Canoe/Kayak | 424.53 |
| Equestrian | 66.41 |
| <i>Total Existing</i> | <i>736.73</i> |
| All Proposed | 216.07 |
| TOTAL EXISTING & PROPOSED TRAILS | 952.80 |

Future Opportunities

The vision for a greenways system in northwest Florida includes an east-west linkage between the region's communities and an east-west linkage between the major

north-south riverine-estuarine systems found there. In addition to the Blackwater and Apalachicola/Chipola Rivers these include the Escambia, Choctawhatchee, Ochlockonee and St. Marks/Aucilla/Wacissa Rivers.

Suwannee River Water Management District

Ecological Resources

The Suwannee River, an Outstanding Florida Water, dominates the landscape of the Suwannee River Water Management District (Figure 9). It forms the major linkage between the Okefenokee Swamp and the Gulf Coast 250 miles downstream. Much of the upper portion of the river has been protected through Water Management District acquisitions, Division of Forestry holdings and Division of Parks and Recreation holdings. The Withlacoochee and Alapaha Rivers are major tributaries that link the region to Georgia, while the headwaters of the Santa Fe River help to link the St. Johns River basin and the Suwannee River basin. The Lower Suwannee Wildlife Refuge creates a hub where the river meets the Gulf. Moving south from this point, Cedar Key Scrub and Waccasassa Bay State Preserve link the region with the coastal conservation lands found within the Southwest Florida Water Management District boundaries. To the north, the state's Big Bend Coast properties protect much of the Gulf shore in Dixie and Taylor counties and link this region with the St. Marks/Apalachicola Complex. The Aucilla and Steinhatchee Rivers form secondary corridors that link inland areas with the coast. Table 6 summarizes information about existing and proposed conservation lands in the Suwannee River region.

Cultural, Historical and Recreational Resources

The Suwannee River Water Management District encompasses some of Florida's most rural communities. The two largest communities are Lake City and Gainesville, the latter shared by the St. Johns River Water Management District. Most of the communities are small with slow, if any, growth in size. Population tends to be dispersed throughout the District at relatively low densities.

Existing and proposed trails in this district, other than the Florida National Scenic Trail, are mostly aquatic and include canoe/kayak trails along the Suwannee River and its tributaries and along the Big Bend Coast including Waccasassa Bay. Significant historic sites include the Olustee Civil War Battlefield in Baker County, Ichetucknee Springs Run and the Santa Fe River, famous



Table 6: Area in Conservation Lands – Suwannee River Water Management District

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area Within District Boundaries |
|--|-------------------|----------------------|--|
| EXISTING FEDERAL | | | |
| Military Bases | 804.63 | 1.26 | 0.01 |
| National Forest | 111,262.68 | 173.85 | 1.75 |
| National Parks, Preserves, Reserves, Seashores, & Monuments | 0.00 | 0.00 | 0.00 |
| National Wildlife Refuges | 46,768.69 | 73.08 | 0.73 |
| <i>Total Existing Federal Areas</i> | 158,836.00 | 248.18 | 2.49 |
| EXISTING STATE | | | |
| Aquatic Preserves* | 234,576.16 | 366.53 | 3.68 |
| Conservation Easements | 0.00 | 0.00 | 0.00 |
| Greenways | 0.00 | 0.00 | 0.00 |
| State Forests | 25,189.64 | 39.36 | 0.40 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas | 36,765.86 | 57.45 | 0.58 |
| Wildlife Management Areas | 108,066.93 | 168.85 | 1.70 |
| <i>Total Existing State Areas</i> | 170,022.43 | 265.66 | 2.67 |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 53,698.11 | 83.90 | 0.84 |
| EXISTING LOCAL | | | |
| All Local Areas** | 1,070.59 | 1.67 | 0.02 |
| EXISTING PRIVATE | | | |
| Private Preserves | 979.22 | 1.53 | 0.02 |
| EXISTING OTHER | | | |
| Indian Reservations | 0.00 | 0.00 | 0.00 |
| Other | 719.20 | 1.12 | 0.01 |
| <i>Total Existing Other Areas</i> | 719.20 | 1.12 | 0.01 |
| Total Existing Conservation Lands | 385,325.55 | 602.07 | 6.05 |
| All Proposed (Federal, State, WMD, & Local) | 335,485.59 | 524.20 | 5.26 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS | 720,811.14 | 1,126.27 | 11.31 |

* Area in Aquatic Preserves not included in any totals ** All Local Areas were included when supplied by local governments

for fossils and early artifacts, and the Stephen Foster Center at White Springs, home of the White Springs Folk Festival and location of a nineteenth century medicinal springs resort. A summary of the existing and proposed trails for the District are found in Table 7.

Future Opportunities

Besides the protection of the Suwannee River corridor, there are several regionally significant concepts for linkages. One is connecting four predominately upland hubs in the southeastern portion of the District—the Goethe State Forest, Devils Hammock, Watermelon Pond and Waccasassa Flats. Linking these areas would create an important upland connection parallel to the southern reach of the Suwannee River.

Another regional concept for the greenways system is the development of a series of trails and bikeways linking the small rural communities with the statewide system. Within each community, these facilities could provide recreational opportunities for the resident population, and between the communities they could support a tourism industry seeking the advantage of mild climate, rural countryside and outstanding natural resources.

**Table 7
Miles of Trails—
Suwannee River Water Management District**

| Trail Designation | Miles |
|---|---------------|
| Hiking | 153.45 |
| Multiple Use | 72.84 |
| Interpretive | 11.68 |
| Canoe/Kayak | 431.20 |
| Equestrian | 36.95 |
| <i>Total Existing</i> | 706.12 |
| All Proposed | 114.80 |
| TOTAL EXISTING & PROPOSED TRAILS | 820.92 |

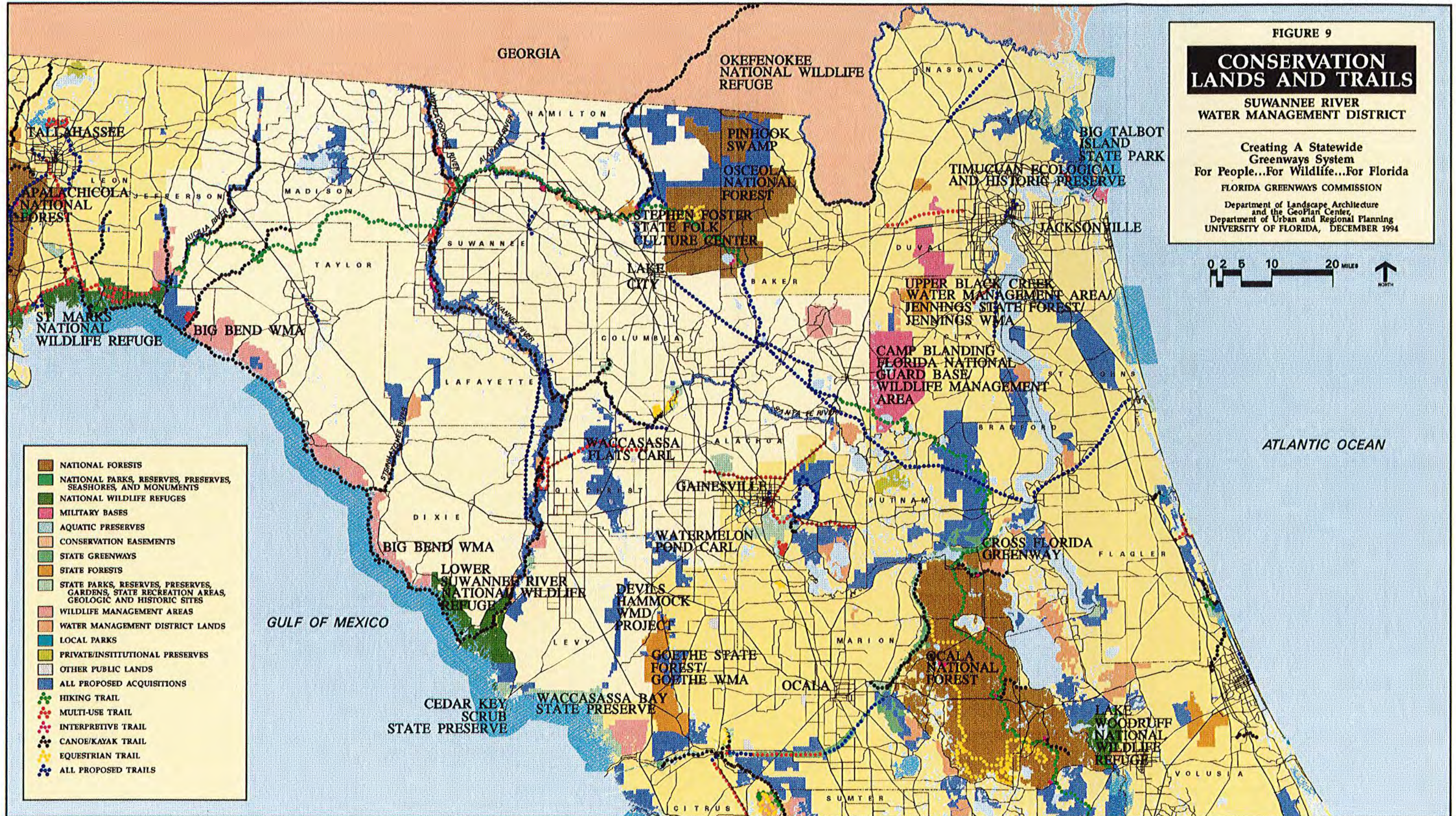


FIGURE 9
CONSERVATION LANDS AND TRAILS
 SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Creating A Statewide Greenways System
 For People...For Wildlife...For Florida

FLORIDA GREENWAYS COMMISSION

Department of Landscape Architecture and the GeoPlan Center,
 Department of Urban and Regional Planning
 UNIVERSITY OF FLORIDA, DECEMBER 1994

0 2 5 10 20 MILES
 NORTH

- NATIONAL FORESTS
- NATIONAL PARKS, RESERVES, PRESERVES, SEASHORES, AND MONUMENTS
- NATIONAL WILDLIFE REFUGES
- MILITARY BASES
- AQUATIC PRESERVES
- CONSERVATION EASEMENTS
- STATE GREENWAYS
- STATE FORESTS
- STATE PARKS, RESERVES, PRESERVES, GARDENS, STATE RECREATION AREAS, GEOLOGIC AND HISTORIC SITES
- WILDLIFE MANAGEMENT AREAS
- WATER MANAGEMENT DISTRICT LANDS
- LOCAL PARKS
- PRIVATE/INSTITUTIONAL PRESERVES
- OTHER PUBLIC LANDS
- ALL PROPOSED ACQUISITIONS
- HIKING TRAIL
- MULTI-USE TRAIL
- INTERPRETIVE TRAIL
- CANOE/KAYAK TRAIL
- EQUESTRIAN TRAIL
- ALL PROPOSED TRAILS



St. Johns River Water Management District

Ecological Resources

In addition to the conservation lands of statewide significance previously described, the St. Johns River Water Management District (Figure 10) contains other important ecological hubs. These include the Newnans Lake/Paynes Prairie State Preserve/Lochloosa Complex, the Jennings State Forest/Black Creek Complex, the Durbin-Twelve Mile Slough, the Tiger Bay State Forest Complex, the Turnbull Marshes and the Bull Creek Complex.

In addition to the previously described ecological linkages of statewide significance found within the St. Johns River Water Management District, regionally significant ecological linkages include a connection between the Newnans Lake/Paynes Prairie State Preserve/Lochloosa Complex and the Ocala National Forest along Orange Creek; a connection between the Jennings State Forest/

Black Creek Complex and Camp Blanding; a connection between Tiger Bay State Forest and the Ocala National Forest; a connection between the Upper Econ Project Area and the St. Johns River; a connection between Bull Creek, the Upper St. Johns River and the Cross Florida Greenway. Table 8 summarizes information about existing and proposed conservation lands in the St. Johns River Water Management District.

Cultural, Historical and Recreational Resources

The St. Johns River Water Management District contains two of Florida's largest cities, Jacksonville and Orlando. It also contains the rapidly developing Atlantic coastal ridge and the inland communities of Palatka, Gainesville and Ocala. The District is the location of Palm Coast and Deltona, two of the state's largest entirely new communities.

The northeastern portion of the District has some of Florida's most significant cultural and historic resources including St. Augustine, Fort Matanzas, Fort Caroline and

Table 8: Area in Conservation Lands – St. Johns River Water Management District

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area within District Boundaries |
|--|---------------------|----------------------|--|
| EXISTING FEDERAL | | | |
| Military Bases | 100,399.07 | 156.87 | 1.33 |
| National Forest | 488,363.68 | 763.07 | 6.46 |
| National Parks, Preserves, Reserves, Seashores, & Monuments (Area in Land and Inland Waters) | 9,514.66 | 14.87 | 0.13 |
| National Parks, Preserves, Reserves, Seashores, & Monuments (Marine Waters Only) | 24,531.00 | 38.33 | 0.32 |
| National Wildlife Refuges (Area in Land and Inland Waters) | 120,199.15 | 187.81 | 1.59 |
| National Wildlife Refuges (Marine Waters Only) | 24,694.00 | 38.58 | 0.33 |
| <i>Total Existing Federal Areas (Area in Land and Inland Waters Only)</i> | 718,476.56 | 1,122.62 | 9.51 |
| EXISTING STATE | | | |
| Aquatic Preserves* | 140,346.31 | 219.29 | 1.86 |
| Conservation Easements | 3,650.00 | 5.70 | 0.05 |
| Greenways | 45,955.78 | 71.81 | 0.61 |
| State Forests | 42,319.36 | 66.12 | 0.56 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas | 111,654.22 | 174.46 | 1.48 |
| Wildlife Management Areas | 2,651.80 | 4.14 | 0.04 |
| <i>Total Existing State Areas</i> | 206,231.16 | 322.24 | 2.73 |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 327,977.81 | 512.47 | 4.34 |
| EXISTING LOCAL | | | |
| All Local Areas** | 5,258.70 | 8.22 | 0.07 |
| EXISTING PRIVATE | | | |
| Private Preserves | 10,773.70 | 16.83 | 0.14 |
| EXISTING OTHER | | | |
| Indian Reservations | 0.00 | 0.00 | 0.00 |
| Other | 20,055.51 | 31.34 | 0.27 |
| <i>Total Existing Other Areas</i> | 20,055.51 | 31.34 | 0.27 |
| Total Existing Conservation Lands (Areas in Land and Inland Waters Only) | 1,288,773.44 | 2,013.71 | 17.06 |
| All Proposed (Federal, State, WMD, & Local) | 750,803.33 | 1,173.13 | 9.94 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS (Areas in Land and Inland Waters Only) | 2,039,576.77 | 3,186.84 | 27.00 |

* Area in Aquatic Preserves not included in any totals

** All Local Areas were included when supplied by local governments



Fort Clinch. Along the St. Johns River are found many large prehistoric shell mounds including the famous Mt. Royal, as well as Hontoon Island. Turtle Mound Archaeological Site at Canaveral National Seashore, is one of the most prominent landmarks on the east coast. Early nineteenth century settlement left remains of sugar mills at Bulow Plantation and New Smyrna Beach. The early development of this region, beginning with the founding of St. Augustine in 1565, and extending southward in later centuries along the Atlantic coastal ridge, has contributed a wealth of historic and cultural resources.

In addition to the Florida National Scenic Trail and the proposed Central Florida Loop Trail, existing and proposed trails in this District include canoe/kayak trails along tributaries of the St. Johns River and the Gainesville - Hawthorne Rail Trail in Alachua County. A summary of the existing and proposed trails for the District is found in Table 9.

Table 9
Miles of Trails-
St. Johns River Water Management District

| Trail Designation | Miles |
|---|---------------|
| Hiking | 243.39 |
| Multiple Use | 143.16 |
| Interpretive | 9.26 |
| Canoe/Kayak | 148.10 |
| Equestrian | 138.50 |
| <i>Total Existing</i> | <i>682.41</i> |
| All Proposed | 182.76 |
| TOTAL EXISTING & PROPOSED TRAILS | 865.17 |

Future Opportunities

The vision for the greenways system in the St. Johns River Water Management District includes linking most of its ecological hubs with the Ocala National Forest/Cross Florida Greenway/Lake Woodruff National Wildlife Refuge/Wekiva River Complex and/or the St. Johns River corridor and continued enhancement of the coastal estuaries currently linked by the Intracoastal Waterway/Lagoon System and the inlets to the Atlantic Ocean. The latter includes St. Marys River/Cumberland Sound, Nassau Sound, Fort George River, St. Johns River, Talomato/Matanzas Estuary, Halifax River, Mosquito Lagoon and Indian River Lagoon. Linkage between the St. Marys River and its

headwaters in the Okefenokee Swamp represents another regionally significant opportunity. Opportunities of statewide significance include the linkage of the Ocala National Forest Complex with the Osceola National Forest Complex and the Merritt Island National Wildlife Refuge with the St. Johns River Complex. Recreational and cultural linkages among the communities of the District can provide resource-based recreation opportunities and opportunities for exploration of the District's natural, cultural and historic heritage.

Southwest Florida Water Management District

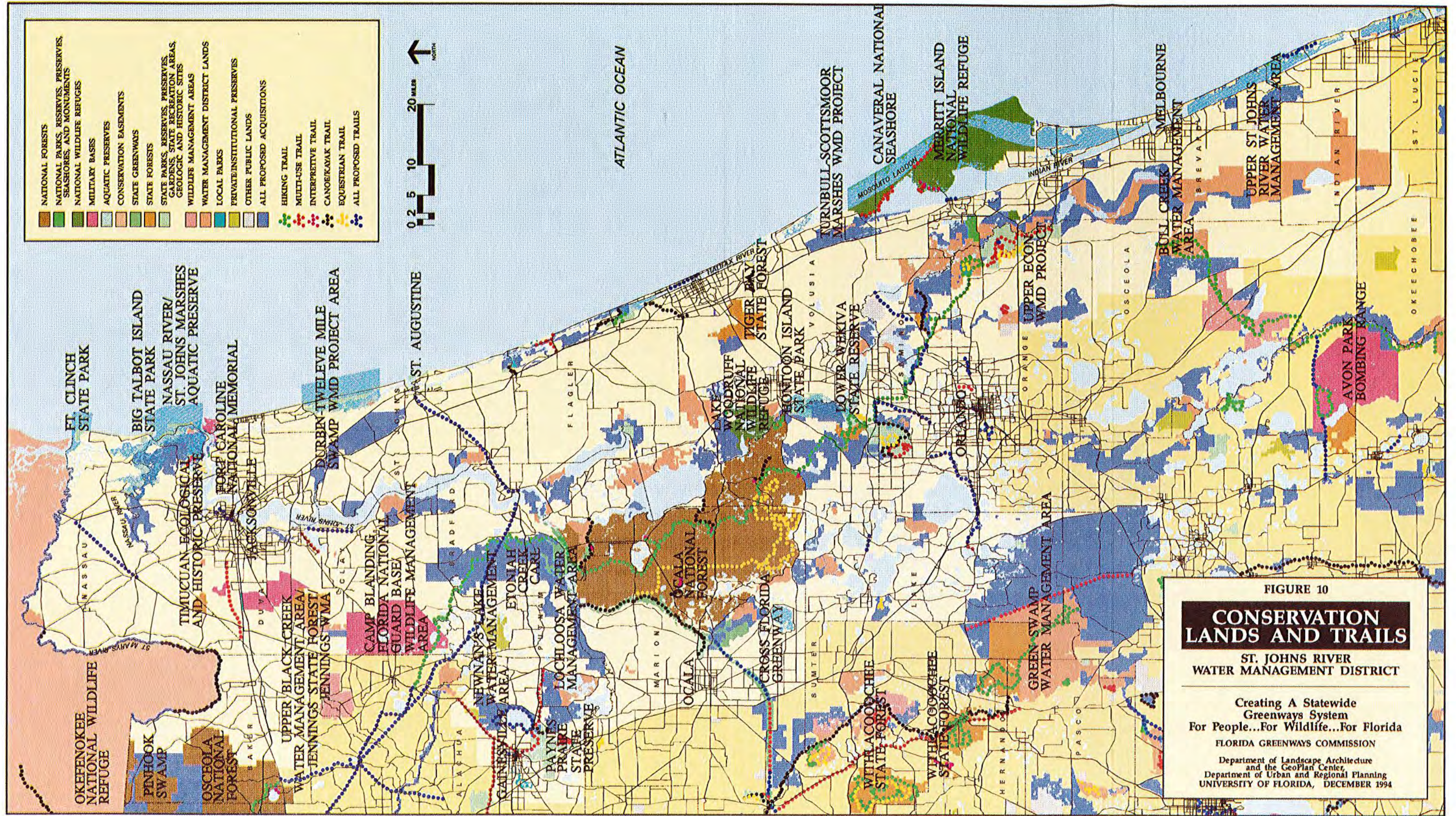
Ecological Resources

In the Southwest Florida Water Management District (Figure 11) there are four areas that serve as ecological hubs of regional significance:

- The Green Swamp, where over 150,000 acres have been protected through Water Management District and State ownership;
- The Myakka River basin, including Myakka River State Park, Sarasota County's Carlton Reserve, and the Water Management District's MacArthur property;
- The Withlacoochee River/Lake Tsala Apopka area, including the Water Management District's Pott's Preserve, Gum Slough, Carlton Ranch, Flying Eagle and Lake Panasoffkee lands, the Jumper Creek and Half Moon Wildlife Management Areas, and local acquisitions; and
- The Chassahowitzka Swamp, including coastal lands in Hernando and Citrus counties protected through a mosaic of federal, state and water management district ownership.

Other significant hubs include the Citrus Tract of the Withlacoochee State Forest in central Citrus County, the C.M. Webb Wildlife Management Area in Charlotte County, and the Lower Suwannee Complex in Levy County. The latter two constitute hub areas that include lands outside the Southwest Florida Water Management District.

Existing ecological linkages consist mainly of river corridors such as the Withlacoochee, Hillsborough, Little Manatee, Peace and Myakka, and the Cross Florida Greenway. None of these corridors is fully protected today, but efforts are underway to protect these critical links which connect conservation lands with other hubs and with major estuaries such as Tampa Bay and Charlotte Harbor. Table



- NATIONAL FORESTS
- NATIONAL PARKS, RESERVES, PRESERVES, SHORES, AND MONUMENTS
- NATIONAL WILDLIFE REFUGES
- MILITARY BASES
- AQUATIC PRESERVES
- CONSERVATION EASEMENTS
- STATE GREENWAYS
- STATE FORESTS
- STATE PARKS, RESERVES, PRESERVES, GARDENS, STATE RECREATION AREAS, GEOLOGIC AND HISTORIC SITES
- WILDLIFE MANAGEMENT AREAS
- WATER MANAGEMENT DISTRICT LANDS
- LOCAL PARKS
- PRIVATE/INSTITUTIONAL PRESERVES
- OTHER PUBLIC LANDS
- ALL PROPOSED ACQUISITIONS
- HIKING TRAIL
- MULTI-USE TRAIL
- INTERPRETIVE TRAIL
- CANOE/KAYAK TRAIL
- EQUESTRIAN TRAIL
- ALL PROPOSED TRAILS



FIGURE 10

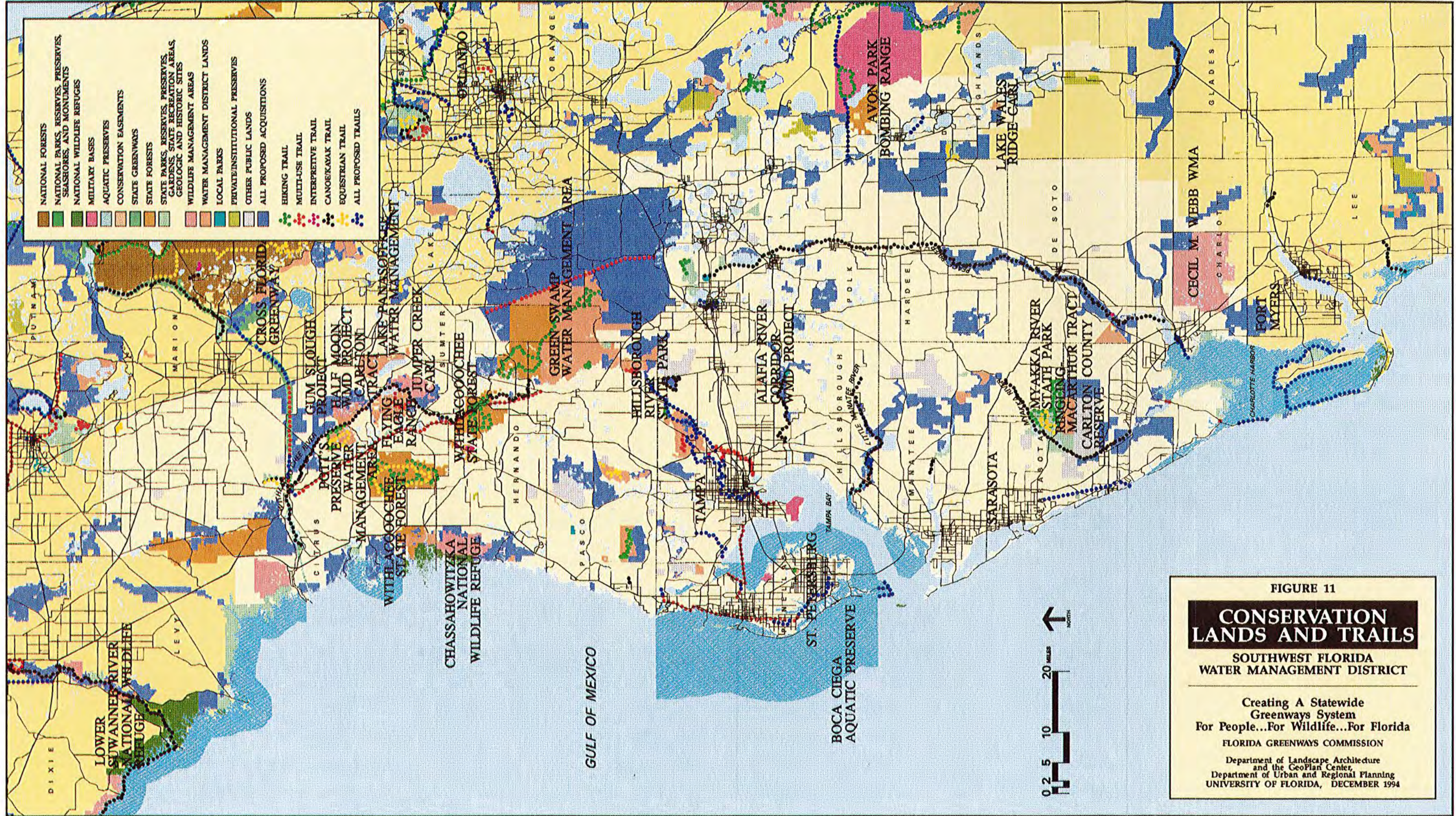
CONSERVATION LANDS AND TRAILS

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Creating A Statewide Greenways System
For People...For Wildlife...For Florida

FLORIDA GREENWAYS COMMISSION

Department of Landscape Architecture and the GeoPlan Center,
Department of Urban and Regional Planning
UNIVERSITY OF FLORIDA, DECEMBER 1994





10 summarizes information about existing and proposed conservation lands in the Southwest Florida Water Management District.

Cultural, Historical and Recreational Resources

Major cultural/recreational hubs within the Southwest Florida Water Management District include the communities of Tampa/St. Petersburg, Sarasota/Bradenton, Lakeland/Winter Haven and Port Charlotte/Punta Gorda/North Port. Smaller, but rapidly growing communities include Crystal River/Homosassa Springs, Spring Hill, New Port Richey and Venice. Cultural and historical resources include the old and culturally diverse communities of Ybor City and Tarpon Springs, along with small, traditional, rural towns such as Brooksville, Dade City, Lake Wales and Arcadia. Resources of pre-European significance include impressive sites of native American settlements like Crystal River, Safety Harbor and Weedon Island.

There are three major rail trail projects at least partially complete in southwest Florida: the Withlacoochee State Trail, the General James A. Van Fleet State Trail and

the Pinellas Trail. Additionally, portions of the Florida National Scenic Trail transverse the Green Swamp. Table 11 summarizes statistics for existing and proposed trails within the boundaries of the District that serve to connect both ecological and cultural/historical resources.

Table 11
Miles of Trails—
Southwest Florida Water Management District

| Trail Designation | Miles |
|---|---------------|
| Hiking | 190.93 |
| Multiple Use | 170.80 |
| Interpretive | 5.78 |
| Canoe/Kayak | 284.20 |
| Equestrian | 70.22 |
| <i>Total Existing</i> | 721.93 |
| All Proposed | 96.91 |
| TOTAL EXISTING & PROPOSED TRAILS | 818.84 |

Table 10: Area in Conservation Lands – Southwest Florida Water Management District

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area Within District Boundaries |
|--|---------------------|----------------------|--|
| EXISTING FEDERAL | | | |
| Military Bases | 9,512.36 | 14.86 | 0.20 |
| National Forest | 0.00 | 0.00 | 0.00 |
| National Parks, Preserves, Reserves, Seashores, & Monuments | 26.76 | 0.04 | 0.00 |
| National Wildlife Refuges | 29,758.70 | 46.50 | 0.62 |
| <i>Total Existing Federal Areas</i> | 39,297.82 | 61.40 | 0.81 |
| EXISTING STATE | | | |
| Aquatic Preserves* | 340,642.73 | 532.25 | 7.05 |
| Conservation Easements | 0.00 | 0.00 | 0.00 |
| Greenways | 17,512.90 | 27.36 | 0.36 |
| State Forests | 149,783.48 | 234.04 | 3.10 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas | 90,411.44 | 141.27 | 1.87 |
| Wildlife Management Areas | 103,759.26 | 162.12 | 2.15 |
| <i>Total Existing State Areas</i> | 361,467.08 | 564.79 | 7.48 |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 213,540.37 | 333.66 | 4.42 |
| EXISTING LOCAL | | | |
| All Local Areas** | 2,224.97 | 3.48 | 0.05 |
| EXISTING PRIVATE | | | |
| Private Preserves | 5,133.03 | 8.02 | 0.11 |
| EXISTING OTHER | | | |
| Indian Reservations | 0.00 | 0.00 | 0.00 |
| Other | 116,955.44 | 182.74 | 2.42 |
| <i>Total Existing Other Areas</i> | 116,955.44 | 182.74 | 2.42 |
| Total Existing Conservation Lands | 738,618.71 | 1,154.09 | 15.28 |
| All Proposed (Federal, State, WMD, & Local) | 661,568.85 | 1,033.70 | 13.69 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS | 1,400,187.56 | 2,187.79 | 28.97 |

* Area in Aquatic Preserves not included in any totals

** All Local Areas were included when supplied by local governments



Future Opportunities

The greenways vision for this part of the state includes the protection of the major river corridors such as the Peace, Myakka, Manatee, Little Manatee, Alafia, Hillsborough, and Withlacoochee. Additionally, remnants of rare scrub habitat on the Lake Wales Ridge need to be preserved before they disappear. The unique ridge ecosystem, which features numerous endemic plant species, needs to be restored and reconnected to the Green Swamp, Kissimmee Basin, and Lake Okeechobee. Linkages should be pursued to connect the Chassahowitzka Swamp and the Withlacoochee/Tsala Apopka region and the Green Swamp via the Withlacoochee State Forest. Currently planned greenways and trails include the Cross Florida Greenway, a Hillsborough River Greenway from the Green Swamp to Tampa Bay, and a bicycle trail associated with the North Suncoast Parkway, a new highway connecting

Hillsborough and Citrus Counties. A cultural/historic trail could cross the peninsula from Bradenton to Fort Pierce, recreating early military roads and the cattle drives of the late 1800's. Additional opportunities will be sought to connect existing and future ecological, cultural and recreational resources throughout the region.

