



OUTDOOR

RECREATION IN FLORIDA



2019 STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

Acknowledgements

Outdoor Recreation in Florida 2019

SCORP Workgroup and Contributors

Doug Alderson- *FDEP, Office of Greenways and Trails*
Dale Allen- *Florida Greenways and Trails Foundation*
Rob Barrett- *FDEP, Interpretive Services*
Alicia Baxter- *Orange County Parks and Recreation Department*
Katie Bernier- *FDEP, Office of Greenways and Trails*
Vincent "Chip" Birdsong- *Florida Department of State*
Robin Birdsong- *Florida Department of Transportation*
David Clark- *FDEP, Division of State Lands*
Stefis Demetropoulos- *Florida Forest Service*
Megan Eno- *U.S. Forest Service*
David Jones- *Florida Disabled Outdoors Association*
Mark Kiser- *FDEP, Office of Park Planning*
Jerry Krenz- *South Florida Water Management District*
Jerrie Lindsey- *Florida Fish and Wildlife Conservation Commission*
Tyler Macmillan- *Northwest Florida Water Management District*
Edwin McCook- *Suwannee River Water Management District*
Sine Murray- *FDEP, Office of the Director*
Bryan Nipe- *City of Lake Mary Parks and Recreation Department*
Nels Parson- *St. Johns River Water Management District*
Dan Pennington- *Florida Department of Economic Opportunity*
Carmen Sanders- *South Florida Water Management District*
Karen Thurston-Chavez- *FDEP, Office of Resilience and Coastal Protection*
Robin Vroegop- *Florida Geotourism Associates*
John Waldron- *All Rec Solutions*
Katherine Wallace- *FDEP, Office of Resilience and Coastal Protection*
Eleanor Warmack- *Florida Recreation and Park Association*
Robin Will- *U.S. Fish and Wildlife Service and Get Outdoors Florida!*
Andrew Williams- *FDEP, Bureau of Natural and Cultural Resources*

Additional Contributors from the Florida Department of Environmental Protection (FDEP)

Tamika Bass
Demi Baxley
Laura Bollmann
Sheryl Boutin
Angela Bright
Samantha Browne
Jennifer Butler
Steve Cutshaw
Daniel Diaz
Mara Dombrowski
Eric Draper
Wileen Footman
Brady Harrison
Ann Lazar
Tyler Maldonado
Heather Mason
Harley Means
Donald Morgan
Ryan Mulvey
Adam Neuse
Linda Reeves
Marisa Rhian
Cole Zelznak

Noah Valenstein, Secretary, FDEP
Barbara Goodman, Deputy Director, Land and Recreation
Eric Draper, Director, Recreation and Parks

Project Manager and Editor: Mark Kiser
Graphic Design and Layout: Cory Bueschel & Kari Baasch





Special Thanks

Florida's Statewide Comprehensive Outdoor Recreation Plan (SCORP)

Paula Allen, Joel Allbritton, Daniel Alsentzer, David Barth, Fred Beckham, Mariano Berrios, Keith Bettcher, Rob Buda, Jennifer Carver, Jim Cichon, David Clayton, Kevin Coyne, Gil Damon, Erika Davis, Craig Diamond, Jesse English, Richard Fetchick, Elyssa Finklestein, Donald V. Forgione, Anne Glick, Whitney Gray, Ada Griffin, Michael Guarino, Scott Hansen, Terry Hansen, Lisa Henning, Eric Hothem, Susanne Hunt, Juni Hylton, Emily Johnson, Penny Justin, Elizabeth Khan, Selena Kiser, Paula Knight, Colleen Kruk, Suzanne Lane, Brenda Leonard, Pam Lister, Vince Magnini, Rosemarie Marco, Shannon Martin, Claudia Mayo, Kayleigh Michaelides, Marti Miller, Matt Mitchell, Britney Moore, Rich Noyes, Eric Pate, Erik Pedersen, Ralph Perkins, Brian Powers, Rosemary Prince, Timothy Rach, Lorna Radcliff, Jim Reynolds, Orlando Rivera, Kaye Robertson, Brian Ruscher, Tessa Schreiner, Annya Shalun, Christine Small, Parks Small, Heather Shuke, Liz Sparks, Adam Straubinger, Alicia Trawick, Derrick Washington, Michelle Waterman, Zack Wetzel, Tashunda Williams and Chuck Wyatt.

The Institute for Service Research and The Balmoral Group provided contractual services for this plan.

To download this plan, or for more information about Florida's recreation planning efforts, visit www.floridadep.gov/parks or call the Office of Park Planning at 850-245-3051.

Recommended Citation:

Florida Department of Environmental Protection. 2019. Outdoor Recreation in Florida 2019: Florida's Statewide Comprehensive Outdoor Recreation Plan. Division of Recreation and Parks, Tallahassee, Florida. 137 pp. + appendices.



Cover Photo Credits: **Top-** Rainbow Springs State Park, Credit: KossinaCreative. **Bottom left-** South Florida Bicycle Coalition, Credit: Kate McCarthy. **Bottom Center-** St. George Island State Park, Credit: FDEP. **Bottom right-** Florida Recreation and Park Association, Credit: Steve Depolo





RON DeSANTIS
GOVERNOR

July 24, 2019

Dear Fellow Floridians:

Outdoor recreation is essential to Florida's prosperity and way of life. Our beautiful beaches, parks, trails and excellent sports facilities draw people from across the world to visit Florida or make it their home.

Every five years, the Florida Department of Environmental Protection, with the help of many partners, develops the Statewide Comprehensive Outdoor Recreation Plan. Numerous stakeholders, including recreation businesses and local governments, contributed their time, talents and passion to develop this important policy document for 2019. The public also had ample opportunity to provide input during the plan's development.

This Plan outlines Florida's bold vision for a thriving and diverse outdoor recreation system. To that end, the Plan focuses on and encourages the following:

- increasing health and wellbeing by promoting active lifestyles in the outdoors;
- expanding the number of recreation facilities, programs and opportunities in underserved communities;
- improving public access to our recreation lands and developing more inclusive and welcoming facilities and programs;
- augmenting coordination among agencies and providers to better connect communities to local and regional parks and trails; and
- promoting governmental and private partnerships to grow Florida's tourism-based economy.

Importantly, this outdoor recreation plan also encourages conservation of the natural and cultural resources upon which we all depend. Sound resource management and stewardship of these resources will help ensure the high-quality recreation experiences our residents and visitors have come to expect from the Sunshine State remains for generations to come.

In short, the recommendations and guidance in this document will help recreation providers improve the well-being of citizens and visitors and will ensure that Florida remains one of the best places in the world to live, work and play.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ron DeSantis".

Ron DeSantis
Governor





SCORP's Priorities and Goals

Oleta River State Park, Credit: Crawford Entertainment

Florida is paradise for millions of outdoor recreation enthusiasts. Whether you enjoy fitness walking in your neighborhood, horseback riding on a woodland trail, deep sea fishing for snapper, playing a pick-up game of basketball at your local court or just relaxing on one of our pristine beaches, the Sunshine State has thousands of parks, thousands of miles of trails and millions of acres of recreation lands and waters available to pursue your passion.

There are numerous challenges, however, to ensuring that all Floridians have a chance to enjoy high-quality recreation experiences. This is especially true for undeserved communities in urban and rural areas. As with Florida's previous Statewide Comprehensive Outdoor Recreation Plans (SCORPs), this plan provides numerous recommendations to help meet our growing recreation needs. To the right are the plan's four priority areas and 10 overarching goals, which cover a wide range of topics. The SCORP workgroup crafted multiple strategies to help ensure successful implementation of the plan. Please see Chapter 5 and Appendix L for more details about this SCORP's goals and strategies.

Working together, Florida's recreation and health care providers, planners, non-government organizations, elected officials and private citizens will use the plan's recommendations to bring Florida closer towards its vision of a balanced, equitable and accessible outdoor recreation system. Please join us and do your part to support outdoor recreation in Florida.

Priority Area 1: Health and Well-being

- Goal 1-1: Increase the promotion of active and healthy lifestyles in the outdoors.
- Goal 1-2: Increase the number the recreation facilities, programs and opportunities in urban areas and rural communities.

Priority Area 2: Public Access, Accessibility and Connectivity

- Goal 2-1: Promote the diversity of recreation participants through the development of inclusive and welcoming programs and facilities.
- Goal 2-2: Improve universal accessibility on all public lands.
- Goal 2-3: Ensure that appropriate conservation lands and waters are open and accessible for public use and are widely promoted.
- Goal 2-4: Coordinate providers, agencies and organizations to better connect and promote lands and opportunities.
- Goal 2-5: Promote local parks and trails, along with neighborhood and regional connectivity.

Priority Area 3: Economic Opportunities and Ecotourism

- Goal 3-1: Promote the economic benefits of outdoor recreation and ecotourism in Florida.

Priority Area 4: Resource Management and Stewardship

- Goal 4-1: Encourage the conservation and protection of Florida's natural, historical and cultural resources.
- Goal 4-2: Support natural, historical and cultural resource management to ensure high quality outdoor recreation experiences for Florida's residents and visitors.





How to Use This.....

If you are new to the Statewide Comprehensive Outdoor Recreation Plan (SCORP), this quick guide will introduce you to what the plan is all about.

Since 1963, Florida has engaged in a planning process that works towards a diverse, balanced, statewide outdoor recreation system. Approximately every 5 years, a team of recreation professionals crafts the SCORP, a policy plan that evaluates the state's recreation needs and serves as a road map for how to meet those needs.

The SCORP is not intended to sit on a shelf, gathering dust. Whether you are a recreation provider, a planner, public official, recreation user group member or a concerned citizen, this document presents actionable recommendations for improving the lives and well-being of Florida's citizens and visitors. Get involved, and use this SCORP as a tool and as a reference to help us improve the recreation opportunities for everyone in the Sunshine State.

Check out Chapter 1 to learn about SCORP's background and purpose, along with the planning process, public participation opportunities and coordination efforts with other recreation providers.

Chapter 2 includes information about the settings and attributes that make Florida such a special place for outdoor recreation, including its people and economy, climate, geology, physiography, hydrology, vegetation, wildlife, history and culture.

In Chapter 3, you'll find the key players and providers of outdoor recreation in Florida, along with their roles, resources and programs. Supply charts for recreation resources and facilities (federal, state, county, municipal and non-government) are included.

Chapter 4 contains results of the participation surveys, and analyzes outdoor recreation demand and need. Resident and visitor opinions about Florida's recreation facilities and opportunities are showcased. Level of service comparisons and a regional supply chart of recreation facilities are also presented.

Chapter 5 is the heart of the plan. It describes the State of Florida's vision for an ideal outdoor recreation system, one that benefits every community. This chapter also explains the priority areas, goals and strategies for the 2019 SCORP; how the plan will be implemented; and how you personally can help.

Chapter 6 describes the types and extent of wetlands and their importance to the state. Also discussed are current threats to wetlands; management and protection efforts; education and outreach; and priority needs and information gaps.

The Appendices contain a wealth of information about outdoor recreation in Florida. For starters, Appendices A and B include terms, definitions and acronyms used throughout the document. Appendix C presents detailed maps from the 2019-2023 Florida Greenways and Trails System Plan, which establishes the vision for a connected statewide system of greenways and trails for recreation, conservation, alternative transportation, healthy lifestyles, a vibrant economy and a high quality of life. The maps include Priority and Opportunity Trails for both land and water. Use the provided URL to open the maps and to zoom in on locations of interest.

Appendix D describes the state's Open Project Selection Process, whereby federal Land and Water Conservation Fund (LWCF) grant monies are made





....SCORP

Falling Waters State Park, Credit: Mick Russell

available to local governments to provide outdoor recreation opportunities to the public. If you are interested in applying for an LWCF grant, read this section to see the funding schedule, grant criteria, application steps and how to obtain technical assistance.

Appendix E includes the methodology and survey instruments used to conduct the participation and opinion surveys for the 2019 SCORP. Survey results can be found in Chapter 4, Appendix G and in the contractor’s final report, which is posted on FDEP’s SCORP web page.

Appendix F presents an online questionnaire administered to public providers of outdoor recreation in Florida. Results of this survey are shown, including major issues affecting recreation programs and recommendations for improving the next SCORP.

Appendix G features numerous data tables pertaining to participation in the 35 outdoor recreation activities monitored in the 2019 SCORP. Here you will find the rates of participation for each activity, plus trends, numbers of days of participation and an activity demand index.

Appendix H includes the Level of Service calculations, charts and recent trends regarding outdoor recreation activities in Florida. Statewide and regional participation figures are given.

Appendix I contains outdoor recreation supply charts for federal and state agencies, along with local resources and facilities. These numbers are derived from an update of the Florida Outdoor Recreation Inventory, which took place in the fall of 2017.

Appendices J and K provide the results of an

economic impact study conducted in tandem with this SCORP, which investigated the value of 35 outdoor recreation activities at the statewide, regional and county levels.

Appendix L presents the priority areas, goals and strategies from Chapter 5 in a mini-poster format. Keep these handy, and consider how they might tie in with your organization’s mission and planning efforts.

So, how will you use this SCORP? Let us know what level of utility the SCORP holds for you, and how you plan to incorporate the information provided to benefit your community and visitors. Thank you!



Credit: Mick Russell





Table of Contents

SCORP'S Priorities and Goals	5
How to Use This SCORP	6
CHAPTER 1 <i>Introduction and Background</i>	
Purpose	12
Outdoor Recreation: An Appropriate Role for Government	14
Roles in Outdoor Recreation Planning	15
Planning Process	16
Public Participation	16
Planning Coordination	18
Planning Regions	19
Conclusion	20
CHAPTER 2 <i>Florida's Outdoor Recreation Setting</i>	
Florida's People and Economy	22
Physical Situation	25
Geology	26
Physiography	26
Hydrology	27
Vegetation	28
Wildlife	30
History and Culture	31
CHAPTER 3 <i>Outdoor Recreation Programs and Supply</i>	
Roles in Providing Outdoor Recreation	34
Outdoor Recreation Programs	36
Federal Programs	36
State Programs	46
Local Government Providers	65
Private Sector and Non-Government Roles	67
CHAPTER 4 <i>Outdoor Recreation Demand and Need</i>	
Outdoor Recreation Demand	70
Top Recreation Activities	71
Importance of Recreation	72
Motivations for Participation	73
Satisfaction with Opportunities and Facilities	73
Comparing Supply and Demand	77
Outdoor Recreation User Groups and Associations	82
Conclusion	82





Table of Contents

Rainbow Springs State Park, Credit: Daniel Ortega

CHAPTER 5	<i>Outdoor Recreation Issues and Recommendations</i>	
	Vision for an Outdoor Recreation System	84
	Priority Areas, Goals and Strategies: A Method for Implementation	85
	Priority Area 1: Health and Well-being	86
	Priority Area 2: Public Access, Accessibility and Connectivity	96
	Priority Area 3: Economic Opportunities and Ecotourism	104
	Priority Area 4: Resource Management and Stewardship	109
	Conclusion	120
CHAPTER 6	<i>Assessment and Protection of Wetlands</i>	
	Introduction	122
	Type and Extent of Florida’s Wetlands	122
	Florida’s Wetlands 2011-2016: Gains and Losses	125
	Monitoring Efforts	127
	Significance of Threats to Florida’s Wetlands	129
	Wetland Regulatory Program Implementation, Policies and Standards	131
	Wetland Restoration and Enhancement Programs	131
	Special Area Management Plans	133
	Wetland Education and Outreach	133
	Priority Needs and Information Gaps	134
<i>List of Figures</i>		
CHAPTER 1	<i>Introduction and Background</i>	
	Figure 1.1 The Role of Public Participation	17
	Figure 1.2 SCORP Planning Regions	20
CHAPTER 2	<i>Florida’s Outdoor Recreation Setting</i>	
	Figure 2.1 Rural Areas of Opportunity	23
	Figure 2.2 Visitor Estimates for Florida	24
	Figure 2.3 Physiographic Regions	26
	Figure 2.4 Florida Facts	32
CHAPTER 3	<i>Outdoor Recreation Programs and Supply</i>	
	Figure 3.1 Federal Recreation Lands by Managing Agency	40
	Figure 3.2 Florida Outdoor Recreation Inventory: Recreation Areas and Facilities	48
	Figure 3.3 State Recreation Lands by Managing Agency	50
	Figure 3.4 Florida’s Regional Planning Councils	64



Table of Contents

CHAPTER 4	<i>Outdoor Recreation Demand and Need</i>	
Figure 4.1	Florida’s Top Recreation Activities	72
Figure 4.2	Importance of Outdoor Recreation – 2016 vs. 2011	73
Figure 4.3	Importance of Outdoor Recreation - Health and Quality of Life	73
Figure 4.4	Resident Opinions – Public Access to Florida’s Coastlines and Waterways	76
Figure 4.5	Resident Opinions – Public Access to Florida’s Recreational Trails	76
Figure 4.6	Predicted Population Increases by 2035	78
Figure 4.7	Level of Service Formula	78
Figure 4.8	Regional Distribution of Residents (Potential Users)	79
Figure 4.9	Regional Distribution of Tourists (Potential Users)	79
CHAPTER 5	<i>Outdoor Recreation Issues and Recommendations</i>	
Figure 5.1	Walking and Bicycling in Florida	102
CHAPTER 6	<i>Assessment and Protection of Wetlands</i>	
Figure 6.1	Florida’s Wetlands 2011-2016; Gains & Losses	125
Figure 6.2	Trends in Seagrass Acreage in Florida Coastal Waters	132
<i>List of Tables</i>		
CHAPTER 2	<i>Florida’s Outdoor Recreation Setting</i>	
Table 2.1	Visitor Estimates for Florida	24
Table 2.2	Managed Conservation Lands in Florida	30
CHAPTER 3	<i>Outdoor Recreation Programs and Supply</i>	
Table 3.1	Outdoor Recreation Resources and Facilities by Category of Provider, Statewide 2017	38
Table 3.2	Federal Agency Outdoor Recreation Resources	41
Table 3.3	State Agency Outdoor Recreation Resources	49
Table 3.4	Local Agency Outdoor Recreation Resources	64
CHAPTER 4	<i>Outdoor Recreation Demand and Need</i>	
Table 4.1	Overall Satisfaction with Recreational Opportunities - Residents	74
Table 4.2	Overall Satisfaction with Recreational Opportunities - Tourists	74
Table 4.3	Satisfaction with Quality of Recreational Facilities - Residents	74





Table of Contents

Rainbow Springs State Park, Credit: Daniel Ortega

Table 4.4	Satisfaction with Quality of Recreational Facilities - Tourists	75
Table 4.5	Satisfaction with Quantity of Recreational Facilities - Residents	75
Table 4.6	Satisfaction with Quantity of Recreational Facilities - Tourists	75
Table 4.7	Outdoor Recreation Supply Chart by Region 2017	80
Table 4.8	Comparing Regional Levels of Service to Statewide Median	81
Table 4.9	Recreation Activities: Top User Group Affiliations	82

CHAPTER 6 *Assessment and Protection of Wetlands*

Table 6.1	Wetland Types of Florida	123
Table 6.2	Extent of Florida's Wetlands	125
Table 6.3	Significance of Threats to Florida's Wetlands	128
Table 6.4	Wetlands Management Programs and Efforts	130
Table 6.5	Priority Needs and Information Gaps	135

Appendices

A.	Terms and Definitions	2
B.	Acronyms	12
C.	Florida Greenways and Trails System Maps	14
D.	Open Project Selection Process	30
E.	Institute for Service Research Methodology and Surveys	34
F.	Online Questionnaire	68
G.	Outdoor Recreation Participation by Activity	94
H.	Level of Service Charts and Activity Profiles	106
I.	Supply Charts by Agency	139
J.	Activity Spending Impacts: Part 1	155
K.	Activity Spending Impacts: Part 2	253
L.	Priority Areas, Goals and Strategies (posters)	330
	Literature Cited	336



Chapter 1

Introduction and Background

Grayton Beach, Credit: Michial McClellan

Florida is like no place else on Earth. Known as “the Sunshine State,” Florida offers an unparalleled combination of inviting climate, spectacular scenery, abundant lands and waters, world-class parks, a rich legacy of historical and archaeological wonders and amazing wildlife that together, provide an impressive suite of recreation locales and activities all year long. Florida might just as well be called “The Outdoor Recreation State.”

The state of Florida has long valued the importance of its natural resources and associated outdoor recreation. In the 1920s, the state established both the Department of Game and Fresh Water Fish and the Florida Forest Service, and its first state park lands were acquired in the 1930s.¹ In 1949, a comprehensive state parks act was passed creating the Board of Parks and Historic Memorials, which became the Division of Recreation and Parks in 1969.¹

Amid growing concerns about the potential loss of recreation opportunities due to increased development, the Florida Outdoor Recreation and Conservation Act of 1963 was passed by the Florida Legislature.¹ The act established the Florida Outdoor Recreation Development Council, which formalized the state’s outdoor recreation planning efforts and enabled a series of land acquisition programs for conservation and recreation purposes, all with dedicated funding sources. The first of these, called the Land Acquisition Trust Fund (LATF), was created to fund the new Outdoor Recreation and Conservation Program, which was designed primarily to purchase land for parks and recreation areas.

Thanks to the success of these early endeavors,

and to new programs they helped spawn such as the Conservation and Recreational Land Program and *Florida Forever*, approximately 15 million acres of public lands in Florida are available today for outdoor recreation (see Table 3.1 in Chapter 3).

Purpose

For decades, all 50 states have produced a policy plan commonly known as a Statewide Comprehensive Outdoor Recreation Plan (SCORP). The purpose of these plans, which are updated every five years, is to guide the development of a diverse, balanced, statewide outdoor recreation system. The SCORP serves as a framework for recreation planning and helps orchestrate the implementation of each state’s goals and recommendations.

According to Section 375.021, Florida Statutes, Florida’s SCORP must document recreational supply and demand, describe current recreational opportunities, estimate needs for additional recreational opportunities and propose means for meeting those identified needs. Florida’s plan is a broad statewide and regional appraisal of our outdoor recreation needs.

In addition, the SCORP fulfills the requirements of the federal Land and Water Conservation Fund (LWCF) Act of 1965 (P.L. 88-578), which was established to create parks and open spaces, protect wilderness, wetlands and refuges, preserve wildlife habitat and enhance recreational opportunities. Under this program, Florida is eligible to receive matching grants



SPOTLIGHT

Land and Water Conservation Fund

Since 1965, the LWCF State and Local Assistance Program has provided \$4.1 billion in financial assistance to states, territories, the District of Columbia and local units of government for the acquisition and development of public outdoor recreation areas and facilities. More than 40,000 grants have been given to state, tribal and local governments for outdoor recreation enhancement. See Chapter 3 for more information on Florida's LWCF projects.

to acquire and develop outdoor recreation lands and facilities.

Florida's 2019 SCORP is part of an outdoor recreation planning process that the state began in 1963;² this document represents the Sunshine State's 11th official plan. The Florida Department of Environmental Protection (FDEP), Division of Recreation and Parks (DRP) coordinates and develops each plan per state and federal legislative requirements.

In accordance with federal planning requirements, the SCORP must address the following issues:

- Evaluate demand for and supply of outdoor recreation resources and facilities;
- Conduct periodic studies to estimate and analyze outdoor recreation demand;
- Provide opportunities for public participation involving all segments of the population;
- Address current wetland protection strategies as required by the Emergency Wetlands Resources Act of 1986 (P.L. 99-645);
- Identify state and national outdoor recreation trends and initiatives;
- Develop and implement an "Open Project Selection Process" for LWCF grants.

Specific planning authority for FDEP is established by Section 375.021(1), Florida Statutes, which gives the agency specific responsibility, authority and power to develop and execute a comprehensive, multipurpose, statewide outdoor recreation plan. Section 258.004(3), Florida Statutes, directs FDEP to study and appraise the recreation needs of the state, and to assemble and disseminate information pertaining to recreation.



Credit: Frank Weber, Orange County Government

SPOTLIGHT

Section 375.021, Florida Statutes: Comprehensive Multi-Purpose Outdoor Recreation Plan

1) The Department (FDEP) is given the responsibility, authority and power to develop and execute a comprehensive multi-purpose outdoor recreation plan for the state with the cooperation of the Department of Agriculture and Consumer Services, the Department of Transportation, the Fish and Wildlife Conservation Commission, the Department of Economic Opportunity and the five water management districts.

2) The purpose of the plan is to document recreational supply and demand, describe current recreational opportunities, estimate the need for additional recreational opportunities and propose means for meeting identified needs. The plan shall describe statewide recreational needs, opportunities and potential opportunities.



Outdoor Recreation: An Appropriate Role for Government

Broadly speaking, outdoor recreation is any leisure activity conducted outdoors. Americans in general, and Floridians in particular are fortunate in having a multitude of activities available from which to choose, from wilderness camping and scuba diving, to hiking and bicycling, to golf and organized sports. These outdoor activities fall into two basic categories:

User-oriented outdoor recreation can be provided almost anywhere for the convenience of the participant. Recreation facilities and activities are especially important in urban and suburban areas, where 90 percent of Floridians reside. As with other urban services, user-oriented facilities and programs are most often provided by local governments. Examples include:



Swimming
(in pools)



Skateboarding



Playground
Activities



Tennis

Resource-based outdoor recreation (the narrower of the two categories) is dependent upon some element or combination of elements in the natural or cultural environments that cannot be easily replicated or provided just anywhere. State and federal agencies provide a significant portion of these opportunities. Examples include:



Hiking



Kayaking



Bicycling



Horseback
Riding

User-oriented outdoor recreation activities can be accommodated in a wide array of settings, as long as adequate physical space and funding exists. An increase in urbanization often results in an increase in user-oriented outdoor recreation facilities and programs to help meet the needs of expanding populations. On the other hand, provision of resource-based outdoor recreation opportunities is limited to the availability of cultural and natural resources.

As the population grows, greater demand is placed on resource-based recreation facilities as suitable land areas and resources are converted to



Madison Blue Springs State Park, Credit: Monica Wagner



development or other land uses. Because they satisfy essentially different human needs, it is difficult to compare these two types of outdoor recreation in terms of importance or urgency.

Both user-oriented and resource-based outdoor recreation are crucial to the health and wellness of America's citizenry. The peoples' need for both must be met if the Sunshine State is to keep pace with the demands of a growing population.

For more than a century, Americans have embraced the idea that outdoor recreation is an appropriate and legitimate function of government. Public responsibility for outdoor recreation stems from two essential purposes: the promotion of social welfare and the protection of our common natural and cultural heritage.

As a matter of social welfare, governments provide outdoor recreation as a means of healthfully occupying the leisure time and enhancing the quality of citizens' lives. The management of natural resources is also a matter of public interest in Florida, for the ecological and health benefits afforded our residents and visitors. Our healthy and diverse natural areas offer fresh air, fresh water, exercise and relief from modern, everyday stress.

Lastly, governments play a major role in preserving and interpreting historic and prehistoric resources. These resources are vital in that they describe our history and culture, and provide a means for individual citizens to understand the events that shaped Florida's past.

Roles in Outdoor Recreation Planning

Florida is a major travel destination for outdoor recreation enthusiasts around the world. According to VISIT FLORIDA, the state's official tourism marketing corporation, more than 100 million tourists now visit annually (118 million in 2017),³ thanks in large part to our subtropical climate, abundant sunshine, sandy beaches, scenery and wildlife. Florida's 20 million residents enjoy these attributes as well, which provide endless possibilities for year-round outdoor recreation. Due to the continued growth, urbanization and diversification of the population, more recreation facilities and services are needed today than ever before. Longer life expectancies, greater mobility and a growing appreciation of the health benefits of recreation



*Getting kids outdoors today is more important than ever.
Credit: Brian Ipsen*

will also generate additional need for facilities and programs.

According to the Outdoor Industry Association,⁴ people who recreate spend substantial sums of money (see also Chapter 5). They also consume large quantities of energy, and require tremendous amounts of open space in which to relax and enjoy being outdoors. As a result, social and environmental conflicts may be generated that must be addressed through comprehensive and coordinated efforts by recreation managers at many levels of government.

Effective coordination among the state's recreation providers is also critical if we hope to maximize the health, economic and environmental benefits derived from recreation. Professional, systematic planning and program implementation are necessary to guide communities, government agencies and other organizations.

Florida's political subdivisions have the responsibility for providing local recreation facilities and programs within their respective jurisdictions, with supplemental assistance from both the state and federal governments. At the state level, the leadership role requires that agencies, particularly the FDEP, must work toward the most efficient utilization of human, financial and natural resources for the maximum benefit to the public. In addition, the state must provide a portion of the financial, technical and physical resources needed to meet Florida's statewide recreational demand.



Planning Process

To be truly comprehensive, the process for creating the SCORP must incorporate a balanced, statewide approach. The 2019 SCORP "team" solicited extensive input from recreation providers and consumers through public workshops and online surveys, and held regular consultations with recreation professionals from around the state. These efforts help ensure Florida's future recreation needs are sufficiently addressed.

The FDEP, with the help of numerous partners, maintains an extensive inventory of recreation facilities available throughout the state. From fall 2016 to early 2018, the database for the Florida Outdoor Recreation Inventory (FORI) was systematically updated by FDEP and hundreds of municipal, county, state, federal and private recreation providers in preparation for this planning effort. See Chapters 3 and 5 for more information about the FORI.

In addition, FDEP and the consulting firm, Institute for Service Research, conducted the 2016-2017 Outdoor Recreation Participation Study.⁵ This study provides an in-depth look at participation in a wide variety of outdoor recreation activities, explores



Credit: Frank Weber, Orange County Government

changes in trends, examines opinions regarding a variety of issues and offers quantitative insight on the recreation demands of both Floridians and tourists. The survey methodology (see Appendix E) employed random sampling and is statistically representative of residents and visitors at the state and regional levels.

The results of the participation study are used throughout this document to provide statewide, regional and county-level analyses that will be helpful tools to a wide variety of public and private recreation providers. The complete report is posted on FDEP's website, FloridaDEP.gov/parks.

The 2019 SCORP represents the state's only comprehensive outdoor recreation plan. This document provides a basis for cooperative action to resolve priority issues and a logical approach to meeting recreation needs throughout Florida. The plan offers programming guidance and is intended to influence the decisions of all recreation suppliers across the state.

Public Participation

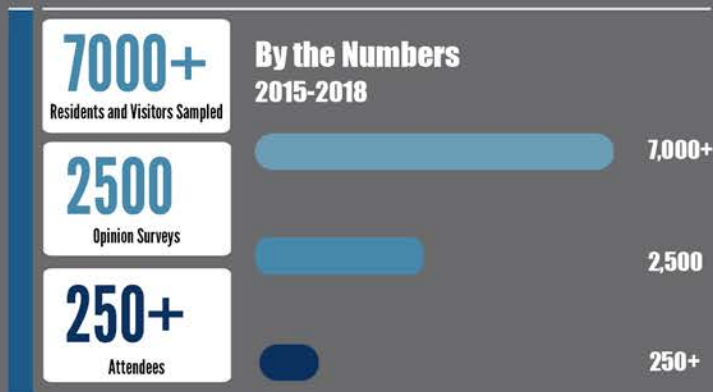
Public input for Florida's SCORP is essential, and was obtained via several methods, including online opinion questionnaires, public workshops and input from the recreation participation surveys (see Figure 1.1). In 2016-2017, two online opinion surveys were distributed, one for the general public and the other for public recreation providers. The opinion survey for the general public was presented in tandem with the resident participation survey, where 2,384 responses were received. The link to the public provider survey was distributed by the FDEP and the Florida Recreation and Park Association, which yielded 110 responses (see Appendix F).

Input was received on recreation issues from the SCORP workgroup, through meetings with stakeholders and through research of national and statewide trends in outdoor recreation.

Public workshops to gather input on the SCORP's draft plan components, including goals and recommendations, were conducted in January 2018 at locations in Tallahassee, Orlando, Tampa and West Palm Beach. These workshops were augmented by another series of promotional events for SCORP held from October 2015 to March 2016 in Jacksonville, Tampa, Panama City and Fort Lauderdale.



The Role of Public Participation



Information gathered from residents, visitors and public events throughout Florida

SCORP Public Events



- Open house events in 2018 for public review and comment on draft components of SCORP
- Held in Tallahassee, Orlando, Tampa and West Palm Beach
- Public workshops in 2015-2016 for recreation providers and outdoor recreation professionals
- Held in Panama City, Jacksonville, Tampa and Fort Lauderdale

Participation and Economic Studies



- Intended to understand statewide recreation participation rates and spending
- Participation study sampled more than 7,000 residents and visitors
- Provided insight into satisfaction and motivation for participating in outdoor recreation
- Economic impact study sampled more than 6,000 residents and visitors
- Documented \$145 billion in total economic output for 35 outdoor activities in Florida

Opinion Surveys



- Intended to understand recreation-based issues impacting Florida
- Targeted Florida residents and public outdoor recreation providers
- Received 2,500 responses
- Provided information on barriers, access and support for outdoor recreation

SCORP Workgroup



- Provided multi-agency perspective on the current state of outdoor recreation in Florida
- Quarterly meetings held throughout the development of SCORP 2019



Planning Coordination

One of the most important steps of outdoor recreation planning is coordination between governments. Many county and municipal governments assisted in the development of this SCORP by cooperating in the preparation of the statewide inventory of outdoor recreation resources and facilities. This massive undertaking could not be accomplished without such assistance.

All Florida counties and many municipalities have participated in state-sponsored financial and technical assistance programs and other efforts involving recreation coordination. Local governments participate in the acquisition and management of land for outdoor recreation through multiple land acquisition and grant programs, including the Florida Forever Program, the Florida Communities Trust Program, the Land and Water Conservation Fund Program, the Florida Recreation Development Assistance Program and the Recreational Trails Program.

State and local planning is further linked through the Local Government Comprehensive Planning and Land Development Regulation Act (Section 163.3167, Florida Statutes), through which the state provides technical assistance in plan preparation and state level review of local plans. In developing their comprehensive plans, many local governments have made use of information and data contained in the SCORP.



SCORP workgroup meeting, Credit: Mark Kiser, FDEP

State and Federal Coordination

SCORP's success depends on the acceptance and implementation of its recommendations by both public and private recreation providers. To begin the process of updating the 2019 plan, the existing workgroup of state and federal land managing agencies was strengthened to better guide the planning efforts of the Division of Recreation and Parks staff.

SCORP Participating Agencies

- *U.S. Forest Service*
- *U.S. Fish and Wildlife Service*
- *FL Department of Agriculture and Consumer Services – FL Forest Service*
- *FL Department of Environmental Protection – FL Park Service; Office of Greenways and Trails; FL Office of Resilience and Coastal Protection*
- *FL Department of State – Division of Historical Resources*
- *FL Fish and Wildlife Conservation Commission*
- *FL Department of Economic Opportunity*
- *FL Department of Transportation*
- *Northwest Florida Water Management District*
- *Suwannee River Water Management District*
- *St. Johns River Water Management District*
- *Southwest Florida Water Management District*
- *South Florida Water Management District*

In addition, representatives from park and recreation departments at the local government level (Orange County and the City of Lake Mary) were invited, as were non-profit organizations including the Florida Recreation and Park Association, Get Outdoors Florida! and the Florida Disabled Outdoor Association. Representatives from two commercial ventures (All Rec Solutions and Florida Geotourism Associates) also participated in the workgroup.

The workgroup focused its attention on the following: implementing the current plan, promoting awareness of SCORP, strengthening the workgroup and building additional connections, the plan's data methodology and developing priority areas, goals





Fort Gatlin Recreation Complex, Credit: Orange County Parks and Recreation

and strategies for the 2019 plan. The group discussed each topic in detail and made recommendations in each area. The recommendations provided by the group were critical to the development of an inclusive and relevant planning process.