South Florida Water Management District

Ecological Resources

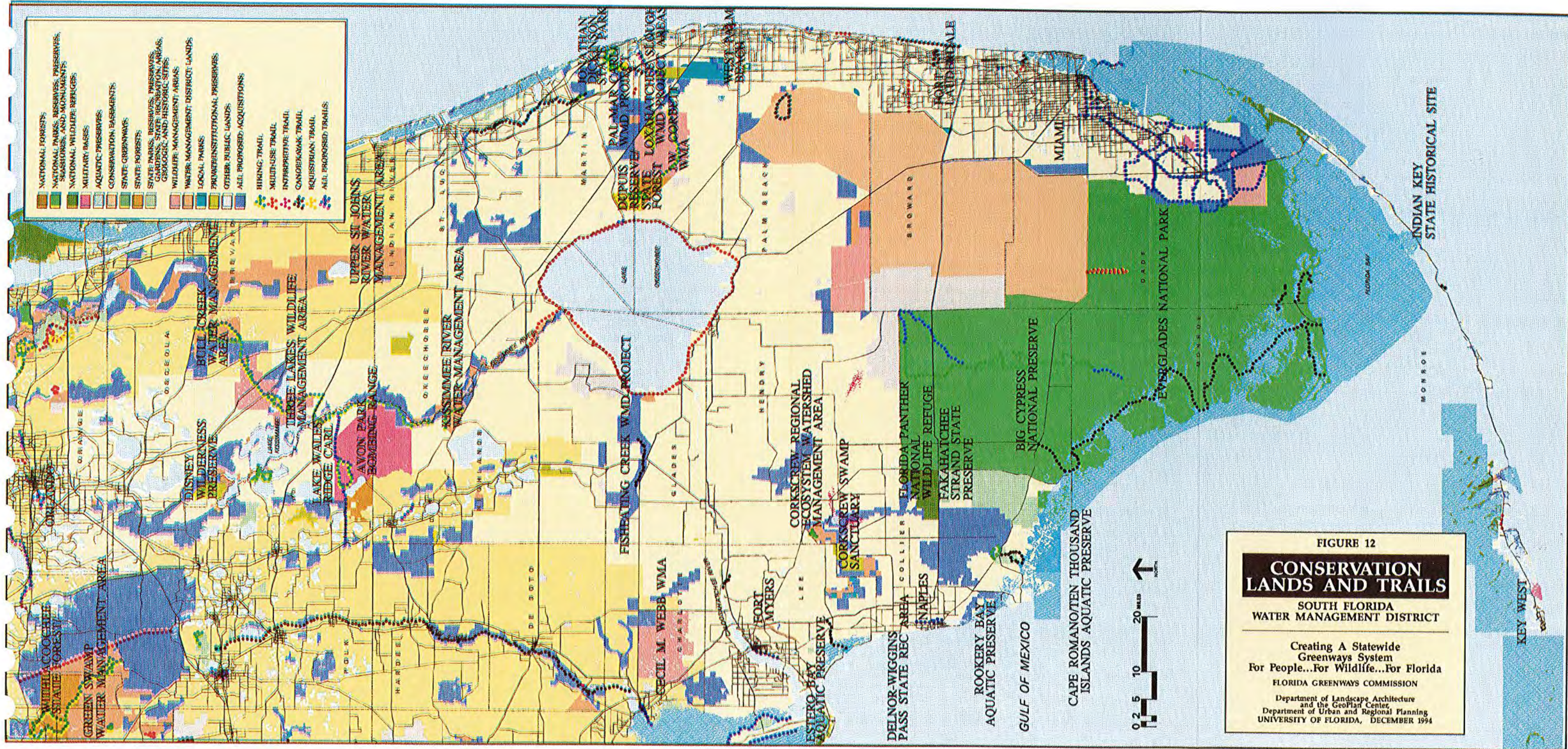
The dominant natural resource feature of the South Florida Water Management District (Figure 12) is the Kissimmee/Okeechobee/Everglades system of swamps, lakes, rivers, marshes and fringing uplands, that flow from

Table 12: Area in Conservation Lands—South Florida Water Management District

| Conservation Land Designation | Area in Acres | Area in Square Miles | Percentage of Total Land Area Within District Boundaries |
|---|---------------------|----------------------|--|
| EXISTING FEDERAL | | | |
| Military Bases | 105,070.78 | 164.17 | 1.00 |
| National Forest | 0.00 | 0.00 | 0.00 |
| National Parks, Preserves, Reserves, Seashores, & Monuments (Area in Land and Inland Waters) | 1,689,265.88 | 2,639.48 | 16.09 |
| National Parks, Preserves, Reserves, Seashores, & Monuments (Marine Waters Only) | 757,976.14 | 1,184.34 | 7.22 |
| National Wildlife Refuges (Area in Land and Inland Waters) | 59,943.65 | 93.66 | 0.57 |
| National Wildlife Refuges (Marine Waters Only) | 361,113.71 | 564.24 | 3.44 |
| <i>Total Existing Federal Areas (Area in Land and Inland Waters Only)</i> | <i>1,854,280.31</i> | <i>2,897.31</i> | <i>17.66</i> |
| EXISTING STATE | | | |
| Aquatic Preserves* | 278,535.78 | 435.21 | 2.65 |
| Conservation Easements | 788,662.79 | 1,232.29 | 7.51 |
| Greenways | 0.00 | 0.00 | 0.00 |
| State Forests | 33,803.76 | 52.82 | 0.32 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas (Area in Land and Inland Waters) | 30,384.79 | 47.48 | 0.29 |
| State Parks, Preserves, Reserves, Gardens, Geologic & Historic Sites, and State Recreation Areas (Marine Waters Only) | 76,055.96 | 118.84 | 0.72 |
| Wildlife Management Areas | 197,314.69 | 308.30 | 1.88 |
| <i>Total Existing State Areas (Area in Land and Inland Waters Only)</i> | <i>1,126,221.99</i> | <i>1,759.72</i> | <i>10.73</i> |
| EXISTING WATER MANAGEMENT DISTRICT | | | |
| All WMD Areas | 73,635.23 | 115.06 | 0.70 |
| EXISTING LOCAL | | | |
| All Local Areas** (Area in Land and Inland Waters) | 31,650.71 | 49.45 | 0.30 |
| All Local Areas** (Marine Waters Only) | 219.38 | 0.34 | 0.00 |
| EXISTING PRIVATE | | | |
| Private Preserves | 47,022.39 | 73.47 | 0.45 |
| EXISTING OTHER | | | |
| Indian Reservations | 191,663.32 | 299.47 | 1.83 |
| Other | 18,108.64 | 28.29 | 0.17 |
| <i>Total Existing Other Areas</i> | <i>209,771.96</i> | <i>327.77</i> | <i>2.00</i> |
| Total Existing Conservation Lands (Area in Land and Inland Waters Only) | 3,342,582.59 | 5,222.79 | 31.84 |
| All Proposed (Federal, State, WMD, & Local) | 609,951.46 | 953.05 | 5.81 |
| TOTAL EXISTING & PROPOSED CONSERVATION LANDS (Area in Land and Inland Waters Only) | 3,952,534.05 | 6,175.83 | 37.65 |

* Area in Aquatic Preserves not included in any totals

** All Local Areas were included when supplied by local governments





the southern city limits of Orlando to Florida Bay. Connected to this central system are several other significant systems including a complex of pine flatwoods, cypress strands, and marshes extending from Lake Okeechobee east to the Atlantic Ocean (DuPuis Reserve State Forest, J.W. Corbett Wildlife Management Area, Pal-Mar, Loxahatchee Slough/River, and Jonathan Dickinson State Park). On the west side of Lake Okeechobee is the largely undisturbed Fisheating Creek Watershed, which extends westerly to the southern edge of the sandhill scrub system. Further north in the Kissimmee Valley are connections to the St. Johns River through the Three Lakes Wildlife Management Area and to the Lake Wales Ridge/Avon Park Bombing Range. On the southwest coast are a number of statewide and regionally significant systems including the Corkscrew Regional Ecosystem Watershed, Big Cypress National Preserve, Florida Panther National Wildlife Refuge and Fakahatchee Strand State Preserve in the interior and the Rookery Bay/Ten Thousand Islands, Wiggins Pass/Cocohatchee and Estero Bay systems on the coast.

Existing and proposed ecological linkages considered for this District focus on the restoration of the Kissimmee/Okeechobee/Everglades Complex. Others include the Upper Basin Lakes project including the Disney Wilderness Preserve and the Three Lakes Wildlife Management Area connecting Bull Creek and the Kissimmee Chain of Lakes. Table 12 summarizes information about existing and proposed conservation lands in the South Florida Water Management District.

Cultural, Historical and Recreational Resources

The South Florida Water Management District is dominated by the highly urbanized Atlantic Ridge. In addition to the large communities found there, it contains the rapidly growing communities of Fort Myers and Naples on the West Coast and the inland communities of Kissimmee, Sebring and Clewiston. The maritime communities of the Florida Keys are unique to this region of Florida.

South Florida is rich in cultural and historic resources. In the early twentieth century, it was a winter resort for wealthy northerners. Important estates from this period include Fort Lauderdale's Bonnett House and Miami's Villa Vizcaya. The southwest coast was home to the famous Calusa Indians. Living on rich estuarine resources, the Calusa left complex shell works like Big Mound Key, Mound Key and Josselyn Island. From the time of sixteenth century Spanish exploration through the present, the Keys have played a critical role in maritime history, particularly Key West. The combination of hurricanes and shallow reefs led hundreds of ships to their end along the Keys. One of these wrecks from the Spanish Plate fleet of 1733, the San Pedro near Indian Key, is open to divers as

an underwater archaeological park.

Other than the Florida National Scenic Trail, there are regionally significant trails that include the Loxahatchee River Canoe Trail and the Avon Park Trail. A summary of the existing and proposed trails for the District are found in Table 13.

Table 13
Miles of Trails
South Florida Water Management District

| Trail Designation | Miles |
|---|---------------|
| Hiking | 209.74 |
| Multiple Use | 154.47 |
| Interpretive | 0.53 |
| Canoe/Kayak | 226.92 |
| Equestrian | 30.22 |
| <i>Total Existing</i> | 621.88 |
| All Proposed | 357.25 |
| TOTAL EXISTING & PROPOSED TRAILS | 979.13 |

Future Opportunities

The vision of the greenways system in the South Florida Water Management District includes a system of recreational/cultural linkages among its east coast communities, including a trail along the eastern edge of the Everglades to link the major coastal communities with the Florida National Scenic Trail near Lake Okeechobee. The vision also includes the South Dade Greenway Network, a regionally significant greenways system that would link Biscayne Bay to the Everglades and south Miami to the Keys. Fort Myers and Naples would be linked with the Florida National Scenic Trail along the Caloosahatchee River and then to Lake Okeechobee. An important cultural/historical trail would cross peninsular Florida from Bradenton to the Fort Pierce area. This trail would recreate the early military roads and fort system, and the cattle drives of the late 1800's.

In addition to the unification of the Kissimmee/Okeechobee/Everglades Complex itself, the greenways system will link the Kissimmee River corridor to the Peace River via Avon Park and the St. Johns River via Three Lakes Water Management Area. In southwest Florida the greenways system will link critical interior native ecosystems and landscapes like the Big Cypress, Corkscrew and restored South Golden Gate/Belle Meade watersheds to the productive coastal islands and estuaries of the Rookery Bay/Ten Thousand Islands/Western Everglades region.



*Background Information on the
Florida Greenways Commission*





Report on Working Committees and Drafting Teams

Working Committees

At its September 1993 meeting the Florida Greenways Commission created four working committees: Greenways Identification and Mapping; Program Integration; Community Action; and Partners, Awareness and Involvement. At that meeting the Commission gave each of the working committees specific assignments related to the charges in the Governor's executive order. The committees' assigned assessments, issues analyses, and report drafting activities constitute the contents of the Florida Greenways Commission's *Report to the Governor*.

The groups looked at four broad areas:

• Greenways Identification and Mapping

The Greenways Identification and Mapping Committee was charged with answering the question "What is a greenway" and with creating a statewide map of existing and proposed greenway connections. The 12-member group was chaired by Florida Department of Transportation Secretary Ben Watts. Its charge was also to develop greenway definitions and a classification system, and discover where greenways already exist and what important connections are missing. Final products for this committee include a series of maps depicting current and potential future greenways. The committee's work was supported by staff of Florida Department of Transportation and Florida Department of Environmental Protection, 1000 Friends of Florida, and the University of Florida Department of Landscape Architecture and Department of Urban and Regional Planning.

• Program Integration

How do the state's existing conservation and recreation programs fit into the greenways picture? What about private projects? Putting the pieces of the program puzzle together was the charge of the Program Integration Committee chaired by George Willson of The Nature Conservancy. This committee's final product was a recommenda-

tion for an institutional framework that will help state, regional and local greenway efforts (both public and private) work together. The committee was supported by staff of Florida Department of Transportation, 1000 Friends of Florida and Florida Infinity, Inc.

• Community Action

As with so many issues, statewide challenges have local solutions. Figuring out how the state can help communities create greenways was the charge of the Community Action Committee. Chaired by Sally Thompson, a member of the board of the Southwest Florida Water Management District, this committee surveyed communities to find out how many of them have greenways and what makes their projects successful. Staff for the committee were provided by Florida Department of Community Affairs and 1000 Friends of Florida.

• Partners, Awareness and Involvement

Identifying groups and individuals interested in working on greenway projects was the charge of the Partners, Awareness and Involvement Committee. This group created materials aimed at getting the word out about greenways. It was also responsible for planning a statewide greenways celebration for Florida's 150th anniversary of statehood and preparing a Florida Greenways Marketing Plan. A specific emphasis: involving nontraditional groups, like city-dwellers and minorities, in the greenways movement. The committee's chair was Margaret Spontak of the St. Johns River Water Management District. The committee was supported by staff from the Department of Commerce and 1000 Friends of Florida.



Drafting Teams

During the course of the Commission's work the Chair also appointed two drafting teams to aid in building consensus on topics that were not specifically the subject of work group activity. The drafting teams, chosen in part on the basis of their members' expertise, were asked to prepare their report sections based on discussions during full Commission meetings.

- **Sustainability Rationale and Goal**

The "Sustainability Rationale" drafting team was created to address the link between a statewide greenways system and Florida's environmental, social and economic sustainable future. The drafting team consisted of Commission members John Fitch, David Land, Dale Allen and member designee Frank Carlile.

- **Human Landscapes**

The "Human Landscapes" portion of the report was developed as a strategy to incorporate urban areas, working landscapes, historical sites and cultural resources into the statewide greenways system. The drafting team consisted of Commission members Dale Allen, Ben Parks, George Percy and member designee Will Abberger.



Summary of Commission Meetings

The Florida Greenways Commission held a total of 10 meetings during 1993 and 1994 (Figure 13). During the early meetings Commission members learned about greenways in Florida and around the country, developed a mission and vision, and put together a process for developing recommendations to the Governor. Later meetings were devoted to going over the work produced by the Commission's working committees, discussing and refining the group's report, and developing additional materials on greenways. A summary of the Commission's meetings appears below.

May 17, 1993 – Tallahassee

The Commission held its first introductory meeting at the Senate Office Building in Tallahassee. The meeting was opened by the Chair of the Commission, Lt. Governor Buddy MacKay, who underscored the importance of the diversity of perspectives represented by the Commission's public and private members. He challenged the Commission to develop a consensus plan for implementing the greenways concept in Florida. The 32 members participating in this first session introduced themselves and offered their perspectives on the potential of greenways in Florida.

After a background briefing by the Commission's executive director Dr. Mark Benedict, the members broke into "interest" groups to generate, from their perspectives, questions the Commission might want to consider in its work plan. These included questions related to natural resources, recreation and multi-use corridors, community planning and action, business and development, and greenways partnership coordination. These groups reported to the full Commission, underscoring both the common concerns and questions and issues unique to different interests.

Over lunch the Commission heard from national greenway partners represented by Bill Spitzer of the National Park Service's Rivers, Trails and Conservation Assistance Program and Loring Schwarz of The Conservation Fund. They briefed the Commission on their programs and offered some suggestions based on their experience.

Commission members then focused on the concept of a greenways partnership and reviewed their respective roles in the development of an overall greenways program, project recognition and initiation, implementation and management of greenways projects and raising and provid-

ing adequate funding. The members suggested that Dr. Benedict, in consultation with the chairs, recommend a staff structure and other organizational roles after the Commission had a chance to further develop its work plan. Members suggested that a mission statement be developed at the next meeting. Secretary Ben Watts, the Commission's afternoon acting chair, adjourned the meeting at 4:00 p.m.

June 23, 1993 – Tallahassee

Vice-chair Nathaniel Reed opened the second meeting at the Senate Office Building in Tallahassee with congratulations on the success of the first Commission meeting in May. The second meeting focused on national case studies presented by participants of the National Greenways Leadership Roundtable held June 21–22 in Dowling Park, Florida, and also included presentations on other greenway initiatives around the country.

Dr. Benedict gave members an overview of the proposed Commission vision, mission, schedule, work plan phases and objectives, products and participants' roles. Ed McMahon of The Conservation Fund's American Greenways Program gave a greenways slide presentation emphasizing the importance of a linked greenways system to natural and cultural features and the opportunities the system provides for nature-based recreation.

National case studies were presented by David Sampson, executive director of the Hudson River Valley Greenway Communities Council in New York; Betsy Otto, greenways coordinator of Openlands Project in Chicago/Northeastern Illinois; Beth Porter, program leader for National Trails Planning, National Park Service's Rivers, Trails and Conservation Assistance Program; Mike Houck, representing the Metropolitan Greenspaces Program in Portland, Oregon; and Teresa Moore, executive director of the Maryland Greenways Commission. Over lunch Commission members had the opportunity to ask questions of the roundtable participants during an informal discussion session. Additional impromptu presentations were also given by Commission member Dr. Larry Harris and Robert Boot, former head of British Nature Conservancy and founder of Age Resources U.K.

After the case study presentations the Commission reviewed and discussed first drafts of its vision and mission



Figure 13
Statewide Location Map of Florida Greenways Commission Meetings and Public Forums



statements and heard a Sunshine Law summary given by Debbie Kearney of the Governor’s Legal Office. Vice-chair Reed adjourned the meeting at 3:50 p.m.

July 27, 1993 – Tallahassee

The Commission held its third meeting at the Senate Office Building in Tallahassee. The meeting, which focused on Florida’s greenways experience, began at 10:00 a.m. with opening remarks by Vice-chair Nathaniel Reed’s designee, James F. Murley, executive director of 1000 Friends of Florida. The morning was devoted to case studies of ecological greenways and greenways systems. The Commission heard presentations on the Wekiva River/Ocala National Forest by Donna Ruffner, of the Florida Department of Environmental Protection; the Suwannee River Valley, by Charlie Houder, of the Suwannee River Water Management District; and the Corkscrew Regional Ecosystem Watershed, by Commission member David Land.

During a working lunch presentations were given on native species and wildlife habitat mapping projects by Jim Muller, of Florida Natural Areas Inventory, and Brian Barnett, of the Florida Game and Fresh Water Fish Com-

mission. After lunch, case studies were given on regional and local multi-use greenways and greenways systems. The Commission heard presentations on Gainesville’s Greenway Network, by David Coffey, former City Mayor-Commissioner; the Cross Florida Greenway, by Fred Ayer, Florida Department of Environmental Protection; and the West Orange Greenway, by Will Abberger, Trust for Public Land and William R. Thomas, Orange County Parks and Recreation. After the case studies, the Commission discussed its mission and vision statements and working committee structure. The meeting adjourned at 4:00 p.m.

September 16–17, 1993 – Tampa

The Commission held its fourth meeting at the Florida Department of Environmental Protection’s district office in Tampa. The first day began at 10:05 a.m. with opening remarks by James Murley, and an overview by Dr. Benedict. The Commission discussed and adopted a mission statement and discussed a revised draft vision statement. The Commission heard a panel presentation on 1000 Friends of Florida’s Suncoast Greenways Project moderated by Dr. Scott Emery, Director of the Suncoast Greenways Project. Panel participants included: Gene



Boles of the Hillsborough County Planning & Development; Bud Cates of the Florida Department of Environmental Protection; Bill Hawkins of Mobil Mining & Minerals and Commission member and Hillsborough County Commissioner Ed Turanchik.

After lunch, Dr. Benedict explained the proposed charges and structure of the Commission's working committees. The committees then broke out into individual meetings to discuss their charges, related activities and products. The full Commission then reconvened to hear presentations from each committee.

During the second day of this two-day meeting the committees met individually to discuss their plans and organizational procedures. The Commission then reconvened to hear committee reports and approve their work plans.

Dr. Benedict led a discussion regarding suggestions to expand the Commission, and asked for the Commission's input on a possible year-end report. Both these issues were referred to the executive committee for further action. During a working lunch the Commission heard a presentation on the Pinellas Trail by Ned Baier, with Pinellas County, and Sally Scholderer, of Pinellas Trails, Inc. The meeting adjourned at 1:00 p.m.

December 2, 1993 – Tallahassee

The Commission held its fifth meeting at the Ramada Inn North in Tallahassee. The meeting began at 10:07 a.m. with a welcome and review of the day's agenda by vice-chair Nathaniel Reed. The Commission discussed and adopted a meeting schedule for 1994 Commission meetings. The morning was devoted to working committee presentations on the results of their assessment and issue analysis activities.

During a working lunch the Commission heard a panel presentation on greenway activities in the Apalachee region. The panel was moderated by David Gluckman of Gluckman & Gluckman. Participants included: Russell Grace of Tallahassee/Leon County Planning Department; Jim McKinley of the Red Hills Conservation Association; Mary Anne Koos of the Florida Department of Environmental Protection; Tyler Macmillan of the Northwest Florida Water Management District and Jan Brandt of the Apalachee Land Conservancy. After lunch, the Commission discussed and adopted the vision statement by unanimous vote. The committees then met individually to plan activities to be undertaken prior to the April Commission meeting.

The full Commission reconvened to hear presentations from each committee and discuss the public workshops to be held in August. By unanimous vote Dr. Benedict was authorized on behalf of the Commission to enter into a three-party Joint Participation Agreement between the

Florida Department of Transportation, 1000 Friends of Florida and the Commission. George Willson announced that the Northwest Florida Water Management District recently signed a 30,000-acre acquisition contract with Champion International. The meeting adjourned at 5:00 p.m.

April 29, 1993 – West Palm Beach

The Commission held its sixth meeting at the South Florida Water Management District office in West Palm Beach. The meeting began at 10:05 a.m. with a welcome and review of the day's agenda by vice-chair Nathaniel Reed. Lt. Governor Buddy MacKay spoke about the Governor's position on greenways and what actions are being taken to promote greenways sustainability. Tilford Creel, Executive Director of the South Florida Water Management District, discussed activities related to planning and managing greenways in south Florida. John W. Turner, president of The Conservation Fund, honored Mr. Reed with the Alexander Calder Conservation Award sponsored by The Conservation Fund and Union Camp Corporation.

After a discussion about the format and schedule for its report to the Governor, the Commission heard reports from each committee. A lunch panel presentation on the Loxahatchee Greenway Project was moderated by Beth Shields of The Conservation Fund. Participants included: Walt Timmerman, with the Florida Park Service, who gave a presentation on wildlife conservation and its relationship to the design of greenways; Frank Conkling, with the John D. and Catherine T. MacArthur Foundation, who discussed how geographic information systems can help facilitate the design of greenways; David Epstein, with The Conservation Fund, who discussed greenway recommendations for the region; and Rick Dent, director of the Loxahatchee River Environmental Control District, who discussed some of the unique aspects of the Loxahatchee greenways planning process. The meeting adjourned at 4:30 p.m.

July 28–29, 1994 – Orlando

The Commission held its seventh meeting at the Hyatt Regency Orlando International Airport in Orlando. On the first day the Commission reviewed its mission and vision statements and heard from Dr. Benedict about the Florida Greenways Sustainability Rationale and the Florida Greenways Goal. After a discussion about the working committees' draft strategies and associated recommendations, the Commission broke for lunch. After lunch, the Commission heard reports on strategies and recommendations from the Greenways Identification and Mapping Committee and the Program Integration Committee. An evening reception gave participants the opportunity to see posters describing



greenway projects in the central Florida region. Posters were presented by: David Barth of Glatting, Jackson & Associates, Inc.; Ben Breedlove of Breedlove, Dennis & Associates, Inc.; Duane DeFreese of Brevard County Environmental Endangered Lands Program; Cristi Flood of Orange County Parks and Recreation; Steve Gatewood of Disney Wilderness Preserve; and Forest Michael of Michael & Michael Associates, Inc.

The second day of this two-day meeting was called to order by Mr. Murley. The Commission heard reports on strategies and associated recommendations from the Community Action Committee and Partners, Awareness and Involvement Committee. The Commission then reviewed plans for its public forums. After lunch, Dr. Benedict discussed fall 1994/1995 Florida Greenways Commission activities and new committee assignments. The meeting adjourned at 3:00 p.m.

September 12-13, 1994 – Tallahassee

The Commission held its eighth meeting at the Ramada Inn North in Tallahassee. The meeting began at 10:05 a.m. with a welcome and review of the day's agenda by James Murley. Dr. Benedict opened the first day's meeting with a preview of the Florida Greenways video. The Commission then heard an update on plans for the public forums. Dr. Benedict gave an overview of the format and production schedule for the *Report to the Governor*, after which the Commission reviewed and gave input on the report's Introduction and Sustainability Rationale sections. After lunch, the Commission reviewed the Background section and heard an overview of the Key Strategies. The Commission then reviewed and gave input on the "Developing a Statewide Implementation Framework," "Conserving Native Ecosystems and Landscapes," "Creating and Managing Community Greenways" and "Educating and Involving the Public" sections. After a summary and review of the next day's agenda, the meeting recessed at 5:30 p.m.

On the second day of this two-day meeting, the Commission reviewed the adopted "Mission and Vision Statements" in light of the current rationale and strategies. Peggy Carr of the University of Florida then gave a presentation on the *Florida Greenways Map Series*. After reports from the working committees, Dr. Benedict led a discussion of the 150 Greenway Recognition and Small Grants programs and 1995 Celebration activities. The meeting adjourned at 1:00 p.m.

November 1-2, 1994 – Tallahassee

The Commission held its ninth meeting at the Division of Forestry in Tallahassee. The meeting began at 10:05 a.m. with a welcome and review of the day's agenda by James Murley. Joe Cooley of the National Park Service gave a summary report on the Public Greenway Forums, after which the Commission reviewed and gave input on the "Executive Summary," "Foreword," "Why Greenways are Important to Florida's Sustainable Future," and "Vision of the Florida Greenways System" sections of the report. During and following a working lunch, the Commission reviewed and gave input on "Defining Greenways and Greenway Networks" and "Commission Findings," "Creating an Institutional Framework," "Creating and Managing Community Greenways," "Conserving Native Ecosystems and Landscapes" and "Designing, Developing and Maintaining a Statewide Trails System." After a summary and review of the next day's agenda, the meeting recessed at 5:15 p.m.

The second day of this two-day meeting began with the Commission's review and input on "Educating and Involving the Public," "Florida Greenway Network Marketing Strategies" and "Protecting Human Landscapes." During a working lunch, Commission members discussed the "Florida Greenways – Current Status, Future Opportunities" section and associated Florida Greenways Map Series. The meeting adjourned at 3:00 p.m.

December 2, 1994 – Tallahassee

The Commission held its tenth meeting at the Ramada Inn Capitol View in Tallahassee. The meeting began at 10:05 a.m. with a welcome and opening remarks by Commission Chair Lt. Governor Buddy MacKay, who pledged continued support of the administration for the work of the Commission. The Lt. Governor then asked committee member Secretary Virginia Wetherell to serve as acting chair for the remainder of the meeting. The meeting focused on review and voting on submitted amendments to the Third Draft Report. The Commission reviewed and adopted each report section as well as the *Florida Greenways Map Series* into the proposed Florida Greenways Commission *Report to the Governor*. After a working lunch the Commission adopted the full Florida Greenways Commission *Report to the Governor*. Dr. Benedict discussed the proposed 1995 Commission Meeting Calendar which was adopted with changes. He then gave an overview of the proposed 1995 Working Committee structure and associated priority activities. The meeting adjourned at 4:00 p.m.



Summary of Public Forums

With the assistance of the National Park Service's Rivers, Trails and Conservation Assistance Program, the Florida Growth Management Conflict Resolution Consortium, and the Florida Department of Environmental Protection Office of Greenways and Trails, the Commission held five statewide public forums between September 24 and October 4, 1994 (Figure 13). The purpose of the forums was to:

- provide an opportunity for the public to learn about greenways and the concept of a statewide greenways system;
- provide information on existing and proposed greenway initiatives in the area of each of the forums;
- offer an overview of the Florida Greenways Commission's mission and work to date; and
- seek public input on the Commission's draft findings and recommendations.

The Florida Greenways video was shown to introduce the concept and benefits of a system of greenways within Florida.

In addition to an agenda, each attendee was presented with an informational packet that included the Commission's vision statement, a definition of greenways and their benefits, an explanation of the term "greenways system" and its components, a description of the origins of the greenways movement, a summary of the Commission's preliminary recommendations, and an evaluation and comment form.

To help focus public discussion, the summary of the Commission's recommendations was divided into four categories. These categories, which served as the main topics for the discussion groups at each forum, were:

- Creating a State Institutional Framework,
- Creating and Managing Community Greenways and Greenways System,
- Conserving Native Ecosystems, and
- Designing, Developing and Maintaining a Statewide Trails System.

The purpose of the discussion groups was to solicit public comment, and everyone was given an opportunity to express concerns and/or ask questions. The intent was not to try to answer every concern but to hear the input, record it, and send that information back to the Commission for review and action as necessary.

Each discussion group included a Commission member, a staff person from the corresponding committee and a facilitator/recorder. Commission members and staff served as information resources and helped clarify specific concerns. The facilitator ensured everyone had an opportunity to speak and recorded comments. A summary of comments from each discussion group was presented at each forum to allow everyone to hear the main issues that were raised in the break-out groups. The recorded comments were sent back to the Florida Greenways Program and then on to the Commission's working committees on October 7, 1994.

The "150 Greenways" recognition and the "Small Grants" programs were introduced at each forum and applications for both were available. Each forum ended with a strong request that attendees fill out the evaluation and comment forms, and an assurance that their comments would be heard by the Commission.

The Commission's executive director, Dr. Mark Benedict, presided over each forum. The meetings began at 6:00 p.m. and concluded by 8:30 p.m. Displays with handouts were set up and open to the public about half an hour before and after the forums. A summary of the forum locations, dates, attendance, and the Commission presenters follows:

Tallahassee

September 27, 1994

Senate Conference Room E-L

A total of 63 people attended, most of whom were state agency employees. Commission members/staff participating in the discussion groups included: Charles Hardee—Creating a State Institutional Framework; Dale Allen—Creating and Managing Community Greenways; John Fitch—Conserving Native Ecosystems; and Sue Noyes—Developing a Statewide Trails System.



Jacksonville

September 28, 1994

Florida Community College, North Campus

Approximately 32 people were in attendance. Due to the small size of the group the public discussion was held as one group discussing all four of the topic areas. Commission members participating in the discussion group included: Thomas Haynes—Creating a State Institutional Framework; Curt Blair—Creating and Managing Community Greenways; Lenore McCullagh—Conserving Native Ecosystems; and Sue Noyes—Developing a Statewide Trails System.

Orlando

September 29, 1994

Orange County Public Library, Downtown Facility

Approximately 70 people were in attendance. Commission members/staff participating in the discussion groups included: Earl Starnes—Creating a State Institutional Framework; Doug Buck—Creating and Managing Community Greenways; Manley Fuller—Conserving Native Ecosystems; and Kent Wimmer—Developing a Statewide Trails System.

West Palm Beach

October 3, 1994

South Florida Water Management District Office

A total of 80 people attended. Commission members participating in the discussion groups included: Bernie Yokel—Creating a State Institutional Framework; Linda Shelley—Creating and Managing Community Greenways; Manley Fuller—Conserving Native Ecosystems; and Liz Carter—Developing a Statewide Trails System.

Tampa

October 4, 1994

Southwest Florida Water Management District Office

A total of 58 people attended. Commission members participating in the discussion groups included: Senator Don Sullivan—Creating a State Institutional Framework; Sally Thompson—Creating and Managing Community Greenways; Larry Harris—Conserving Native Ecosystems; and Ethel Palmer—Developing a Statewide Trails System.



State of Florida

OFFICE OF THE GOVERNOR

EXECUTIVE ORDER NUMBER 93-40

WHEREAS, the natural environment and outdoor recreational activities are the basis of Florida's quality of life and economic vitality; and

WHEREAS, pursuant to Article II, Section 7 of the Florida Constitution, it shall be the policy of the State to conserve and protect its natural resources and scenic beauty; and

WHEREAS, Greenways are linear open spaces protected and managed for resource conservation, outdoor recreation and environmental education; and

WHEREAS, Preservation 2000, passed by the Florida Legislature, provides funding for land acquisition for conservation, open space and recreational activities specifically including the development of greenway projects; and

WHEREAS, the Florida Legislature has initiated activities directed at conversion of the Cross Florida Barge Canal into the Cross Florida Greenbelt State Recreation and Conservation Area; and

WHEREAS, the Department of Natural Resources, the Department of Transportation, the Department of Environmental Regulation, including the water management districts and the Department of Community Affairs, including the Florida Communities Trust, all individually have greenways initiatives underway; and

WHEREAS, numerous local communities, citizens organizations and the private sector have commenced activities directed at open space planning, wildlife protection and outdoor recreational enhancement associated with the development of a linked network of greenways and greenspaces; and

WHEREAS, there is a need to bring together the diverse efforts of these groups into a coordinated approach for the protection, enhancement and management of a statewide network of linked natural areas, parks and other open spaces;

NOW, THEREFORE, I, LAWTON CHILES, as Governor of the State of Florida, by virtue of the authority vested in me by the Constitution and laws of the State of Florida, do hereby promulgate the following Executive Order effective immediately:

Section 1.

There is hereby created the Florida Greenways Commission, hereinafter referred to as The Commission".

Section 2.

The Commission shall be composed of thirty-one (31) members to be appointed by and serve at the pleasure of the Governor. Sixteen members shall initially be appointed for 1 year terms at the Governor's pleasure. The remaining members shall



serve for two year terms at the pleasure of the Governor. The Commission shall include representatives of the Florida Departments of Natural Resources, Community Affairs, Transportation, Environmental Regulation and Commerce; the Florida Game and Fresh Water Fish Commission; the Legislature; each water management district; a regional planning council; local government; the environmental, conservation, recreational, development, and business communities and the general public. The chairman and vice chairman shall be appointed by the Governor, and the Commission shall meet upon the call of the chairman.

Section 3.

The Commission shall have as its goal to promote the creation of a linked network of greenways and greenspaces across Florida that will benefit the state's citizens, native wildlife and environment. To help advance this statewide network, and to emphasize the diverse public and private initiatives necessary to make it a reality, the Governor and the Commission shall initiate formal recognition of 150 state, regional or local greenways by the state's 150th birthday in 1995.

Section 4.

The Commission shall have the following responsibilities and objectives: a) to assess the current status of greenway activities within federal, state, regional, and local governmental and private entities; (b) to develop a state agency framework to support community greenway initiatives and further interagency greenway activities; (c) to identify statewide greenway issues and goals and draft recommended actions and alternatives for meeting key issues and goals; (d) to hold workshops at selected locations across the state to obtain the input of local citizens and elected officials while formulating shared visions for community greenway and greenspace networks; (e) to develop further initiative and plans for the achievement of the commission agenda as directed by the Governor. The Commission shall provide a report to the Governor containing items (a) through (e) above by January 1, 1994. The Commission shall give particular attention to the following: (1) current activities by state and federal agencies and by private and nonprofit organizations associated with greenways; (2) greenway partnerships between local and state governments, private interests, nonprofit organizations, and citizens; (3) local government efforts in the development and implementation of local government comprehensive plans associated with greenways; (4) a plan with recommendations to the Florida Legislature and the Executive Branch for accomplishing these responsibilities and objectives.

Section 5.

The Commission shall provide for the creation of technical advisory committees to support the Commission in meeting its responsibilities and objectives.

Section 6.

For purposes of administration, the Commission shall be housed in the Executive Office of the Governor.

Section 7.

All state agencies are directed and/or requested to provide professional and technical support for the Commission. Appropriate federal agencies and all regional and local governmental units are requested to cooperate fully with the Commission by carrying out this charge.



Section 8.

Florida's conservation, recreation and citizen organizations, private businesses and development interests are asked to assist the Commission as it conducts its activities. The Florida Greenways Program of 1000 Friends of Florida and The Conservation Fund are requested to help facilitate the active participation of these groups.

Section 9.

Members of the Commission who are governmental employees shall receive travel reimbursement from their respective agencies. The citizen members of the Commission may be eligible for travel and other expenses, pursuant to Section 112/061, Florida Statutes, incurred while fulfilling their duties as Commission members.

Section 10.

This executive order shall expire, and the existence of the Commission shall terminate on December 31, 1995, unless otherwise extended by Amendment or legislative action.

IN TESTIMONY WHEREOF, I have hereunto set my hand and have caused the Great Seal of the State of Florida to be affixed at Tallahassee, the Capitol, this 22nd day of January, 1993.

Lawton Chiles
Governor

ATTEST:
Jim Smith
Secretary of State



State of Florida

OFFICE OF THE GOVERNOR

EXECUTIVE ORDER NUMBER 93-111

WHEREAS, by executive order 93-40 the Governor established the Florida Greenways Commission to promote the creation of a linked network of greenways and greenspaces across Florida that will benefit the state's citizens, native wildlife and the environment, and

WHEREAS, it is appropriate to amend that executive order to increase the number of members of the Commission to more fully draw upon the expertise available in Florida to assist the Commission in reaching its goals, and

WHEREAS, it is further appropriate to amend the previous executive order to add an optional report which, if appropriate, will contain suggested legislative action.

NOW, THEREFORE, I, LAWTON CHILES, as Governor of the State of Florida, by virtue of the authority vested in me by the Constitution and laws of the State of Florida, do hereby amend Executive Order 93-40 as follows:

Section 1.

The Commission shall be composed of thirty-eight members to be appointed by the Governor to serve at his pleasure.

Section 2.

The Commission shall provide a report to the Governor containing items (a) through (e) above by October 15, 1994, and, if deemed necessary by the Commission, provide an interim report containing suggested legislative action by January 1, 1994.

Section 3.

Except as amended hereby, Executive Order 93-40 is ratified and reaffirmed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and have caused the Great Seal of the State of Florida to be affixed at Tallahassee, the Capitol, this 7th day of April, 1993.

Lawton Chiles
Governor

ATTEST:
Jim Smith
Secretary of State



State of Florida

OFFICE OF THE GOVERNOR

EXECUTIVE ORDER NUMBER 94-159 (AMENDS 93-40 AND 93-111 Greenways Commission)

WHEREAS, by Executive Orders 93-40 and 93-111 the Governor established the Florida Greenways Commission to promote the creation of a linked network of greenways and greenspaces across Florida that will benefit the state's citizens, native wildlife and the environment, and

WHEREAS, it is appropriate to amend those executive orders to increase the number of members of the Commission and to add a representative of the Department of State, and

WHEREAS, it is further appropriate to amend the previous executive orders to add an interim status report which will be prepared at the request of the Governor's Office.

NOW, THEREFORE, I, LAWTON CHILES, as Governor of the State of Florida, by virtue of the authority vested in me by the Constitution and laws of the State of Florida, do hereby amend executive orders 93-40 and 93-111 as follows:

Section 1. The Commission shall be composed of forty (40) members to be appointed by the Governor to serve at his pleasure. The Commission shall include a representative from the Department of State, Division of Historical Resources.

Section 2.

The Commission shall provide a report to the Governor containing items (a) through (e) in Section 4 of Executive Order 93-40 by December 15, 1994, and, if requested by the Governor's Office, provide an interim status report summarizing Commission work to date by October 15, 1994.

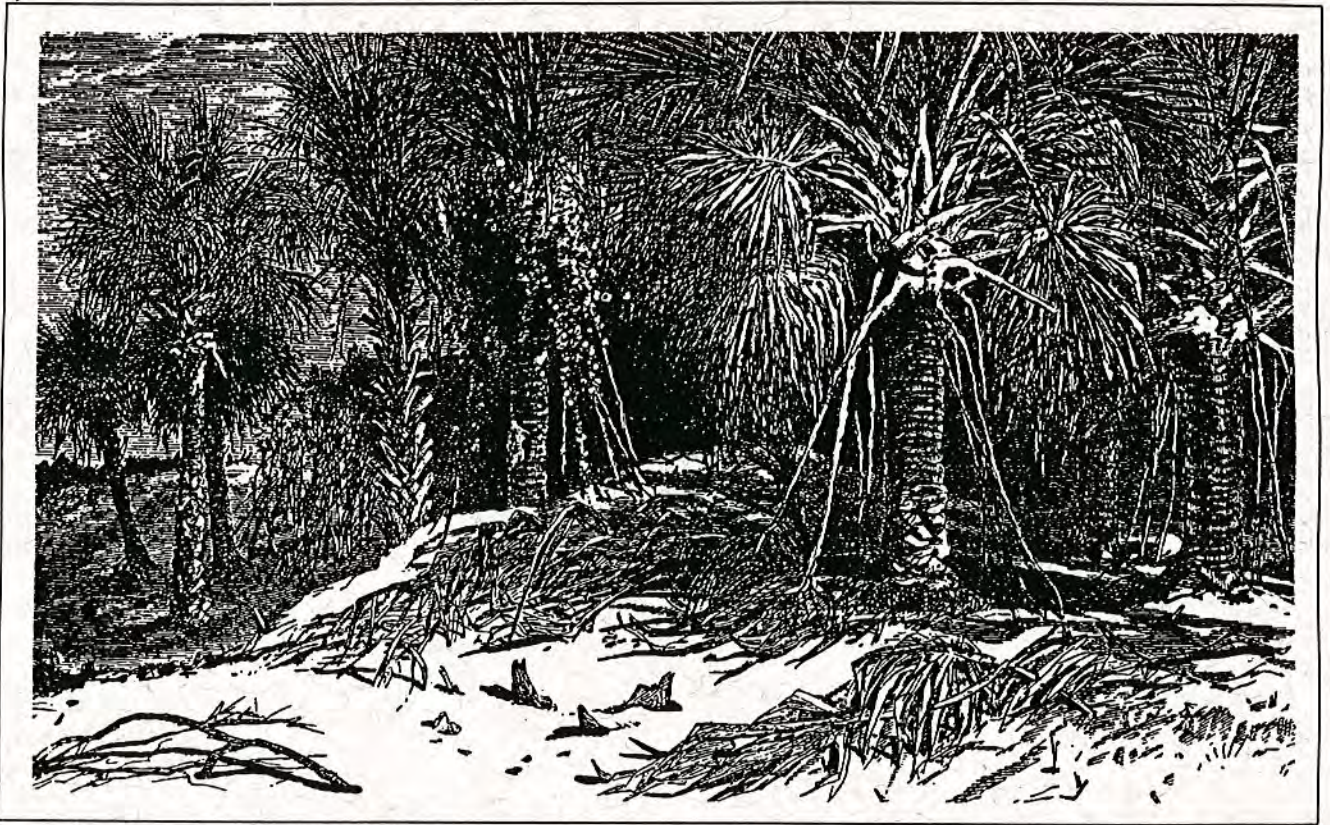
Section 3.

Except as amended hereby, Executive Orders 93-40 and 93-111 are ratified and reaffirmed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and have caused the Great Seal of the State of Florida to be affixed at Tallahassee, the Capitol, this 28th day of June, 1994.

Lawton Chiles
Governor

ATTEST:
Jim Smith
Secretary of State



Appendices





APPENDIX 1:

Summary of State and Regional Greenways Program Assessment

Governor Chiles asked the Commission to develop a state framework that supports community greenway initiatives and furthers interagency greenway activities, and to assess the current status of greenway activities within federal, state, regional and local governmental and private entities. In order to do this, a survey was developed and distributed to more than 390 state and regional agencies and organizations. The survey sought the following information:

- the mission of the agency/organization as it relates to greenways;
- whether the agency/organization conducts specific planning functions for greenways;
- whether the agency/organization offers land acquisition or management programs;
- whether partnerships are a significant part of the agency/organization's program; and
- whether the agency/organization conducts a public education/involvement program.

Table 14 summarizes the information provided by the agencies/organizations responding to the survey and their programs that relate to greenways.

The survey information led to two conclusions: First, although there are many greenways programs, there is currently no legislatively-sanctioned organization looking at how all the pieces fit together, and actively seeking opportunities to create greenways through coordination, leadership, service and advocacy. Second, in the past there has been little acknowledgement of the primary importance of private stewardship of greenspace lands in Florida. An institutional framework is needed to provide leadership, service and advocacy for greenway issues and to seek and support private participation in the greenways implementation effort.



Table 14: Statewide and Regional Greenways Program Initiatives—Survey Results

| AGENCY OR ORGANIZATION NAME | TYPE OF AGENCY | GREENWAYS PROGRAM TYPE | | | | | |
|---|-----------------------------|------------------------|------------|------------|---------|-------------|-----------|
| | | Planning | Management | Regulatory | Partner | Acquisition | Education |
| Department of Agriculture and Consumer Services, Division of Forestry | State | Yes | Yes | No | No | Yes | No |
| Department of Commerce | State | Yes | No | No | No | No | No |
| Department of Community Affairs, Bureau of Local Planning | State | No | No | Yes | No | No | No |
| Department of Community Affairs, Florida Coastal Management Program | State | No | Yes | No | Yes | Yes | No |
| Department of Community Affairs, Florida Communities Trust | State | Yes | Yes | No | Yes | Yes | No |
| Department of Education | State | No | No | No | No | No | Yes |
| Department of Environmental Protection, Division of State Lands | State | Yes | Yes | Yes | No | Yes | Yes |
| Department of Environmental Protection, Division of Recreation and Parks | State | Yes | Yes | No | Yes | Yes | Yes |
| Department of Environmental Protection, Division of Resource Permitting, Integrated Habitat Network Program | State | Yes | No | Yes | Yes | No | Yes |
| Department of Environmental Protection, Office of Ecosystem Management | State | Yes | No | No | Yes | No | Yes |
| Department of Environmental Protection, Office of Greenways and Trails | State | Yes | Yes | No | Yes | Yes | Yes |
| Department of State | State | Yes | Yes | Yes | Yes | Yes | Yes |
| Department of Transportation | State | Yes | No | No | Yes | Yes | Yes |
| Florida Game and Fresh Water Fish Commission | State | Yes | Yes | Yes | Yes | Yes | Yes |
| Florida Institute of Phosphate Research | Statewide Independ. Council | No | No | No | No | No | No |
| Florida Trail Association | State | Yes | Yes | No | Yes | Yes | Yes |
| FAU/FIU Joint Center for Environmental and Urban Problems | State | No | No | No | No | No | Yes |
| National Park Service | Federal | Yes | Yes | No | Yes | Yes | Yes |
| Northwest Florida Water Management District | Regional | Yes | Yes | Yes | No | Yes | Yes |
| South Florida Water Management District | Regional | Yes | Yes | Yes | Yes | Yes | Yes |
| Southwest Florida Water Management District | Regional | Yes | Yes | Yes | No | Yes | Yes |
| St. Johns River Water Management District | Regional | Yes | Yes | Yes | Yes | Yes | Yes |
| Southern Trailriders Association | State | Yes | No | No | Yes | No | Yes |
| Suwannee River Water Management District | Regional | Yes | Yes | No | No | Yes | Yes |
| The Nature Conservancy | Statewide Organization | Yes | Yes | No | No | Yes | No |
| Trust For Public Land | Statewide Organization | Yes | No | No | Yes | Yes | Yes |
| U.S. Army Corps of Engineers | Federal | Yes | Yes | Yes | Yes | No | No |
| U.S. Environmental Protection Agency | Federal | Yes | No | Yes | No | No | Yes |
| U.S. Fish and Wildlife Service | Federal | Yes | Yes | Yes | Yes | Yes | Yes |
| U.S. Forest Service | Federal | Yes | Yes | Yes | Yes | Yes | Yes |

Note: This table is not all-inclusive. It lists only those statewide/regional greenways program initiatives that responded to the Commission's survey.



State and Regional Greenways Programs:

Description Summary

Department of Agriculture and Consumer Services, Division of Forestry:

The mission of the Florida Department of Agriculture and Consumer Services, Division of Forestry is to protect and manage Florida's forest resources through a stewardship ethic to assure these resources will be available for future generations. One of the strategies employed by the Division of Forestry to support this mission is the management of 31 state forests (approximately 488,235 acres). Florida's state forests are managed to provide multiple benefits to the public, including outdoor resource-based recreation. An integral part of the Division of Forestry's recreation program is to provide hiking and horseback riding trails.

Department of Commerce: The Department of Commerce's mission is to be an effective force in improving the quality of life for all Floridians by building an economy characterized by higher personal income, better employment opportunities and improved business access to domestic and international markets. The greenways initiative is important to the Department of Commerce from both a tourism and a rural economic growth perspective.

Department of Community Affairs, Bureau of Local Planning: The Department's Bureau of Local Planning reviews local government comprehensive plans. Certain natural resources requirements, including plant and animal protection, can be met through buffers and greenways.

Department of Community Affairs, Florida Coastal Management Program:

The mission of the Florida Coastal Management Program is to build and maintain an effective partnership of public and private interests to develop, coordinate and implement policies that manage, preserve and sustain Florida's diverse coastal resources.

Department of Community Affairs, Florida Communities Trust:

The Florida Communities Trust is a non-regulatory agency that helps local governments implement the conservation, recreation and open space, and coastal management elements of local government comprehensive plans. The Trust assists local governments through a program of grants and loans for local land acquisition projects that further these elements of the comprehensive plan. Trust awards have been used by

local governments to develop local or regional greenways systems. In fact, whether a project creates or enhances a greenways system is an important factor in the Trust's grant/loan process.

Department of Education: The Office of Environmental Education (OEE), established in 1989 by the Environmental Education Act, offers environmental education products and services to Florida's public education system, from kindergarten through the college and university level. OEE and the Regional Environmental Education Service Projects (RSP) encourage students of all ages to participate in hands-on environmental education activities that may use local greenways and other natural areas.

Department of Environmental Protection, Division of State Lands:

The Division of State Lands is responsible for the acquisition, administration, and disposition of lands that are or will be vested in the Board of Trustees of the Internal Improvement Trust Fund. More than \$300 million is spent each year to purchase environmentally sensitive and outdoor recreation lands through the Preservation 2000, Conservation and Recreation Lands (CARL), and other state acquisition programs. The Division also is responsible for managing submerged lands and the state's aquatic preserve program (which includes some upland reserves of substantial size), as well as administering the management of leases to other state agencies and public and private entities for all Trustees' lands. All of these functions are critical to the creation and protection of greenways and components of greenways systems.

Department of Environmental Protection, Division of Recreation and Parks:

Many trails wind through Florida's state parks. Self-guided trails are maintained to provide recreational users an opportunity to learn about the state's natural and cultural/historic resources. Along with many miles of walking and hiking trails found within state parks, the Florida Park Service also administers a system of recreational, scenic and historic trails to encourage bicycling, canoeing, hiking, horseback riding, walking and jogging. Within this system are five of the state's significant trails: Withlacoochee Trail, Van Fleet Trail, Blackwater-Heritage Trail, Gainesville-to-Hawthorne Trail, and St. Marks Trail.

Department of Environmental Protection, Division of Resource Permitting, Integrated Habitat Network Program:

Through the state's mine reclamation program, the Integrated Habitat Network Program encourages the creation of greenways by restoration of areas mined for phosphate



and other materials. The consolidation of reclaimed native communities and unmined/protected riparian areas will form the nucleus of the Integrated Habitat Network.

Department of Environmental Protection, Office of Ecosystem Management:

This program is responsible for implementing the Department's mission with regard to ecosystem management, "an integrated approach to management of Florida's biological and physical environments conducted through the use of tools such as planning, land acquisition, environmental education, regulation, and pollution prevention—designed to maintain, protect and improve the state's natural, managed, and human communities."

Department Of Environmental Protection, Office of Greenways and Trails:

Initially created to plan, manage and protect the state's first greenway, the Cross Florida Greenways State Recreation and Conservation Area, the Office of Greenways and Trails has evolved into the state's primary program for planning, management, and protection of Florida's greenways and trails system. Through the Florida Recreational Trails Program, the Office of Greenways and Trails is responsible for developing and implementing a statewide system of trails. The Rails-to-Trails acquisition program gives the state and communities a source of acquisition funding for rail-trail and Florida National Scenic Trail acquisitions. Advice and guidance for the statewide vision are provided to staff of the Office of Greenways and Trails through the Florida Recreational Trails Council.

Department of State: The Department of State's mission statement and state policy relative to historic properties addresses greenways. The Department considers greenways connecting archaeological and historic sites an effective means for visitors to experience both natural and historic places.

Department of Transportation: The mission of the Florida Department of Transportation is to plan, develop, operate, and maintain a safe, cost effective and efficient statewide system of transportation facilities and services. The Department's mission does not directly cite greenways protection, but its environmental policy and compliance with federal and state environmental preservation and planning laws support the creation of greenways.

Florida Game and Fresh Water Fish Commission: The mission of the Florida Game and Fresh Water Fish Commission is to manage freshwater aquatic life, wild animal life and their habitats to perpetuate a diversity of species with densities and distributions that provide sustained ecological, recreational, scientific,

educational, aesthetic and economic benefits. To accomplish this mission, the commission works to maintain adequate habitat for the complete diversity of native species and ensure the protection of linkages between habitat blocks so that wildlife populations do not become adversely affected through isolation.

Florida Institute of Phosphate Research:

The Florida Institute of Phosphate Research (FIPR) is a state research agency whose mission is to develop knowledge for resolving phosphate-related issues affecting Florida's environment and its citizens' health and safety. One of FIPR's many research objectives is to develop technology for restoring natural habitats and ecological systems.

Florida Trail Association:

The Florida Trail Association is a statewide independent advocacy group. Its mission is to build a 1300-mile-long hiking trail running from the Big Cypress National Preserve to the Gulf Islands National Seashore.

FAU/FIU Joint Center for Environmental and Urban Problems:

The Florida Atlantic University/Florida International University (FAU/FIU) Joint Center For Environmental and Urban Problems' mission is to inform decision-makers and the public of options available for preserving natural systems, while accommodating future growth and ensuring a strong economy.

National Park Service:

One part of the National Park Service's mission is to assist in the planning, development and management of our nation's greenways. This is accomplished through the work of the NPS Rivers, Trails and Conservation Assistance Program.

Northwest Florida Water Management District:

The Northwest Florida Water Management District is responsible for making acquisitions under the Save Our Rivers and Preservation 2000 programs. The district specifically seeks to acquire and then manage in a natural state, lands needed for the protection and conservation of water resources. Practically speaking, the district tends to buy the bottomlands along the major rivers in northwest Florida.

South Florida Water Management District:

The South Florida Water Management District is a regional governing agency responsible for the protection and management of surface and ground water resources throughout a sixteen-county area stretching from Orlando to the Florida Keys. The district's four-fold mission includes: flood protection, environmental enhancement, wa-



ter supply and water quality protection. The mission is accomplished through the combined efforts of planning and research, operations and maintenance, community and government relations, land management, regulation, construction, and public communications. Inherent in the mission is the responsibility to assist public and government officials by protecting water resources and by identifying and recommending options for incorporating water resource considerations into land use decisions.

Southwest Florida Water Management

District: Central to the mission of the Southwest Florida Water Management District is maintaining a balance between the water needs of current and future users while protecting and maintaining the natural systems which provide the district with its existing and future water supply. The District has attempted to maintain this balance in a variety of ways, and has recently begun incorporating the greenways concept in its planning and land acquisition activities.

St. Johns River Water Management

District: The District's mission to protect and manage water resources is directly related to its land acquisition program. The District has acquired approximately 300,000 acres of land for the purpose of either environmental restoration, flood protection, or natural systems protection.

Southern Trailriders Association:

The Southern Trailriders Association is a statewide independent association that advocates for equestrian interests. The association's mission is to promote the development and use of public horse trails throughout the State of Florida.

Suwannee River Water Management

District: The District's land acquisition and management plan sets out its strategy to protect the 100-year floodplain of the Suwannee and its tributaries.

The Nature Conservancy:

The Nature Conservancy's mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

Trust for Public Land:

The Trust For Public Land (TPL) is a national nonprofit land conservation organization dedicated to preserving land for people to enjoy as parks, community gardens, recreation areas, and wilderness lands. A problem-solving organization, TPL helps communities, public agencies, and nonprofit organizations acquire and protect open space.

U.S. Army Corps of Engineers: The U.S. Army Corps of Engineers can be regarded as having a greenways program with respect to its permitting authority for dredging and filling of wetland resources.

U.S. Environmental Protection Agency:

The U.S. Environmental Protection Agency implements the Clean Water Act. EPA's regulatory programs indirectly relate to greenways through wetland regulatory programs, wetlands planning, water quality standards, and watershed protection.

U.S. Fish and Wildlife Service:

The U.S. Fish and Wildlife Service is charged with protecting species and their habitats.

U.S. Forest Service:

The U.S. Forest Service is responsible for protecting and maintaining the nation's national forest resources. In so doing, the Forest Service offers a variety of recreational opportunities including trails for hiking, biking, horseback riding, and in some cases motor vehicles.



APPENDIX 2:

Summary of Community Survey and Case Study Results

The Community Survey

To assess the current status of greenways activities around the state, the Commission sent surveys to more than 600 local governments and community groups, including regional planning councils and local land trusts. Respondents were asked to identify any plans or programs that support the creation of greenways or link greenways with other natural areas and open spaces to create a system of greenways within the larger community. The survey was also designed to identify those groups involved in making greenways happen, their most pressing needs, and whether the local comprehensive plan supported and encouraged greenway efforts.

The high level of community interest in greenways is indicated by the survey's response rate of approximately 25 percent. This response was much greater than the Commission anticipated; as of November 1994, 172 surveys had been returned. Of those responding, 43 provided detailed information about existing greenway projects, nine greenways were partially existing with additional phases planned, and nine were under construction. An additional 60 respondents indicated they had greenways in the planning stages. In addition to those 121 responses, 51 local government and private organizations returned surveys indicating they had no greenways, but indicated their future interest in greenways by providing a specific community contact.

The survey asked for lists of geographic features, functions and uses that applied to each greenways project. The survey also requested that respondents describe characteristics other than those listed.