The State-Federal Coordination Liaison for outdoor recreation planning purposes is maintained with the U.S. Department of the Interior, National Park Service, especially through its Southeast Regional Office. Other federal agencies, such as the U.S. Forest Service and U.S. Fish and Wildlife Service were consulted on recreation-related planning matters.

State-Private Coordination

Private outdoor recreational enterprises constitute a significant element of the Florida economy and will continue to be relied upon to provide a major share of the outdoor recreation supply. Coordination with the private sector is necessary to achieve more efficient development and operation of mutual programs, to improve and expand the ongoing inventory of private recreation sites and facilities and to implement major recreation action program objectives.

State-private liaison is established primarily through the trade organizations, conferences and networking opportunities such as the Governor's Conference on Tourism and VISIT FLORIDA, which is primarily involved with tourism promotion and an array of commercial recreation enterprises. In addition, the DRP consults with representatives of various clubs and groups concerned with conservation and recreation to discuss matters of mutual concern. State representatives also attend various gatherings of private organizations to present and discuss state recreation policies and programs.

Planning Regions

The 2019 plan divides the state into eight planning regions (see Figure 1.2). These regions are the same as VISIT FLORIDA's planning regions, a good match given the strong ties between the state's recreation and tourism industries. This format enables statewide and regional comparative analyses of recreation participation, demand and need with the state's current trends in tourism.



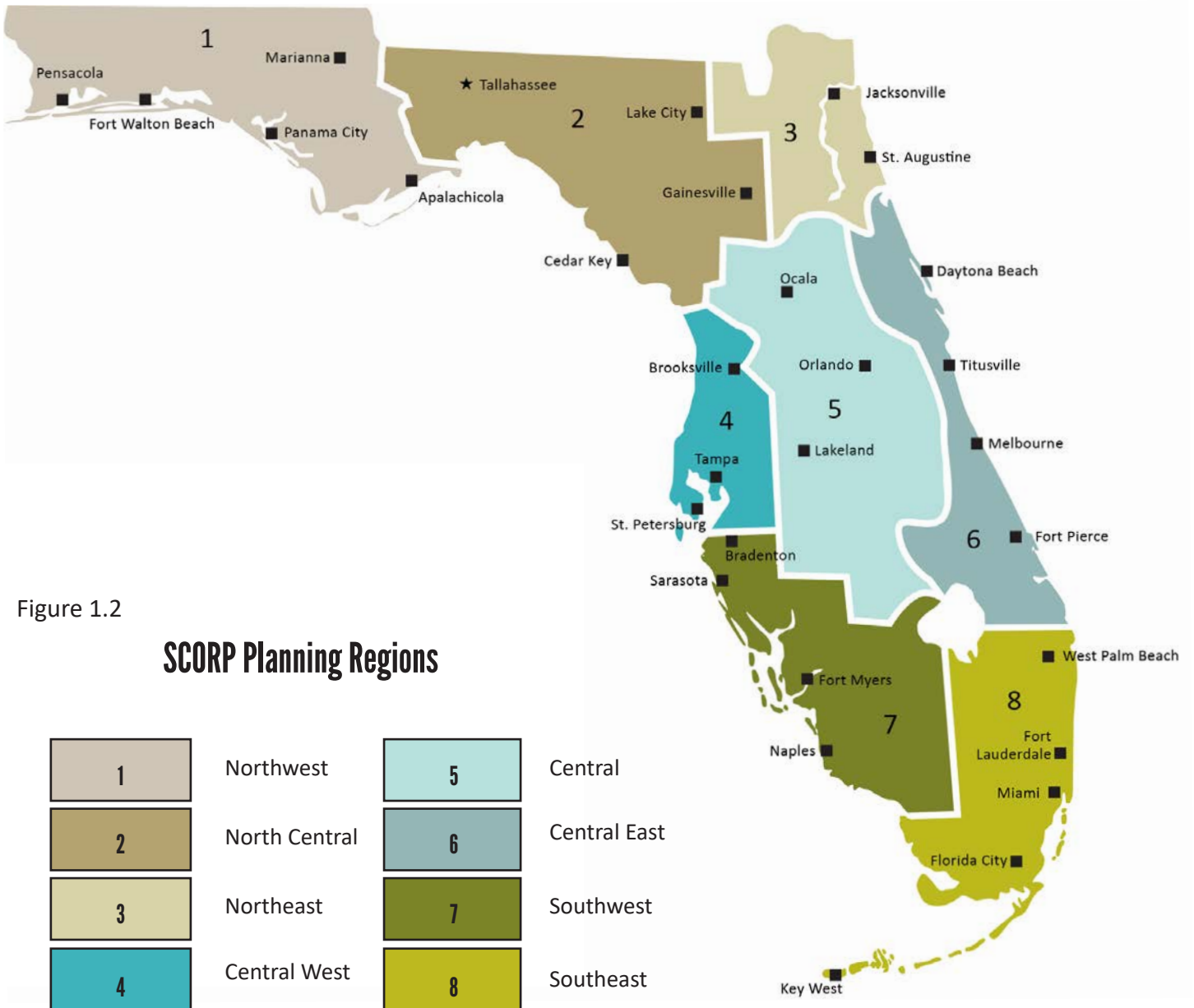


Figure 1.2

SCORP Planning Regions

Conclusion

Florida is one of the world’s most popular tourist destinations, as well as one of the best places to live, work and play, thanks to our year-round recreation possibilities. Numerous government agencies, non-profit organizations and private industry providers are working together to supply the memorable outdoor experiences that “re-create” us and enrich our lives.

Since the 1960s, the state has made excellent progress in developing outdoor recreation plans to serve its residents and visitors. Florida continues to strive toward the development of a truly diverse, balanced and accessible outdoor recreation

system, one that offers a wide range of high-quality opportunities in each community. SCORP is an integral part of this system, and its guiding influence will continue as demand for outdoor recreation lands, facilities and programs grows in tandem with the state’s population.

Whether for the health and welfare of Florida’s people, the stability of its tourist-oriented economy or the wise management of its natural resources, a carefully-planned and effectively-implemented outdoor recreation system remains a major necessity. Florida’s 2019 SCORP provides a solid foundation for such a system.



“Outdoor recreation is vitally important to Florida – both for the health and well-being of its people and as the mainstay of the tourist-oriented economy. With its abundant natural assets of lands and waters, wildlife and climate, the state is unusually well-suited as a provider of outdoor recreation for a growing population and millions of annual visitors.”
- Florida Outdoor Recreation at the Crossroads, 1963



Gasparilla Island State Park, Credit: Diana Berkofsky



Florida's Outdoor Recreation Setting

Credit: Frank Weber, Orange County Government

A comprehensive statewide plan for outdoor recreation requires a thorough analysis of the state's social and physical settings. Florida's unique settings and attributes make it a paradise for outdoor recreation enthusiasts.

Florida's People and Economy

As the 21st century rolls onward, the Sunshine State's remarkable rate of population growth shows no signs of slowing anytime soon. Florida's population is now the nation's third largest, having surpassed New York in 2014.⁶ According to the University of Florida's Bureau of Economic and Business Research, Florida's population grew to 20.4 million in 2017, an 8.9 percent increase from 2010.⁷ Florida is projected to have 23.0 million residents by 2025 and 24.3 million by 2030.⁸ In comparison, when Florida's first SCORP was written in 1965, its population was only 5.9 million.

Although more than 90 percent of Florida's residents live in urban and suburban areas, many of the state's counties are still designated as rural. Section 288.0656, Florida Statutes, defines a rural county as:

- A county with a population of 75,000 or less
- A county with a population of 125,000 or less which is contiguous to a county with a population of 75,000 or less

As of 2019, 29 of Florida's 67 counties (43 percent) are considered rural (see Figure 2.1).⁹ These counties are grouped into three regions and are designated by the Office of the Governor as Rural Areas of Opportunity (RAO). The Rural Economic Development Initiative works to assist Florida's rural communities by "providing a more focused and coordinated effort" among agencies that provide rural programs and services.

The state continues to become more ethnically and culturally diverse, and as reported in the 2013 SCORP, Hispanics represent the fastest growing segment of Florida's population.¹⁰ In 2017, the Hispanic/Latino population rose to 25.4 percent (an 23.2 percent increase since 2010).¹¹

Mirroring national trends, Florida's population is also getting older. In fact, Florida is known as a "retirement state," with the highest proportion of retirees in the country. In 2017, nearly one in five (19.5 percent) Floridians were aged 65 or older, as compared to the national average of 15 percent.¹¹ By 2020, Florida's median age is expected to climb to 42.1, an upward shift from 40.7 in 2010.¹² By comparison, the projected U.S. median age in 2020 will be 38.5 years.¹²

The state's rapid population growth, increasing ethnic diversity and the shift in age of its population continues to create complex challenges affecting many aspects of the state's social and economic framework. The planning and coordination of Florida's outdoor recreation programs will likewise be affected by these changes.

If current trends continue, most of the new



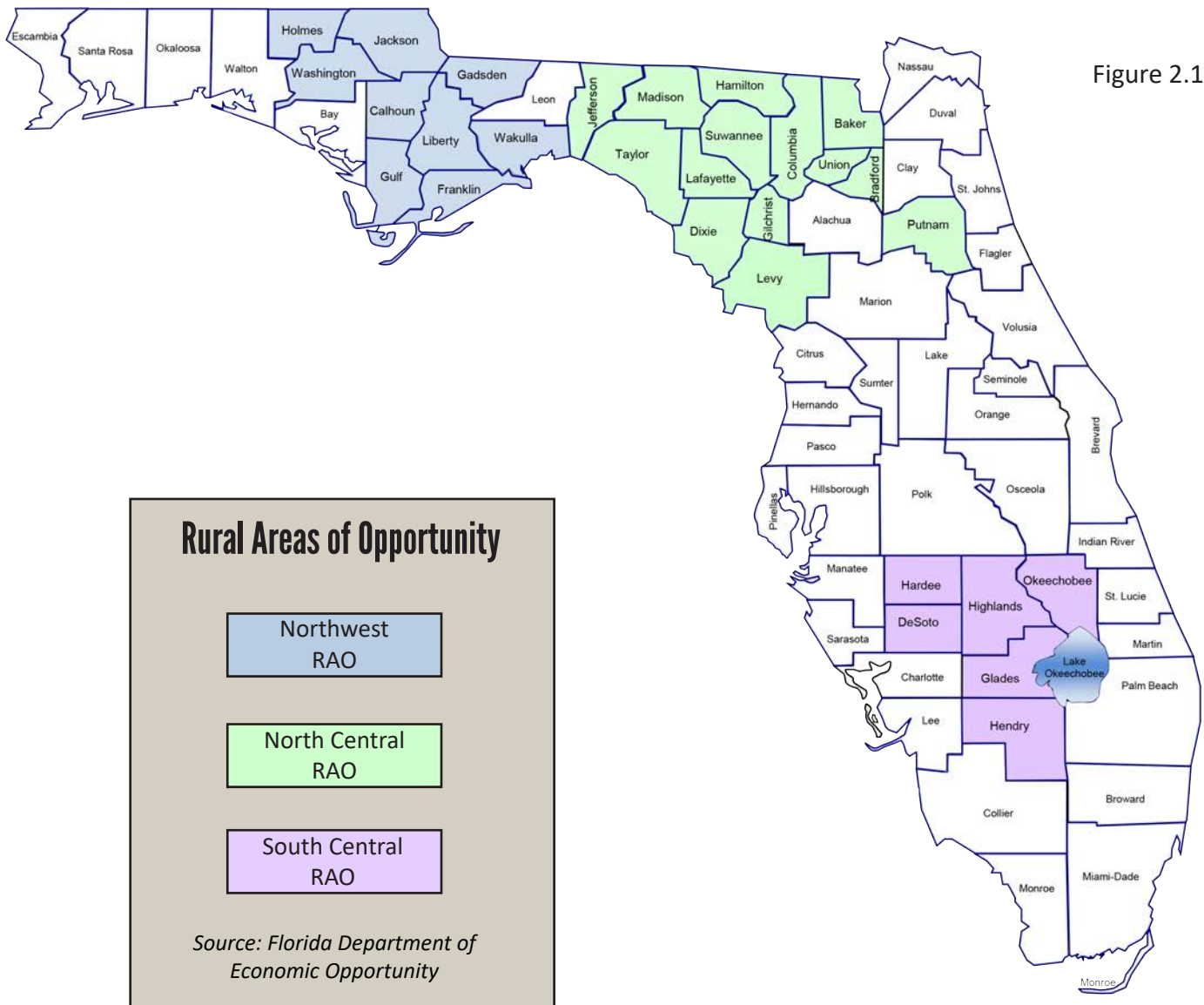
population will concentrate in less populated counties adjacent to highly developed metropolitan areas, particularly in coastal areas. As these areas become more developed, problems such as loss of open space and natural areas, crowding and a higher cost of living will provide an impetus for further expansion into more rural areas.

Sprawl also reduces the availability of outdoor recreation land and facilities, unless more land is acquired and more facilities developed in pace with the expansion. Rapid development continues to be a major challenge for recreation planning and programming in Florida. Ensuring an adequate land base for outdoor recreation and securing the necessary funding for development and operation of

recreation facilities are critical to Florida’s continued recreation supply.

To ensure a high quality of life in Florida, the amenities provided by the state’s outdoor recreation providers must be coupled with a healthy social and economic climate. Among socioeconomic variables, income is a major factor in determining the ability of people to participate in many kinds of recreational activities. Florida’s economic situation has improved significantly since the 2008 recession, when per capita annual income dropped by roughly \$2,600 to \$37,382.¹⁰ As of 2017, Florida’s per capita personal income had rebounded to an estimated \$47,684 according to the Bureau of Economic Analysis.¹³

As of December 2018, Florida’s unemployment





rate remains low (3.3 percent), as compared to the national average (3.9 percent).¹⁴ The health of the state and local economies will always directly affect the public resources available to support outdoor recreation. Therefore, current economic conditions and subsequent financial support for recreation remains priority issues for recreation system planning in Florida.

Tourism remains Florida’s number one industry, and tourism-based activities continue to dominate Florida’s economy.¹⁵ An estimated 118.8 million tourist visits took place in Florida in 2017, a 5.7 percent increase from 2016 and a 36 percent increase since 2011.³ Tourism in Florida accounted

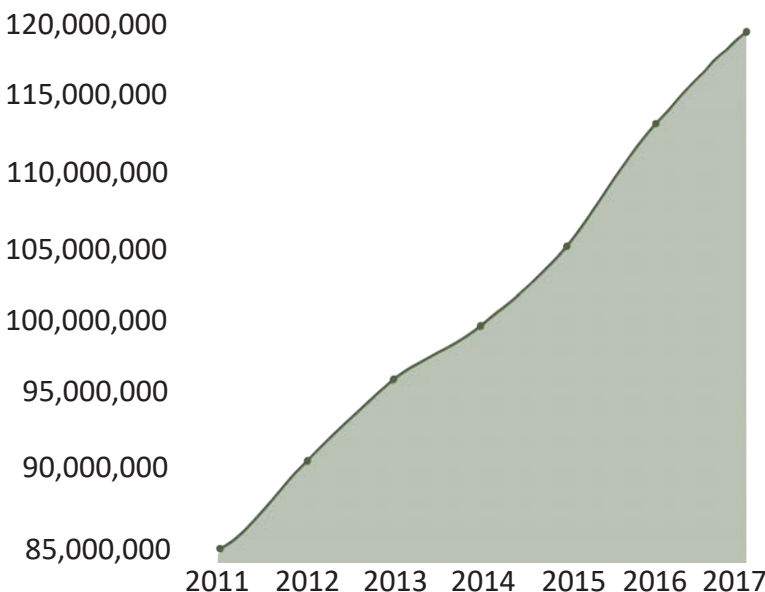
for 1.4 million jobs in 2016,¹⁶ and direct tourism spending during 2016 was \$111.7 billion, according to data from VISIT FLORIDA.¹⁷

Outdoor recreation is a key component of the Florida’s tourism industry, contributing an estimated \$145 billion to the state’s economy.¹⁸ Given Florida’s setting, and the breadth of recreation opportunities available, the state will likely remain a popular destination for both domestic and international travelers, although increased competition from other vacation destinations, the emergence of the Zika virus, hurricanes and increases in travel costs are major concerns.

Figure 2.2

Visitor Estimates for Florida 2011-2017

Table 2.1



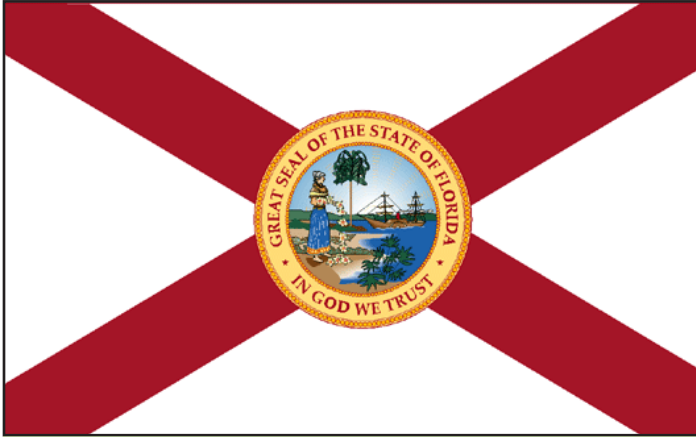
Year	Annual Visits (millions)	Percentage Change
2011	87.3	N/A
2012	91.5	4.8%
2013	94.1	2.8%
2014	98.5	4.7%
2015	106.6	8.2%
2016	112.4	5.4%
2017	118.8	5.7%

Source: VISIT FLORIDA Research



Physical Situation

Florida, the second largest state east of the Mississippi River, has an elongated peninsula stretching 447 miles from north to south; the state is 361 miles from east to west.¹⁹ Despite its size, no point in Florida is more than 70 miles from either the Atlantic or Gulf coasts. Florida's diverse coastline extends 1,350 miles around the peninsula. To the north, Florida shares borders with Alabama and Georgia.



Florida By The Numbers

Land Area: 34.7 million acres
Water Area: 2.8 million acres
Total Area: 37.5 million acres
Smallest County: Union (156,800 acres)
Largest County: Palm Beach (1.65 million acres)¹⁹

Climate

Florida's climate is one of its primary assets, enabling residents and visitors to enjoy year-round outdoor activities. Florida lies within the temperate zone, yet its climate, particularly in the lower peninsula, is subtropical, with wet, humid summers and relatively dry, cool winters. The influence of the Gulf of Mexico's waters on the west and the Atlantic Ocean on the east helps moderate seasonal temperature extremes.

Most of the state enjoys a long, warm summer, relatively minor seasonal transitions and a short, mild winter. The mean annual temperature ranges from the upper 60s in the northern portions of the state to the upper 70s in the south. North Florida's average monthly temperature highs range from 60° to 92° F and lows range from 39° to 75° F. South Florida's average monthly temperature highs range from 70° to 92° F and lows range from 49° to 80° F.²⁰

Florida's abundant rainfall is seasonal. Most of the state's average annual rainfall of 54 inches consists of short summer showers.²⁰ In the winter months, when sunshine is conducive to outdoor activity, Florida enjoys the greatest average percentage of seasonal sunshine in the eastern U.S.

Florida's geography makes it extremely vulnerable to tropical storms and hurricanes. These cyclonic weather systems have always been a part of Florida's natural climatic patterns, and in any given year, it is possible for multiple storm events to impact both inland and coastal areas. As the science surrounding climate change indicates that carbon emissions are affecting global climate, the state's outdoor recreation resources may be more vulnerable to the effects of climate change than many others.

Changes in climate can affect water temperatures and salinity, disrupting natural conditions in sensitive areas such as coastal wetlands and coral reefs. Coastal erosion has also compromised many of the state's saltwater beaches, necessitating costly restoration and stabilization efforts to protect this vital component of Florida's economy and culture.

Florida's Recreation and Leisure-Based Tourism

Florida is a popular place to visit and vacation for many reasons. Climate, beautiful beaches, theme parks, wildlife, scenery and access to water are all well-known draws. Many of Florida's most unique traits are rooted in its landscape, leading millions of people each year to participate in outdoor recreation and leisure activities while in Florida.

According to VISIT FLORIDA, the percentage of tourists who choose to visit the state because of outdoor opportunities is significant.



Percentage of visitors who came to Florida primarily for recreation and leisure.



Geology

A map of Florida as it appears today does not divulge its geological past. What we think of as the state of Florida occupies only about half of a larger geological unit known as the Floridian Plateau or Florida Platform.²² This partly submerged platform is nearly 500 miles long and up to 400 miles wide, and it separates the deep waters of the Atlantic Ocean and the Gulf of Mexico. The submerged portions of the plateau are called the continental shelf, extending out to an ocean depth of about 300 feet.¹

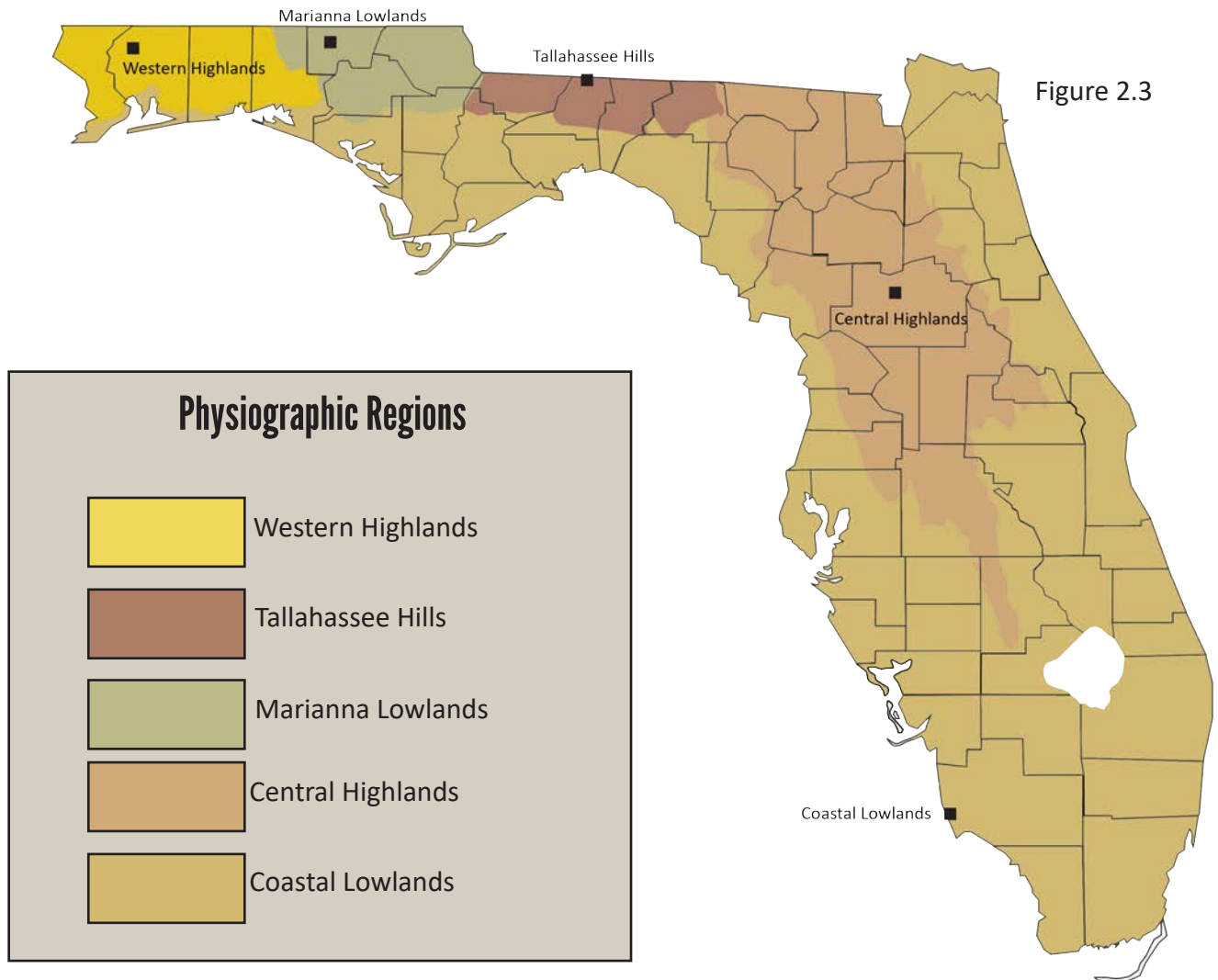
The Floridian Plateau has been in existence for millions of years, during which time it has been alternately dry land or shallow sea. It consists of a core of metamorphic rocks buried under layers of sedimentary rocks (mostly limestone) which vary in thickness from a little less than one mile to more than four miles.

Physiography

The state is divided into five physical or natural regions. These are the Western Highlands, the Marianna Lowlands, the Tallahassee Hills, the Central Highlands and the Coastal Lowlands (see Figure 2.3).²³

The **Western Highlands** region includes much of the Florida Panhandle between the Perdido and Apalachicola Rivers, and lies north of the Coastal Lowlands. It is a southward-sloping plateau, hilly in the northern part and carved by narrow steep-walled stream valleys. The hills in the northern part of the plateau are more than 300 feet in elevation and include the highest measured elevation in the state (the 345-foot Britton Hill is located here within Lakewood Park in Walton County).

The **Marianna Lowlands** region, found west of the Apalachicola River, is characterized by low, rolling hills, sinkholes and numerous small lakes. This



Topsail Hill Preserve State Park, Credit: Walter Ebbert



region occupies a roughly quadrilateral area, with its southern and western limits marked by a rise to the Western Highlands. The elevation is due to the increasing thickness of sand covering the limestone base that lies near the land surface.

The **Tallahassee Hills** region, north of the Coastal Lowlands, stretches from the Apalachicola River to the northern Withlacoochee River. It is approximately 100 miles wide by 25 miles in length and is characterized by long, gentle slopes with rounded summits.

The **Central Highlands** region extends from the Tallahassee Hills and the Okefenokee Swamp in the north almost to Lake Okeechobee in the south. It is approximately 250 miles long and the northern half is approximately 60 miles wide. Much of the northern part is a nearly level plain approximately 150 feet above sea level. The western portion consists of hills and hollows interspersed with broad, low plains. This sub-region ranges in altitude from 200 feet to less than 40 feet above sea level. Adjoining this sub-region to the east and extending southward to the end of the Central Highlands is a sub-region known as the Lake Region. It is characterized by numerous lakes and high hills of up to 325 feet above sea level.

The **Coastal Lowlands** region forms the entire Florida coastline, including the Florida Keys, and reaches inland as much as 60 miles. The inner

edge generally lies along the 100' contour line. In recent geologic times, these lowlands were marine terraces and experienced three or more successive inundations by higher sea levels. This is a flat region, except where ancient shorelines or dune ridges occur or where the surface has been modified by stream erosion or underground solution.

The Gulf Coast has the appearance of a drowned coastline, one that is sinking into the sea. The east coast has the appearance of an emergent coast, one that is rising from the sea. However, sea levels on both coasts are rising gradually as the result of changes in global climatic patterns.

Hydrology

Much of Florida is covered by water; roughly 2.8 million acres are submerged, in fact. These include some 7,700 natural and man-made lakes larger than 10 acres, as well as marshes, swamps and seasonal floodplains.¹⁹ More than 11,000 miles of rivers, streams and waterways wind through the state, mostly in the northern half. South Florida's paucity of river systems is due to its differing geological history and flatter terrain. Drainage in south Florida occurs through broad, shallow channels, many of which have





Florida is tailor-made for boating and paddling.
Credit: Andrew Phillips

been altered extensively by humans for purposes of reclamation and water management.

In addition to lakes, rivers and streams, wetlands comprise a major component of the state's surface waters. It has been estimated that in 1996, wetlands and their associated open waters accounted for approximately 29 percent of Florida's total area.²⁴ An overview of wetlands in Florida, including a description of wetland protection efforts, is contained in Chapter 6.

A considerable amount of Florida's waters percolate through the underlying limestone rock, forming groundwater reservoirs. These underground reservoirs, or aquifers, discharge tremendous quantities of fresh water to wells and to some of the world's largest springs. Florida has 33 first magnitude springs (flows of >100 cubic feet per second), more than anywhere else in the world,²⁵ discharging more than 6 billion gallons of water per day. The combined flow of all 700-plus of the state's springs is estimated to be 8 billion gallons per day.²⁶

Florida's sheltered offshore waters, such as bays and lagoons, are collectively referred to as estuaries. These dynamic natural communities,

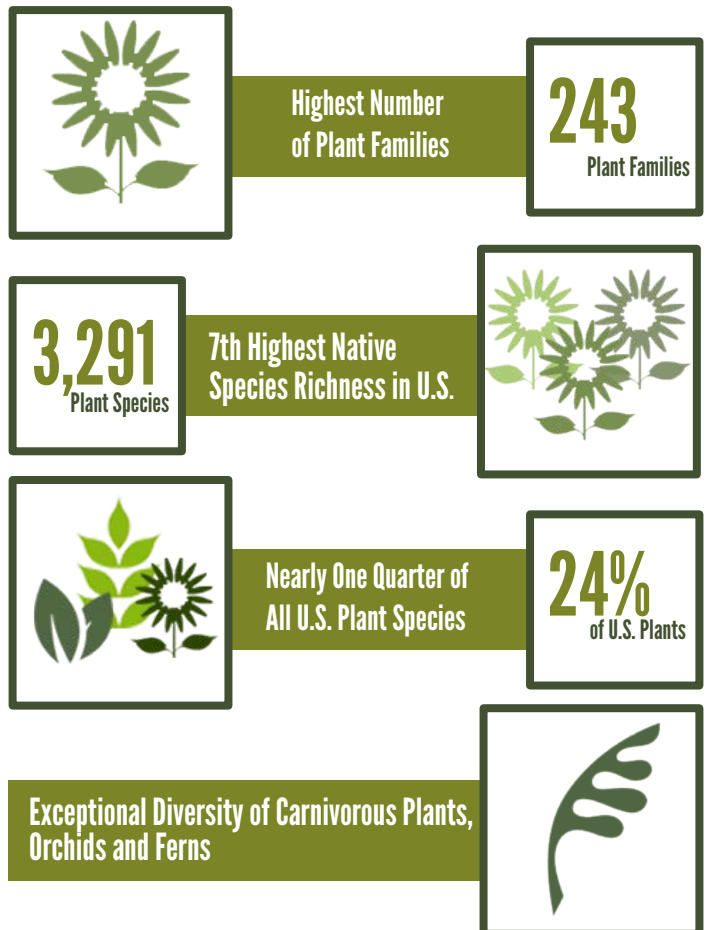
sometimes called the "cradles of the ocean," form where fresh water from inland rivers and streams and nutrients from upland areas meet coastal waters. Estuaries are among Florida's most biologically productive waters, and are vital to the state's commercial and sport fisheries. Shrimp, crabs, oysters, grouper and redfish, among others, depend upon healthy estuaries.

Vegetation

Vegetation is one of the most significant features of Florida's landscape. Florida's name "Land of Flowers" stems from Juan Ponce de Leon's exploration of "La Florida" in the 1500s. Even today, a tremendous variety of plant associations and natural vegetation covers approximately 50 percent of the state.¹⁹

Historically, Florida's landscape was shaped by fire (e.g. lightning); more than 30 percent of its natural communities are fire-adapted.²⁷ Frequent, low-intensity fires remain essential to the survival of many plant and animal species.

According to the Florida Natural Areas Inventory, the Sunshine State has the highest number of plant families (243)¹⁹ and the seventh highest native species richness in the U.S, with approximately 3,200 species,²⁸ approximately





Credit: John Moran/Florida Wildflower Foundation

one quarter of all U.S. plant species occur here. The state supports an exceptional number of carnivorous plants, orchids and ferns.¹⁹

It is estimated that more than one-third of Florida's native plants held ethnobotanical values for its original inhabitants, either as food, shelter, medicine, clothing, fiber and dyes, or had some form of cultural use.¹⁹

Florida's natural vegetation is noteworthy from the standpoint of outdoor recreation. In addition to its obvious aesthetic qualities, the state's flora utilizes carbon dioxide, produces oxygen, absorbs wastes, maintains water quality, provides food and habitat for wildlife and performs a host of other environmental

functions that themselves contribute to outdoor recreation.

Approximately 1,500 naturalized exotic plants occur here; roughly 140 of these are particularly invasive (e.g. kudzu, Brazilian pepper and cogongrass) and threaten Florida's natural areas and native species.²⁸ Significant resources are required annually to combat them.

Effective management of Florida's diverse native plant communities through prescribed burning, exotic plant control, hydrological restoration and other methods is critical for maintaining their ecological and recreational values.

SPOTLIGHT

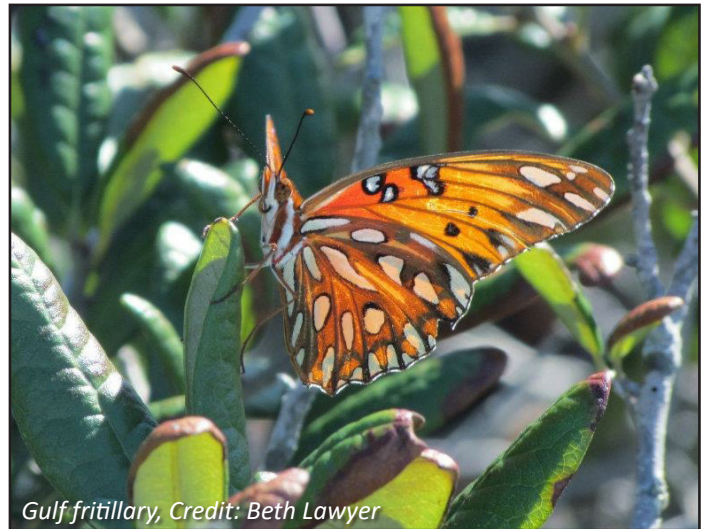
According to the Florida Natural Areas Inventory (FNAI), the state has more than 80 natural community types.²⁹ Some of these include mesic flatwoods, upland hardwoods, bottomland forest, maritime hammock, dome swamp, sandhill, scrub, dry prairie, wet prairie, floodplain marsh, salt marsh, mangrove swamp, beach dune, coral reef, seagrass bed, blackwater stream and aquatic and terrestrial caves.



Wildlife



Florida scrub-jay, Credit: Derek Ray



Gulf fritillary, Credit: Beth Lawyer

Florida’s wildlife is as varied as the habitats that support it. Florida’s bird and butterfly diversity is the highest in eastern North America.¹⁹ Species range from those common throughout the southeastern United States to some that occur nowhere else in the U.S. such as the American crocodile, Florida panther and the Florida scrub-jay.

Florida’s native species include thousands of saltwater fishes and marine invertebrates, more than 500 birds, 200 freshwater fishes, 185 butterflies, 135 non-marine reptiles and amphibians and nearly 80 mammals that spend all or part of their lives on land.^{19,30} Roughly 30 species of marine mammals such as the Florida manatee and bottlenose dolphin can be found off Florida’s coasts, and five of the world’s sea

turtle species nest here.¹⁹

The state’s diverse wildlife resources provide a major attraction for many types of outdoor recreation enthusiasts. Fish, both freshwater and saltwater, are exceptionally important to the economy and to outdoor recreation in Florida, which prides itself as the “Fishing Capital of the World.” Numerous game species such as white-tailed deer and wild turkey play an important role as well. Non-game species, particularly Florida’s rich bird life, support wildlife viewing and appreciation, along with a wide range of environmental education activities. Approximately 10.5 million acres of managed conservation lands in Florida (roughly 30 percent of the total land area) make many forms of outdoor recreation possible (see Table 2.2).³¹

Managed Conservation Lands in Florida (non-submerged) 10.5 million acres

Table 2.2

Source: FNAI

Manager	Fee Simple Acres	Percent	Less-Than-Fee Simple Acres	Percent
Federal	4.1 million	11.7	146,906	0.4
State	4.8 million	13.9	657,518	1.9
Local	487,361	1.4	9,785	0.03
Subtotal	9.4 million	27.0	814,209	2.3
Private Conservation Lands	120,830	0.37	67,916	0.19
Private Mitigation Banks	85,697	0.02	0	0
Total	9.6 million	27.4	882,125	2.5



History and Culture

Florida's history and culture are interwoven in a rich and vibrant tapestry. Both the Prehistoric and the Modern eras blend together here, producing a wide range of cultural resources for citizens and visitors to discover and enjoy. Numerous federal, state and local parks, along with other public lands and museums, help interpret Florida's colorful past and present.