The most commonly identified geographic feature was a rail/utility/road corridor. Both upland forest/grassland and wetlands were also common greenway features. Of the functions and uses listed in the survey, the most commonly identified was trail (e.g., pedestrian, bicycling, equestrian). Protection and restoration of native habitats and protection of open space were also frequently identified. In an attempt to further characterize each greenway, respondents were asked to identify who was formally designated to maintain the greenway. The most common response was the local government.

Another portion of the survey addressed the identification of programs that support the creation, protection, and management of greenways in the community. Seventy-nine of the survey respondents indicated that although their local government comprehensive plans may not include language specific to the establishment of greenways or greenways systems, they do contain general goals, objectives, and policies that support the protection of native habitat systems, the provision of recreation and open space, the conservation and preservation of natural areas, and/or recreational trails and trail systems, as well as provisions for land use and zoning regulations.

When asked what programs were needed to assist efforts to establish or maintain greenways, 36 respondents indicated the need for additional funding sources. Other needs identified included improved intergovernmental cooperation, better communication and incentives, the establishment of local greenways information and education programs, and better management and maintenance programs. The primary obstacles identified by the respondents included lack of funding, and public resistance or opposition. Other obstacles cited were development pressures and fear of crime.

In response to a request to identify key organizations or individuals involved in creating and/or proposing their community greenway, 48 respondents indicated that more than three partners were involved in the effort, eight respondents identified more than seven partners and 19 stated that they were the only party involved.

Finally, the survey provided an opportunity for the respondent to identify the funding sources used or anticipated for the greenways project. Many identified more than one funding source. Preservation 2000, including Florida Communities Trust, was identified by 56 respondents, local government general revenue by 28, Save Our Rivers by 24, the Conservation and Recreational Lands program by 18, and the Intermodal Surface Transportation Efficiency Act by 16. Other funding sources identified included the Land and Conservation Fund, the Florida Recreational Development Assistance Program, and various forms of tourism or public utility taxes and impact fees.

Responses to the community survey are depicted in Table 15.

Table 15: Local and Regional Greenways—Community Survey Results

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|---|---|-----------------------------|---------|--------|--|---|-------------------------------------|--|---|--------------------|--|--|--|
| 1 | Hogtown Creek Greenway | Alachua Conservation | Alachua | E/P | Upland Forest/Grassland Wetlands River Corridor Stream Bed | Protect/Restore Habitat Protect Water Quality Quantity Trail | Local Government | | \$ | no | Crime and \$ | FCT and General Revenue | Department Culture and Nature Op. Greenways Inc. Buffington Association And Alachua Conservation Trust |
| 2 | Gainesville Rail-Trail | Gainesville | Alachua | E/P | Upland Forest/Grassland Wetlands Shorelines River Corridor Rail Corridor | Protect/Restore Habitat, Protect Species Movement, Protect Water Quality/ Quantity, Protect Open Space, Trail | FL DEP | Friends of Morningside Alachua Co. | \$ | Yes | \$, Opposition, Non-understandingGR, | ISTEA, Infrastructure DEP, St. Johns River Trust Fund WMD ACT CARL | City of Gainesville Alachua County, FL |
| 3 | Thousand Islands | Cocoa Beach | Brevard | E | Upland Forest/Grassland Wetlands River Corridor Canal | Protect Open Space Protect/Restore Habitat | LG | None | \$ | Yes | None | Local Govt. GR Brevard Co. Waterways Bd. 1000 Islands Mgt. Plan Committee | LG, Brevard Co Citizen Committees Waterways Bd. 1000 Islands Mgt. Plan Committee |
| 4 | Palm Bay | Land Trust for Indian River | Brevard | P | River Corridor | Protect/Restore Habitat, Protect Species Movement, Protect Water Quality/ Quantity, Land Use Buffer, Trail | Florida Audubon City of Palm Bay | Turkey Creek Sanctuary Comm., County Env. Endangered Land | Conservation Easement on Waterway | Yes | Political | FRDAP Local Govt. Land Acquisition Gift of land | City of Palm Bay, DEP, Turkey Creek Sanctuary Comm. Florida Audubon |
| 5 | Melbourne Beach Backyards | Main Resources Council | Brevard | P | River Corridor | Protect Species Movement, Protect Water Quality/ Quantity, Protect/Restore Habitat Land use buffer Trail | FL Audubon Society of Palm Bay | Turkey Creek Sanctuary | Conservation Easements on | Yes | Political | FRDAP, Local gov't. Land Acq., Gift of Land | City of Palm Bay, DEP, Turkey Creek Sanctuary Committee Florida Audubon |
| 6 | Turkey Creek Sanctuary | Palm Bay | Brevard | E | Upland Forest/Grassland Wetlands Shorelines River Corridor | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Land Use Buffer | LG and Audubon Society | Conservation Easements | \$ | Yes | \$ | Local: GR Private, Donations, and FCT | Local Gov't., Audubon, FCT |
| 7 | Space Walk of Fame | Titusville | Brevard | C | Shorelines River Corridor Canal Intercostal Waterway | Protect Open Space Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail Land Use Buffer | Brevard County, Titusville | All interested area citizens | \$ | Yes | Development Patterns | LWCF, EDA, EPA, FCT, P-2000, FRDAP, DEP, Tax | City of Titusville and Brevard Co., Brevard County Tourist Development Council |
| 8 | Broward County Urban River Greenway Project | Broward County | Broward | P | River Corridor | Protect/Restore Habitat Protect Water Quality/ Quantity | No | Env. Coal. Broward Co. Public Land | | Yes | Urbanization Private Property Rights | Broward County Foundation DNRP fines | Too numerous to list |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|--------------------------------------|----------------|-----------|--------|---|--|----------------------------------|--------------------------------------|-----------------|--------------------|---|---|---|
| 9 | Town of Davie Open Space | Davie | Broward | E | Upland Forest/Grassland Wetlands Rail Corridor Utility corridor Easements | Protect/Restore Habitat Protect Open Space Trail | Broward Co. Parks and Rec. Dept. | Environmentally Sensitive Lands Bond | | Yes | Urbanization Private Property Rights | LWCF, CARL, Local Gov't Land | Broward Co. Parks and Rec. Town of Davie, 1000 Friends of Florida |
| 10 | West Lake Preserve and Park | Hollywood | Broward | E | Wetlands Shorelines Canal Estuary | Protect Species Movement Protect Open Space Protect Water Quality/Quantity, Protect/Restore Habitat, Scenic Road | City of Hollywood, Broward Co. | No | \$ | Yes | Private Property Rights | CARL, Local Gov't Land Acquisition | State of Florida, Broward Co., City of Hollywood Hollywood, Inc. |
| 11 | New River | Plantation | Broward | E | Canal | Protect Water Quality/Quantity, Buffer-Weiland Trail Canal | South Florida WMD | | \$ | Yes | City at 85-90% buildout | | |
| 12 | Sea Ranch Lakes Beach Area | Sea Ranch Lake | Broward | E | Wetlands Shorelines | Protect Open Space Protect/Restore Habitat | Sea Ranch Lakes Beach Club | No | N/A | Yes | N/A | Private | Sea Ranch Lakes Beach Club |
| 13 | Southgate Blvd. Utility Corridor | Tamarac | Broward | E | Rail Corridor Utility Corridor Road Corridor | Protect Open Space | LG | LDRs | None | Yes | No | GR, Impact fees | LG |
| 14 | North and South Fork of Middle River | Wilton Manors | Broward | E | Canal Intra-coastal Waterway | Canal | LG | No | N/A | No | \$ | FL Boating Imp. Prog., LG GR | LG |
| 15 | City of Punta Gorda | Punta Gorda | Charlotte | P | Shorelines Rail Corridor River Corridor | Protect Open Space Protect Water Quality/Quantity, Protect/Restore Habitat, Trail | LG | TDRs | \$ | Yes | Need for Easements | State Recreation Grant GR | LG And City Business Alliance & Revitalization Comm. |
| 16 | Cross Florida | Citrus Co. | Citrus | E | Canal Upland Forest/Grassland | Trail | DEP, Greenways | Land Acquisition | \$ | Yes | \$ | Fed Transfer Leg. and Rails to Trails | LG, DEP |
| 17 | Withlacoochee State Trail | Citrus Co. | Citrus | E | Upland Forest/Grassland | Trail | DEP, Parks and Recreation | Land Acquisition | \$ | Yes | \$ | Fed Transfer, Leg. & Rails-to-Trails | LG, DEP |
| 18 | Wallace Brooks Park | Inverness | Citrus | E | | Fishing Picnicking | LG | | \$ | Yes | | Land Acquisition Program, and Local Tourist tax | LG |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|---------------------------------------|---|---------|--------|--|---|----------------------------|---------------------------|-------------------------------------|--------------------|---|---|---|
| 19 | Whispering Pines Park | Inverness 2 | Citrus | E | Upland Forest/Grassland | Recreation Preservation | LG | | \$ | Yes | | Federal Grant | LG - Feeds |
| 20 | Rails-to-Trails near Keystone Heights | Clay County | Clay | P | Upland Forest/Grassland Wetlands Rail Corridor Utility Corridor Road Corridor | Protect Open Space Trail | DEP | No | | No | | P-2000 | DEP, Clay County Recreation Department |
| 21 | Jennings State Forest/Camp Blanding | Clay County 1 | Clay | 90% E | Upland Forest/Grassland Wetlands River Corridor | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Land Use Buffer | SJWMD, DEP | | | Yes | No | P-2000, CARL, Save Our Rivers | St. Johns Water Management District, DEP |
| 22 | Portion of Florida Trail | Clay County 2 | Clay | E | Upland Forest/Grassland Wetlands Shorelines | Trail association | Trail association | Florida Trail Association | Florida Trail | Yes | Yes | No Funding and Maintenance | Private |
| 23 | Gateway Beautification | Everglades City | Collier | P | Rail Corridor Utility Corridor Road Corridor | Trail Scenic Road | Not Yet | None | DOT funds | Yes | None | Private and Nonprofit | Local Gov't EDC, Chamber |
| 24 | Goodlette Road Greenway | Southwest Florida Land Preservation Trust | Collier | P | Rail Corridor | Land Use Buffer Trail Scenic Road | City and County Government | | Better Communication and Incentives | Seeking Amendment | Funding if matches from local Government required | ISTEA, Impact Fees | Pathways Advisory Committee to the MPO, Southwest Florida Land Preservation Trust |
| 25 | Gordon River Greenway | Southwest Florida Land Preservation Trust | Collier | P | Upland Forest/Grassland Wetlands Road Corridor Rail Corridor | Protect Open Space Trail Canoe/Kayak | | | Better Communication and Incentives | Seeking Amendment | Funding from local Government | FCT, P-2000 CARL, SOR, Southwest Florida Land Preservation Trust | Pathways Advisory Committee of MPO, Southwest Florida Land Preservation Trust |
| 26 | Village of Biscayne Park | Biscayne Park | Dade | E | Medians | Road Dividers | | | | | | State and Local GR | |
| 27 | CSX Rail Road | Dade County | Dade | P | Rail Corridor Utility Corridor Road Corridor | Trail | No | Yes | Long-term Maintenance | Yes | Negotiations | ISTEA, Hurricane Andrew Trust Fund, Rails-to-Trails | LG, Redlands Conservancy |
| 28 | CSX Right-of-Way | Land Trust of Dade County | Dade | P | Rail corridor Utility Corridor | Protect Open Space Land Use Buffer Trail | No | EEL Conservation Easement | | | | | Dade County Parks Department Land Trust Dade Co., Trust for Public Land |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|---|----------------------------------|-----------|--------|---|---|----------------------------|--|--|-----------------------|--|--|---|
| 29 | Snake Creek Canal Linear Park and Bike Path | North Miami Beach | Dade | E/C | Canal | Protect Open Space Trail | Local Government and SFWMD | | | Yes | | Federal Highway Admin. | Local Government and North Miami Beach Beautification Committee |
| 30 | Greenway Network for South Dade | Redland Conservancy (South Dade) | Dade | P | Wetlands Canal Rail Corridor | Protect Open Space Protect Water Quality/ Quantity, Land Use Buffer, Trail, Ecotourism | No | Redlands Citizens Assoc., Redlands Conservancy | FDOT invol., Rails-to-Trails Development | Not Yet | Paris Dept., FDOT | ISTEA, Foundation, NPS, Con. Hurr. Andrew Fund | SFWMD, FDOT, Rails-to-Trails Greenway Comm. |
| 31 | Howard Clark Sr. Comprehensive Linear Parkway | Town of Pembroke Park | Dade | E/P | Rail Corridor Utility Corridor Road corridor Vacated Right-of-Way | Trail | City Parks Dept. | Comprehensive Plan Policies and Land Acquisition | Greenway Program, Acquisition of Easements | Yes | ROW on Hallandale Beach Blvd., DOT Road Widening | Land and Water Conservation Fund, FCT P-2000, Local GR | Town Commission, Small Business Administration (Tree Purchase Program) |
| 32 | Timucuan Preserve | Jacksonville | Duval | E | Upland Forest/Grassland Wetlands Shorelines Intracoastal Waterway Canal | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail | DEP, National Park Service | No | \$, Management Program | Yes | No | Federal, P-2000, CARL, WMD, local | National Park Service, St. Johns River WMD, DEP, Sierra Club, Audubon, City Environmental Lands Selection |
| 33 | Coastal Greenway | Flagler County | Flagler | P | Upland forest/Grassland Wetlands Shorelines River Corridor Canal | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Land Use Buffer | LG and DEP | City Cen Sens Land Project, P-2000, Save Our Coast | | Yes | | Land and Water Conservation Fund, P-2000 FCT, Save Our Coast, LG | LG, Sierra Club, Audubon |
| 34 | St. Johns City Recreational Park | Hastings | Flagler | E | Recreation Fields | Recreation | Local Government | | | Yes | \$ | FRDAP & Local GR | Local Government & Chamber |
| 35 | Bell Central | Town of Bell | Gilchrist | P | Rail Corridor Utility corridor Road Corridor | Protect Open Space Land Use Buffer Trail | No | No | \$ | No | No | ISTEA, FCT | Local Government and Citizen Advisory Committee |
| 36 | Hemasco | Hemando County 1 | Hemando | E | Upland Forest/Grassland Wetlands Shorelines Canal | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space Scenic Road | None at this time | Hemando County's Environmentally Sensitive lands Program | FGFWFC, DOF land acquisition programs expanded | Yes, not specifically | Opposition if greenway lowers tax base | FCT, P-2000, Wildlife Mitigation Fund, SOR, Local, Non-Profit | Hemando county, SFWMD, FOT, Gulf Coast Conservancy, The Nature Conservancy |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|-----------------------------------|-----------------------|--------------|--------|---|--|-----------------------------------|---|---|-----------------------|---|---|--|
| 37 | Atpeka Coastal Greenway/Oak Sound | Hernando County 2 | Hernando | P/E | Upland Forest/Grassland Wetlands Shorelines Canal | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity Protect Open Space | SWFWMD Black Bear Corridor | Environmentally Sensitive Lands Program | FGFWFC, DOF, Intergovernmental program | Yes, not specifically | Opposition if greenway lowers county's tax base | FCT P-2000, CARL, Mitigation Fund, SOR, local, non-profit | Hernando County, SWFWMD, FGFWFC, DOF, FCT, Gulf Coast Conservancy, The Nature Conservancy |
| 38 | The Nature Conservancy Addition | Hernando County 3 | Hernando | E | Upland Forest/Grassland Wetlands Sinkhole Creek | Protect Listed Species Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space | None | Environmentally Sensitive Lands Program | FGFWFC, DOF, Intergovernmental Programs | Yes, not specifically | Opposition if greenway lowers county's tax base | FCT, P-2000, CARL, Wildlife Mitigation Fund, SOR, local, non-profit | Hernando county, SWFWMD, FGFWFC, DOT, FCT, Gulf Coast Conservancy, The Nature Conservancy |
| 39 | Cypress Lakes | Hernando County 4 | Hernando | E | Upland Forest/Grassland Wetlands River Corridor Rail Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Trail Canoe/Kayak | None at this time | Environmentally Sensitive Lands Program | FGFWFC, DOF, Intergovernmental programs | Yes, not Specifically | Opposition if greenway lowers county tax base | FCT, P-2000, CARL, Wildlife Mitigation Fund, SOR, Local, Nonprofit | Hernando County, SWFWMD, FGFWFC, DOF, FCT, Gulf Coast Conservancy, The Nature Conservancy |
| 40 | South Tampa | City of Tampa | Hillsborough | P | Rail Corridor Utility Corridor Road Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space | City of Tampa Parks Department | ELAPP Funds if the land is pristine | Funding for master plans and land acquisition | Yes | Lack of land acquisition funds | LWCF, local GR, Local gov't land acq. program | City Parks Department, Mayor's Beautification Committee, FDOT, Coastal Management Grant, FRDAP, LWCF |
| 41 | Hillsborough River | City of Tampa 1 | Hillsborough | P | River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space | City of Tampa Parks Department | ELAPP Funds if the land is pristine | Funding for master plans and land acquisition | Yes | Lack of land acquisition funds | Land and Water Conservation Fund, local GR | City Parks Department, Mayor's Beautification Committee, FDOT, Coastal Management Grant, FRDAP, LWCF |
| 42 | McKay Bay | City of Tampa 2 | Hillsborough | P | Wetlands | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space, Trail | City of Tampa Parks Department | ELAPP funds if the land is pristine | Funding for master plans and land | Yes | Lack of land acquisition funds | LWCF, local GR, Local gov't land acq. program | City Parks Department, Mayor's Beautification Committee, FDOT, Coastal Management Grant, FRDAP, LWCF |
| 43 | Suncoast Greenway | Hillsborough County 1 | Hillsborough | P | Upland Forest/Grassland River Corridor Wetlands | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space, Land Use Buffer | No | Sleeting Committee, Task Force | Conservation Easements | Yes | Anticipate opposition at first | FCT, Save Our Rivers, Land Acq. | Hillsborough Co. 1000 Friends of Florida, Conservation Fund, SWFWMD |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|--|--|--------------|--------|--|--|--------------------------------------|--|-----------------|--------------------|--------------------------------|---|---|
| 44 | Upper Tampa Bay Trail | Hillsborough County 2 | Hillsborough | P | Rail Corridor Canal Intracoastal Waterway Utility Corridor | Trail Protect Open Space | County | Hillsborough Trails, Inc., Tampa Bay Freewheelers Bicycle Advisory Committee | \$ | Yes | \$, Public resistance at first | Hillsborough Trails, ISTEA, GR | Hillsborough County, Hillsborough Trails, FDOT |
| 45 | Old Fort King Trail | Hillsborough County 3 | Hillsborough | P | Rail corridor | Recreation Protect Open Space | Hillsborough County | Hillsborough County, Hillsborough Trails, Inc. | Maintenance | | \$ | Florida Rails-to-Trails Program | Hillsborough County, Rails-to-Trails Program, Hillsborough Trails |
| 46 | Little Manatee River Project | Southwest Florida Water Management District 10 | Hillsborough | P/E | Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Land Use Buffer Canoe/Kayak | SWFWMD, Hillsborough County | Yes | | | Fragmented Ownership | P-2000, FCT, Local Government Land Acq. Program | SWFWMD, DEP, Hillsborough County |
| 47 | Medard Park and Reservoir | Southwest Florida Water Management District 1 | Hillsborough | E | Upland Forest/Grassland Wetlands Shoreline-Lake/Marsh Equestrian Trail | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Trails, Boating/Fishing | Hillsborough County | Yes | | | | Water Resources Development, Ad valorem | SWFWMD, Hillsborough County, American Cyanamide Company |
| 48 | Tampa Bypass Canal and Hamey Canal | Southwest Florida Water Management District 12 | Hillsborough | E | Canal | Protect Water Quality/Quantity Trail Canoe/Kayak Water Control Structure | SWFWMD | Yes | | | | Federal, Local Ad valorem | Army Corps of Engineers, SWFWMD |
| 49 | Brooker Creek Riverine System Corridor "A" | Southwest Florida Water Management District 5 | Hillsborough | P | Upland Forest/Grassland Wetlands | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space, Land Use Buffer | Undetermined | Yes | | | | Save Our Rivers | SWFWMD, City of Clearwater |
| 50 | Alafia River Corridor | Southwest Florida Water Management District 6 | Hillsborough | P/E | Upland Forest/Grassland Wetlands River Corridor Hardwood Swamps Upland Hammock | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Land Use Buffer Canoe/Kayak | SWFWMD | Yes | | | Fragmented Ownership | P-2000, Save Our Rivers, Local Gov't Land Acq. Program | SWFWMD, Hillsborough County |
| 51 | Lower Hillsborough Flood Detention Area | Southwest Florida Water Management District 8 | Hillsborough | E | Upland Forest/Grassland Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space, Trails | Hillsborough County Parts, SWFWMD | Yes | | | \$ for Management | FCT, Fed Army Corps of Engineers, WRDA Funds SOR, FRDAP | SWFWMD, Hillsborough County |
| 52 | Brooker Creek Riverine System Headwaters | Southwest Florida Water Management District 9 | Hillsborough | P/E | Upland Forest/Grassland Wetlands | Protect/Restore Habitat Protect Species Movement Protect Open Space Land Use Buffer Protect Water Quality/ Quantity | Hillsborough County, SWFWMD | Yes | | | | Save Our Rivers, Local ELAPP | SWFWMD, Hillsborough County |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|--|--|----------------------|--------|---|---|---------------------------------|---|---|--------------------|---|--|---|
| 64 | Gopher, Frog, and Alligator Rail Trail | DEP 2 | Leon | P | Upland Forest/Grassland Wetlands Shorelines River Corridor Rail Corridor | Protect/Restore Habitat Protect Water Quality/ Quantity, Protect Open Space, Environmental Education, Trail | Not yet | REDI to encourage Eco-tourism | Techniques for Multi- District Mgt. | No | Hunters and St. Joseph Paper Co. | USFS, State GR, FSU | DEP, DOT, USFS, Carrabelle Chamber of Commerce, Capital City Cyclists, Wakulla County Historical Society, Tallahassee/ Leon County Bicycle- Pedestrian Advisory Committee for Tallahassee-Leon Co., MPO |
| 65 | Elnor Klapp- Phipps Park/ Lake Overstreet | NWFWMD | Leon | P | Upland Forest/Grassland Wetlands Shorelines Ravines | Forest/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space, Trail | City of Tallahassee, DEP | Apalachee Land Conservancy, Red Hills, etc. | Incentives, Troubleshooting Programs | Yes | Problems with Opposition | FCT, P-2000, CARL, Save Our Rivers, GR | City of Tallahassee, Leon County, DEP FCT, ALC, Tall Timbers, NWFWMD |
| 66 | Cross Florida State Greenways Recreation & Conservation Area | Withlacoochee Area Residents, Inc. | Levy | P | Upland Forest/Grassland Wetlands Shorelines River Corridor Canal | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail | Office of Greenways, DEP | | Public Education on Value of Greenways | | Greenways being used for Private Profit | State General Revenue | Canal Authority, Withlacoochee Area Residents, Inc., Florida Defenders of the Environment |
| 67 | Yankeelown Wilderness | Yankeelown | Levy | E | Upland Forest/Grassland Wetlands Shorelines Canal Intracoastal Waterway | Protect/Restore Habitat | Local Government | No | | Yes | No | Donations | Local Government, Nature Conservancy |
| 68 | Upper Myakka River Watershed Project | Southwest Florida Water Management District 2 | Manatee | P/E | Upland Forest/Grassland Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Land Use Buffer | SWFWMD | Yes | | | | P-2000, SOR | SWFWMD |
| 69 | Myakka/Hatchee Creek | Southwest Florida Water Management District 3 | Manatee, Sarasota | P | Upland Forest/Grassland Wetlands River Corridor Protect River Headwaters Platted Land | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space | Undetermined | Yes | | | | P-2000, Save Our Rivers | SWFWMD, Sarasota County, DEP |
| 70 | Lake Manatee Lower Watershed | Southwest Florida Water Management District 4 | Manatee | EP | Upland Forest/Grassland Wetlands Shorelines River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Land Use Buffer Trail | SWFWMD, Manatee County, DOF | | | | | P-2000 | SWFWMD, Manatee County, Florida DEP |
| 71 | Williston Linear Park | Dunnellon | Manion | E | Rail Corridor Utility Corridor Road Corridor | Protect Open Space Trail Land Use Buffer | Local Government and Chamber | | | Yes | | | |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|---|------------------------------------|----------|--------|--|--|---|---|---|-----------------------|---|---|---|
| 72 | Cross Florida Greenway & Florida National Trail | Marion County Parks and Recreation | Marion | E/P | Upland Forest/Grassland Wetlands Shorelines River Corridor Canal | Protect/Restore Habitat Protect Species Movement Protect Water Quality/Quantity, Protect Open Space, Trail | DEP Office of Greenways and Trails | Park and Environmental Land Acq. Program | Land Management Funding and Acquisition | Yes, not Specifically | None | State GR, FCT, P-2000, CARL, SOR, Local Gov't | Office of Greenways and Trails, Marion County, Marion County Friends of Parks and Recreation, 1000 Friends of Florida |
| 73 | Cross Florida Greenway | Member of Scenic Road Committee | Marion | P | Upland Forest/Grassland Wetlands River Corridor Canal Rail Corridor | Protect Water Quality/Quantity, Protect/Restore Habitat, Trail, Canoe/Kayak, Scenic Road | Greenways Commission | None yet | Statewide personal transportation network | No | Major Road Construction and Extension of Turnpike | GR, FCT, P-2000, CARL | Florida Defenders of the Environment, Shady Historic and Scenic Trails Assoc. |
| 74 | Okeechobee Greenway | Marion County | Marion | P | Upland Forest/Grassland Shorelines | Protect/Restore Habitat Protect Species Movement Land Use Buffer Trail | Florida Trail Association | Florida Trail Association | Maint. of Public land | Yes | \$ | ISTEA, P-2000, Rails-to-Trails, Gov't Bonds, FCT | Martin County, Florida Trail Association, Trust for Public Land |
| 75 | Overseas Heritage Trail | Monroe County Planning Department | Monroe | P/E | Upland Forest/Grassland Pineland/Hammock Wetlands Shorelines Flagler's Overseas Railroad | Trail Scenic Road | Monroe County, DEP | Land Acquisition Programs, TDRs System | ISTEA, P-2000, FCT, CARL, ISTEA Scenic Byways | Yes | Bridges are Missing or Dilapidated and Too Narrow | LWCF, gas tax, ISTEA, State FCT, P-2000, CARL, Local Impact Fees | Monroe County Planning Department & Parks Board, Nat'l Center for Shipwreck Research, Rails-to-Trails |
| 76 | Glenwood Park Nature Trail | Cinco Bayou | Okaloosa | E | Stream | Protect/Restore Habitat Trail | Town | Audubon Society | None | Yes | No | Local GR | Town Council Audubon Society |
| 77 | The Harborwalk | Destin | Okaloosa | P | Shorelines | Pedestrial Access | No | City of Destin Harborwalk Task Force | | Yes | Development \$ | Considering Tax Increment | Harborwalk Task Force, Chamber of Commerce, Greening of Destin, NWFWMND |
| 78 | Turkey Creek Walk | Niceville | Okaloosa | P | Upland Forest/Grassland Wetlands Shorelines | Protect Open Space Protect Species Movement Protect Water Quality/Quantity, Protect/Restore Habitat, Trail | LG | | | Yes | No | FRDAP, LG, GR, Land Donations | LG, Local Businessmen |
| 79 | Econlockhatchee River Corridor | Orange County | Orange | E | Upland Forest/Grassland Wetlands Shorelines | Protect Open Space Protect Species Movement Protect Water Quality/Quantity, Protect/Restore Habitat, Land Use Buffer | Shared | Land Acquisition | \$ | Yes | Rapid Development, Property Rights | FCT, P-2000, CARL, SOR, Mitigation for Beltway | LG, Seminole County, Friends of Econlockhatchee, Sierra, Audubon, Business Community |
| 80 | West Orange Trail | Orange County Parks and Recreation | Orange | P | Upland Forest/Grassland Wetlands Rail corridor | Protect Restore Habitat Protect Species Movement Protect Open Space Trail, Transportation | Orange County Parks and Recreation Department | P-2000, Utility Tax Money, Enhancement Fund | Funding, Design, Acquisition, Dev. Workshops | Yes | Competing Dollars in Local Gov't | LWCF, Enhancement, MPO, Central Florida P-2000, Local Friends of Trails, Inc., GR, Public Utility Tax | County, City, FDOT, MPO, Central Florida P-2000, Local Friends of Trails, Inc., P-2000, DEP, FHA |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|---|---|------------|--------|--|---|--|---|-----------------------|--------------------|---|---|--|
| 81 | Cady Way to Fashion Square Greenway | Orlando | Orange | P | Upland Forests/Grasslands Rail Corridor | Protect/Restore Habitat Protect Species Movement Trail | | Office of Beautification and Design Volunteers | No | Yes | Citizen Opposition | ISTEA government Bond, Capital Improvement Orlando Utilities, Rails-to-Trails | Naval Training, Winter Park government Orlando, Orange Co., Orlando Utilities, Rails-to-Trails |
| 82 | Cady Way to Fashion Square | Winter Park | Orange | C | Rail Corridor Utility Corridor Upland Forests/Grassland Wetlands Road Corridor | | | | Yes | | | | |
| 83 | East Lake Tohopekaliga Lake Front | St. Cloud | Osceola | E | Shorelines | Protect Open Space Protect Water Quality/ Quantity, Trail | LG | Proposed TDRs (not specific) | Yes, not specifically | Yes | Need for Easements and Req. Coord. | Special Act- Land Transfer/GR | LG |
| 84 | Bike/Pedestrian Path | Highland Beach | Palm Beach | E | Rail Corridor Utility Corridor Road Corridor | Land Use Buffer Trail | Local Government | Florida Inland Navigation Dept. | Yes | Yes | Future Road Widening | Local GR | Palm Beach County |
| 85 | Lakeshore Park Heart Trail | Lake Park | Palm Beach | 80% E | shorelines Canal Intracoastal Waterway | Protect Open Space Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail | Lake Park Public Works | Town Tree Board Maintenance | Post-Construction | Yes | Budget | Local GR Tree Board, | Town of Lake Park, Tree City USA |
| 86 | Lake Trail | Palm Beach | Palm Beach | E | Shorelines Canal | Trail Land Use Buffer Protect Open Space Protect/Restore Habitat | LG | None | None | Yes | No | ROW from 1929 | LG and Garden Club |
| 87 | Old Indian town Road Grade | Palm Beach Co Environmental Resource Mgt. Dept. 1 | Palm Beach | P | Rail Corridor Utility Corridor Road Corridor | Land Use Buffer Trail | | Tax Abate ments for Conservation Easements | Yes | Yes | Funds, Opposition, Incompatibility of Uses, Fear Coord. | FDOT ISTEA | Palm Beach County Planning & Zoning, Marin County Comm., Loxahatchee Historical Society, Jupiter Rural Residents, Jupiter Horseman's Assoc. |
| 88 | The Ridge | Palm Beach County Environmental Resources Mgt. Department 3 | Palm Beach | P | Upland Forests/Grassland Shorelines | Protect/Restore Habitat Protect Open Space Land Use Buffer Trail | | Interim TDRs Program, Tax Abate ments on Conservation Easements | Yes | Yes | Funding, Opposition from Adjacent Landowners | FCT, Historic Pres., FDOT, ISTEA, RPC, Canal point Canal Point Renewal Renewal Fund | Marin County, Treasure Coast RPC, Canal point Renewal |
| 89 | Wildlife Corridors of the Loxahatchee River | Palm Beach County | Palm Beach | P | Upland Forests/Grassland Wetlands Water Storage Marsh Filter | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail | Dept. of Environmental Resources Mgt., SFWMMD | Environmentally Sensitive Land Bonds Program, Interim TDRs Prog., Tax Abate ments | Yes | Yes | Funds, Opposition, Incompatibility of uses | P-2000, Save Our Rivers, Local Gov't Land Acq. Program FL Native Plant Society, Sierra Club | Treasure Coast RPC, Audubon, Soc. of the Everglades- Palm Beach Chapter, Palm Beach Chapter, Native Plant Society, Sierra Club |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|----|---|--|------------|--------|--|--|---|--|-------------------------------------|--------------------|----------------------------------|--|---|
| 90 | Pathway System | Palm Beach Gardens | Palm Beach | P | Upland Forest/Grassland Wetlands | Trail Land Use Buffer Protect/Restore Habitat | LG and Homeowners Association | LDRs | Special Taxing District Legislation | Yes | Funds for Maintenance | LG GR, Developer Contribution | LG and MacArthur Foundation |
| 91 | Loxahatchee Greenway Project | The Conservation Fund (Palm Beach County) | Palm Beach | E | Upland Forest/Grassland Wetlands River Corridor Canal Rail Corridor | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat, Trail | No | Conservation Fund, 1000 Friends of Florida, MacArthur Foundation | State Land Acquisition | Yes | Adding Bike Lanes and Canal Rows | LWCF, FCT, P-2000, CARL, Save Our Rivers | Loxahatchee Greenways Task Force |
| 92 | Water Catchment Area | West Palm Beach | Palm Beach | E | Wetlands | Protect Open Space Protect Water Quality/ Quantity | West Palm Beach Utilities | No | \$, Acquiring Land | Yes | No | FCT, Utilities Reserve Fund | Palm Beach County Department of Environmental Resources Mgt., Nature Conservancy Conservation Fund, FCT |
| 93 | Arpeka Coastal Greenway | Gulf Coast Conservancy (Arpeka) | Pasco | E | Upland Forest/Grassland Wetlands Shorelines River Corridor | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect Restore/ Habitat, Trail | Gulf County Conservancy | Gulf County Conservancy | | Yes | Development | FCT, P-2000, CARL, Save Our Rivers, Land acq. | Nature Conservancy |
| 94 | Grand Boulevard Riverfront | New Port Richey | Pasco | E | River Corridor | Protect Open Space Scenic Road | City of New Port Richey | No | | Yes | None Anticipated | Local GR | City of New Port Richey |
| 95 | Cypress Creek | SWFWMD 13 | Pasco | E | Upland Forest/Grassland Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Protect Open Space, Trail | SWFWMD - West Coast Regional Water Supply Authority | Yes | | | | P-2000 WRDA, SOR, Local- St. Petersburg/West coast Regional Water Supply Authority | SWFWMD, Pasco Co., Pinellas County, City of St. Petersburg, St. Petersburg/West coast Regional Water Supply Authority |
| 96 | Withlacoochee River Park and Green Swamp West | SWFWMD 14 | Pasco | E | Upland Forest/Grassland Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Trails, Canoe/Kayak | SWFWMD, and Pasco County | Yes | | | | P-2000, Save Our Rivers, Local Ad valorem | SWFWMD, Pasco County |
| 97 | Upper Hillsborough | SWFWMD 7 | Pasco | E | Upland Forest/Grassland Wetlands | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Land Use Buffer Trails | SWFWMD, Florida Game Commission | Yes | | | | State - WRDA, Save Our Rivers | SWFWMD, FGF/WFC |
| 98 | Starkey Wilderness Park and Wellfield | Southwest Florida Water Management District 15 | Pasco | E | Upland Forest/Grassland Wetlands River Corridor Wellfield Space, Trails | Protect/Restore Habitat Protect Water Quality/ Quantity, Protect Species Movement, Protect Open Space, Trails | SWFWMD County | Yes | | | | Save Our Rivers | SWFWMD, Pasco County, West Coast Reg. Water Supply Authority |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|-----|--|---|----------|--------|---|---|--|--------------------------------------|-----------------|--------------------|--|---|--|
| 99 | Pinellas Trail | Belleair | Pinellas | E(90%) | Rail Corridor Utility Corridor Road Corridor | Trail | Pinellas County | No | No | No | No | Local GR | Pinellas county, Belleair Civic Association |
| 100 | Pinellas Trail | Dunedin | Pinellas | E/C | Rail Corridor | Trail | Local Government Parks Dept. | Res. Dev. Dedication Fees Req. | \$ | Yes | Public Opposition to \$ | Local GR | Local Government, Friends of the Trail National Rails-to-Trails |
| 101 | Gulfport Spur | Gulfport | Pinellas | P | Rail Corridor Utility corridor Road Corridor | Trail | Leisure Services Department | | | Yes | Public Opposition | ISTEA | |
| 102 | Fl DeSoto Park Bike Trail | Pinellas County Planning Department | Pinellas | E/C | Wetlands Shorelines Barrier Island | Protect Open Space Trail Park | Pinellas County Parks Dept. | Pinellas Trail, Inc. | | | | Local GR | Pinellas County Board of County Commissioners |
| 103 | Honeymoon Island Caladesi Island, Anclote Key | Pinellas County Planning Department 2 | Pinellas | E | Shorelines Park/Recreation/Preserve | Protect/Restore Habitat Protect Species Movement Protect Open Space | State of Florida | | | | | State | |
| 104 | East-West Rec. Trail/Bayshore Linear Park Bike Path | Pinellas County Planning Department 3 | Pinellas | E | | Trail | | | | | | | |
| 105 | Gateway Preservation Area | Pinellas County Planning Department 4 | Pinellas | E | Wetlands Shorelines | Protect/Restore Habitat Protect Water Quality/ Quantity, Protect Open Space | Pinellas County Government | Pinellas Trail, Inc. | | | | CARL, local government | Pinellas County Government, State of Florida |
| 106 | Pinellas Trail | Pinellas County 1 | Pinellas | E/P | Rail Corridor Utility Corridor Road Corridor | Trail | Parks Department | Pinellas Trail, Inc. | | Yes | Northern Pinellas Preservation Opposition | Pinellas Trail, Inc. Infrastructure Advisory | County Commission Pinellas Bicycle Advisory |
| 107 | McKay Creek Loop | Pinellas County 2 | Pinellas | P | Creek Corridor | Trail | Pinellas County Government | | | | N. Pinellas Preservation | ISTEA Local Gov't Land Acq. | County Commission |
| 108 | Brooker Creek Preserve Hiking Trail | Pinellas County 3 | Pinellas | P | Upland Forest/Grassland Wetlands | Trail | County Environmental Management | Florida Trail Association | | | N. Pinellas Preservation | Local Gov't Land Acquisition | County Commission, Florida Trail Association |
| 109 | Bayshore Linear Park and Bike Path | Safety Harbor | Pinellas | E | Road Corridor Shorelines | Protect Open Space Trail-Bicycle Scenic Road | Local Gov't. | No | | Yes | Funds & Easements GR | FRDAP Grant & GR | Florida Division of Recreation and Open Space, Local Government |
| 110 | Cliff Stevens Park | SWFWMD | Pinellas | E | Upland Forest/Grassland Wetlands River Corridor | Protect/Restore Habitat Protect Species Movement Protect Water Quality/ Quantity, Trail Canoe/Kayak | City of Clearwater Parks and Recreation | Yes | | | | State, Ad valorem | SWFWMD, City of Clearwater |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|-----|--|---------------------------------------|------------|--------|--|--|--|--|--|--------------------|--|---|---|
| 111 | Sawgrass Lake Park | SWFWMD | Pinellas | E | Upland Forest/Grassland Wetlands Bayhead Swamp | Protect/Restore Habitat Protect Water Quality/ Quantity, Trail Water Control Structure | Pinellas County and Pinellas county School Board | Yes | | | | Save Our Rivers, Local County Ad valorem | SWFWMD, Local County |
| 112 | Lots for Native Plants | Hillcrest Heights/Babson | Polk | P | Residential Lots | Protect/Restore Habitat | | | Government Mandated Greenways Program | No | General Public | | Local Citizens |
| 113 | Lakeshore Park | Lake Wales | Polk | E | Shorelines | Protect Water Quality/ Quantity, Protect Open Trail | Local Government | Green Horizon Land Trust | funds | Yes | Funds and Funds for Extension | Local GR | Local Government and Horizon Land Trust |
| 114 | Lakeland Urban Area Greenway | Lakeland | Polk | E/P | Wetlands Shorelines Rail Corridor Utility Corridor | Protect Open Space | Public Works, Parks and Rec. | Citizens advisory Committee | \$ grants | Yes | Funding | P-2000, GR Gov't Bond Land acq. | Lakeland Community Development Department, Citizens Advisory Committee |
| 115 | Blackwater Heritage State Trail (Millon-Whiting Field) | Blackwater Heritage Trail, Inc. | Santa Rosa | P | Rail Corridor | Trail Wildlife Movement Corridor Landscaping/Scenic Beauty | Blackwater Heritage Trail, Inc. | No | ISTEA, Northwest Florida Office of Greenways | No | Not enough Support form Office of Greenways Management | ISTEA | Blackwater Heritage Trail, Inc., Richard W. Collins, Jack Sarbom |
| 116 | Brohard Park | Venice 1 | Sarasota | E | Upland Forest/Grassland Wetland/Upland Mosaic Wetlands | Protect Open Space Protect/Restore Habitat | Local Government | DEP | Funds | Yes | Funds | All possibilities except Feds | West Coast Inland Navigation District, Chamber of Commerce, Venice Preservation League and Venice Heritage Land |
| 117 | Pedway | Venice 2 | Sarasota | P | Upland Forest/Grassland Wetland/Upland Mosaic Shorelines | Trail Protect Open Space | ? | DEP | Funds | Yes | Funds | All possibilities except Feds | West Coast Inland Navigation District, Chamber of Commerce, Venice Preservation League and Venice Heritage Land |
| 118 | Econlockhatchee River Protection Area | City of Oviedo | Seminole | P | Wetlands River Corridor | Protect Open Space Protect Species Movement Protect Water Quality/ Quantity, Protect/Restore Habitat | SWMD, Oviedo Seminole County | Conservation Easements, Acquisition Program, Fine System | Matching funds for purchase and preservation | Yes | Growth and Development | None | |
| 119 | CSX Right-of-Way | Live Oak | Suwannee | P | Upland Forest/Grassland Rail Corridor | Protect Open Space Protect/Restore Habitat Land Use Buffer Trail | LG | Stormwater | \$ | Yes | Land cost and \$ | P-2000 | |