Recent archaeological research indicates that humans have inhabited the state for approximately the last 14,500 years.³² Prehistoric cultures like the Apalachee, Timucua, Calusa and Tequesta thrived in this hospitable area and left behind much evidence of their way of life. Mounds, middens, earthworks and other archaeological sites, along with a wide array of artifacts, continue to be a source of wonder and curiosity. Thanks to professional excavation, curation and analysis of data gathered from many cultural sites around the state, information about Florida's

prehistory is still unfolding.

More than 100 locations on the Division of Historical Resources' (DHR's) Florida Native American Heritage Trail provide excellent opportunities to learn more about the native peoples who made Florida their home long ago.³³ Native American cultures in Florida are not lost however, as tribes including the Seminole, Miccosukee and Muscogee (Creek) persist today. Living history museums like the Ah-Tah-Thi-Ki Museum on the Big Cypress Seminole Indian Reservation and Mission San Luis elucidate the past and present of Florida's indigenous peoples.

Florida has the longest written history of any American state, extending back more than 500 years. In all, the flags of five nations have flown over its borders. Two decades after Columbus' first voyage, Florida was forever transformed when it was opened up to the western world by Spanish

Stephen Foster Folk Culture Center State Park, Credit: Colin Hackley



“discovery” in 1513. The founding of Pensacola in 1559 (the oldest European settlement in North America)³⁴ and of St. Augustine in 1565 (the oldest continually settled city on the continent)³⁵ are important milestones for both Florida and the nation. From those first colonial settlements and subsequent territorial conflicts between France, England and Spain, to the first free African settlement in the U.S. at Fort Mose, and to the Revolutionary War, Seminole Wars and American Civil War, Florida’s role in U.S. history is substantial and rewarding to explore. Visiting historical and archaeological sites is one of Florida’s most popular forms of outdoor recreation, in fact. More than 2,400 historical, archaeological and cultural sites, 525 museums and nearly 300 commemorative structures help tell the

stories of Florida’s unique heritage.

Florida’s culture is complex and ever-evolving, and varies considerably from region to region. Numerous cultures and nationalities, particularly those from the Caribbean, Central America, South America and Europe, have contributed heavily to the exploration, colonization, settlement and development of the Sunshine State. The influences of African, Cuban and Jewish cultures, to name but a few, are interpreted in additional Heritage Trail guidebooks from the state’s DHR.³⁶ Whether it’s the energetic nightlife of Miami or Orlando, the small-town feel of DeFuniak Springs or Okeechobee, or the laid-back atmosphere of Key West or Cedar Key, Florida’s modern culture is on full display and best experienced firsthand.

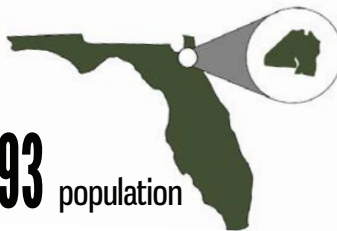
Figure 2.4

Florida Facts

Largest City: Jacksonville



874 miles² **907,093** population



Capital: Tallahassee

192,381 population

Largest Metropolitan Area:

Miami, Fort Lauderdale,
West Palm Beach

6,158,824
population

67 Counties
412 Municipalities

Most Populous County:

Miami-Dade:

2,779,322

Least Populous County:

Lafayette:

8,501



22 Cities
with > 100,000 residents

KEY INDUSTRIES



Tourism



Agriculture



International
Trade



Aerospace/
Aviation



Logistics/
Distribution



Life Sciences



Information
Technology



Cleantech



Financial
Services



Defense

Sources: University of Florida Bureau of Economic and Business Research;^{7,37} U.S. Census Bureau;³⁸ Enterprise Florida³⁹



"Leisure is the Mother of Philosophy."

- Thomas Hobbes



Key West Lighthouse, Credit: Marc Averette CC-BY-3.0



Chapter 3

Outdoor Recreation Programs and Supply

Tomoka State Park, Credit: Walter Ebbert

As with other states, Florida's outdoor recreation programs are the collaborative efforts of many federal, state and local governments, as well as private institutions, businesses and non-governmental organizations. A multitude of recreation providers fund, manage and support opportunities for outdoor recreation, which collectively, help meet the needs of Florida's citizenry and visitors. No one entity could tackle this enormous challenge alone.

Roles in Providing Outdoor Recreation

To efficiently meet the state's diverse, outdoor recreation needs, some division of responsibility is required. It would not be ideal, for example, for agencies charged with managing state parks, forests, wildlife and aquatic resources to also be responsible for local ball fields, tennis courts and neighborhood playgrounds.

The core responsibility for coordinating, promoting and inventorying all outdoor recreation efforts beneficial to the general public rests with state government. This is the only level of government where such a task can be accomplished effectively, especially when the resources on which recreation is based crosses jurisdictional boundaries, as with regional or statewide trails.

Thus, whether directly or indirectly, the state must work to ensure that public demand for outdoor recreation is brought into a reasonable balance with the supply of opportunities (at least in a broad,

regional perspective). Rather than meet these needs entirely through state-level programs, the state should assume responsibility for ensuring that needs are met through the planned and coordinated efforts of state, federal and local governments, as well as via private interests.

In Florida, the state's primary responsibility is to provide resource-based outdoor recreation, at least as far as its direct programming efforts are concerned. This is accomplished through the acquisition of lands and development of facilities necessary to make natural and cultural outdoor recreation resources of regional or statewide significance available to the public.

The extensive land requirements, the typical location outside urban centers and the higher costs of operation have led the state to assume this role as a bridge between the large, nationally significant parks and forests managed by the federal government and the community playgrounds and recreational facilities traditionally provided by local governments. No other level of government can reasonably be expected to meet this obligation.

User-oriented outdoor recreation, like other local services, is largely the responsibility of local government. The need for this form of recreation is strongest in urban and suburban areas, and it increases in proportion to the degree of urbanization.

However, 29 of Florida's 67 counties and eight cities have established excellent conservation and environmental land acquisition programs of their own that offer many forms of resource-based recreation. These programs typically originated from



referendums in which citizens voted to increase their sales taxes or property taxes to fund land acquisition and management. Matching funds from state programs such as *Florida Forever* have also provided incentives for these local acquisition efforts.

All local governments, large or small, are faced with the task of providing a wide range of recreational opportunities that are important to the well-being of their citizens. These include everything from cultural arts programs to ball fields to nature trails. However, local governments are finding it increasingly difficult to accomplish this, particularly considering rising costs and slimmer budgets.

While the state's primary focus in its outdoor recreation efforts is directed toward resource-based outdoor recreation, a substantial effort is made to assist local governments with financial support and technical assistance to construct user-oriented recreation facilities. Three programs — the Florida Recreation Development Assistance Program, the Florida Communities Trust Program and the Florida Recreational Trails Program — provide local governments with funds in the form of matching grants for acquiring and developing recreational lands and facilities. The demonstrated priorities and needs of local governments are given full consideration in the allocation of funds from these programs.

Private recreation providers are also an essential component of the state's outdoor recreation supply. Commercial providers meet a significant portion

of the overall demand for both resource-based and user-oriented outdoor recreation in Florida, particularly tourist-generated demand. For example, commercial providers supply nearly 90 percent of the campsites in the state and meet a considerable portion of the overall demand for camping facilities by residents and visitors (see Table 3.1).

Non-profit organizations include private and quasi-public institutions such as scout troops, church groups and conservation organizations. These entities provide land and facilities primarily for the use of their members, but in some cases for the public at large.

Clubs and other organizations not certified as non-profit by the Florida Department of State (FDOS), such as hunt clubs, country clubs, yacht clubs and others, manage lands and facilities that are primarily available only to organization members and their guests. In doing so, they can relieve some of the pressure that is often placed on public facilities.

In addition, private industry lands (timber companies and other industries with extensive land holdings whose lands or portions thereof are open to the public) are used for resource-based recreation, although some forms of user-oriented facilities are also available. In recent years, however, many such areas have been withdrawn from use by the general public, particularly areas for hunting, and are now available only to leaseholders or others who have access to the lands.



Outdoor Recreation Programs

Florida's ever-growing and ever-changing public demand have fueled a variety of outdoor recreation programs over the years. While both private and public efforts have served this demand, most formal outdoor recreation programs have been instituted by various levels of government. Not only have state and federal agencies been extensively involved, but practically every county and municipality in Florida conducts some outdoor recreation programs of its own.

Many of these diverse programs have evolved more out of expediency than by careful design, and as a result, there has been much duplication and overlap. Fortunately, however, most of the legitimate outdoor recreation needs in the state have been met in some fashion by concerted efforts to coordinate these governmental programs.

Florida's Outdoor Recreation Providers:

- Federal Government
- State Government
- County Government
- Municipal Government
- Private Sector



Florida's outdoor recreation providers can be classified into five categories: federal government, state government, county government, municipal government and private sector providers. Both federal and state agencies are concerned with areas and facilities designed to accommodate the demand for resource-based outdoor recreation. County and municipal governments are the primary suppliers of the public facilities needed for user-oriented recreation, although some also provide areas and facilities to meet part of the need for resource-based outdoor recreation.

Private recreation providers, which include non-profit organizations and other entities not certified as non-profit by the FDOS, such as hunt clubs, country clubs and yacht clubs are a necessary component of the state's outdoor recreation supply and meet a significant portion of the overall demand for both resource-based and user-oriented outdoor recreation in Florida.



Florida National Scenic Trail, Credit: Abigail Chambers

FEDERAL PROGRAMS

The federal government has responsibility for developing recreational facilities and programs that provide public opportunities that are not, or cannot, be made available by state or local government.

Federal roles in outdoor recreation are broad in scope and include dredging waterways, lock and levee construction and maintenance, endangered species protection, habitat preservation and providing crucial funds for many programs through federal grants. Federal agencies coordinate and cooperate on resource protection efforts such as protecting wilderness areas, designating wild and scenic rivers and implementing trail connectivity projects that require inter-jurisdictional management.

The core mission of most of the federal agencies, with the exception of the National Park Service, is not recreation per se. However, by the nature of their settings and vast tracts of federal lands - the national forests, national wildlife refuges, military installations, dams and locks, waterways and estuaries - are key locations for outdoor recreation and play a crucial role in the state's outdoor recreation supply.



Land and Water Conservation Fund

The National Park Service administers the Land and Water Conservation Fund (LWCF), a federal program that provides funding for park acquisition and development projects. The LWCF supplied more than \$27 million to Florida's local governments between 2004 and 2017, resulting in the establishment and improvement of more than 137 different parks throughout the state. Permanent reauthorization of the LWCF in March 2019 offered hope that this "crown jewel of conservation programs" will be fully funded by Congress in the near future and will result in increased levels of grant monies for local communities.

Intracoastal Park, located in the City of Sunny Isles Beach, received \$200,000 through the LWCF program. The grant helped enhance the park's presence as an open, public green space amid a bustling urban setting. The funds provided for the renovation of a multi-use trail, and helped add a waterfront viewing area, a shaded playground, picnic facilities, landscaping, security lights, bicycle rack and other support facilities.



U.S. Department of the Interior

National Park Service

The mission of the National Park Service (NPS) is to "preserve the natural and cultural resources and values of the National Park System for the enjoyment, education and inspiration of this and future generations." The NPS also "partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world." Besides active land management for outdoor recreation, the NPS also administers financial and technical assistance programs to aid state and local agencies and private citizens.

In Florida, NPS's mission includes:

- Managing 11 national parks, preserves, monuments, memorials and seashores comprising approximately 2.6 million acres of submerged and upland areas set aside for their natural or historic interest.
- Administering the federal Land and Water Conservation Fund Program, which provided more than \$27 million to local governments between 2004 and 2017 to fund 137 park acquisition and development projects. These funds are awarded to meet recreation needs identified through an open selection process described in Appendix D.
- Maintaining the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966 (16 United States Code 470).
- Designating significant properties or landmarks of national historical or archaeological interest, as defined in the Historic Sites Act of 1936 (16 United States Code 461), including districts, sites, buildings, structures and objects of state and regional significance.
- Collaborating with other federal agencies as well as state and local government programs designed to achieve national goals such as clean air, protection of wilderness areas, clean water and access to waterways and coastal areas under the National Wild and Scenic Rivers Act and the Water Resources Development Act.
- Providing matching grants through the Historic Preservation Grants-in-Aid Program, an expansion of the National Historic Preservation Act of 1966, to government, private groups and individuals for historic preservation surveys, planning activities and community education. These programs are administered in Florida by the Division of Historic Resources within FDOS.
- Administering the Federal Lands-to-Parks Program, which enables states and local governments to establish park and recreation areas on federal properties which are no longer needed for military or civilian uses by conveying lands for that purpose.
- Coordinating the Rivers and Trails Conservation Assistance Program by providing planning assistance to communities for projects that are designed to protect rivers, trails and greenways on lands outside of the federal domain.



Outdoor Recreation Resources and Facilities by Category of Provider, Statewide 2017

Table. 3.1

RECREATION AREAS

Facilities	Federal	State	County	Municipal	Non-Government	Total	Facilities Per 1,000 Participants
Outdoor Recreation Areas	73	938	3,993	5,488	2,983	13,475	0.65
Land (in Acres)	4,554,410	6,046,765	383,241	109,649	357,920	11,451,985	555.6
Water (in Acres)	789,774	2,748,193	47,830	7,031	20,056	3,612,884	175.3
Acres Total	5,344,184	8,794,958	431,071	116,680	377,976	15,064,869	730.9

RESOURCE-BASED RECREATION (LAND)

Facilities	Federal	State	County	Municipal	Non-Government	Total	Facilities Per 1,000 Participants
Cabins	37	272	86	14	3,028	3,437	0.17
Tent Campsites	1,226	1,202	1,007	118	5,142	8,695	0.42
Primitive Tent Campsites	28	781	98	64	110	1,081	0.05
Primiting Camping (Acres)	255.5	791.0	443.0	559.0	5,715.0	7,763.5	0.38
RV Campsites	2,006	4,408	2,805	1,478	112,974	123,671	6.0
Equestrian Campsites	0	351	5	1	80	437	0.02
Historic Sites	392	1,478	170	179	185	2,404	0.12
Commemorative Structures	10	51	34	162	38	295	0.01
Museums	27	108	126	115	153	529	0.03
Picnic Tables	2,014	9,758	21,322	19,496	53,318	105,908	5.14
Picnic Shelters	173	1,619	3,378	4,215	782	10,167	0.49
Hunting Areas (Acres)*	259,070	6,944,838	15,002	0	22,952	7,241,862	351.4
Bike Trails (Miles Paved)	74.5	467.2	591.1	482.9	63.5	1,679.2	0.08
Bike Trails (Miles Unpaved)	148.1	3,629.8	726.9	250.1	39.7	4,794.6	0.23
Hiking Trails (Miles)	1,103.4	6,205.0	2,722.9	520.8	271.3	10,823.4	0.53
Equestrian Trails (Miles)	120.7	3,305.5	520.3	134.2	174.3	4,255.0	0.21
Jogging Trails (Miles)	71.4	311.0	605.7	675.7	69.3	1,733.1	0.08
OHV Trails (Miles)	401	286.0	17.2	1.7	0.0	705.9	0.03
Nature Trails (Miles)	316.4	440.5	643.5	385.2	197.6	1,983.2	0.10

*Includes land and water

RESOURCE-BASED RECREATION (WATER)

Facilities	Federal	State	County	Municipal	Non-Government	Total	Facilities Per 1,000 Participants
Canoe Trails (Miles)	536.5	3,108.9	284.6	147.1	281.0	4,358.1	0.21
Freshwater Beaches	18	66	106	90	156	436	0.02
Freshwater Beach (Miles)	0.7	4.7	18.4	6.6	9.3	39.7	0.0002
Freshwater Boat Ramps	90	353	561	273	330	1,607	0.08
Freshwater Boat Ramps (Lanes)	97	438	681	346	355	1,917	0.09
Freshwater Canoe Launch	11	146	64	53	4	278	0.01
Freshwater Catwalks	11	162	181	239	205	798	0.04
Freshwater Catwalks (Feet)	907	42,363	63,301	65,464	23,435	195,470	9.5

Source: Florida Outdoor Recreation Inventory (FORI)



Outdoor Recreation Resources and Facilities by Category of Provider, Statewide 2017

Table. 3.1

RESOURCE-BASED RECREATION (WATER) CONT.

Facilities	Federal	State	County	Municipal	Non-Government	Total	Facilities Per 1,000 Participants
Freshwater Jetties (Feet)	120	4,650	3,599	75,222	1,306	84,897	4.1
Freshwater Marinas	5	4	5	15	271	300	0.01
Freshwater Marinas (Slips)	39	86	75	818	9,455	10,473	0.51
Freshwater Marinas (Dry Storage)	0	0	212	182	3,885	4,279	0.21
Freshwater Piers	29	122	250	275	77	753	0.04
Freshwater Piers (Feet)	5,515	6,710	30,262	28,773	40,612	111,872	5.4
Saltwater Beaches	41	98	558	929	170	1,796	0.09
Saltwater Beach (Miles)	138.0	140.7	85.6	75.0	36.0	475.3	0.02
Saltwater Boat Ramps	35	66	287	244	305	937	0.05
Saltwater Boat Ramps (Lanes)	52	82	458	336	340	1,268	0.06
Saltwater Canoe Launch	5	66	51	38	2	162	0.008
Saltwater Catwalks	53	59	354	191	143	800	0.04
Saltwater Catwalks (Feet)	23,044	23,182	69,039	52,783	41,861	209,909	10.2
Saltwater Jetties (Feet)	10,120	13,953	13,494	21,769	9,964	69,300	3.4
Saltwater Marinas	11	11	20	64	808	914	0.04
Saltwater Marinas (Slips)	700	477	543	5,391	36,158	43,269	2.1
Saltwater Marinas (Dry Storage)	1,137	0	1,310	380	31,144	33,971	1.6
Saltwater Piers	19	39	167	162	99	486	0.02
Saltwater Piers (Feet)	7,506	24,875	38,438	43,736	18,403	132,958	6.5
Shoreline/Bank Fishing Areas	23	879	247	1,338	4	2,491	0.12

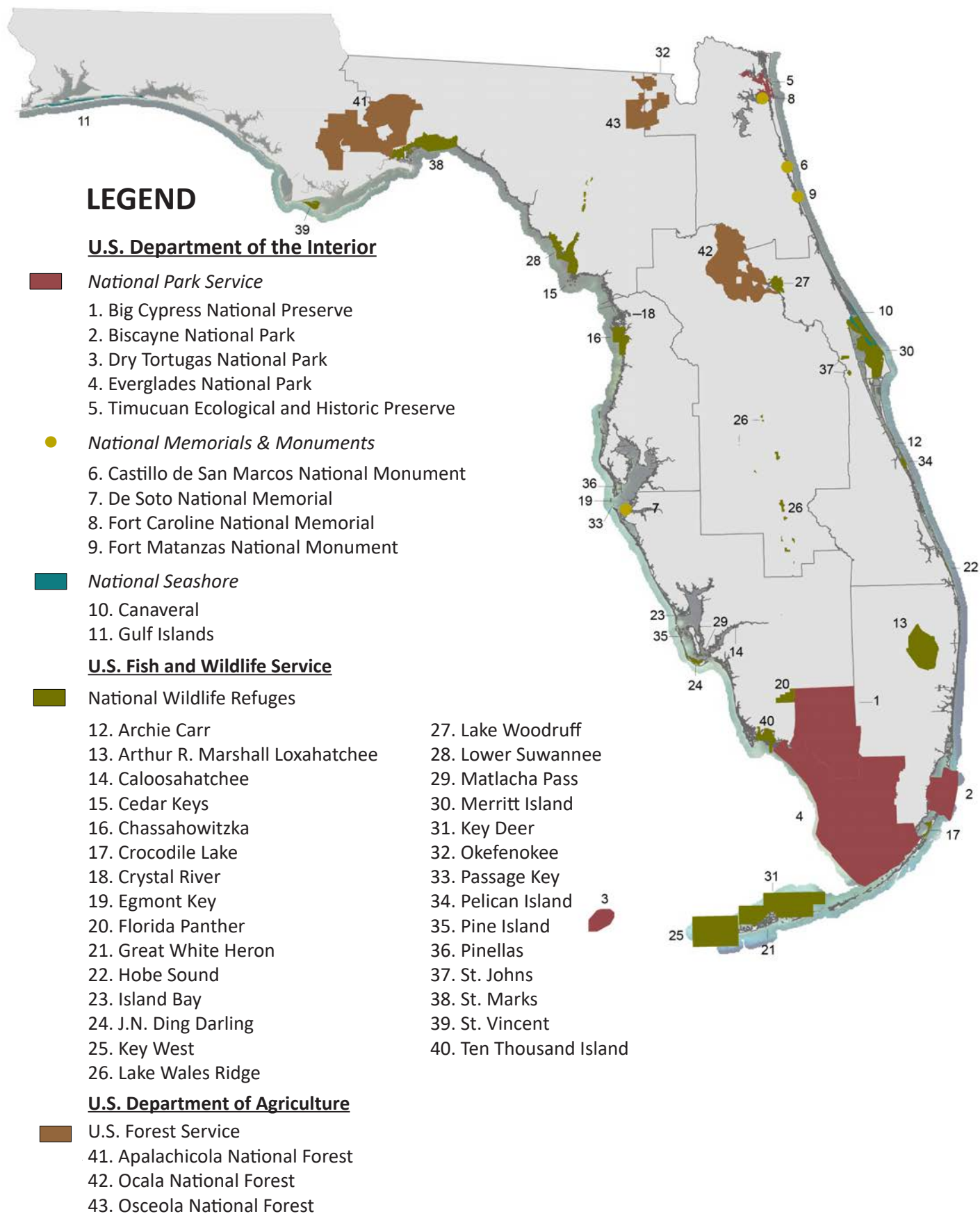
USER-ORIENTED RECREATION

Facilities	Federal	State	County	Municipal	Non-Government	Total	Facilities Per 1,000 Participants
Baseball Fields	51	72	2,657	2,717	178	5,675	0.28
Basketball Goals	56	115	3,803	3,494	635	8,103	0.39
Equipped Play Areas	52	124	1,899	2,739	424	5,238	0.25
Football Fields	18	44	1,084	932	89	2,167	0.11
Golf Courses (18-Hole)	8	3	13	61	786	871	0.04
Golf Courses (9-Hole)	5	2	13	20	134	174	0.008
Golf Courses (Executive)	1	0	3	10	190	204	0.009
Golf Holes Total	207	72	363	1,416	15,884	17,942	0.87
Multi-Use Courts	6	15	396	358	154	929	0.05
Multi-Use Fields	9	68	999	853	229	2,158	0.10
Outdoor Swimming Pools	14	31	149	330	1,479	2,003	0.09
Racquetball Courts	19	166	611	700	265	1,761	0.09
Recreation Centers	28	32	430	867	956	2,313	0.11
Shooting Ranges	4	7	2	0	0	13	0.0006
Shuffleboard Courts	5	18	347	1,701	2,325	4,396	0.21
Skate Parks	0	0	13	24	0	37	0.002
Tennis Courts	78	319	1,770	2,700	4,198	9,065	0.44
Volleyball Courts	3	75	352	344	44	818	0.04



Federal Recreation Lands by Managing Agency

Figure 3.1



Federal Agency Outdoor Recreation Resources

Table. 3.2

Region	# of Recreation Areas	Land (in Acres)	Water (in Acres)	Acres Total
Northwest	17	1,143,829	2,653	1,146,482
North Central	6	348,235	2,746	350,981
Northeast	9	9,480	105	9,585
Central West	5	24,202	10,007	34,209
Central	2	479,693	10,000	489,693
Central East	10	105,105	119,560	224,665
Southwest	13	763,692	22,050	785,742
Southeast	11	1,680,175	622,653	2,302,828
Statewide	73	4,554,410	789,774	5,344,184

Source: FORI

National Trail System



Florida National Scenic Trail, Copyright 2014 Bill Buck, National Trails Guide

The National Trail System Act of 1968 (Public Law 90-543) authorized creation of a national trail system comprised of National Recreation Trails, National Scenic Trails and National Historic Trails. While National Scenic Trails and National Historic Trails may only be designated by congressional act, National Recreation Trails may be designated by the Secretary

of the Interior or the Secretary of Agriculture to recognize exemplary trails of local and regional significance, upon application from the trail managing agency or organization. When designated, these trails are recognized as part of the National Trail System, which celebrated its 50th anniversary in 2018.

In order to be certified as a National Scenic



Trail, a trail must contain outstanding recreation opportunities and encompass more than 100 miles of a continuous, primarily non-motorized trail. Eleven National Scenic Trails have been designated across the U.S. A total of 1,300 miles of hiking trails across Florida were designated as the Florida National Scenic Trail (FNST) in 1983.⁴⁰ The FNST is further discussed under the U.S. Forest Service section on page 43.

National Historic Trails commemorate historic and prehistoric routes of travel that are significant to the nation. Throughout the United States, there are 19 National Historic Trails made up of 36,311 miles of designated trails.⁴¹ These trails provide user experiences through a series of interpretive facilities along trails and signed automobile routes. There are currently no National Historic Trails in Florida.

National Recreation Trails provide outdoor recreation opportunities in a variety of urban, rural and remote settings. A total of 44 trails including nearly 620 miles of land-based trails and 2,439 miles of paddling trails have been designated in Florida.⁴² These trails are managed by federal, state, county and municipal agencies and run the spectrum from urban jogging and bicycling in Tallahassee to wilderness canoeing in the Everglades.

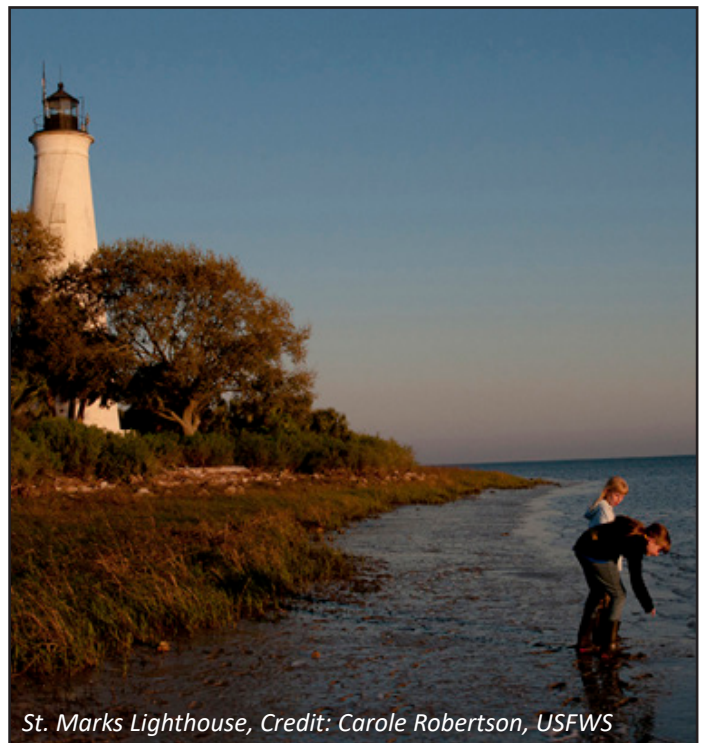
U.S. Fish and Wildlife Service

The mission of the U.S. Fish and Wildlife Service (USFWS), an agency within the U.S. Department of the Interior, is to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people. This mission is accomplished by enforcing federal wildlife laws, protecting endangered species, managing migratory birds, restoring nationally significant fisheries and conserving and restoring wildlife habitat including wetlands. The USFWS also distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies across the nation. The activities of the USFWS in Florida include:

- Management of 29 national wildlife refuges, comprising nearly one million acres of land and water. Most of the refuges are limited-purpose outdoor recreation areas that provide bird watching, wildlife observation, fishing, environmental education and interpretation. Some refuges also offer public hunting. In addition, the Service manages

a national fish hatchery in Welaka and maintains law enforcement facilities at six locations.

- Administration of federal aid programs, including Federal Aid in Sport Fish Restoration (commonly referred to as the Dingell-Johnson Act and Wallop-Breaux Act), Federal Aid in Wildlife Restoration (commonly referred to as the Pittman-Robertson Act) and Wildlife Partnership Act (conservation of non-game species). These grant programs are managed in Florida by the Florida Fish and Wildlife Conservation Commission. Grants to Florida under the Clean Vessel Act (clean boating programs) are managed by the Clean Marina Program in the Florida Department of Environmental Protection's ORCP.



St. Marks Lighthouse, Credit: Carole Robertson, USFWS

Clean Marina Program

In 1992, Congress enacted the Clean Vessel Act (CVA), which established a federal grant program administered by USFWS to reduce aquatic pollution. The grant program enables marinas to purchase, install and maintain pump-out equipment. The Sport Fishing Restoration Program provides funding, comprised of revenues from excise taxes on fishing equipment, boats and motorboat fuels. Since Florida's CVA Program initiation in 1994, more than 570 pump-outs have been installed across the state. Florida's Clean Marina Program (CMP) is a voluntary, partnership-driven initiative that assists





St. Augustine Municipal Marina, Credit: ORCP

facilities throughout the state with incorporating environmental Best Management Practices (BMPs) into their operating procedures. It provides compliance assistance, supplies education on storm readiness through the Clean and Resilient Program and encourages the provision of sewage pump-out stations, recycling and the proper disposal of hazardous materials to ensure a sustainable future for our marine and freshwater environments. With more than 380 designated facilities in Florida, CMP educates recreational boaters, marinas, boat yards and marine retailers on pollution control, and enhance recreational boating through brochures and workshops that emphasize protecting aquatic resources.

U.S. Department of Agriculture

U.S. Forest Service

The U.S. Forest Service (USFS) provides leadership in the management, protection and use of the nation's forests and grasslands. The agency is dedicated to multiple-use management of these lands for sustained yields of renewable resources such as wood, water, forage, wildlife and recreation to meet the diverse needs of people. The responsibility of the USFS in the field of outdoor recreation is to sustainably develop the recreational potential of National Forests and protect their scenic character. The USFS also cooperates with other federal, state and local agencies in planning and developing recreational resources on other federal, state, local and private lands.

In Florida, the USFS administers three National Forests: the Apalachicola, the Ocala and the Osceola. Together these areas contain approximately 1.2 million acres of land and water, thus making a major contribution to the state's recreational resources.

They contain some of Florida's most pristine lands including extensive woodlands, swamps, springs and streams. Within the National Forests, the USFS manages numerous designated public recreation sites. The vast majority of National Forest land is open for dispersed recreational purposes, such as hiking, hunting, fishing, primitive camping and wildlife viewing.



Savannas Preserve State Park, Credit: Paul Strauss

Florida National Scenic Trail

The USFS is the federal administering agency for the Florida National Scenic Trail, or FNST. The FNST, designated by Congress in 1983, extends from the Big Cypress National Preserve north to the Gulf Islands National Seashore in the Florida Panhandle. Along the way, the Florida Trail passes through lands managed by more than two dozen public land managing agencies in more than 40 separate management units. The USFS acts as a partner with state land management agencies and private landowners to obtain through-trail access for the project. The non-profit Florida Trail Association, Inc., through its volunteer membership of hiker-volunteers, provides nearly 70,000 hours of manpower each year to build and maintain the FNST and other hiking trails throughout Florida.⁴³



U.S. Department of Defense

The U.S. Department of Defense (USDOD) includes the Departments of the Army, Navy and Air Force. Each provides outdoor recreation opportunities in Florida. The USDOD has 17 military installations in Florida that make lands available for recreational purposes. Although public outdoor recreation is not a primary function of USDOD, its contributions in this regard are nevertheless important to Florida's overall outdoor recreation program. Generally, all military installations offer some degree of outdoor recreation programs for military personnel, dependents and their guests. However, access to their resources for recreational use by the general public is usually limited.

U.S. Army Corps of Engineers

Along with its primary responsibilities for navigation, flood risk management, environmental restoration and beach renourishment, the U.S. Army Corps of Engineers (USACE) has made considerable efforts to provide recreational facilities. It is the policy of USACE to plan for and provide outdoor recreation resources and facilities at all of its water resources projects. For information on the Corps' recreational opportunities, visit www.corpslakes.us.

The USACE's general authority for recreational development stems from the Flood Control Act of 1944, which was later expanded by the Federal Water Project Recreation Act of 1965 (16 United States Code 460). The latter act directs that all projects give full consideration to opportunities for outdoor recreation and fish and wildlife enhancement, and it establishes outdoor recreation and preservation of wildlife and fish as a full project purpose.

Florida is divided into two USACE districts. The Mobile District manages recreation sites at the Jim Woodruff Lock and Dam on Lake Seminole, a 37,500-acre impoundment in southern Georgia and Jackson County, Florida. Excellent opportunities for camping, hiking, fishing, hunting and boating are available here.

The Jacksonville District manages Lake Okeechobee and the Okeechobee Waterway in southern Florida. Not only does this managed area provide extensive outdoor recreation opportunities,

but its series of locks and canals provides a cross-Florida waterway that is popular among pleasure boaters. The Okeechobee Waterway connects the Atlantic Ocean and the Gulf of Mexico via the lake, the St. Lucie Canal and the Caloosahatchee River. A few of the outdoor recreation opportunities include three full-facility campgrounds along the Okeechobee Waterway and the 110-mile Lake Okeechobee Scenic Trail that runs atop the Herbert Hoover Dike.

In partnership with the South Florida Water Management District, the Florida Department of Environmental Protection and other federal, state, local and tribal agencies, the USACE is implementing the Comprehensive Everglades Restoration Plan (CERP), one of the world's largest wetland restoration projects.⁴⁴ The project covers 16 counties and more than 18,000 square miles. The plan was approved by Congress through the Water Resources Development Act of 2000, which was reauthorized by Congress in November 2007. It includes 68 project elements and will require more than 35 years to construct at an estimated cost of \$10.5 billion.⁴⁴ The CERP Master Recreation Plan will provide guidance to assist recreation planning within CERP project fee title lands, and will help provide recreation opportunities that are compatible with the restoration purposes of the project.

U.S. Department of Transportation

The Federal Highway Administration (FHWA) within the U.S. Department of Transportation provides grants to state and local governments for various recreational trail projects, including bicycle and pedestrian facilities. The Recreational Trails Program provides funds to the states to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized trail uses. The Office of Operations in the Florida Department of Environmental Protection administers the financial assistance program in coordination with the FHWA.

The Florida Department of Transportation (FDOT), in cooperation with FHWA, is the administering agency of several additional programs, including the Scenic Byways Program and the Transportation Alternatives Program (TAP, formerly the Transportation Enhancements Program). The National Scenic Byways Program may recognize roads having outstanding scenic, historic, cultural,



natural, recreational and archaeological qualities by designating them as National Scenic Byways or all-American Roads. Today, TAP funding, as administered by FDOT, may be utilized for planning, design and construction of trail facilities for pedestrians, bicyclists and other non-motorized transportation improvements, including pedestrian and bicycle signals, lighting and other safety related infrastructure, Americans with Disabilities Act of 1990 compliance projects, new sidewalks and bicycle infrastructure, and traffic calming techniques.