| # | Greenway Name | Respondent | County | Status | Geographic Features | Greenway Uses | Maintenance | Existing Programs | Programs Needed | Comp. Plan Support | Obstacles | Funding | Partners |
|-----|--------------------------------------|------------------|---------|--------|--|---|-------------|-------------------|-----------------|--------------------|----------------------------------|--|---|
| 120 | Riverside Drive Beach Path Project | Holly Hill | Volusia | P | Intracoastal Waterway | Protect Open Space Trail Scenic Road | LG | Local Comp Plan | | Yes | Objections of adjacent residents | LWCF, FRDAP, LG GR, Volusia Co. Port Authority | |
| 121 | Indian River Lagoon National Estuary | New Smyrna Beach | Volusia | E/P | Wetlands Shorelines Canal River Corridor Estuary | Protect Open Space Protect Species Movement Protect Water Quality Quantity, Protect/Restore Habitat, Land Use Buffer | No | Local Comp Plan | \$ | Yes | | FCT, LG, Land Acquisition | LG, Volusia Co., Local Environmental Group, National Estuary Program, FCT |

KEY:

E=EXISTING P=PROPOSED C=CONSTRUCTION

LG=LOCAL GOVERNMENT

\$=FUNDING MONEY

ACRONYMS

- ALC—Apalachee Land Conservancy
- CARL—Conservation and Recreation Lands
- DEP—Department of Environmental Protection
- DNRP—Department of Natural Resource Protection
- DOF—Department of Forestry
- EDA—Economic Development Assistance Program
- EDC—Economic Development Council
- ELAPP—Environmental Lands Acquisition and Protection Program
- EPA—Environmental Protection Agency
- FCT—Florida Communities Trust
- FDOT—Florida Department of Transportation
- FGFWFC—Florida Game and Freshwater Fish Commission
- FHA—Federal Highway Administration
- FOT—Friends of Trails
- FRDAP—Florida Recreational Development Assistance Program
- FSU—Florida State University
- FTA—Florida Trail Association
- GR—General Revenue
- ISTEA—Intermodal Surface Transportation Enhancement Act
- LATF—Land Acquisition Trust Fund
- LDRs—Land Development Regulations
- LWCF—Land and Water Conservation Fund
- MPO—Metropolitan Planning Organization
- NPS—National Park Service
- NWFWM—Northwest Florida Water Management District
- P-2000—Preservation 2000 Land Acquisition Program
- REDI—Rural Economic Development Initiative
- RPC—Regional Planning Council
- SFWM—South Florida Water Management District
- SJWMD—St. Johns Water Management District
- SWFWM—Southwest Florida Water Management District
- TDRs—Transferable Development Rights
- USFS—U.S. Forest Service
- WMD—Water Management District
- WRDA—Water Resource Development Account

NOTE: Updates have been made to accurately report the most recent information for each project. This matrix represents all survey responses about specific projects and as a result may list projects more than once. In some cases entities listed as funding sources and partners may overlap.



Case Studies

Although the initial survey helped Commission members understand the enormous amount of community greenways activity underway in Florida, members felt they needed a more detailed understanding of key players, initiatives, unique aspects, and histories leading to successful local greenways. Therefore, using the survey results as a departure point, the Commission selected six greenways as case studies to develop more in-depth information regarding the critical aspects of creating successful local greenways. In selecting the six case studies the Commission's objective was to achieve a cross-section of greenway types and locations. The survey responses were divided into three categories: existing greenways, which included greenways under construction; proposed greenways; and greenways that were partially existing or under construction, but for which additional funding was being sought.

The initial objective was to select four case studies: a proposed greenway, a partially completed greenway, and

two existing greenways. The four greenways initially chosen were the Okeechobee Greenway located in Martin County, the Gainesville-Hawthorne Rail-Trail and Hogtown Creek Greenway located in Alachua County, West Lake Park and Preserve located in Broward County, and the Pinellas Trail located in Pinellas County. However, to broaden the initial case study selection and geographic scope, as well as document the importance of private sector involvement, two additional greenways were selected. The Blackwater-Heritage Trail located in Santa Rosa County was selected from the northwest Florida region, and the Hillsborough River Greenway located in Hillsborough County was selected due to its strong private sector involvement and focus on conservation and habitat protection.

Table 16 depicts the attributes of the community greenways selected for further study.

A brief synopsis of each case study is provided in text boxes throughout this report (please refer to the *Table of Contents* for each case study's page number).

Table 16
Matrix of Community Action Case Studies

| | RECREATION/OPEN SPACE | CONSERVATION/HABITAT |
|---------------------------------------|--|--|
| NUMEROUS PARTNERS AND FUNDING SOURCES | * Okeechobee Greenway (proposed) | * Okeechobee Greenway (proposed) |
| | * Hogtown Creek Greenway (partial) | * Hogtown Creek Greenway (partial) |
| | * Gainesville-Hawthorne Rail-Trail (partial) | * Gainesville-Hawthorne Rail-Trail (partial) |
| | * Hillsborough River Greenway (partial) | * Hillsborough River Greenway (partial) |
| | * Pinellas Trail (existing) | * West Lake Park & Preserve (existing) |
| FEW PARTNERS AND FUNDING SOURCES | * West Lake Park & Preserve (existing) | |
| | * Blackwater-Heritage Trail (partial) | |



APPENDIX 3:

Florida Greenways Marketing Plan

Overview

The strategies included in this marketing plan are intended to become a part of an annual performance or implementation plan to be developed by the Florida Greenways Coordinating Council (FGCC). The intention is that the Florida Department of Environmental Protection and the FGCC will be encouraged to prepare annual goals, objectives and strategies, including those that appear within this marketing plan. The marketing plan strategies require coordination with state agencies, local organizations and nonprofit groups. These strategies are likely to take several years to accomplish. FGCC members will determine time frames and appropriate entities for carrying forth each strategy as they prepare their annual implementation plan.

The *Florida Greenways Marketing Plan* is organized around interest groups described as target markets and is not meant to be exclusive in any way. The plan addresses the kinds of activities that could be targeted to six different markets including:

- Conservation, Preservation and Recreation Groups
- Business Community
- Greenway Partners
- Landowners
- Minorities
- Public Information
- Tourism Promotion.

The greenway marketing and promotional strategies are designed to achieve a variety of results. They are designed to educate residents and tourists about greenway benefits and features and motivate them to use greenway areas. They are intended to create support for new greenways and new greenway linkages. The strategies could strengthen existing partnerships and forge new relationships with both the private and public sectors that promote Florida greenways.

Many strategies serve a liaison function between the various groups including recreational users and those more interested in conservation and preservation. Other strate-

gies encourage coordination among public local, state and federal agencies. Some strategies are intended to generate media exposure and influence leisure activity decisions. Others are intended to generate funding and an interest in donating lands for greenway uses.

TARGET MARKET:

Conservation, Preservation and Recreation Groups

Market Profile:

State and local conservation, preservation and recreation groups, including leaders as well as membership, interested in land acquisition for preservation and appropriate recreational use of greenways. Examples of these groups include: hiking, walking and running clubs, bicycle clubs, horseback riding clubs, rail clubs, hunt clubs, boat clubs, fisherman and youth groups, conservation organizations, historical and archeological societies, preservation organizations.

Market Goal:

To acquire support for and involvement in the creation of greenways in local communities.

Message:

Greenway initiatives will not negatively impact conservation/preservation efforts. Collaboration with local conservation, preservation, recreation groups, government, and the business community is key to developing funding and support for a successful greenways system.

Strategies:

- Survey state and local greenway organizers to ascertain which groups are current partners in their greenways effort. Compile list for use with new greenway organizers.
- Develop press releases, graphics and photos for existing publications highlighting greenway characteristics and events (e.g. mini grant program, recognition program, the greenways celebration).



- Complete slide/video show and conduct speaker training.
- Offer speakers, slide/video presentations and other materials for groups to include on the agendas of their state, regional and local meetings.
- Encourage groups to plan and implement locally sponsored field trips to promote greenways education and stewardship.
- Create technical assistance materials to teach groups how to develop local community service organizations that will act as "Friends of the Greenways".
- Customize articles for specific user groups and specialized media outlets (examples: hunting and fishing magazines, Affiliated Horse Organizations of Florida (AHOOF) and Florida Trail Association newspapers).
- Develop a grassroots, membership-supported organization that will focus activities on statewide greenways development. This group would support a newsletter, make and distribute local progress reports, continue greenways promotion and network among other interest groups.
- Encourage participation of groups in events celebrating Florida Greenways Month.
- Encourage greenways sponsorship from statewide and local service organizations including the Girl and Boy Scouts of America.

Evaluation:

- Increased involvement of conservation groups/partners in local greenways efforts.
- Number of locally sponsored greenway events.
- Development of statewide nonprofit grassroots organization.
- Coverage in organizational newsletters and publications.
- Number of speaking engagements conducted through 1995.

TARGET MARKET:

Business Community

Market Profile:

Utility companies, agricultural interests, other large corporate landowners and businesses that have the potential to locate greenways on their property or support a local greenways effort.

Market Goal:

Acquire support from the business community for the creation of greenways in their community and on their properties.

Message:

Greenways benefit businesses and their employees by creating better communities and a higher quality of life. Involvement in the creation of greenways offers a way that corporate and business owners can improve public relations by demonstrating a commitment to the environment.

Strategies:

- Develop a general Florida Greenways information "kit" to encourage businesses to become involved in the development of greenways on private properties.
- Develop a program of recognition for businesses that have contributed to the development of greenways.
- Prepare a sponsorship proposal to attract business sponsor(s) to fund greenway celebrations and related activities.
- Feature corporations involved in local greenways in press materials highlighting the 150 greenways celebration.
- Distribute greenways packet discussing tax benefits, obligations, liabilities and other aspects of land or easement donations to targeted corporations. Donations can be land, cash or in-kind materials or services.
- Develop models for local adopt-a-greenway programs that gain private investment and participation.
- Contact business and economic development organizations, state agencies, and county appraisers offices to identify large corporate landowners who might be targeted to donate land or services for greenways.



Evaluation:

- Number of greenway recognition applications received from businesses and private landowners.
- Corporate and other sponsorship of greenways.
- Land easements and other donations statewide.

TARGET MARKET:

Greenway Partners

Market Profile:

Organizations currently involved in greenways planning, development and management.

Market Goal:

Strengthen and link existing greenways across Florida. To utilize existing greenways as models for others.

Message:

Current greenway projects can serve as models for new greenways development and provide links in a statewide greenways system. Existing greenway partners can provide valuable information to each other, as well as to infant organizations.

Strategies:

- Develop slide/video presentations and handouts that feature model greenways.
- Distribute information on recognition program and small grants awards to existing partners.
- Recognize 150 greenways during the sesquicentennial awards ceremony.
- Create a formal network including a mailing list, electronic billboard or other system of sharing information from current partners.
- Support development of a greenways newsletter and, in cooperation with the FGCC and lead state agency, organize and hold an annual meeting to provide a regular forum for networking and exchanging information.

Evaluation:

- Number of existing greenway partners identified.
- Number of applications for recognition and grants program.
- Interest in formal network of partners throughout Florida.

TARGET MARKET:

Landowners

Market Profile:

Individual landowners whose property may be included in a greenway and landowners adjacent to proposed greenways.

Market Goal:

Educate landowners about the benefits of greenways to reduce opposition and foster support of greenway programs.

Message:

Many of the concerns that have been voiced before greenways were developed have not been realized after the projects were completed. For example, in many cases, the value of property adjacent to greenways has gone up.

Strategies:

- Create a network of landowners that have had positive experiences with greenways that will meet with landowners in communities developing new greenways. Record landowner testimonials.
- Develop information that focuses on sensitive and controversial projects and how barriers were overcome.
- Include in the *Florida Greenways Community Resource Guide* tips on how to involve landowners, listen and be responsive to their concerns, present solutions for recurring issues, and handling the media when differences occur.

Evaluation:

- Landowners support for greenway projects statewide.



TARGET MARKET:

Minorities

Market Profile:

Individuals such as African Americans, Hispanics, the disabled, the elderly are often under-represented in groups focusing on environmental issues.

Market Goal:

Encourage under-represented groups to become more active in greenways and encourage greenways planning for low income urban and rural areas.

Message:

Greenways are important to the quality of life and the provision of alternative transportation systems in urban and rural communities. Successful urban greenways have connected residents of urban areas with employment, necessary services and recreational amenities. Greenways can be utilized as alternative transportation models to get to work or play via bicycling or walking.

Marketing Strategies:

- Promote different kinds of greenways, including community gardens, safety boulevards and functional linkages for transportation.
- Educate communities about using urban redevelopment funds to identify grayways and make them green.
- Encourage cultural, ethnic and age diversity on local greenway planning groups.
- Involve neighborhood and civic groups, churches and school, elder organizations and other key groups in greenways planning with a focus on neighborhood beautification and development of recreational resources and also in exploring and using greenways.
- Develop information sources on successful greenways in urban and rural communities.

Evaluation:

- Increased minority involvement in greenways planning.
- Addition of urban greenways serving diverse areas.

TARGET MARKET:

Public Information

Market Profile:

Florida has approximately 60 daily newspapers, 300 weeklies, 50 television stations, 250 radio stations and dozens of trade and general interest magazines.

Market Goal:

Acquire coverage and support for local, regional and statewide greenway initiatives.

Message:

Small dailies, weeklies, tv and radio: Greenways are good for communities because they bring people together, protect unique places and greenspaces, and provide recreation close to home.

Major dailies: Greenways are good for the state because the concept brings together conservation and recreation interests to create an overall framework for protection and conserving our environmental resources.

Magazines: Targeted messages depending on the publication. Focus can be on recreation opportunities, ecosystem protection, tourism opportunities, etc.

Strategies:

- Develop a list of specialty publications, magazines and newsletters, that may have an interest in greenways.
- Develop a popular guide to Florida greenways that would be widely available at a minimal cost.
- Develop and distribute camera-ready PSA's and press kits to specialty publications to create interest in workshops, greenways speaker's bureau, and general support of greenways.
- Produce feature articles for key publications such as the water management district's *Water* magazine.
- Utilize the Florida Department of State and the Governor's office to announce the 150 greenways recognition program, small grants program and overall concept of a statewide system of greenways via a press conference from the St. Marks trail or other new or high profile greenway.
- Plan visits to editorial boards by staff and members of the Commission to discuss the Commission's report and present camera-ready maps for publication.
- Develop a statewide recognition program to highlight Florida's 150th birthday and 150 outstanding



greenways and after 1995 to continue providing public information on successful greenway projects.

Evaluation:

- Press coverage in inches and minutes.

TARGET MARKET:
Tourism Promotion

Market Profile:

The 41 million out-of-state visitors that are attracted to Florida annually, as well as intrastate tourists that make short trips within their own state.

Market Goal:

Gain endorsement for creation and existence of greenways by capitalizing on eco-tourism trends.

Message:

Preserve and protect America's playground. A family vacation opportunity that is both enjoyable and educational.

Strategies:

- Develop a logo and slogan to improve the recognition of greenways information on signage and publications.
- Develop tools, including a map/brochure for promoting existing greenways in the state.
- Assist tourism development councils and convention and visitor bureaus in developing promotional/informational materials on greenways in their areas.
- Distribute greenways map/brochure to Florida welcome stations and chambers of commerce.
- Incorporate greenways in local travel writer familiarization (FAM) trips.
- Develop consistent signage on major highways to locate greenways and indicate their particular use.
- Contact eco-tour and other tour operators about designing packages including greenway side trips.
- Explore the possibility of an American Automobile Association guide to Florida greenways for their membership. Negotiate for possible inclusion in trip planners and Florida publications.
- Promote greenways as an alternative way of seeing Florida in conjunction with more traditional Florida recreational activities.

- Incorporate greenways information in statewide activity and resource guides including the Florida Vacation Guide, the State Parks Directory, the Historical Marker Guide and wildlife magazines.

Evaluation:

- Coverage in travel publications.
- Completion and distribution of map/brochure.



APPENDIX 4:

Conservation Lands and Trails in the State of Florida

The following table of conservation lands and trails (table 17) was derived from the digital GIS database developed by the University of Florida to support the work of the Florida Greenways Commission. It represents the University's best effort to compile information about conservation lands and trails in the State of Florida. Contributions to the database were made by the St. Johns River Water Management District, South Florida Water Management District, Southwest Florida Water Management District, Suwannee River Water Management District, Northwest Florida Water Management District, Florida Department of Environmental Protection, Florida Natural Areas Inventory, Florida Game and Freshwater Fish Commission, Florida Department of Transportation, Florida Division of Forestry, U.S. Fish and Wildlife Service, U.S. Forest Service, several local government agencies and 1000 Friends of Florida.

The database is continually being updated as new lands are purchased, agencies sign cooperative management agreements and errors and omissions are corrected. Therefore, the following table will be slightly out-of-date and will contain minor inaccuracies. Comments, corrections and additions are welcome and should be directed to:

Greenways Project Manager
431 ARCH, University of Florida
Gainesville, Florida 32611
Voice: (904) 392-2056
Fax: (904) 392-3308
E-Mail: flagw@geoplan.ufl.edu.

Please note:

- 1) The list of conservation lands was developed from digital spatial data. The acreage totals for all items on the list include areas in marine waters, wetlands and land. Some areas are contained within the boundaries of both aquatic preserves and other categories on the list. Therefore the acreage figures include situations of double counting and summing them would result in an overly large total.
- 2) To facilitate database development, each database entry was assigned an address in one water management district, even though some actually straddle water management district boundaries. For example Osceola National Forest is predominantly within the boundaries of the St. Johns River Water Management District. For the purpose of this listing, the total acreage of each entry is found in one water management district only. Through future improvements to the database, this anomaly will be corrected to allow for listing of the portion of each area found within each water management district boundary.