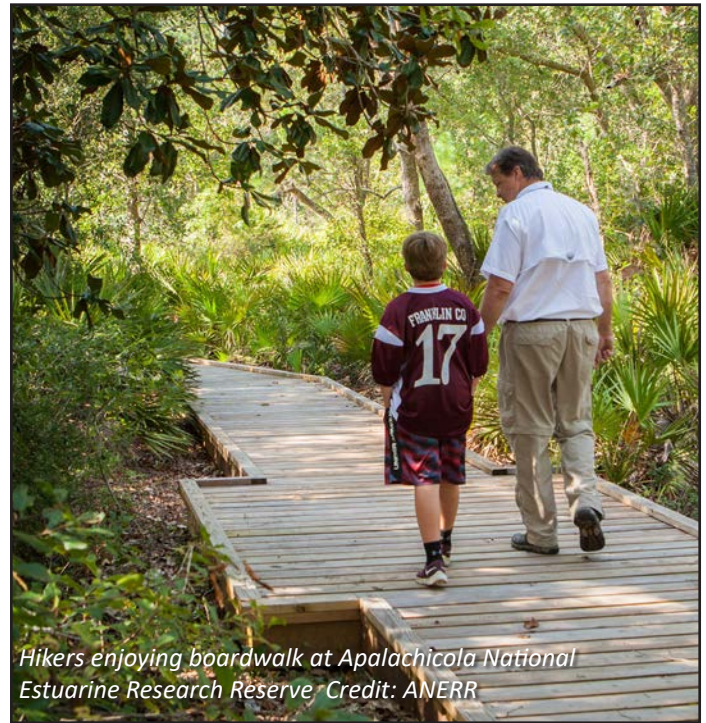
Since 2000, more than \$647 million (representing more than 2,300 projects) have been apportioned for enhancements to bicycle and pedestrian facilities, preservation and conversion of abandoned railroad corridors to trails, and scenic overlooks in Florida's communities.

U.S. Department of Commerce

The **National Oceanic and Atmospheric Administration (NOAA)** is a scientific and technical organization that works to preserve and enhance the nation's coastal resources and ecosystems. Its mission is to provide products, services and information that promote safe navigation, support coastal communities, sustain marine ecosystems and mitigate coastal hazards. The National Ocean Service provides assistance to Florida in observing, understanding and managing coastal and marine resources. Florida is an active partner in several programs that directly affect resource protection in Florida's coastal areas.

The **National Estuarine Research Reserve System** is a network of estuarine areas across the nation established for long-term stewardship, research and education. Each reserve has developed an organized ecological research program containing extensive teacher training, education, research and monitoring. Findings are communicated to coastal managers and other decision makers, as well as local citizens. Florida contains three of these reserves: Apalachicola, Guana Tolomato Matanzas and Rookery Bay.

The **National Marine Sanctuary Program** designates and manages areas of the marine environment with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational or aesthetic qualities. The Florida Keys National



Hikers enjoying boardwalk at Apalachicola National Estuarine Research Reserve Credit: ANERR

Marine Sanctuary, one of 16 in the National Marine Sanctuaries System, covers 3,800 square miles and encompasses part of the most extensive living coral reef system in the nation (and the third largest in the world).

The **National Coastal Zone Management Program** fosters an effective partnership among federal, state and local governments. By leveraging federal and state matching funds, the program strengthens the capabilities of each partner to address coastal issues while giving states the flexibility to design a program that accommodates their unique coastal challenges.

The Florida Department of Environmental Protection's Office of Resilience and Coastal Protection administers the Florida Coastal Management Program. This state program serves as the lead coordinator with eight other state agencies and five water management districts in enforcing 24 statutes and implementing several coastal zone management programs in cooperation with NOAA. The program works to protect coastal resources, build and maintain vibrant communities, enhance coastal access, protect remarkable places and revitalize working waterfronts.

In 2002, the National Coastal Zone program initiated the Coastal and Estuarine Land Conservation Program (CELCP). The program protects important coastal and estuarine areas that have significant conservation, recreation, ecological, historical or aesthetic values and that are threatened by





Cayo Costa State Park, Credit: Greg McCracken

conversion from their natural or recreational state to other uses. The Florida Coastal Management Program manages this grant program, which provides up to \$3 million for each eligible project.

STATE PROGRAMS

The State of Florida's responsibilities for providing public recreation are met through a variety of facilities and programs, each unique to the mission of many separate entities.

Florida Department of Environmental Protection

The **Florida Department of Environmental Protection (FDEP)** is charged with the protection, administration, management, supervision, development and conservation of Florida's natural and cultural resources.

Direct acquisition and management of public outdoor recreation and conservation areas help accomplish this broad mandate, as do major initiatives and agency priorities which contribute to

healthy ecosystems. The FDEP's functions include protecting and conserving Florida's water quality and supply; protecting springs and oceans; restoring America's Everglades; acquiring, conserving and managing conservation and recreation lands; enforcing environmental laws and regulations; investing in cleaner sources of energy; and protecting the health of Florida's communities.

Division of Recreation and Parks

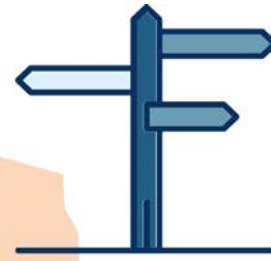
The FDEP's Division of Recreation and Parks (DRP) develops and operates Florida's state park system and state greenways and trails for the benefit and enjoyment of Florida's citizens and visitors. The state park system contains many of the best remaining examples of Florida's original domain and cultural heritage. Units in the state park system are classified for management according to the natural and cultural resources they contain and the desired balance between resource preservation and public use.

Besides providing nearly 800,000 acres for public recreational use, the state park system is the largest steward of public historic properties in



FLORIDA PARK SERVICE

175 STATE PARKS



68 HISTORIC SITES

ON THE NATIONAL REGISTER
OF HISTORIC PLACES



9 NATIONAL HISTORIC LANDMARKS

ON THE NATIONAL REGISTER
OF HISTORIC PLACES

The DRP's Florida Park Service manages 175 state parks, state trails and historic sites spanning nearly 800,000 acres of Florida's natural environment, including 100 miles of beaches, nine National Historic Landmarks and 68 sites on the National Register of Historic Places. The mission of the Florida Park Service is to provide resource-based recreation while preserving, interpreting and restoring natural and cultural resources.



100 MILES

OF BEACHES

the state. More than 80 parks contain significant historic resources, including almost 300 historic structures and more than 1,500 archaeological sites. These resources provide a broad array of unique interpretive and educational opportunities for residents and visitors. In addition to administering Florida's state park system, DRP also administers the Florida Recreation Development Assistance Program and the federal Land and Water Conservation Fund.

The FDEP's Office of Park Planning is responsible for maintaining the Florida Outdoor Recreation Inventory (FORI), a comprehensive inventory of the existing outdoor recreation resources and facilities in Florida. The FORI also has an interactive mapping function, allowing users to search by location, provider and resource/facility categories. The

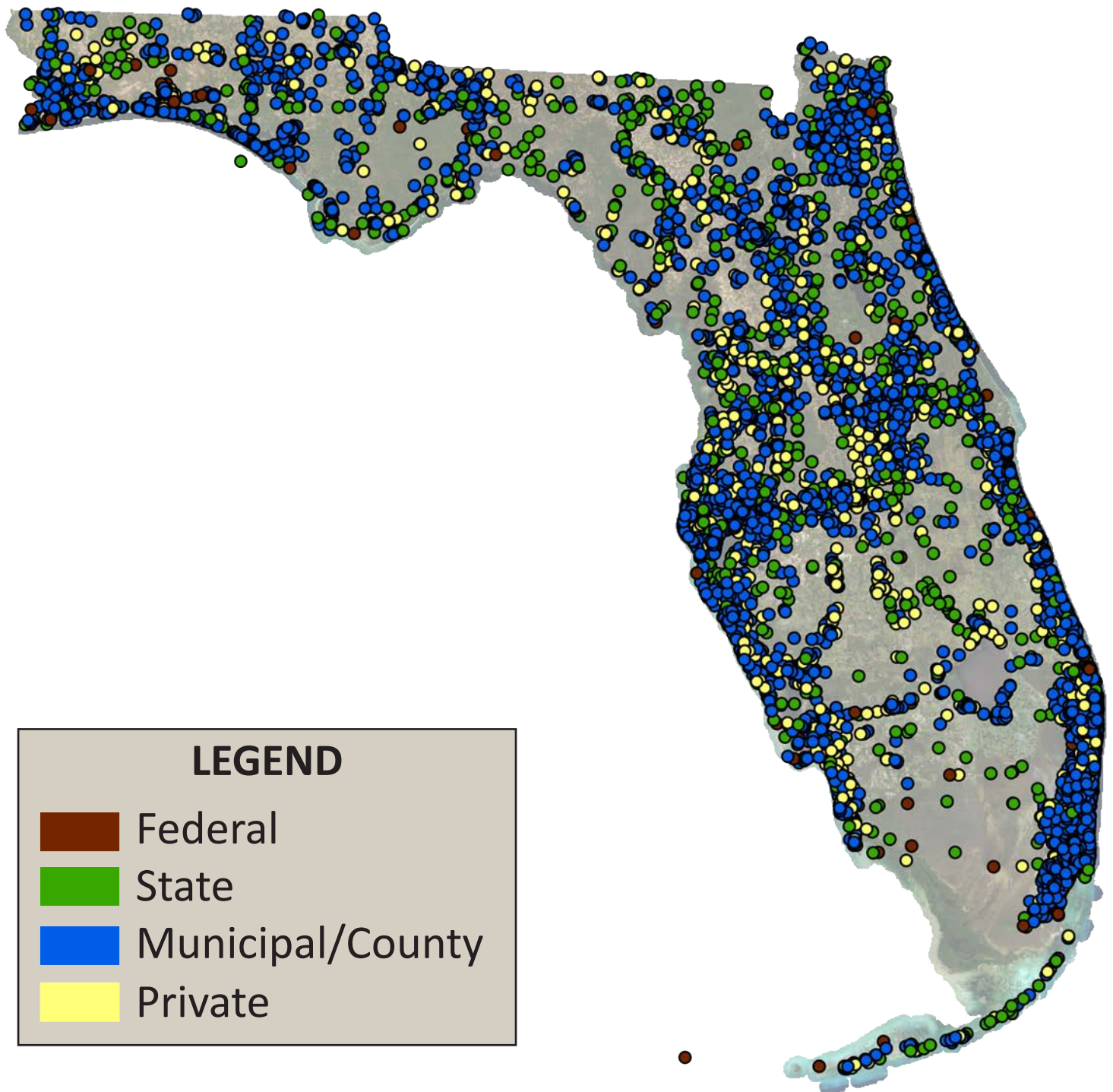
inventory provides details regarding parks, recreation areas, open spaces and other outdoor recreation sites in the state.

The FORI includes the known outdoor recreation resources and facilities reported to FDEP by federal, state, county and municipal governments, commercial enterprises, non-profit organizations and clubs. The database consists of more than 13,000 records, maintained for the purpose of developing the SCORP. In 2017, new web-based and mobile applications powered by FORI data were launched, enabling users to find recreation sites more easily on conservations lands. These new applications, known as *Outdoor Florida*, can be accessed on the FDEP website and can be downloaded from iTunes and Google Play.



Florida Outdoor Recreation Inventory: Recreation Areas and Facilities

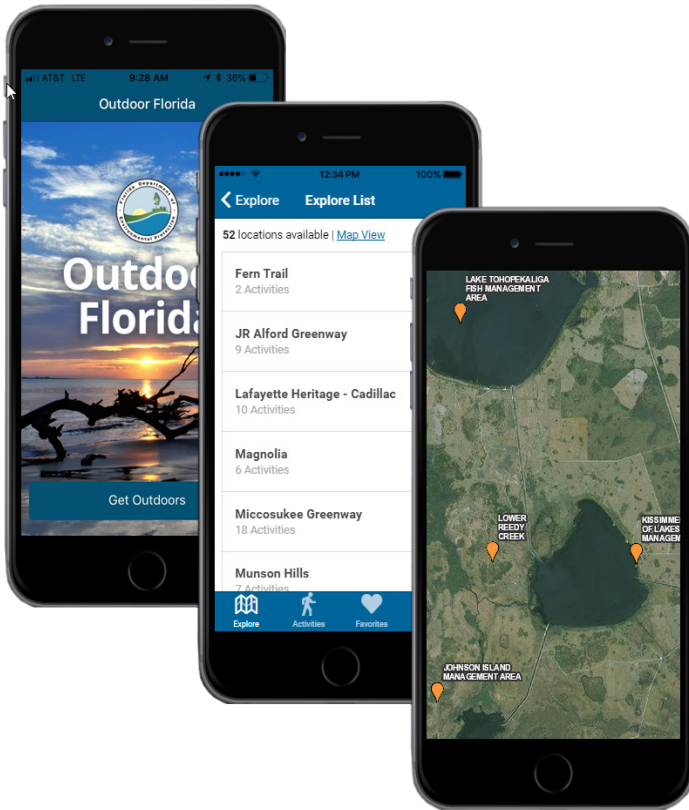
Figure 3.2



Although maintained by FDEP, the FORI database depends upon accurate reporting by the owners and managers of Florida’s public and private outdoor recreation facilities. Park and recreation managers are contacted periodically to update their data. However, new recreation areas and errors may be reported at any time. Contact the FORI database manager at outdoor.recreation@dep.state.fl.us or visit <https://floridadep.gov/parks/florida-outdoor-recreation-inventory> to use the mapping tool, conduct searches, export data, update an existing location, add a new location or to learn more about the inventory.



Outdoor Florida app



The DRP created the *Outdoor Florida* application to fulfill legislation that took effect July 1, 2016. This purpose of this app is to increase awareness of recreational opportunities available to the public on Florida’s conservation lands. Recreation sites associated with state and federal lands were added in 2017; municipal and county sites were included in 2018.

The **Florida Recreation Development Assistance Program (FRDAP)** provides financial assistance to eligible local governments, including the 67 county governments and 412 incorporated municipalities of Florida. Funding from the program is awarded on a competitive basis that considers the total project costs and the economic status of the applicants among other evaluation criteria. Pursuant to Section 375.075, Florida Statutes, and Chapter 62D-5, Part V, Florida Administrative Code, FDEP recommends to the Legislature each year that an appropriation of not less than five percent of the total amount credited annually to the Land Acquisition Trust Fund be authorized for the program.

Since 2001, the program has also received two percent of the bond proceeds made available through the *Florida Forever* program. Funding for the program has been awarded to approximately 1,805 projects for the last 16 fiscal year funding cycles.

State Agency Outdoor Recreation Resources

Table 3.3

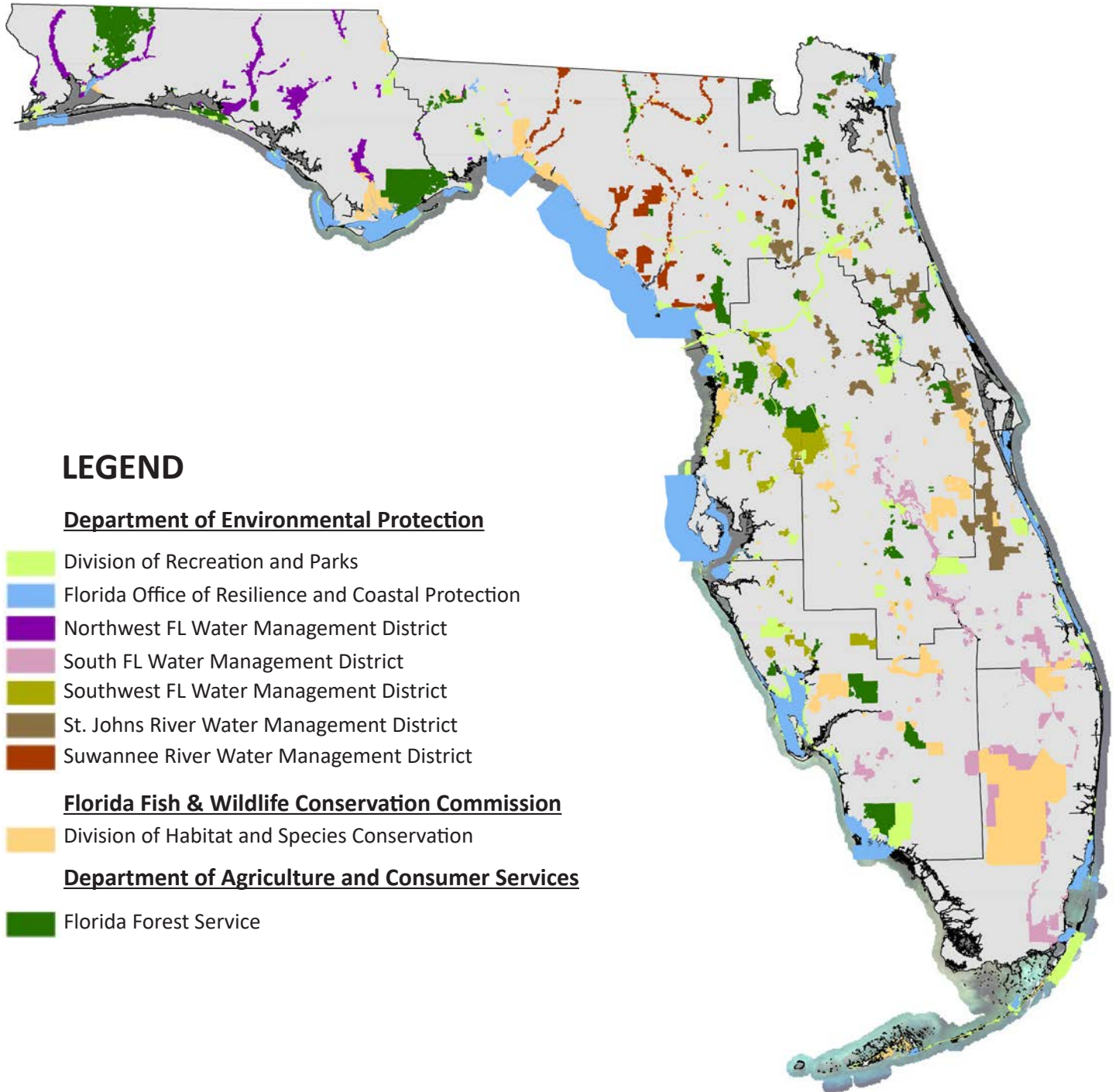
Region	# of Recreation Areas	Land (in Acres)	Water (in Acres)	Acres Total
Northwest	117	880,056	359,257	1,239,313
North Central	206	584,756	1,028,572	1,613,328
Northeast	103	286,348	171,322	457,670
Central West	92	760,673	415,972	1,176,645
Central	145	723,683	126,223	849,907
Central East	125	594,255	112,499	706,754
Southwest	69	607,246	382,446	989,691
Southeast	81	1,609,748	151,903	1,761,650
Statewide	938	6,046,765	2,748,193	8,794,958

Source: FORI



State Recreation Lands by Managing Agency

Figure 3.3



Office of Greenways and Trails

The Office of Greenways and Trails (OGT) within the Division of Recreation and Parks provides statewide leadership and coordination to establish, expand and promote the Florida Greenways and Trails System (FGTS). To fulfill its mission under the Florida Greenways and Trails Act (Chapter 260, F. S.), OGT coordinates and implements the plan for the FGTS in partnership with communities, businesses, agencies, the Florida Greenways and Trails Council and many other stakeholders.