Table 17
Data on Conservation Lands and Trails by Water Management District

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
CONSERVATION LANDS

| EXISTING FEDERAL CONSERVATION LANDS | ACRES |
|--|--------------|
| Military Bases | |
| Eglin Air Force Base | 474,737 |
| Pensacola Naval Air Station | 5,346 |
| Tyndall Air Force Base | 28,302 |
| National Forests | |
| Apalachicola National Forest | 652,578 |
| National Parks, Preserves, Seashores, and Monuments | |
| Gulf Island National Seashore | 12,141 |
| National Wildlife Refuges | |
| St. Marks National Wildlife Refuge | 65,633 |
| St. Vincent Island National Wildlife Refuge | 12,277 |
| EXISTING STATE CONSERVATION LANDS | |
| Aquatic Preserves | |
| Alligator Harbor | 15,615 |
| Apalachicola Bay | 76,601 |
| Big Bend | 38,356 |
| Fort Pickens | 31,131 |
| Lake Jackson | 4,701 |
| Private Submerged | 30 |
| Rocky Bayou | 370 |
| St. Andrew Bay | 25,452 |
| St. Joseph Bay | 65,784 |
| Yellow River Marsh | 7,699 |
| State Forests | |
| Blackwater River State Forest | 190,741 |
| Lake Talquin State Forest | 21,033 |
| Pine Log State Forest | 6,753 |
| Point Washington CARL/State Forest | 546 |
| Point Washington State Forest | 22,741 |
| Tates Hell State Forest | 29,726 |
| Topsail Hill | 1,759 |
| State Park, Preserves, Reserves, Gardens, Historic Sites And State Recreation Areas | |
| Florida Caverns State Park | 1,226 |
| St. George Island State Park | 1,841 |
| St. Joseph Peninsula State Park | 2,648 |
| Torrey State Park | 2,572 |
| Wakulla Springs State Park | 2,857 |
| Apalachicola National Estuarine Research Reserve | 50,568 |
| Cape St. George State Reserve | 2,328 |
| Perdido Key State Preserve | 301 |
| Maclay State Gardens | 331 |
| Big Lagoon State Recreation Area | 739 |
| Falling Waters State Recreation Area | 155 |
| Fred Gannon Rocky Bayou State Recreation Area | 694 |



| | |
|--|---------|
| Grayton Beach State Recreation Area | 1,290 |
| Henderson Beach State Recreation Area | 1,432 |
| Ponce De Leon Springs State Recreation Area | 423 |
| St. Andrews State Recreation Area | 1,067 |
| EXISTING WATER MANAGEMENT DISTRICT CONSERVATION LANDS | |
| Apalachicola River WMD Area | 36,269 |
| Choctawhatchee River WMD Area | 53,451 |
| Econfina Creek Priority Project | 1,784 |
| Econfina Creek WMD Area | 7,024 |
| Escambia River Water Management Area | 32,121 |
| Garcon Point Water Management Area | 1,974 |
| Upper Chipola WMD Area | 7,632 |
| Yellow River WMD Area | 8,471 |
| EXISTING LOCAL CONSERVATION LANDS | |
| Phipps Park | 721 |
| Phipps-Overstreet Greenway | 856 |
| EXISTING PRIVATE CONSERVATION LANDS | |
| Apalachicola Bluffs And Ravines | 6,723 |
| Choctawhatchee River TNC Preserve | 3,264 |
| Phipps Preserve | 83 |
| Tall Timbers | 3,660 |
| EXISTING OTHER LANDS | |
| Lake Seminole USA-Coe | 17,092 |
| PROPOSED STATE CONSERVATION LANDS | |
| Apalachicola River Project Macrosite (CARL) | 4,047 |
| Blackwater River Project Area (CARL) | |
| Blue Springs (CARL) | 287 |
| Escribano Point Project Area (CARL) | 4,584 |
| Gainer Springs Project Area (CARL) | 1,967 |
| Kini Springs (CARL) | 29 |
| Letchworth Mounds Project Area (CARL) | 449 |
| Merritts Mill Pond Project Area (CARL) | 23 |
| Natural Bridge Springs (CARL) | 933 |
| Point Washington Project Macrosite (CARL) | 10,387 |
| River Sink Spring (CARL) | 92 |
| Sand Mountain Project Area (CARL) | 32,234 |
| St. Joseph Bay Buffer Project Area (CARL) | 7,293 |
| St. Michaels Landing Project Area (CARL) | 291 |
| Tates Hell Carrabelle Tract Project Area (CARL) | 109,294 |
| Waddell Mill Pond Project Area (CARL) | 2,925 |
| Yellow River Ravines Project Area (CARL) | 12,186 |
| PROPOSED WATER MANAGEMENT DISTRICT CONSERVATION LANDS | |
| Apalachicola River Priority Project | 35,724 |
| Blackwater River Priority Project | 18,626 |
| Econfina Creek Priority Project | 2,433 |
| Garcon Point Priority Project | 308 |
| Shoal River Priority Project | 8,195 |
| Tates Hell Project Area | 67,160 |
| Tates Hell Swamp Priority Project | 7,573 |
| Yellow River Priority Project | 9,527 |



NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

TRAILS

| EXISTING HIKING TRAILS | MILES |
|--|-------|
| Apalachicola East FNST Section 23 | 25.35 |
| Apalachicola West FNST Section 24 | 28.71 |
| Buckeye Trail (FNST Section 21 Alternate Route) | 1.36 |
| Headquarters Pond Trail | 0.95 |
| Jackson Red Ground FNST Section 29 | 19.35 |
| Leon Sinks Geological Area Trail | 5.58 |
| Levee Trail | 0.55 |
| Mounds Loop Interpretive Trail | 0.99 |
| Pine Log FNST Section 26 | 27.32 |
| Plum Orchard Pond Trail | 1.18 |
| Trail of Lakes Trail | 3.66 |
| Wright Lake Interpretive Trail | 1.50 |
| EXISTING MULTIPLE USE TRAILS | |
| Blackwater Heritage Trail (Milton-Whiting Rail-Trail) | 9.16 |
| Crestview To Alabama Rail-Trail | 25.35 |
| Glenwood Park Nature Trail | 0.83 |
| Otter Lake Trail | 7.68 |
| Pensacola-St. Augustine Road Trail | 2.41 |
| Phipps-Overstreet Greenway | 11.68 |
| St. Marks FNST Section 22 | 41.13 |
| Stoney Bayou Trail | 6.36 |
| Tallahassee-St. Marks Historic Rail Road State Trail | 14.27 |
| Tallahassee-St. Marks Historic Rail Road State Trail | |
| Extension To Stadium Drive Bike Path | 5.17 |
| Munson Hills Off-Road Bike Trail | 4.28 |
| Stadium Drive Bike Path | 0.75 |
| EXISTING INTERPRETIVE TRAILS | |
| Camel Lake Loop Trail | 0.27 |
| Colonel Robins Nature Trail/Withlacoochee State Forest | 0.03 |
| Discovery Loop Trail | 0.40 |
| EXISTING CANOE/KAYAK TRAILS | |
| Aucilla River State Canoe Trail | 1.22 |
| Basin Creek Canoe Trail | 2.57 |
| Big Bend Historic Saltwater Paddling Trail | 28.38 |
| Blackwater River Canoe Trail | 30.44 |
| Boiling Creek Canoe Trail | 2.64 |
| Bradford Brook Canoe Trail | 2.35 |
| Bradford Chain of Lakes Canoe Trail | 2.78 |
| Chipola River Canoe Trail | 50.10 |
| Coldwater Creek Canoe Trail | 16.88 |
| Cypress Springs Canoe Trail | 4.04 |
| East River Canoe Trail | 8.58 |
| Econfina Creek State Canoe Trail | 20.00 |
| Fisher Creek Canoe Trail | 3.13 |
| Holmes Creek Canoe Trail | 14.08 |
| Lost Creek Canoe Trail | 5.80 |
| Ochlockonee (Lower) River State Canoe Trail | 55.86 |



| | |
|---|-------|
| Ochlockonee (Upper) River State Canoe Trail | 24.34 |
| Perdido River Canoe Trail | 21.20 |
| Rocky Creek Canoe Trail | 6.20 |
| Shoal River State Canoe Trail | 18.44 |
| Sopchoppy River Canoe Trail | 16.99 |
| St. Marks River Canoe Trail | 9.48 |
| Sweetwater-Juniper Creeks Canoe Trail | 11.07 |
| Titi River Canoe Trail | 4.12 |
| Turkey Creek Canoe Trail | 3.82 |
| Wacissa River State Canoe Trail | 8.23 |
| Wakulla River State Canoe Trail | 2.70 |
| Yellow River Canoe Trail | 49.07 |

EXISTING EQUESTRIAN TRAILS

| | |
|---|-------|
| Coldwater Horse Trails | 34.28 |
| Florida Caverns State Park Horse Trails | 4.87 |
| Vinzant Horse Trail | 27.25 |

ALL PROPOSED TRAILS

| | |
|---|-------|
| Eglin Air Force Base Trail (FNST Section 27 Alternate Northeastern Route) | 39.54 |
| Eglin Air Force Base Trail (FNST Section 28 Alternate Northwestern Route) | 50.53 |
| Fisher Creek Horse Trail | 7.12 |
| Fort Pickens St. Park Trail (FNST Section 30 Alternate Route) | 7.96 |
| Goose Pond Greenway | 3.62 |
| Gopher, Frog & Alligator Rail-Trail | 47.45 |
| Gopher, Frog & Alligator/Stadium Road Bike Path Extension | 2.66 |
| Gulf Islands National Seashore Trail (FNST Section 30 Alternate Route) | 11.04 |
| Marianna-Blountstown Rail-Trail | 27.90 |
| Pensacola Beach Trail (FNST Section 30 Alternate Route) | 5.13 |
| Spring Creek Trail (FNST Section 22 Alternate Route) | 3.16 |
| Tallahassee-St. Marks Historic Railroad State Trail Extension to Tom Brown Park | 8.47 |
| The Harborwalk | 0.82 |
| Turkey Creek Walk | 0.66 |



SUWANNEE RIVER WATER MANAGEMENT DISTRICT
CONSERVATION LANDS

| EXISTING FEDERAL CONSERVATION LANDS | ACRES |
|--|--------------|
| National Wildlife Refuges | |
| Cedar Keys NWR | 692 |
| Lower Suwannee River National Wildlife Refuge | 46,924 |
| EXISTING STATE CONSERVATION LANDS | |
| Aquatic Preserves | |
| Big Bend | 234,576 |
| State Forests | |
| Big Shoals State Forest | 3,378 |
| State Park, Preserves, Reserves, Gardens, Historic Sites And State Recreation Areas | |
| Ichetucknee Springs State Park | 2,221 |
| Manatee Springs State Park | 2,115 |
| Oleno State Park | 3,731 |
| River Rise State Park | 1,682 |
| Stephen Foster State Folk Culture Center | 244 |
| Suwannee River State Park | 1,883 |
| Cedar Key Scrub State Preserve | 4,792 |
| San Felasco Hammock State Preserve | 6,230 |
| Waccasassa Bay State Preserve | 28,036 |
| Peacock Springs State Recreation Area | 273 |
| Wildlife Management Areas | |
| Andrews Wildlife Management Area | 2,863 |
| Aucilla WMA | 15,043 |
| Cypress Creek WMA | 1,020 |
| Gulf Hammock WMA | 16,885 |
| Hickory Mound Unit WMA | 20,758 |
| Jena WMA | 20,131 |
| Spring Creek WMA | 15,670 |
| Tide Swamp WMA | 23,368 |
| EXISTING WATER MANAGEMENT DISTRICT CONSERVATION LANDS | |
| Aucilla River | 2,377 |
| Falmouth Spring | 275 |
| Holton Creek WMA | 2,588 |
| Poe Springs | 99 |
| Santa Fe Swamp Wildlife And Environmental Area | 6,968 |
| Steinhatchee Springs WMA | 5,242 |
| Suwannee River | 23,156 |
| Twin Rivers WMA | 9,339 |
| Withlacoochee River | 3,676 |
| EXISTING LOCAL CONSERVATION LANDS | |
| Hart Springs | 269 |
| Poe Springs | 112 |
| EXISTING PRIVATE CONSERVATION LANDS | |
| Turkey Island | 1,008 |
| EXISTING OTHER LANDS | |
| Rudy's Airport | 719 |



| PROPOSED STATE CONSERVATION LANDS | ACRES |
|--|--------------|
| Atsena Otie Key (CARL) | 114 |
| Big Bend Coast Tract Project Area (CARL) | 2,364 |
| Cedar Key Scrub (CARL) | 9,220 |
| Hixtown Swamp (CARL) | 24,491 |
| Longleaf Pine Ecosystems Project-Blue Spring Longleaf (CARL) | 2,004 |
| Suwannee Buffers Project-Deep Creek Drainage Tract (CARL) | 7,256 |
| Suwannee Buffers Project-Falling Creek Falls Tract (CARL) | 2,437 |
| Suwannee Buffers Project-Trillium Slopes/Nobles Ferry (CARL) | 743 |
| Wacasassa Flats (CARL) | 44,995 |
| Wacissa/Aucilla River Sinks Project (CARL) | 16,710 |
| Watermelon Pond (CARL) | 15,619 |

| PROPOSED WATER MANAGEMENT DISTRICT CONSERVATION LANDS | |
|--|---------|
| Aucilla River | 13,020 |
| Devils Hammock | 12,460 |
| Santa Fe River | 11,717 |
| Santa Fe Swamp | 141 |
| Steinhatchee River | 4,425 |
| Steinhatchee Springs | 15,333 |
| Suwannee Buffers | 658 |
| Suwannee River | 122,886 |
| Waccasassa Basin Project Area | 613 |
| Wacissa River | 3,862 |
| Withlacoochee River | 11,049 |

TRAILS

| EXISTING HIKING TRAILS | MILES |
|--|--------------|
| Buckeye Trail (FNST Section 21 Alternate Route) | 38.34 |
| Gilman-Buckeye Trail (FNST Section 20 Alternate Route) | 25.37 |
| Gold Head Branch Trail FNST Section 15 | 5.79 |
| Osceola FNST Section 17 | 31.10 |
| St. Regis-Champion Trail (FNST Section 19 Alternate Route) | 15.92 |
| Suwannee River Trail (FNST Section 18 Alternate Route) | 36.93 |

| EXISTING MULTIPLE USE TRAILS | |
|--|-------|
| Econfina River State Park Trails | 9.20 |
| Gilchrist Greenway (And Canoe Trail) | 29.92 |
| Millhopper Road-53rd Ave. Connector | 6.79 |
| River Rise State Park Trail | 7.40 |
| Twin Rivers Wildlife Management Area Ellaville Unit Trails | 6.78 |
| Twin Rivers Wildlife Management Area | |
| Mill Creek Unit North Trail | 1.45 |
| Twin Rivers Wildlife Management Area | |
| Mill Creek Unit South Trail | 4.15 |
| Twin Rivers Wildlife Management Area Withlacoochee Unit Trails | 6.54 |
| Waldo Road Rail-Trail | 0.60 |

| EXISTING INTERPRETIVE TRAILS | |
|--------------------------------------|------|
| Allen Mill Pond Nature Trails | 4.02 |
| Big Shoals Nature Trail | 1.84 |
| Sawmill Interpretive Trail | 0.66 |
| Spirit of Suwannee Campground Trails | 5.16 |



EXISTING CANOE/KAYAK TRAILS

| | |
|---|-------|
| Aucilla River State Canoe Trail | 33.91 |
| Big Bend Historic Saltwater Paddling Trail | 97.74 |
| Econfina River Canoe Trail | 28.75 |
| Ichetucknee River Canoe Trail | 4.84 |
| Lower Suwannee River State Canoe Trail | 90.57 |
| Santa Fe River Canoe Trail | 27.13 |
| Southern Suwannee River Canoe Trail | 71.18 |
| Steinhatchee River Canoe Trail | 9.55 |
| Upper Suwannee River State Canoe Trail | 66.87 |
| Wacissa River State Canoe Trail | 6.73 |
| Withlacoochee (North) River State Canoe Trail | 26.50 |
| Existing Equestrian Trails | |
| Oleno S.P. Horse Trails | 18.15 |
| Osceola National Forest Horse Trails | 18.80 |

ALL PROPOSED TRAILS

| | |
|---|-------|
| Bell Central Linear Park | 0.36 |
| Branford Rail-Trail | 1.39 |
| Deep Creek Trail (FNST Section 17 Alternate Route) | 6.03 |
| Hainesworth-Lake Butler Greenway | 15.84 |
| High Springs-Poe Springs Park Trail (ISTEA) | 3.28 |
| Jasper Rail-Trail | 2.71 |
| Live Oak Rail-Trail | 4.24 |
| Olustee Trail (FNST Section 16 Alternate Route) | 35.78 |
| Palatka-Navair Rail-Trail (FNST Sections 14-16 Alternate Route) | 40.42 |
| Perry Rail-Trail | 4.74 |



ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
CONSERVATION LANDS

| EXISTING FEDERAL CONSERVATION LANDS | ACRES |
|--|--------------|
| Military Bases | |
| Camp Blanding | 73,873 |
| Cecil Field Naval Air Station | 21,536 |
| Mayport Naval Station | 3,957 |
| Whitehouse Field | 1,836 |
| National Forests | |
| Ocala National Forest | 394,409 |
| Osceola National Forest | 164,727 |
| Pinhook Swamp | 40,492 |
| National Parks, Preserves, Seashores, And Monuments | |
| Castillo De San Marcos | 15 |
| Pelican Island National Wildlife Refuge | 5,429 |
| Canaveral National Seashore | 28,631 |
| Fort Caroline National Memorial | 138 |
| Rebault Monument | 3 |
| National Wildlife Refuges | |
| Lake Woodruff National Wildlife Refuge | 22,370 |
| Merritt Island National Wildlife Refuge | 120,911 |
| Pelican Island National Wildlife Refuge | 5,429 |
| St. Johns National Wildlife Refuge | 5,986 |
| EXISTING STATE CONSERVATION LANDS | |
| Aquatic Preserves | |
| Banana River | 26,166 |
| Fort Clinch | 7,808 |
| Guana River Marsh | 29,026 |
| Indian River-Fort Pierce | 4,229 |
| Indian River-Malabar | 26,712 |
| Lake Weir | 6,287 |
| Mosquito Lagoon | 1,679 |
| Nassau River | 31,907 |
| Oklawaha River | 428 |
| Pellicer Creek | 264 |
| Tomoka Marsh | 2,459 |
| Wekiva River | 3,214 |
| Conservation Easements | |
| Jane Green Creek Flowage Easement | 3,650 |
| Greenways | |
| Cross Florida Greenway | 41,761 |
| State Forests | |
| Cary State Forest | 3,438 |
| Econlockhatchee River State Forest | 978 |
| Jennings State Forest | 13,317 |
| Seminole Forest | 6,194 |
| Tiger Bay State Forest | 18,138 |
| Watson Island State Forest | 255 |

**State Parks, Preserves, Reserves, Gardens, Historic Sites And State Recreation Areas**

| | |
|---|--------|
| Big Talbot Island State Park | 1,540 |
| Blue Springs State Park | 1,848 |
| De Leon Springs State Park | 11 |
| Faver-Dykes State Park | 657 |
| Ft. Clinch State Park | 1,279 |
| Goldhead Branch State Park | 1,709 |
| Guana River State Park | 12,408 |
| Hontoon Island State Park | 5,043 |
| Kingsley Plantation State Historic Site | 11 |
| Little Talbot Island State Park | 1,672 |
| Rocksprings Run State Reserve And Wekiva Springs State Park | 13,343 |
| Silver River State Park | 2,860 |
| Spring Hammock State Park | 1,274 |
| Tomoka State Park | 2,862 |
| Wekiva Springs State Park | 6,407 |
| Lower Wekiva River State Reserve | 4,900 |
| Paynes Prairie State Preserve | 18,260 |
| Tosohatchee State Reserve | 29,114 |
| Haw Creek State Preserve | 2,483 |
| Timucuan Ecological And Historic Preserve | 777 |
| Washington Oaks State Garden | 327 |
| Fort Matanzas Historic Site | 199 |
| Amelia Island State Recreation Area | 804 |
| Anastasia State Recreation Area | 1,565 |
| Flagler Beach State Recreation Area | 140 |
| Lake Griffin State Recreation Area | 478 |

Wildlife Management Areas

| | |
|-------------|--------|
| Raiford WMA | 19,297 |
| River Lakes | 2,651 |

EXISTING WATER MANAGEMENT DISTRICT CONSERVATION LANDS

| | |
|---|--------|
| Bayard Point Project Area | 7,067 |
| Black Hammock Project Area | 39 |
| Black Sink Prairie | 583 |
| Blue Cypress Project Area | 25,729 |
| Bull Creek Project Area | 21,705 |
| Canaveral Marshes Project Area | 6,459 |
| Caravelle Ranch | 6,596 |
| Deep Creek Project Area | 3,820 |
| Dunns Creek Project Area | 4,089 |
| Econ-St Johns River Corridor Project Area | 3,850 |
| Econlockhatchee River State Forest | 1,807 |
| Emeralda Marsh Project Area | 6,192 |
| Fort George Island | 468 |
| Guana River | 300 |
| Haw Creek Project Area | 1,042 |
| Lake Apopka Restoration Area | 5,885 |
| Lake George Project Area | 36,073 |
| Lake Jesup Project Area | 1,348 |
| Lake Monroe Project Area | 3,246 |



| | |
|--|---------|
| Lochloosa Wildlife Project Area | 10,642 |
| Lower Econ Project Area | 7,048 |
| Oklawaha Farms WMD | 4,702 |
| Oslo Riverfront Project Area | 315 |
| Pine Meadows | 622 |
| Prairie Creek- Newnans Lake | 199 |
| River Lakes Project Area | 7,837 |
| Rocksprings Run State Reserve And Wekiva | |
| Springs State Park | 1,621 |
| Seminole Ranch Project Area | 32,469 |
| Seven Sisters Islands | 77 |
| St. Marys Project Area | 3,636 |
| Sunnyhill Farms | 4,246 |
| Three Forks Project Area | 102,548 |
| Tumbull/Scottsmoor Marshes Project Area | 1,120 |
| Upper Black Creek Project Area | 7,625 |
| EXISTING LOCAL CONSERVATION LANDS | |
| City of Orlando Park | 1,661 |
| Hogtown Creek Greenway | 1,720 |
| Huguenot Memorial Park | 447 |
| Malacompra Road Park | 48 |
| Newnans Lake Park | 293 |
| Old Salt Road Park | 20 |
| Pope Duval Park | 400 |
| Princess Place Preserve | 435 |
| Spruce Creek | 326 |
| EXISTING PRIVATE CONSERVATION LANDS | |
| Austin Cary Memorial Forest | 2,124 |
| Ordway-Swisher Preserve | 8,608 |
| EXISTING OTHER LANDS | |
| City of Sanford Property | 2,061 |
| Enchanted Forest CARL Project | 427 |
| Micco Scrubb San | 1,301 |
| Newnans Lake Project Area | 2,316 |
| Orange County | 2,251 |
| Orlando Utilities | 3,251 |
| Seminole County | 6,280 |
| Seminole County Expressway Authority | 1,578 |
| PROPOSED FEDERAL CONSERVATION LANDS | |
| Timucuan Ecological And Historic Preserve | 35,641 |
| PROPOSED STATE CONSERVATION LANDS | |
| Maritime Hammock Initiative Project – North Florida (CARL) | 124 |
| Maritime Hammock Initiative Project – Hog Point (CARL) | 58 |
| Maritime Hammock Initiative – Wasburncove (CARL) | 45 |
| Archie Carr National Wildlife Reguge (CARL) | 922 |
| Archie Carr Sea Turtle Reguge Project (CARL) | 81 |
| Cow Heaven Bay (CARL) | 25,743 |
| Dunns Creek Project Area (CARL) | 9,004 |
| Econ–St Johns River Corridor Project Area (CARL) | 12,808 |
| Emeralda Marsh Project Area (CARL) | 9,584 |



| | |
|---|--------|
| Etoniah Creek (CARL) | 57,216 |
| Heather Island Project Area (CARL) | 9,660 |
| Julington/Durbin Peninsula (CARL) | 4,994 |
| Lake George Project (CARL) | 166 |
| Lake George Project Area (CARL) | 20,559 |
| Lochloosa Wildlife Project Area (CARL) | 25,241 |
| Longleaf Pine Ecosystems Project – Deland Ridge Sandhill (CARL) | 4,280 |
| Lower Econ Project Area (CARL) | 9,979 |
| Maritime Hammock Initiative – Coconut Point (CARL) | 67 |
| Maritime Hammock Initiative Project – Jetty Park South (CARL) | 133 |
| Melbourne Beach Backyards – Palm Bay Turkey Creek (CARL) | 96 |
| Newnans Lake Project Area (CARL) | 14,620 |
| Paynes Prairie (CARL) | 5,863 |
| Pumpkin Hill Creek (CARL) | 6,264 |
| Rock Springs Run State Reserve And Wekiva Springs State Park (CARL) | 4,418 |
| Scrub Jay Refugia Project – Condev (CARL) | 32 |
| Scrub Jay Refugia Proejct – Rockledge (CARL) | 2,719 |
| Scrub Jay Refugia Project – South Babcock (CARL) | 695 |
| Scrub Jay Refugia Project – Tico (CARL) | 2,676 |
| Scrub Jay Refugia Project – Valkaria (CARL) | 2,329 |
| Sebastian Creek (CARL) | 6,857 |
| Seminole Ranch Project Area (CARL) | 83 |
| Tumbull/Scottsmoor Marshes Project Area (CARL) | 19,705 |
| Twelve Mile Swamp (CARL) | 26,386 |
| Upper Black Creek Project Area (CARL) | 2,158 |
| Warea Archipelago Project (CARL) | 931 |
| Wekiva Project Area (CARL) | 9,783 |
| Wekiva–Ocala Connector Project Area (CARL) | 10,287 |
| Wekiva–Ocala Connector State Project Area (CARL) | 29,898 |

PROPOSED WATER MANAGEMENT DISTRICT CONSERVATION LANDS

| | |
|---|--------|
| Bayard Point Project Area | 16,630 |
| Blue Cypress Project Area | 2,991 |
| Bull Creek Project Area | 29,249 |
| Canaveral Marshes Project Area | 1,049 |
| Deep Creek Project Area | 3,345 |
| Dunns Creek Project Area | 5,212 |
| Durbin-Twelve Mile Swamp Project Area | 6,071 |
| Emeralda Marsh Project Area | 3,962 |
| Fort Drum Marsh Project Area | 1,353 |
| Hallowes Cove Project Area | 4,869 |
| Haw Creek Project Area | 9,612 |
| Heather Island Project Area | 2,085 |
| Lake Apopka Restoration Area | 5,875 |
| Lake George Basins | 1,771 |
| Lake George Project Area | 208 |
| Lake Griffin State Recreation Area | 183 |
| Lake Jesup Project Area | 6,022 |
| Lake Monroe Project Area | 4,247 |
| Lower Econ Project Area | 1,869 |
| Lower Econlockhatchee Conservation Area | 5,099 |



| | |
|--|--------|
| McGirts Creek Project Area | 1,944 |
| Mullet Creek Islands Project Area | 654 |
| Newnans Lake Project Area | 908 |
| Orange Creek Run | 15,561 |
| Oslo Riverfront Project Area | 642 |
| Pelican Island National Wildlife Reserve | 214 |
| Pellicer Creek Project Area | 2,310 |
| River Lakes Project Area | 16,964 |
| Sebastian Creek Project Area | 6,958 |
| Seminole Ranch Project Area | 51,805 |
| Spring Hill | 229 |
| St. Marys River Project Area | 28,408 |
| Sunnyhill Farm | 27 |
| Three Forks Project Area | 9,169 |
| Tiger Bay Project Area | 5,188 |
| Upper Econ Project Area | 21,515 |
| Upper Nassau River Project Area | 8,017 |
| Wekiva Project Area | 948 |
| PROPOSED LOCAL CONSERVATION LANDS | |
| Flagler County Coastal Greenway | 16,669 |
| Princess Place Preserve DRI Add. | 60 |

TRAILS

| EXISTING HIKING TRAILS | MILES |
|--|-------|
| Bull Creek WMA FNST Section 7 | 22.31 |
| Bulow Creek Hiking Trail | 3.91 |
| Cassia FNST-Section 11 | 43.15 |
| Chuluotta Florida Trail Spur | 2.03 |
| DeLeon Springs State Park Wild Persimmon Hiking Trail | 2.30 |
| Gold Head Branch Trail FNST Section 15 | 19.47 |
| Lake Jessup Florida Trail-Section 10 | 28.53 |
| Ocala National Forest FNST North-Section 13 | 34.58 |
| Ocala National Forest FNST South-Section 12 | 24.27 |
| Osceola FNST Section 17 | 0.92 |
| Potts Preserve Hiking Trails | 0.73 |
| Rice Creek Florida Trail-Section 14 (FNST Alternative Route) | 33.41 |
| Rice Creek Hiking Trail | 2.15 |
| Salt Springs Spur Hiking Trail | 2.94 |
| Seminole Ranch/Orlando Wildemess Park Hiking Trail | 9.47 |
| St. Francis Hiking Trail | 5.72 |
| Three Lakes/Prairie Lakes FNST Section 6 | 7.49 |
| EXISTING MULTIPLE USE TRAILS | |
| Cady Way-Fashion Square Rail-Trail | 2.99 |
| Crook Shank Drive | 2.50 |
| Cross Florida Greenway Trail (FNST Alternate Route) | 0.11 |
| Dr. Lake Drive Recreational Trail | 4.37 |
| Gainesville-Hawthorne State Rail-Trail | 17.62 |
| General James Van Fleet State Trail (FNST Alternative Route) | 0.84 |
| Hal Scott Preserve Loop Trail | 4.78 |
| Jacksonville-Baldwin Rail-Trail | 13.78 |



| | |
|--|-------|
| Lake Minneola Rail-Trail | 1.70 |
| Merritt Island National Wildlife Refuge | |
| Indian River Lagoon Dike Road | 10.84 |
| Merritt Island National Wildlife Refuge | |
| Mosquito Lagoon Dike Road | 5.51 |
| Millhopper Road-53rd Ave. Connector | 1.09 |
| Millhopper Road-53rd Ave. Transportation Corridor | 5.55 |
| Palm Coast Bikeway System | 6.51 |
| Paynes Prairie State Preserve Eq., Hiking, And Biking Trails | 7.44 |
| Pelotes Island Recreational Trails | 3.16 |
| Tosohatchee State Preserve FNST-Section 9 | 18.16 |
| Tosohatchee State Preserve Hiking Trail | 11.54 |
| Waldo Road Rail-Trail | 13.06 |
| Wekiwa Springs State Park Trails | 11.59 |

EXISTING INTERPRETIVE TRAILS

| | |
|---|------|
| Alexander Springs Timucuan Loop Trail | 0.84 |
| Black Point Drive | 4.13 |
| Buck Lake Nature Trail | 0.45 |
| Clearwater Lake Nature Trail | 0.49 |
| Davenport Landing Nature Trail | 0.27 |
| Juniper Springs Nature Trail | 0.22 |
| Lake Eaton Loop Trail | 0.96 |
| Lake Eaton Sinkhole Trail | 1.68 |
| Salt Springs Wildlife Observation Trail | 0.22 |

EXISTING CANOE/KAYAK TRAILS

| | |
|--|-------|
| Alexander Springs Canoe Trail | 5.47 |
| Bulow Creek Canoe Trail | 7.30 |
| Eaton Creek Canoe Trail | 1.92 |
| Econlockhatchee River Canoe Trail | 11.59 |
| Juniper Creek Canoe Trail | 9.55 |
| Lower Oklawaha River Canoe Trail | 11.16 |
| Oklawaha River Canoe Trail (Eureka-S.R. 40) | 16.84 |
| Oklawaha River Canoe Trail (Orange Springs-Eureka) | 11.12 |
| Pellicer Creek State Canoe Trail | 2.43 |
| Prairie Creek Canoe Trail | 3.54 |
| Silver River Canoe Trail | 4.73 |
| Spruce Creek Canoe Trail | 5.28 |
| St. Marys River State Canoe Trail | 33.46 |
| Tomoka River Canoe Trail | 9.43 |
| Wekiwa River/Rock Springs Run State Canoe Trail | 14.29 |

EXISTING EQUESTRIAN TRAILS

| | |
|---|-------|
| Flat Island Preserve Island Hammock Trail | 4.38 |
| Lam Equestrian Trail | 31.91 |
| Lower Wekiva River State Preserve Horse Trail | 4.69 |
| Ocala 100-Mile Horse Trail | 71.43 |
| Potts Preserve Horse Trails | 3.26 |
| Rock Springs Run State Preserve | 8.69 |
| Tosohackee State Reserve Horse Trails | 14.14 |



ALL PROPOSED TRAILS

| | |
|---|-------|
| Cross Florida Greenway (FNST Alternate Route) | 12.56 |
| Dinky Line Rail-Trail | 1.43 |
| Duckpond/Matheson Greenway | 0.99 |
| East Palatka-St. Augustine Rail-Trail | 24.57 |
| Econlockhatchee Trail | 1.35 |
| Jacksonville "S" Trail | 4.63 |
| Jungle Trail | 7.04 |
| Lake Arbuckle-Maxey Quarters Connector (FNST Alternate Route) | 0.20 |
| Little Econlockhatchee Trail | 3.88 |
| Minneola-Killamey Rail-Trail | 5.97 |
| Newnans Lake Recreational Trail | 18.03 |
| Orange Park-Green Cove Springs Recreational Trail | 7.11 |
| Ormond Beach Riverside Drive Bicycle Path Project | 5.26 |
| Oviedo-Spring Hammock Rail-Trail (FNST Alternative Route) | 8.81 |
| Palatka-Navair Rail Corridor (FNST Alternative Route) | 25.89 |
| Palatka-Navair Rail Trail (FNST Alternative Route) | 2.19 |
| Palatka-Navair Rail-Trail (FNST Sections 14-16 Alternate Route) | 2.54 |
| Seminole-Wekiva Rail-Trail (FNST Alternative Route) | 13.48 |
| Space Walk of Fame | 1.99 |
| State Road 13 Rail-Trail | 8.15 |
| Tavares U.S. 441 Greenway Trail | 2.41 |
| West Orange Trail (Killamey-Apopka) | 15.34 |
| Yulee Rail-Trail | 14.19 |



SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
CONSERVATION LANDS

| EXISTING FEDERAL CONSERVATION LANDS | ACRES |
|---|--------------|
| Military Bases | |
| Mac Dill Air Force Base | 4,905 |
| U.S. Coast Guard Air Station | 1,171 |
| National Parks, Preserves, Seashores, And Monuments | |
| DeSoto National Memorial | 26 |
| National Wildlife Refuges | |
| Chassahowitzka National Wildlife Refuge | 29,128 |
| Egmont Key National Wildlife Refuge | 389 |
| Island Bay National Wildlife Refuge | 145 |
| Passage Key National Wildlife Refuge | 21 |
| Pinellas National Wildlife Refuge | 392 |
| EXISTING STATE CONSERVATION LANDS | |
| Aquatic Preserves | |
| Big Bend | 17,234 |
| Cape Haze | 10,123 |
| Charlotte Harbor | 50,148 |
| Cockroach Bay | 4,459 |
| Lemon Bay | 6,823 |
| Pinellas County | 203,016 |
| Rainbow Springs | 138 |
| St. Martins Marsh | 19,486 |
| Terra Ceia | 21,411 |
| Greenways | |
| Cross Florida Greenway | 9,103 |
| Lake Rousseau State Recreation Area | 8,485 |
| State Forests | |
| Goethe State Forest | 44,783 |
| Lake Arbuckle State Forest | 13,631 |
| Withlacoochee State Forest | 124,943 |
| State Parks, Preserves, Reserves, Gardens, Historic Sites And State Recreation Areas | |
| Caladesi Island State Park | 691 |
| Crystal Bay | 135 |
| Dade Battlefield State Park | 78 |
| Ft. Cooper State Park | 716 |
| Highlands Hammock State Park | 3,527 |
| Hillsborough River State Park | 1,176 |
| Homosassa Springs State Park | 170 |
| Lake Louisa State Park | 1,765 |
| Little Gator Creek State Park | 573 |
| Myakka Estuary | 179 |
| Myakka River State Park | 28,931 |
| Peace Creek | 497 |
| Rainbow Springs State Park | 643 |
| St. Martins Keys State Park | 189 |
| St. Martins River | 178 |
| Charlotte Harbor State Reserve | 19,722 |
| Crystal River State Reserve | 2,985 |



| | |
|--|-------|
| Green Swamp | 323 |
| Saddle Creek Strip Mines | 1,473 |
| Anclote Key State Preserve | 365 |
| Gamble Plantation State Historic Site | 13 |
| Madira Bickel Mound Historic Site | 10 |
| Paynes Creek Historic Site | 391 |
| Charlotte Beach State Recreation Area | 226 |
| Don Pedro Island State Recreation Area | 152 |
| Honeymoon Island State Recreation Area | 793 |
| Lake Manatee State Recreation Area | 1,407 |
| Little Manatee River State Recreation Area | 1,262 |
| Oscar Scherer State Recreation Area | 462 |
| Tenoroc State Recreation Area | 9,495 |

Wildlife Management Areas

| | |
|--------------------|--------|
| Cecil M. Webb WMA | 67,426 |
| Chassahowitzka WMA | 15,106 |
| Half Moon WMA | 4,393 |
| Jumper Creek WMA | 10,103 |

EXISTING WATER MANAGEMENT DISTRICT CONSERVATION LANDS

| | |
|---------------------------------------|--------|
| Alligator Creek | 43 |
| Alston Tract | 2,768 |
| Bartow Service Office | 7 |
| Brooker Creek - Corridor "B" | 1,300 |
| Brooker Creek Headwaters | 938 |
| Carlton Tract | 4,052 |
| Chassahowitzka River Project | 5,719 |
| Cypress Creek | 8 |
| Cypress Creek FDA (Reservoir) | 6,851 |
| Flying Eagle Ranch | 16,386 |
| GDC | 5,849 |
| Green Swamp Project Area | 83 |
| Green Swamp Riverine Corridor (GSFDA) | 37,559 |
| Green Swamp WMA | 60,590 |
| Hidden Lake | 589 |
| Jack/Josephine Creek | 1,259 |
| Jerry Lake | 78 |
| Lake Manatee Lower Watershed | 2,411 |
| Lake Panasoffkee | 10,021 |
| Lake Panasoffkee/Outlet | 512 |
| Lake Tarpon Outfall Canal | 238 |
| Little Manatee River | 1,171 |
| Lower Hillsborough Fda | 16,518 |
| Masaryktown Canal | 239 |
| Medard Park | 1,284 |
| Pinellas Co. Flood Abate (Joes Crk) | 24 |
| Potts Preserve | 9,352 |
| Ringling - MacArthur Tract | 8,373 |
| SWFWMD Headquarters | 39 |
| Sawgrass Lake | 397 |
| Starkey Wilderness Park | 8,133 |



| | |
|---|--------|
| Sweetwater Creek Watershed | 3 |
| Tampa Bypass Canal | 1,562 |
| Tarpon Lake Sink Enclosure | 10 |
| Upper Myakka River Watershed | 2,357 |
| Weeki Wachee Riverine System | 615 |
| Withlacochee/Hillsborough Riverine Corridor "D" | 6,540 |
| EXISTING LOCAL CONSERVATION AREAS | |
| Alderman Ford Park | 634 |
| Crews Lake Park | 539 |
| Ft. DeSoto County Park | 54 |
| Pasco County Park | 261 |
| Saddle Creek Park/Rawl Park | 753 |
| Existing Private Conservation Areas | |
| Archbold Biological Station | 5,321 |
| Tiger Creek TNC Preserve | 4,627 |
| Existing Other Lands | |
| Balri Boyette Scrub | 1,322 |
| Bartow Municipal Airport | 1,799 |
| Bonnie Lake Refuge | 1,643 |
| Brohard Park and Pedway | 1,316 |
| Carlton County Preserve | 31,626 |
| City of Lake Wales | 476 |
| Cone Ranch | 12,840 |
| County Airport | 1,939 |
| Cross-Bar Wellfield | 8,153 |
| Dunnellon Airport | 1,338 |
| Gateway Preservation Area | 1,525 |
| GDU/Peace River | 588 |
| Hernando Municipal Airport | 2,121 |
| Lakeland Municipal Airport | 1,161 |
| Manatee County Watershed Project | 20,998 |
| Ocala Municipal Airport | 870 |
| Pasco County Wellfields | 511 |
| Pinellas County | 68 |
| Pinellas County Property | 3,169 |
| St. Petersburg Wellfield | 1,320 |
| Sun City Center Airpark | 356 |
| Tampa International Airport | 2,500 |
| Verna Wellfield | 1,900 |
| Williston Municipal Airport | 1,705 |
| Zephyrhills Municipal Airport | 845 |
| Proposed State Conservation Lands | |
| Withlacochee State Forest | 539 |
| Lake Wales Ridge Ecosystem Project (CARL) | 329 |
| Catfish Creek (CARL) | 8 |
| Charlotte Harbor Flatwoods Project Area (CARL) | 21,221 |
| Chassahowitzka Swamp (CARL) | 4,412 |
| Cockroach Bay Project Area (CARL) | 3,092 |
| Crystal Bay Project Area (CARL) | 5,965 |
| Crystal River/Bay Project Area (CARL) | 9,390 |



| | |
|--|---------|
| Golden Aster Scrub (CARL) | 1,196 |
| Green Swamp (CARL) | 200,361 |
| Homosassa Reserve/Walker Property (CARL) | 383 |
| Lake Wales Ridge (CARL) | 14,051 |
| Lake Wales Ridge Ecosystems (CARL) | 15,212 |
| Levy County Sandhills (CARL) | 11,369 |
| Longleaf Pine Ecosystem (CARL) | 9,543 |
| Myakka Estuary Project Area (CARL) | 15,639 |
| Pineola Fern Grotto (CARL) | 470 |
| Saddle Blanket Lakes Scrub (CARL) | 903 |
| St. Martin's River (CARL) | 26,687 |
| Weeki Wachee (CARL) | 552 |
| Withlacoochee State Forest (CARL) | 976 |
| Withlacoochee State Forest Addition (CARL) | 4,469 |

PROPOSED WATER MANAGEMENT DISTRICT CONSERVATION LANDS

| | |
|------------------------------------|--------|
| Alafia River Corridor | 9,063 |
| Alston Tract | 9,670 |
| Brooker Creek - Corridor "B" | 259 |
| Brooker Creek Corridor "A" | 425 |
| Brooker Creek Headwaters | 1,492 |
| Carlton Tract | 68 |
| Charlie Creek | 40,511 |
| Charlotte 1 | 11,306 |
| Chassahowitzka Springs | 81 |
| Crooked Lake | 3,732 |
| Cypress Creek | 768 |
| ELAPP #1 | 20 |
| ELAPP #2 | 9 |
| ELAPP #3 | 14 |
| ELAPP #4 | 29 |
| ELAPP #5 | 83 |
| Flying Eagle | 172 |
| Flying Eagle Ranch | 897 |
| Gdc | 2,684 |
| Gdu/Peace River | 3,147 |
| Green Swamp | 5,551 |
| Gum Slough | 17,927 |
| Highlands Hammock Addition | 10,133 |
| Hillsborough Riverine Corridor "C" | 2,284 |
| Horse Creek | 10,949 |
| Jack Creek | 2,011 |
| Jordan Ranch | 3,134 |
| Lake Manatee Lower Watershed | 22,117 |
| Lake Panasoffkee | 80 |
| Lake Panasoffkee/Outlet | 860 |
| Little Manatee River | 19,389 |
| Lower Hillsborough Fda | 1,722 |
| Lower Myakka River | 7,231 |
| Marion 1 | 7,387 |



| | |
|------------------------------|--------|
| Marion/Levy 1 | 19,398 |
| Myakka River | 2,293 |
| Myakka River Flatwoods | 5,308 |
| Myakkahatchee Creek | 11,575 |
| Pasco 1 | 22,603 |
| Peace Creek Canal System | 4,505 |
| Peace River Corridor | 35,334 |
| Prairie/Shell Creek | 9,293 |
| Starkey Addition | 7,353 |
| Sumter 1 | 6,498 |
| Sumter 2 | 12,128 |
| Upper Myakka River Watershed | 6,729 |
| Weeki Wachee Riverine System | 12,449 |

PROPOSED LOCAL CONSERVATION LANDS

| | |
|---------------------|-------|
| Wetstone Tract | 696 |
| Cypress Creek Tract | 4,719 |

TRAILS

| EXISTING HIKING TRAILS | MILES |
|--|--------------|
| Citrus Hiking Trail Section 10 W (FNST Alternate Route) | 40.33 |
| Croom Hiking Trail Section 9 W (FNST Alternate Route) | 20.75 |
| Green Swamp Hiking Trail Section 7 W (FNST Alternate Route) | 25.97 |
| Hillsborough River State Park Hiking Trails Section 8 W | 4.40 |
| Hog Island Trail (Withlacoochee State Forest) | 4.73 |
| Myakka River State Park Hiking Trails | 35.45 |
| Potts Preserve Hiking Trails | 13.05 |
| Richloam Hiking Trail Section 8 W (FNST Alternate Route) | 23.48 |
| Sawgrass Lake Park Oak Hammock Trail | 1.26 |
| Starkey Wilderness Park Trail | 11.79 |
| Tenoroc State Reserve Trails (FNST Alternate Route) | 5.37 |
| Withlacoochee River Park Trail | 4.35 |
| EXISTING MULTIPLE USE TRAILS | |
| Bayshore Boulevard | 5.46 |
| Bayshore Linear Park And Bike Path/City of Clearwater | |
| East-West Recreational Trail Link | 4.84 |
| Courtney Campbell Causeway | 9.51 |
| Cross Florida Greenway Trail (FNST Alternate Route) | 14.94 |
| Flatwoods Loop Trail | 4.30 |
| Flying Eagle Trail | 6.18 |
| General James Van Fleet State Trail (FNST Alternative Route) | 28.08 |
| Myakka River Fishing Pier | 0.52 |
| Pinellas Trail | 24.71 |
| Placida Fishing Pier | 0.15 |
| Tampa Bypass Canal and Harney Canal | 22.27 |
| Withlacoochee State Trail | 45.91 |
| Zephyrhills Equestrian And Bicycle Trail | 3.93 |
| EXISTING INTERPRETIVE TRAILS | |
| Backwoods at Mosi Nature Trails | 0.90 |
| Colonel Robins Nature Trail/Withlacoochee State Forest | 3.67 |
| McKethan Lake Nature Trail/Withlacoochee State Forest | 1.21 |

**EXISTING CANOE/KAYAK TRAILS**

| | |
|---|-------|
| Upper Manatee River State Canoe Trail | 3.72 |
| Alafia River State Canoe Trail | 16.92 |
| Blue Run Canoe Trail | 15.61 |
| Little Manatee River Canoe Trail | 30.05 |
| Myakka River Canoe Trail | 35.74 |
| Peace River State Canoe Trail | 92.44 |
| Pithlachascotee River State Canoe Trail | 1.55 |
| Saddle Creek Canoe Trail | 11.81 |
| Withlacoochee River (South) State Canoe Trail | 76.37 |

EXISTING EQUESTRIAN TRAILS

| | |
|---------------------------------------|-------|
| Citrus Horse Trail | 24.89 |
| Cypress Creek Hiking Trail | 3.81 |
| Cypress Creek Horse Trail | 2.46 |
| Highlands Hammock Horse Trails (S.P.) | 7.89 |
| Myakka River State Park Horse Trails | 15.52 |
| Potts Preserve Horse Trails | 11.85 |
| Shiloh-Dungavarin Horse Trails | 3.79 |

ALL PROPOSED TRAILS

| | MILES |
|---|--------------|
| Cross Florida Greenway Pruitt Trail Connector (FNST Alternate Route) | 4.18 |
| Eucalyptus Parkway Rail-Trail | 3.19 |
| Fort DeSoto Park Bike Trail | 6.82 |
| Gulfport Spur-Pinellas Trail | 0.71 |
| Hillsborough River Canoe Trail | 44.09 |
| Lake Arbuckle-Maxey Quarters Connector (FNST Alternate Route) | 6.14 |
| Lake Wire-Lake Parker Greenway | 8.25 |
| Little Manatee River SRA Equestrian Trails | 4.82 |
| McKay Creek Loop Trail | 3.75 |
| Old Fort King Trail | 11.15 |
| Pinellas Trail Extension North | 1.09 |
| Pinellas Trail Extension South | 9.31 |
| Proposed City of Clearwater East-West Recreational Trail Link | 0.74 |
| Punta Gorda Greenway Park And Path | 7.16 |
| Sarasota to Venice Circus Trail | 13.17 |
| Tampa Linear Park And Riverfront Greenway | 5.08 |
| Upper Tampa Bay Trail | 8.02 |
| Venice Waterfront Park Trail | 2.08 |
| Withlacoochee-Cross Florida Greenway Trail Connector (FNST Alternate Route) | 1.26 |



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
CONSERVATION LANDS**

| EXISTING FEDERAL CONSERVATION LANDS | ACRES |
|--|--------------|
| Military Bases | |
| Avon Park Bombing Range | 100,251 |
| Homestead Air Force Base | 2,701 |
| National Guard Reservation | 324 |
| U.S. Naval Air Station Key West | 3,760 |
| U.S. Army Reserve | 183 |
| U.S. Coast Guard Communication Station | 333 |
| U.S. Naval Reservation | 959 |
| National Parks, Preserves, Seashores, And Monuments | |
| Biscayne Bay National Park | 174,554 |
| Everglades National Park | 1,547,545 |
| Big Cypress National Preserve | 727,457 |
| Blowing Rocks Preserve | 60 |
| National Wildlife Refuges | |
| Crocodile Lake National Wildlife Refuge | 11,433 |
| Florida Panther National Wildlife Refuge | 27,089 |
| Great White Heron National Wildlife Refuge | 159,455 |
| Hobe Sound National Wildlife Refuge | 301 |
| J.N."Ding" Darling Wildlife Refuge | 3,892 |
| Key Deer NWR | 1,575 |
| Key West National Wildlife Refuge | 151,752 |
| Matlacha Pass National Wildlife Refuge | 115 |
| NKD Refuge & GWHNW Refuge | 16,239 |
| NKD Refuge & KWNW Refuge | 49,199 |
| Pine Island National Wildlife Refuge | 263 |
| EXISTING STATE CONSERVATION LANDS | |
| Aquatic Preserves | |
| Biscayne Bay | 63,142 |
| Cape Haze | 1,157 |
| Charlotte Harbor | 32,865 |
| Coupon Bight | 4,812 |
| Estero Bay | 10,686 |
| Indian River-Fort Pierce | 4,712 |
| Jensen Beach | 22,885 |
| Lignumvitae Key | 8,277 |
| Loxahatchee River | 1,539 |
| Matlacha Pass | 13,875 |
| Pine Island Sound | 54,694 |
| Rookery Bay | 29,516 |
| St. Lucie River | 2,371 |
| Ten Thousand Islands | 27,954 |
| Conservation Easements | |
| Water Conservation Area No. 1 | 138,291 |
| Water Conservation Area No. 2a | 103,284 |
| Water Conservation Area No. 2b | 28,285 |
| Water Conservation Area No. 3a | 420,322 |
| Water Conservation Area No. 3b | 98,477 |

**State Forests**

| | |
|-----------------------------|--------|
| Dupuis Reserve State Forest | 22,062 |
|-----------------------------|--------|

State Parks, Preserves, Reserves, Gardens, Historic Sites And State Recreation Areas

| | |
|---|--------|
| Bahia Honda State Park | 587 |
| Bill Baggs Cape Florida State Recreation Area | 406 |
| Collier-Seminole State Park | 7,356 |
| Delnor-Wiggins Pass State Recreation Area | 182 |
| John D MacArthur Beach State Park | 440 |
| John Pennekamp Coral Reef State Park | 78,062 |
| Jonathan Dickinson State Park | 10,516 |
| Koreshan State Historical Site | 154 |
| Lake Kissimmee State Park | 4,569 |
| Little Pine Island | 3,525 |
| St Lucie Inlet State Park | 1,087 |
| Barefoot Beach State Preserve | 170 |
| Catfish Creek State Preserve | 5,838 |
| Cayo Costa State Preserve | 917 |
| Fakahatchee Strand State Preserve | 80,881 |
| Florida Preserve | 1,149 |
| Nature Conservancy Preserve | 628 |
| Savannas State Preserve | 6,562 |
| Key Largo State Botanical Site | 848 |
| Lignumvitae Key State Botanical Site | 368 |
| Shell Key | 251 |
| Indian Key State Historic Site | 109 |
| Caloosahatchee River State Recreation Area | 830 |
| Fort Pierce Inlet State Recreation Area | 387 |
| Fort Zachary Taylor State Recreation Area | 57 |
| Hugh Taylor Birch State Recreation Area | 183 |
| John U. Lloyd Beach State Recreation Area | 222 |
| Long Key State Recreation Area | 763 |
| Okeetantie Recreation Area | 204 |
| Oleta River State Recreation Area | 1,182 |
| Palm Beach Farms State Recreation Area | 801 |
| Pepper Beach State Recreation Area | 705 |
| Savannas Recreation Area | 733 |

Wildlife Management Areas

| | |
|--------------------------------------|--------|
| Holey Land Wildlife Management Area | 35,099 |
| J.W. Corbett Wildlife Mgmt. Area | 58,237 |
| Prairie Lakes Unit | 3,297 |
| Rotenberger Wildlife Management Area | 19,917 |
| Three Lakes Wildlife Management Area | 48,790 |
| Southern Glades WEA | 29,548 |

EXISTING WATER MANAGEMENT DISTRICT CONSERVATION LANDS

| | |
|--|--------|
| Big Pine Key Project | 614 |
| Corkscrew Regional Ecosystem Watershed | 15,014 |
| Everglades Buffer Strip | 2,134 |
| Kissimmee Chain of Lakes | 1,511 |
| Kissimmee Lakes | 5,936 |
| Kissimmee River | 26,099 |



| | |
|-------------------------------------|--------|
| Loxahatchee River | 1,537 |
| Nicodemus Slough | 1,695 |
| Pal Mar | 1,959 |
| Palm Beach County Preservation Area | 261 |
| Paradise Run | 1,794 |
| Shingle Creek | 977 |
| Six Mile Cypress I | 1,774 |
| South Fork St Lucie River | 99 |
| Stormwater Treatment Area 3 & 4 | 10,159 |
| Strazzulla | 1,605 |
| Tibet Butler Preserve | 459 |

EXISTING LOCAL CONSERVATION AREAS

| | |
|--|--------|
| Airport East | 133 |
| Airport West | 764 |
| Arsenicker Park | 126 |
| Bowmans Beach County Park | 108 |
| Carl E. Johnson County Park | 1,533 |
| Carlin Park | 116 |
| Chapmen Field Park | 674 |
| Corkscrew Regional Ecosystem Watershed | 3,071 |
| Crandon Park | 931 |
| Deerfield Island Park | 48 |
| Dreher Park/Zoo | 117 |
| Fox Property | 339 |
| Haulover Beach Park | 189 |
| Homestead Bayfront Park | 271 |
| ITT-Snapper Creek Park | 651 |
| John Prince Park | 756 |
| Juno Hills | 174 |
| Jupiter Island Park | 44 |
| Jupiter Ridge | 33 |
| Lake Lytal Park | 81 |
| Lakes County Park | 317 |
| Loggerhead Park | 167 |
| Markham Park | 654 |
| Matheson Hammock County Park | 603 |
| Milton E. Thompson County Park | 644 |
| Okeeheliee Park | 946 |
| Peanut Island Park | 76 |
| River Bend County Park | 181 |
| South County Regional Park | 555 |
| Tamiami Park | 302 |
| Tropical Park | 346 |
| Virginia Key Park | 935 |
| WPB Water Catchment Area | 16,182 |

EXISTING PRIVATE CONSERVATION AREAS

| | |
|-----------------------------|--------|
| Corkscrew Swamp Sanctuary | 10,652 |
| Disney Wilderness Preserve | 9,437 |
| Kissimmee Prairie Sanctuary | 7,431 |
| Loxahatchee Preserve | 6,194 |



| | |
|--|--------|
| Pratt Whitney Wildlife Refuge | 7,096 |
| Sanibel Captiva Conservation Foundation | 779 |
| EXISTING OTHER LANDS | |
| Brighton Indian Reservation | 37,454 |
| Cypress Seminole Indian Reservation | 71,972 |
| Hollywood Indian Reservation | 482 |
| Miccosukee Indian Reservation | 81,753 |
| Airport Property | 446 |
| Barley-Barber Swamp | 447 |
| Dade Correctional Institute | 57 |
| Dade County Institution State Prison | 38 |
| Dot Mitigation Bank Lands | 1,703 |
| FDOT Property | 346 |
| South Florida State Hospital | 228 |
| State Owned Land | 14,502 |
| U.S. Reservation (FAA) | 338 |
| PROPOSED STATE CONSERVATION LANDS | |
| Avalon (CARL) | 296 |
| Belle Meade (CARL) | 38,363 |
| Cayo Costa Island (CARL) | 852 |
| Coupon Bight Key Deer (CARL) | 5,075 |
| Curry Hammock (CARL) | 651 |
| Deering Estate (CARL) | 381 |
| Deering Estate Addition (CARL) | 37 |
| Golden Gate Estates South (CARL) | 56,759 |
| Hammocks of the Lower Keys (CARL) | 6,499 |
| Horse Creek Scrub (CARL) | 1,400 |
| Hutchinson Island/Blind Creek (CARL) | 434 |
| Miami Rockridge Pinelands Project (CARL) | 441 |
| Pal-Mar Project Area (CARL) | 13,796 |
| Rookery Bay (CARL) | 11,128 |
| Tropical Flyways Project (CARL) | 152 |
| Tropical Flyways Project (CARL) | 1,427 |
| Tropical Flyways Project (CARL) | 307 |
| Yamato Scrub (CARL) | 275 |
| PROPOSED WATER MANAGEMENT DISTRICT CONSERVATION LANDS | |
| Atlantic Ridge Ecosystem | 12,344 |
| Corkscrew Regional Ecosystem Watershed | 41,822 |
| Dade Broward Levee | 11,691 |
| Everglades Buffer Strip | 1,628 |
| Fisheating Creek | 42,939 |
| Frog Pond | 5,439 |
| Kissimmee Chain of Lakes | 6,965 |
| Kissimmee Lakes | 16,859 |
| Kissimmee River | 35,552 |
| L31N Transition Lands | 5,193 |
| Loxahatchee River | 462 |
| Loxahatchee Slough | 11,122 |
| Model Lands Basin | 43,016 |
| North Savannas | 935 |



| | |
|---------------------------------|--------|
| Okaloacoochee Slough | 22,458 |
| Pal Mar | 21,038 |
| Paradise Run | 2,297 |
| Shingle Creek | 6,048 |
| Six Mile Cypress II | 174 |
| South Fork St Lucie River | 106 |
| Southern Glades | 6,515 |
| Stormwater Treatment Area 1 | 205 |
| Stormwater Treatment Area 1E | 6,561 |
| Stormwater Treatment Area 1W | 7,209 |
| Stormwater Treatment Area 2 | 7,169 |
| Stormwater Treatment Area 3 & 4 | 7,339 |
| Stormwater Treatment Area 5 | 10,593 |
| Stormwater Treatment Area 6 | 1,028 |
| Strazzulla | 677 |
| Telegraph Swamp | 9,749 |
| Twelve Mile Slough | 3,259 |
| Upper Basin Lakes Watershed | 42,117 |

PROPOSED LOCAL CONSERVATION LANDS

| | |
|-------------------------------------|--------|
| Adams-Bluefields Rangelands | 41,033 |
| Bessemer Property | 486 |
| Fort Pierce Woods | 408 |
| Fox Property | 310 |
| Greenlees | 3 |
| J.H. Peebles Ranch | 3,894 |
| MacArthur Property | 1,000 |
| Northern Trust Pines | 1,160 |
| Palm Beach County Park | 209 |
| Palm Beach County Preservation Area | 402 |
| Savannas Additions | 219 |
| Seabranh Property | 1,051 |
| Site A St. Lucie County | 2,671 |
| Site B St. Lucie County | 4,836 |
| St. Lucie Preserves | 1,279 |
| TP&J | 34 |

PROPOSED PRIVATE CONSERVATION LANDS

| | |
|--------------------------------|-----|
| Loxahatchee Slough FCT Project | 656 |
| M-Canal/Turnpike FCT Project | 549 |

TRAILS

| EXISTING HIKING TRAILS | MILES |
|---|-------|
| Big Cypress FNST Section 1 | 48.00 |
| Big Cypress FNST Section 1 Connector | 12.16 |
| Collier Seminole State Park Hiking Trail | 6.65 |
| Corbett Hiking Trail FNST Section 3E2 | 14.47 |
| Corkscrew Marsh Hiking Trail | 5.19 |
| Dupuis Hiking Trail | 14.20 |
| Highlands/Okeechobee North FNST Section 4N | 6.84 |
| Jonathan Dickinson State Park Hiking Trails | 13.62 |
| Kissimmee River Trail FNST Section 5 | 33.32 |



| | |
|---|-------|
| Lake Arbuckle Hiking Trail FNST Section 8W | 14.58 |
| Lake Kissimmee State Park Hiking Trails | |
| Section 3W (FNST Alternate Route) | 13.14 |
| South Fork St. Lucie River Hiking Trail | 1.11 |
| Three Lakes/Prairie Lakes FNST Section 6 | 26.45 |
| EXISTING MULTIPLE USE TRAILS | |
| Bayshore Linear Park And Bike Path | |
| City of Clearwater East-West Recreational Trail Link | 1.03 |
| Highland Beach Bicycle/Pedestrian Path | 2.71 |
| Historic Old State Road 4A Greenway (Cudjoe Key Heritage Trail) | 2.44 |
| Lake Okeechobee Ridge | 5.01 |
| Lake Trail | 2.05 |
| Lakeshore Park Heart Trail | 0.23 |
| Okeechobee East FNST Section 3E | 34.76 |
| Okeechobee South FNST Section 4S | 9.58 |
| Okeechobee Southeast FNST Section 3E | 29.07 |
| Okeechobee Southwest FNST Section 3W | 13.80 |
| Okeechobee West FNST Section 3W | 30.74 |
| Shark Valley Loop Road Trail | 14.82 |
| Snake Creek Canal/Linear Park And Bike Path | 2.47 |
| Southgate Blvd. Utility Corridor | 5.76 |
| EXISTING INTERPRETIVE TRAILS | |
| Colonel Robins Nature Trail/Withlacoochee State Forest | 0.53 |
| EXISTING CANOE/KAYAK TRAILS | |
| Bear Lake Canoe Trail | 12.77 |
| Blackwater River/Royal Palm Hammock Creek State Canoe Trail | 10.84 |
| Estero River Canoe Trail | 8.90 |
| Fisheating Creek Canoe Trail | 12.28 |
| Fort Lauderdale Beach Blue Way Recreational Trail | 11.20 |
| Hells Bay Canoe Trail | 5.45 |
| Hickeys Creek State Canoe Trail | 3.82 |
| Long Key Lakes Canoe Trail | 1.68 |
| Loxahatchee National Wildlife Refuge Canoe Trail | 11.59 |
| Loxahatchee River State Canoe Trail | 5.46 |
| Nine-mile Pond Canoe Trail | 0.58 |
| Noble Hammock Canoe Trail | 1.32 |
| North Fork St. Lucie River Canoe Trail | 18.32 |
| North And South Fork River Canoe Trail | 6.61 |
| Oleta River Canoe Trail | 2.01 |
| South Fork St. Lucie River Canoe Trail | 12.04 |
| Turner River Canoe Trail | 7.35 |
| West Lake Canoe Trail | 10.24 |
| Wilderness Waterway | 84.47 |
| EXISTING EQUESTRIAN TRAILS | |
| Dupuis Reserve Equestrian Trails | 22.18 |
| Equestrian Trail of Palm Beach County | 1.01 |
| Jonathan Dickinson State Park Horse Trails | 7.04 |
| ALL PROPOSED TRAILS | |
| Big Cypress FNST Section 1 Extension | 6.31 |
| Boca Grande Rail-Trail | 4.96 |



| | |
|---|--------|
| C-18 Canal Trail (Hungryland Slough Canal) | 13.73 |
| Calusa Canoe Trail | 47.14 |
| Collier Tract Trail Section 2 (FNST Alternate Route) | 24.33 |
| Goodlette/Gordon River Greenway | 7.38 |
| Greenway Network for South Dade (Watershed Interactive Network) | 204.37 |
| Hassee Lakada Rail Trail | 1.10 |
| Howard Clark Sr. Comprehensive Linear Walkway | 0.79 |
| Kissimmee River-Lake Arbuckle FNST Connector (FNST Alternate Route) | 8.81 |
| Lake Arbuckle-Maxey Quarters Connector (FNST Alternate Route) | 0.39 |
| Lake Arbuckle-Maxey Quarters FNST Connector (FNST Alternate Route) | 4.44 |
| Lake Okeechobee Ridge | 0.90 |
| Miami-Homestead Rail-Trail | 26.26 |
| Orlando Butler Greenway | 6.33 |



APPENDIX 5: *Glossary*

Active Recreation

recreation that involves some direct and specialized physical manipulation by the participant such as swimming, hiking, boating, bicycling, horseback riding, etc.

Ad Valorem Tax

a special tax levied to raise funds for a particular purpose of recognized value to the community

Alternative Transportation

transportation not using single-passenger motorized vehicles

Appropriate Use

a use that is consistent with the established conservation and management goals and/or regulations of a specific area

Archaeological Site

location bearing physical evidence, usually buried, of past human use or occupation

Biodiversity

the variety and variability within and among living populations and species of organisms and the ecosystems in which they occur

Bioregions

assemblages of native landscapes and ecosystems that can be defined by topographic or climatic features or watershed; a place defined by its life forms, its topography and its biota

Buffer

natural area or open space used to minimize the impacts of adjacent lands and their uses on core areas or areas selected for a particular management strategy

CARL

see Conservation and Recreation Lands

Coarse Filter Approach

biodiversity conservation that involves identifying and conserving entire native communities and ecosystems

Compatible Human Use

uses that protect, sustain, or enhance the underlying natural, recreational, cultural, and historic resources of a specific area

Comprehensive Plan

plan that meets the requirements of §163.3177 and §163.3178, *F.S.* and thus contains the guidelines, principles, and standards for the orderly, coordinated and balanced future economic, social, physical, environmental, and fiscal development of the area

Connectivity

the ability to create functionally contiguous blocks of land or water through linkage of similar ecosystems or native landscapes; the linking of trails, communities and other human features

Conserve

the act or practice of protecting, managing, maintaining, and/or restoring natural, cultural, and historical resources

Conservation and Recreation Lands

land acquisition program administered by the Florida Department of Environmental Protection to acquire property from willing property owners to protect environmentally endangered lands for state parks, forest, wildlife management areas, beaches and recreation areas which are sensitive due to the presence of unique or rare habitats, endangered or threatened species or unique historical, archaeological or geological features

Conservation Corridor

linear natural areas and ecological communities primarily managed for the conservation of biological diversity and renewable resources, that differ in form and function from their surroundings; routes or avenues to ensure completion of life cycles, unimpeded water flow and migration and gene flows

Conservation Easements

a less-than-fee-simple land acquisition technique that allows the property owner to retain ownership rights while agreeing to manage the land for its given use

**Continuum**

continuous whole, quantity, or series; thing whose parts cannot be separated or separately discerned; biological complexity can be considered a continuum from amino acids to the biosphere

Core Ecosystem

a large area that is managed solely or primarily as an ecological reserve for the conservation of biological diversity; such areas will often be the central units within an integrated conservation system; may include several ecosystems

Corridor

linear protected areas that may serve as biological and/or hydrological connecting corridors and/or provide outdoor, resource-based recreational opportunities

Critical Threshold

a maximum limit or threshold that when crossed, results in degradation or deterioration

Cultural Heritage

the complex of historical, archaeological, folklife, and other cultural components representing the past and present people

Cultural Landscape Features

components of the landscape representing past and present human use or modification that contribute to our understanding or appreciation of past and present people

Cultural Resources

archaeological and historical sites and properties

Ecological

pertaining to the interactions of living organisms with one another and their physical/chemical environment

Ecological Degradation

the interruption of ecological functions and processes and/or loss of ecological structure necessary to maintain the integrity and adaptive nature of native landscapes and ecosystems

Ecological/Nature Reserves

areas established solely or primarily to protect, maintain and/or restore native landscapes and ecosystems and associated native biological diversity

Ecological Process

the interactions of living organisms with one another and with their physical/chemical environment

Ecological Site

a site with unique ecological/geological features

Ecosystem

the living and nonliving components of the environment that interact or function together, including native plants, animals, and peoples, as well as the physical environment and the energy systems in which they exist

Ecosystem Integrity

the ability of an ecosystem to maintain essential ecological processes, functions, and structures and to adapt to spatial and temporal changes

Ecosystem Management

an integrated approach to the management of Florida's green infrastructure of native landscapes and communities recognizing the biological, physical and chemical elements of discrete environments conducted through the use of tools such as planning, land acquisition, environmental education, regulation and pollution prevention designed to maintain, protect, and improve the state's natural, managed, and human communities

Ecotourism

tourism based *principally* upon natural and archaeological/historical resources; differs from tourism based upon man-created attractions; that segment of tourism that involves traveling to relatively undisturbed or uncontaminated natural areas with the specific object of admiring, studying, and enjoying the scenery and its wild plants and animals, as well as any existing cultural features (both past and present) found in these areas

Environmental Education Act

passed in 1989 to create a continuing awareness of the essential mission to preserve the earth's capability to sustain life in the most healthful, enjoyable, and productive environment possible; with special concern being given to the ecological system of the state and the ways human beings depend upon and interact with this system; the act established the Florida Advisory Council on Environmental Education, the Office of Environmental Education and the Environmental Education Foundation of Florida, Inc.

Evolution

adaptation or change in the genetic makeup of species over time; natural selection

Evolutionary Forces

biological and environmental factors that cause changes in the genetic makeup of species' populations over time



Exotic Species

those species not native to the existing ecosystems or geographical area; often detrimental to native ecosystems, flora, and fauna

Fauna

animal populations and species

FCT

see Florida Communities Trust

Fee-Simple

acquisition of all the interests in property resulting in ownership

FGCC

see Florida Greenways Coordinating Council

Fine Filter Approach

biodiversity protection focusing on specific single species and their habitats

Flora

plant populations and species

Florida Communities Trust

a non-regulatory agency housed within the Department of Community Affairs, created to assist local communities implement the goals, policies, and objectives of the Conservation, Recreation and Open Space and Coastal Management elements of the local comprehensive plan

Florida Greenways Coordinating Committee

proposed 26-member council of private business- people, landowners, conservationists, recreationists, local government and the public sector to explore opportunities to promote greenway initiatives through technical support, leadership, education, advocacy and other service-oriented efforts; will serve as a facilitator for the formation of partnerships involving public agencies, landowners, private businesses, environmental and other community-based groups and nonprofits

Florida Greenways Plan

refers to the Five-year Florida Greenways System Implementation Plan to be prepared by the lead state agency that would identify existing pertinent data on greenways; prepare a comprehensive statewide analysis of the biological, physical, economic, recreational, historical and transportation data for greenways in Florida; update and refine the Florida Greenways Commission's greenway map series with the goal of developing a Florida Greenways map atlas; effectively link the statewide system of greenways to

other state, regional and local programs; and identify specific actions to implement the statewide system of greenways

Florida Greenways Project

created in 1991 as a joint effort of 1000 Friends of Florida and The Conservation Fund to look for ways to link existing urban and rural "green" areas like state and national parks and forests, rivers and wetlands systems to create a statewide "green infrastructure"; better protect and manage Florida's biodiversity and water resources; forge better links between Floridians and the natural Florida; and develop more widespread popular support for natural resource conservation

Florida Greenways System

statewide system proposed to link natural areas, open spaces and trails in Florida, consisting of large or medium-sized hubs, smaller sites, and extensive to small connective landscape features

Florida Master Site File

computer and paper inventory of known archaeological and historical sites in Florida, maintained at the Division of Historical Resources, Florida Department of State

Florida National Scenic Trail

a 1,300-mile-long trail designated in 1983, following the route of the Florida Trail

Florida Rails-to-Trails Acquisition Program

state program administered by the Department of Environmental Protection to acquire abandoned railroad corridors for their use as trails and to protect the route of the Florida National Scenic Trail

Florida Recreational Development Assistance Program

state program administered by the Department of Environmental Protection to give grants to local governments and state agencies to acquire and develop park and recreation lands

Florida State Comprehensive Outdoor Recreation Plan

statewide planning document prepared by DEP to identify outdoor recreation resource and facility needs in Florida, address statewide outdoor recreation issues and recommend policies, goals, and objectives for meeting those needs and issues



Florida Trail Association

private, not-for-profit organization created in 1966 to build a continuous hiking trail some 1300 miles long, from south Florida to northwest Florida

General Obligation Bonds

also known as full faith and credit bonds because their repayment is based on the general credit and taxing powers of the borrowing government, typically used to finance the capital portion of tax-supported general public purpose governmental activities

Generalist Species

a plant or animal species that can survive under a wide range of biological or physical environmental conditions

Genes

units by which inherited characteristics are transmitted from an organism to its offspring

Grassroots

efforts at local level utilizing public interest groups and communities

Green Infrastructure

the sum of the public and private conservation lands including native landscapes and ecosystems, greenspaces and waters throughout the state

Greenbelt

protected natural lands or working landscapes that surround cities and serve to conserve and direct urban and suburban growth

Greenspace

natural areas, open space, trails and greenways that function for both wildlife and people

Greenway

a linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or over land along a railroad right-of-way converted to recreational use, a canal, a scenic road, or other route; any natural or landscaped course for pedestrian or bicycle passage, an open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas; locally, certain strip or linear parks designated as a parkway or greenbelt

Habitat Fragmentation

human activity such as agriculture, road building, suburb and city development resulting in the creation of small, isolated areas that are poorly suited to maintaining ecological function and support smaller populations of re-

maining species; two components of habitat fragmentation, both of which cause extinctions: (1) reduction in total habitat area (which primarily affects population sizes and thus extinction rates); and (2) redistribution of the remaining area into disjunct fragments (which primarily affects dispersal and thus immigration rates)

Heritage Tourism

tourism activities based on and incorporating the cultural heritage of an area

Historic Preservation Grant Program

state and federally funded grant program using Historic Preservation Trust Fund monies administered by the Division of Historical Resources to support projects that identify, inventory, protect, and promote historical resources

Hubs

areas that anchor a network and provide an origin or destination for elements moving to or through it

Information Clearinghouse

storehouse and distributor of information

Integrated Conservation System

a comprehensive system of ecological reserves, conservation areas, buffer zones, landscape linkages, and corridors that function as a unit to effectively conserve biological diversity

Intermodal Surface Transportation Efficiency Act

federal transportation act passed in 1991

Intrastate Highway System

the road network owned and maintained either directly or through memoranda of agreement by the Florida Department of Transportation

IRS §501 (c)(3)

the provision of the Internal Revenue Code that authorizes the IRS to grant tax-exempt status to not-for-profit corporations, enables donors to deduct contributions to the corporation from income taxation

ISTEA

see Intermodal Surface Transportation Efficiency Act

K-12

kindergarten through grade twelve

Keystone Species

plant and animal species occupying important niches that have major impacts on trophic levels and ecological struc-



ture and function and/or specifically create necessary habitat for other species

Land and Water Conservation Fund

a Department of Interior program that gives grants to state agencies and local governments to acquire and develop park and recreation lands

Land Ethic

the desire humans have to conserve, protect, and respect the native landscape and other natural resources because their own well-being is dependent upon the proper functioning of the ecosystem

Landscape

includes a mix of both human and natural features and contains numerous interacting ecosystems such as forests, fields, waterways, and human settlements

Landscape Ecology

the study of native landscape structure, function, and change at the scale of entire landscapes, as well as the application of the results to the design and management of both natural and human-dominated areas

Landscape Linkage

large linear protected areas connecting ecosystems and landscapes that provide sufficient space for native flora and fauna to safely live, reproduce, and move, and that may result in the protection of historic sites

Less-Than-Fee-Simple

land acquisition technique that obtains only certain land use rights from the landowners, such as conservation easements, management agreements or leases

Linkages

connections that enable the system to function and multiply the utility of existing components by connecting them together like beads on a string

Management Agreements/Leases

agreements/leases by landowners and agencies to guide land uses and management activities; can be used to establish low-impact buffer zones between the undeveloped and developed areas

Mitigation Banking

preserving large natural systems or areas for the purpose of mitigating, in advance, the adverse effects caused by a number of future negative activities; allows developers and landowners with eligible sites to fully and irrevocably transfer responsibility to mitigate for negative impact to multi-acre "bank" sites of degraded lands, which bank op-

erators enhance or restore to carry out their clients' mitigation responsibilities

Multi-Modal Transportation

the use of several modes of transportation to meet the mobility needs of the public including personal vehicles, public transportation, bicycling, walking, and trip-reducing techniques

Multiple Use

a land management objective seeking to coordinate several environmental, recreational, economic, historical, cultural and/or social values in the same geographic area in a compatible and sustainable manner

National Trails System

federal program designed to spur the creation of a system of trails throughout the country; authorized pursuant to the "National Trails System Act" (16 U.S.C. 1241) and administered by the Department of the Interior

Native Ecosystems

protected, managed, and/or restored biotic communities and composite ecological processes that are relatively unaltered by human activity in comparison to human dominated environments

Native Landscapes

relatively natural juxtapositions and interactions of protected, managed, and/or restored native ecosystems in comparison to human dominated and other highly altered landscapes including those productive lands protected as nature preserves and conservation areas; provide numerous free services such as stable flow of clean water, aesthetic qualities that enhance real estate values and tourist revenues

Natural Heritage

the complex of biological and physical components representing the past and present environment

Natural Resources

renewable and non-renewable resources found in nature such as forests, water, minerals, and energy

Open Space

undeveloped lands suitable for passive recreation or conservation uses

Passive Recreation

recreation which is more mental than physical, such as sightseeing, nature study, scenic appreciation, etc.



Preservation 2000 (P2000)

approved by the Florida Legislature in 1990 to fund the state's purchases of natural lands to protect ecosystems that provide vital services and to ensure both Florida's tourist economy and the very survival of future generations of Floridians

Private Land Stewardship

management practices of private landowners that recognize the community benefits of the land, such as flood control, groundwater recharge, habitat protection, or scenic views, and maintain the land in such a way as to protect these benefits for present and future generations

Rails-to-Trails Conservancy

national not-for-profit organization established in 1985 by conservationists and outdoor recreation leaders to serve as an information clearinghouse and advocacy group for rail-trail conversions

Recreational Corridor

linear open spaces used primarily for outdoor recreational activities

Recreational Site

an area that provides recreational facilities opportunities, and sometimes serves within a greenway system as origin or destination

Regional Landscape Approach

a conservation strategy that recognizes the importance of interactions between the built environment, rural lands, and native ecosystems and incorporates planning and management at an appropriately large spatial scale that ensures effective conservation of biological diversity and economic sustainability

Reserve

large protected areas that serve as primary sites for the conservation of biological diversity, natural resources, and in some cases for important historic sites

Resource-Based Recreation

outdoor recreation of types dependent on certain specific outdoor recreation resources, such as boating on water, hunting in forests, etc.

Restore

to bring back to a former or normal condition by repairing or rebuilding

Ridge-Top Corridors

corridor along or adjacent to mountains or other elevated areas

Riparian

living or located on the bank of a natural watercourse

Riparian Corridor

corridor adjacent to and/or including the banks of a water body functioning to protect water resources and environmental integrity

Save Our Rivers

land acquisition program administered by each of Florida's five water management districts; requires each district to develop a five-year plan detailing proposed land acquisitions for the district; selects projects based on protection of water quality, groundwater recharge areas and natural communities, and nonstructural flood control

Scenic Byways

national program which provides a rationale, design standards, and financing techniques for establishing scenic roads or historic roads

Scenic Corridor

corridors of land that are protected for scenic quality and other aesthetic considerations such as scenic highways and canopy roads

Setback

a zoning or land use tool that restricts the use of property adjacent to a property line for utilitarian uses

Sites

small features that may serve as points of origin or destination but are not always linked with other system components

SOR

see Save Our Rivers

Sovereign Immunity

a limited immunity from lawsuits granted to governmental entities that is often waived for particular purposes up to specified amounts

Spatial

happening or existing in an open landscape or space, as in spatial integration or spatial connectivity

Species Interchange

movement of wildlife to facilitate biological diversity, ecological stability, and species survival

Statewide Trails System

state-designated trails for canoeing, hiking, bicycling, and horse back riding administered by DEP

**Stewards**

those who act with a sense of responsibility for, desire to participate in, or take charge of the protection of land and water resources

Stewardship

sense of responsibility for, desire to participate in, or taking charge of the protection and management of land and water resources

Succession

the slow, regular sequence or series of changes in the regional development of communities of plants and animals culminating in a climax characteristic of a specific geographical environment

Sustainable Future

a future in which the actions of the present generation enhance rather than constrain the opportunities of present and future generations

Sustainability

making sure present needs are met without compromising the needs of future generations

System

set of interconnected components that function as a whole and thereby achieve a behavior or performance that is different than the sum of each of the components taken separately

Systems Approach

systems are made up of sets of components that work together for the overall objective of the whole; the systems approach is simply a way of thinking about these total systems and their structures, function and processes

Tax Increment Financing District

a geographically defined area in which additional tax revenues accrue through increases in the ad valorem tax base, which are dedicated to implementing the purpose of the district

Temporal

of or impacted by time

The Conservation Fund

national organization committed to advancing land and water conservation in America; major project is American Greenways, a concept that grew out of President Ronald Reagan's Commission on Americans Outdoors

Tort Claims

judicially-evolved legal claims brought to redress personal injury or property damage, often modified by statute

Trail

linear corridors on land or water with protected status and public access for recreation or transportation

Trail Certification

process of approving a trail's design, use and management to protect the resource and the visitor's recreational experience

Urban Area

may serve as human hubs that generate demand for a greenways system

Utilitarian Corridor

linear man-made features whose primary purpose is utilitarian but may also serve as short or temporary connections for recreational, cultural, or natural needs

Utility

public utilities (electric, telephone, fiber optic, water and sewage and gas companies) and utility-like (pipelines, roads, levees, canals)

Vascular Plants

any plant having specialized tissues (xylem and phloem) that conduct water and synthesized foods

Vertebrate Species

species having a backbone, or spinal column, such as mammals, fishes, birds, reptiles, and amphibians

Watershed

a topographically discrete unit or stream basin, including the headwaters, main channel, slopes leading from the channel, tributaries and mouth area, and defined by a common drainage pattern

Wellness

general state of good health and well-being; may be increased by outdoor recreation and sound nutrition

Working Landscapes

rural lands that have been modified by the hand of mankind and continue to be operated on a productive basis, including farmland of all types, privately-managed timber land, reclaimed mine lands, and other privately owned rural land maintained in a predominantly open and undeveloped state



APPENDIX 6:

Selected References

- American Hiking Society. Summer 1994. *American Hiker*. David Lillard, ed., Washington, D.C.
- Churchman, C. West. 1968. *The Systems Approach*. Dell Publishing Co., Inc., New York.
- Cox, James, Randy Kautz, Maureen MacLaughlin, and Terry Gilbert. 1994. *Closing the Gaps in Florida's Wildlife Habitat Conservation System – Recommendations to meet minimum conservation goals of declining wildlife species and rare plant and animal communities*. Office of Environmental Services, Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.
- Davis, J.H. 1967. *General map of natural vegetation in Florida*. Agricultural Experiment Station, Institute of Food and Agricultural Science, University of Florida, Gainesville, Florida.
- Fernald, Edward A. and Elizabeth D. Purdum, eds. 1992. *Atlas of Florida*. Institute of Science and Public Affairs, Florida State University, University Press of Florida, Gainesville, Florida.
- Flink, Charles A. and Robert M. Searns. 1993. *Greenways: A Guide to Planning, Design, and Development*. Loring LaB. Schwarz, ed., The Conservation Fund, Island Press, Washington, D.C.
- Flink, Charles A., Peter Lagerwey, Diana Balmori, and Robert M. Searns. 1993. *Trails for the Twenty-First Century: Planning, Design, and Management Manual for Multi-Use Trails*. Karen-Lee Ryan, ed., Rails-to-Trails Conservancy, Island Press, Washington, D.C.
- Florida Department of Environmental Protection. 1994. *Outdoor Recreation in Florida 1994*. Florida's Statewide Comprehensive Outdoor Recreation Plan. Division of Recreation and Parks, Tallahassee, Florida.
- Florida Department of Environmental Protection. 1994. *Preservation 2000: A 10-Year Land Acquisition Plan, Conservation and Recreation Lands Annual Report*. Division of State Lands and Land Acquisition Advisory Council, Tallahassee, Florida.
- Florida Department of Natural Resources. 1989. *Florida Rivers Assessment*. Tallahassee, Florida.
- Florida Trail Association. 1992. *Guide to the Florida Trail*. Glanzer Press, Inc., Newberry, Florida.
- Forman, R.T.T. 1987. "The ethics of isolation, the spread of disturbance, and landscape ecology," *Landscape Heterogeneity and Disturbance*. Turner, M.G., ed., Springer-Verlag, New York, pp. 213-230.
- Hansson, L. and P. Angelstam. 1991. "Landscape ecology as a theoretical basis for nature conservation." *Landscape Ecology*. 5(4): 191-201.
- Harris, Larry D. 1984. *The Fragmented Forest: Island Biogeography Theory and the Preservation of Biotic Diversity*. The University of Chicago Press, Chicago, Illinois.
- Harris, Larry D., and G. Silva-Lopez. 1992. "Forest fragmentation and the conservation of biological diversity," *Conservation Biology: The Theory and Practice of Nature Conservation, Preservation, and Management*. P. Fielder, and S. Jain, ed., Chapman and Hall, New York, pp. 197-237.
- Hunter, M.L., G.L. Jacobson, and T. Webb. 1988. "Paleoecology and the coarse-filter approach to maintaining biodiversity." *Conservation Biology*, 2(4):1988.
- Kautz, Randy. 1993. "Trends in Florida Wildlife Habitat 1936-1987." *Florida Scientist* 56:7-24.
- Kusler, Jon A. 1991. *Ecotourism and Resource Conservation*. Ecotourism and Resource Conservation Project. OmniPress, Madison, Wisconsin.
- Labaree, Jonathan M. 1993. *How Greenways Work – A Handbook on Ecology*. Rivers, Trails, and Conservation Assistance Program, National Park Service and Quebec-Labrador Foundation's Atlantic Center for the Environment, Ipswich, Massachusetts.
- Land Acquisition Advisory Council. 1991. *Florida Preservation 2000 Needs Assessment*. Lands Acquisition Program Integration Committee. Tallahassee, Florida.



- Lautin, Lew. 1994. *Wetlands Mitigation Banking Update*. Florida Wetlandsbank, Smith & Knibbs, Inc.
- Leopold, A. 1949. *A Sand County Almanac*. Oxford University Press, New York.
- Little, Charles E. 1990. *Greenways for America*. The Johns Hopkins University Press, Baltimore and London.
- Metro. 1992. *Metropolitan Greenspaces Master Plan, A Cooperative Regional System of Natural Areas, Open Space, Trails and Greenways for Wildlife and People*. Portland, Oregon.
- Moody's Investors Service. 1987. *Moody's on Municipal: An Introduction to Issuing Debt*. Moody's Investors Service, Inc., New York, N.Y.
- Moore, Roger L., Alan R. Graefe, Richard J. Gitelson, and Elizabeth Porter. 1992. *The Impact of Rail- Trails: A Study of Users and Nearby Property Owners from Three Trails*. National Park Service, Rivers and Trails Conservation Assistance Program, Washington, D.C.
- Muller, J.W., E.D. Hardin, D.R. Jackson, S.E. Gatewood, and N. Caire. 1989. *Summary report on the vascular plants, animals, and plant communities endemic to Florida*. Nongame Wildlife Program Technical Report No. 7, Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.
- Myers, Ronald L. and John J. Ewel, eds. 1990. *Ecosystems of Florida*. University of Central Florida Press, Orlando, Florida.
- National Park Service, Rivers, Trails and Conservation Assistance Program. 1990. *Economic Impacts of Protecting Rivers, Trails and Greenway Corridors*.
- North Carolina Greenways Advisory Panel. May, 1994. *Report to the Governor*. Raleigh, North Carolina.
- O'Neill, R.V., C.T. Hunsaker, D. Jones, J.M. Klopatek, V.H. Dale, M.G. Turner, R.H. Gardner, and R. Graham. In preparation. *Sustainability at Landscape and Regional Scales*. Environmental Sciences Division, Oak Ridge National Laboratory.
- Office of Technology Assessment. 1984. *Technologies to sustain tropical forest resources*. Report OTA-F- 214. Office of Technology Assessment, U.S. Congress, Washington, D.C.
- Outdoor Recreation Resources Review Commission. 1962. *Final Report*. Government Printing Office, Washington, D.C.
- President's Commission on Americans Outdoors. 1987. *Americans Outdoors: The Legacy, The Challenge*. Island Press, Covelo, California.
- Reilly, William K. 1991. *A New Vision for Paradise*. Remarks made to 1000 Friends of Florida Annual Conference, Orlando, Florida.
- Sale, K. 1985. *Dwellers in the Land: The Bioregional Vision*. Sierra Club, San Francisco.
- Smith, Daniel S. and Paul Cawood Hellmund, eds. 1993. *Ecology of Greenways - Design and Function of Linear Conservation Areas*. University of Minnesota Press, Minneapolis, London.
- Surface Transportation Policy Project Resource Guide. 1992. *Vermont Gets Five Miles Greener*. Washington, D.C.
- Surface Transportation Policy Project Resource Guide. March 1993. *Greenway Gets a Green Light*. Washington, D.C.
- Turner, M.G. 1989. *Landscape ecology: the effect of pattern on process*. *Annu. Rev. Ecol. Syst.* 20:171-97.
- United States Department of Agriculture, Forest Service. 1986. *Florida National Scenic Trail Comprehensive Plan*. Tallahassee, Florida.
- United States Department of Interior. 1978. *National Urban Recreational Study - Executive Report*. Government Printing Office, Washington, D.C.
- United Nations Framework Convention on Biological Diversity. 1992. *International Legal Materials*. 31: 818.
- Wilcove, D.S., C.H. McLellan, and A.P. Dobson. 1986. "Habitat fragmentation in the temperate zone," *Conservation Biology: The Science of Scarcity and Diversity*. M.E. Soule, ed., Sinauer Associates, Inc., Sunderland, Massachusetts.
- World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University Press, New York.