As part of its mission, OGT maintains and updates the priority and opportunity maps that are a companion to the FGTS Plan, encompassing land-based trails, paddling trails and ecological greenways. These maps for land and paddling trails are included in Appendix C.

OGT establishes the vision for the FGTS by identifying and coordinating greenways and trails planning efforts throughout Florida. This is accomplished by joining with state and local partners to compile local trails data from cities, counties

and other land managing entities into one inclusive system. Depicting the trails data on a statewide map helps to identify where connections can be made across jurisdictional boundaries. In addition, OGT coordinates with and provides technical assistance regarding the acquisition, development, designation and management of greenways and trails projects that fulfill the FGTS plan and vision, along with the designation of Trail Towns that provide necessary amenities and opportunities for trail users.

OGT disseminates information about the many benefits that greenways and trails provide to Florida residents and visitors. OGT also provides information about greenways and trails-related recreational opportunities through publications, e-newsletters, press releases and through their website, FloridaGreenwaysAndTrails.com. The 2019-2023 Florida Greenways and Trails System Plan, available for download on their website, helps to guide OGT's efforts.

East Central Regional Rail Trail, Credit: Volusia County Parks, Recreation and Culture

SPOTLIGHT



Stretching 52 miles between Volusia and Brevard Counties, the East Central Regional Rail Trail is the longest rail-to-trail acquisition in Florida. Once completed, the trail will connect three major tourism destinations in the state: the greater Orlando area, Kennedy Space Center and Daytona's beaches. The trail corridor was purchased by the state through the Greenways and Trails Acquisition Program, with Brevard and Volusia Counties responsible for construction and management of the trail. In 2017, OGT acquired property to be developed as a trailhead by the town of Keystone Heights along the Palatka-Lake Butler State Trail.



Office of Resilience and Coastal Protection



The Office of Resilience and Coastal Protection (ORCP) is the principal manager of submerged lands and their associated marine and aquatic resources in Florida. The Florida Aquatic Preserve Act of 1975 (Chapter 258, Part II, Florida Statutes), authorizes the Board of Trustees of the Internal Improvement Trust Fund to maintain state-owned submerged lands with exceptional biological, aesthetic and scientific value as aquatic preserves. These areas offer prime opportunities for fishing, boating, swimming, paddling, snorkeling, diving and other water-related types of recreation.

The ORCP manages Florida's 41 aquatic preserves, including 37 saltwater and four freshwater sites, encompassing more than 2 million acres of sovereign submerged lands. In cooperation with NOAA, ORCP manages approximately 418,000 acres of submerged land and coastal uplands in three National Estuarine Research Reserves: Apalachicola, Guana Tolomato Matanzas and Rookery Bay. In addition, ORCP partners with NOAA to manage the Florida Keys National Marine Sanctuary. The sanctuary contains 2,800 square miles of submerged lands around the 126-mile long Florida Keys, and encompasses the most extensive living coral reef system in the nation.

Through the Southeast Florida Coral Reef Initiative and the Coral Reef Conservation Program, ORCP supports Florida's membership in the U.S. Coral Reef Task Force and the U.S. All Islands Committee. These programs coordinate research and monitoring, develop management strategies and promote partnerships to protect the coral reefs, hard bottom communities and associated reef resources of southeast Florida.

Division of State Lands

Since 1968, Florida has invested nearly \$8 billion through successive land acquisition programs to conserve approximately 3.9 million acres of land for environmental preservation, conservation and outdoor recreation purposes. The Division of State Lands (DSL) administers these land acquisition programs on behalf of the Board of Trustees of the Internal Improvement Trust Fund and FDEP. The DSL also provides administrative oversight for approximately 12 million acres of state owned lands, including 700 freshwater springs, 4,510 islands of 10 acres or more and 7,000 lakes. The state's public lands help ensure that everyone has the opportunity to appreciate Florida's unique landscapes.

Florida Forever

The DSL administers the *Florida Forever* program, which was created by the 1999 Florida Legislature as the successor to the Florida Preservation 2000 program established in 1990. *Florida Forever* supports a variety of land acquisition purposes, including the preservation of environmental, conservation and water management lands and to provide grants to local governments. Since *Florida Forever's* inception, 718,126 acres of land and water have been acquired, reflecting an investment of more than \$2.9 billion.

In 2008, *Florida Forever* was extended for another decade by the Florida Legislature. As part of the program's re-authorization, several important changes were made to the original program, including the creation of two new land acquisition programs. The Rural and Family Lands Protection Act was established in the Department of Agriculture and Consumer Services for the acquisition of agricultural lands through perpetual easements and other less-than-fee techniques. The Stan Mayfield Working Waterfronts Program was created to preserve and restore working waterfronts and provide public access to Florida's waters. In 2011, the Florida Communities Trust and Stan Mayfield Working Waterfronts programs were transferred to the DSL.

In addition to these new programs, greater emphasis was placed on providing public access to conservation lands, increasing accountability of public land management, protecting listed plant and animal species and addressing climate change.



Florida Communities Trust

The **Florida Communities Trust** (FCT), established in 1989 to help local governments preserve parks, open space, beaches and natural areas, has created more livable communities throughout the state. Matching and full grants for conservation and recreation land acquisition projects are provided to local governments, as well as to nonprofit environmental organizations through a competitive application process. The FCT receives 21 percent of annual proceeds from *Florida Forever*, when it is funded. The FCT also periodically receives specific funding allocations for land acquisition. In 2017, FCT held an application cycle for funding that, per statute, required all projects to enhance recreational opportunities for individuals with unique abilities.

As of June 2017, more than 92,400 acres were acquired through the program. The FCT provided nearly \$842 million of the \$1.57 billion spent to acquire these lands, while local government partners provided more than \$724 million in matching funds.



92,400

More than 92,400 acres acquired as of June 2017

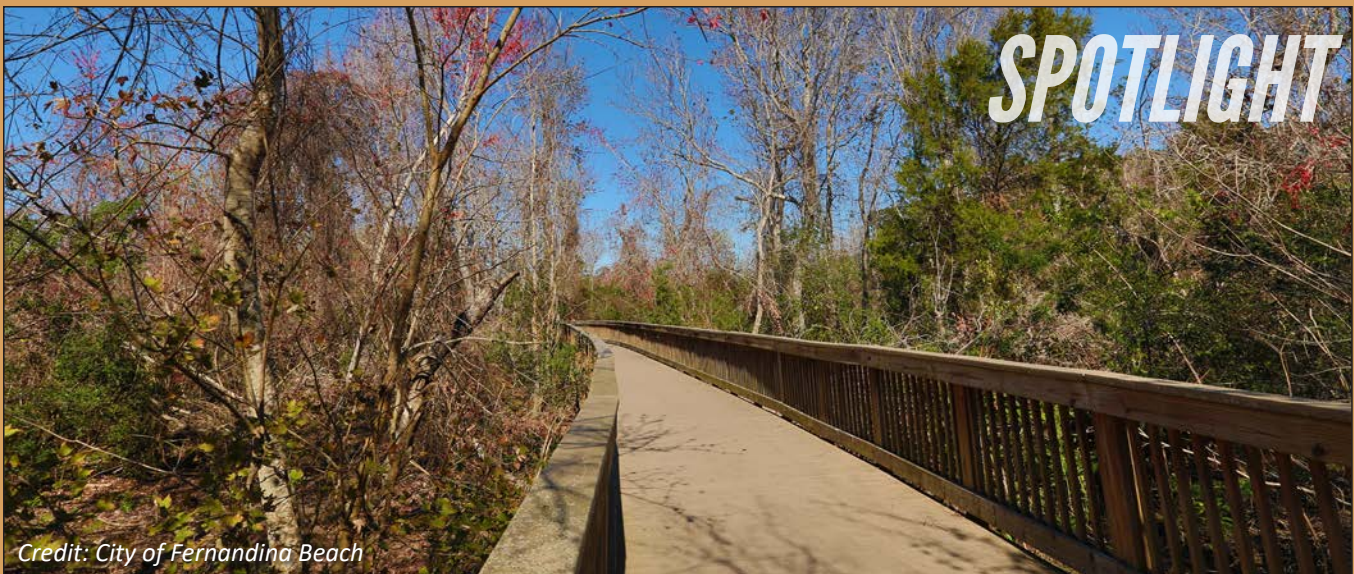
842 Million

Nearly \$842 million in project funding provided

724 Million

More than \$724 million in matching funds from local government partners

Florida Communities Trust provides matching and full grants for conservation and recreation land acquisition projects.



The City of Fernandina Beach acquired Egans Creek Greenway (ECG), a 300-acre greenway corridor, with matching funds from FCT in three phases between 2000 and 2003. Management of the greenway focuses on wetland restoration, removal of exotic nonnative vegetation and preserving the Egans Creek corridor as a natural storm water filter. The ECG continues to be a popular destination for local residents and visitors to Amelia Island. The city developed numerous public-use facilities in the park, including educational kiosks, a wildlife observation platform, geocaching sites and a network of multi-use trails and boardwalks. The city also provides guided ECG walks and other field-based learning opportunities throughout the year.

The ECG, along with Fort Clinch State Park to its north, is an important natural corridor within the City of Fernandina Beach on Amelia Island. The ECG enhances the community's resilience and provides a wide-range of nature-based outdoor recreational opportunities.



Recreational Trails Program

The Recreational Trails Program (RTP) is a federally-funded competitive grant program that provides financial assistance to local communities for the development of trails. Since its inception, the RTP has assisted communities in 50 of Florida's counties to establish and expand their trails.



The Recreational Trails Program and the Greenways and Trails Acquisition Program have assisted 121 communities across the state with the development and expansion of recreational trails.



The City of Kissimmee is developing Shingle Creek Regional Trail, a 32-mile, multi-use recreational trail. Shingle Creek is the headwaters of the renowned Florida Everglades, and this trail was selected as one of 101 America's Great Outdoors projects by President Obama's administration. This trail is the result of 25 years of planning and purchasing pristine parcels of land adjacent to scenic Shingle Creek. The trail offers a beautiful, natural environment for cyclists, pedestrians, bird watchers and other nature lovers. Phase 1 is complete and additional phases are underway. Once fully constructed, the trail will run through some of Florida's most urbanized areas and will connect to an even larger regional trail network.

Florida Recreation Development Assistance Program

The Florida Recreation Development Assistance Program (FRDAP) is a state competitive grant program that provides financial assistance to local governments to develop and/or acquire land for public outdoor recreational purposes. Over the last 16 fiscal year funding cycles, funding has been awarded to 1,805 projects. A local match is required for grants greater than \$50,000. The maximum grant amount is \$200,000.

The City of Miami Springs (population 14,000) recently matched a \$50,000 FRDAP grant to purchase a 35-foot water slide for the pool at its new Miami Springs Aquatic Center. The center's pool provides a place to swim, and swimming lessons and water aerobics programs for the public are offered as well.



Division of Water Resource Management



The Division of Water Resource Management (DWRM) is responsible for protecting the quality of Florida's drinking water as well as its rivers, lakes and wetlands, and for reclaiming lands after they have been mined for phosphate and other minerals.

The DWRM's programs establish the technical basis for setting the state's surface water and ground water quality standards, which are critical to maintaining the viability of water resources for public outdoor recreational use. By 2030, Floridians are expected to use about 7.7 billion gallons of fresh water per day, an increase of about 16 percent, or 1.3 billion gallons more per day over 2010 levels.⁴⁵ The Water Protection and Sustainability Program, created in 2005, has the task of increasing alternative water supplies to meet existing and future water supply needs. The FDEP's 2015 Annual Report on Regional Water Supply Planning describes the highlights and accomplishments of this program. The report also describes the progress of the state's five water management districts in meeting Florida's future demands for water.

Coastal protection and restoration are vital in preserving one of Florida's most valuable natural resources - its 825 miles of sandy shoreline fronting the Atlantic Ocean, the Gulf of Mexico and the Straits of Florida. To date, more than 229 of the state's 411 critically eroded shoreline miles have been restored and monitored under the Beach Management Funding Assistance Program (formerly the Beach Erosion Control Program), which works in concert with other agencies and local governments to protect, preserve and restore coastal sandy beaches.

Financial assistance is requested annually from the Program in amounts of up to 50 percent for beach projects and 75 percent for inlet projects from county and municipal governments, community development districts and special taxing districts for shore protection and preservation. In addition to beach restoration and nourishment, funds are also available for the construction of dunes and dune protection measures such as the planting of native dune vegetation. The Florida legislature appropriated more than \$878 million dollars for beach erosion control activities from 1964 through 2016.

Mining and Mitigation Program

The DWRM's **Mining and Mitigation Program** (MMP) regulates mining in Florida through a review and monitoring process. Originally established in the late 1980s to regulate, restore and reclaim phosphate-mined land, the program has evolved to incorporate a habitat and wildlife management program. The program manages extensive habitat corridors in areas that were historically disturbed by mining activities.

Today, the MMP is responsible for managing approximately 16,450 acres of state-owned lands along the Peace and Alafia Rivers. The management focus is on the protection of water, natural and cultural resources. Long-term management activities are implemented to protect these greenways, wildlife corridors and riparian buffers. In 2012, the MMP also restored 2,000 acres as part of the Upper Peace River/Saddle Creek Restoration project. This project improved the water quality and ecology of the Saddle Creek Basin, expanded public recreational opportunities and increased wildlife use in the Peace River corridor.



Water Management Districts

The Office of Water Policy within FDEP addresses statewide water management issues in coordination with Florida's water management districts and other agencies. Chapter 373, Florida Statutes, created five water management districts for the purpose of managing and conserving the state's water resources. The five districts were organized around major drainage basins in the state: Northwest Florida, Suwannee River, St. Johns River, Southwest Florida and South Florida. Land acquisition is one of the districts' primary tools for carrying out their mission of flood control, water storage and management, water resource development and preservation of wetlands, streams and lakes.

The districts play a key role in providing public outdoor recreation opportunities on lands under their ownership. The water management districts acquire land and construct water resource-related capital improvements, including water resource or water supply development and restoration projects. The districts are required to make their lands available for compatible public outdoor recreation uses whenever practicable. Numerous public access sites and recreational facilities have been developed on district-owned lands throughout the state in cooperation with other state agencies, the federal government, counties, municipalities and the private sector. Examples of the recreational opportunities provided on district lands include hiking, fishing, hunting, horseback riding, bicycling, canoeing, primitive camping and wildlife viewing.

Florida Fish and Wildlife Conservation Commission

The Florida Fish and Wildlife Conservation Commission (FWC) is the agency responsible for conserving the state's fish and wildlife resources; it was established in 1999 by an amendment to the Florida Constitution that consolidated multiple agencies. In 2004, after consulting stakeholders, employees and other interested parties, the FWC adopted a new internal structure to address the complex conservation issues of the 21st century. The new structure focuses on programs such as habitat management that affect

numerous species, and the agency continues to move decision-making processes closer to the public realm.

Florida's Constitution authorizes the Commission to enact rules and regulations regarding the state's fish and wildlife resources for their long-term well-being and the benefit of people. To do this, seven Commissioners (each appointed by the governor and confirmed by the Senate) hold five public meetings each year to hear reports, consider rule proposals and conduct other business.

Central to FWC's role in outdoor recreation is the management of hunting, fishing, boating and wildlife viewing opportunities. The FWC receives federal funds for preservation, restoration and enhancement of Florida's sport fishing resources, including boating access facilities, from the Federal Aid in Sport Fish Restoration (also known as the Dingell-Johnson or Wallop-Breaux) program. The FWC also receives funds for protection of endangered species from the Federal Aid in Wildlife Restoration (also called the Pittman-Robertson) Trust Fund. These programs are administered at the federal level by the U.S. Fish and Wildlife Service, which provide grants and technical assistance to the states.

Division of Marine Fisheries Management



Credit: Crawford Entertainment

The division of Marine Fisheries Management (DMFM) develops sustainable management recommendations for consideration by the FWC Commissioners for more than 500 saltwater species. This management ensures the long-term conservation and sustainability of Florida's valuable marine fisheries resources while balancing the needs of anglers. Saltwater fishing along Florida's 2,276 miles of coastal and offshore areas created an economic impact of \$8.0 billion and supported nearly 115,000 jobs in 2014.⁴⁶ In addition, Florida's commercial fishers landed approximately 97 million pounds in 2016, worth more than \$230 million



dockside.⁴⁶ The DMFM staff also work with federal and state agencies on marine issues, and represent Florida on the Gulf of Mexico and South Atlantic fishery management councils and the Gulf of Mexico and Atlantic States marine fisheries commissions.

The DMFM outreach and education team provides the public with opportunities to learn more about saltwater fishing, from learning basic fishing skills and fish identification to sustainable habits such as the best ways to catch and release fish. The DMFM's other programs include planning and deploying artificial reefs; reaching out to commercial, recreational and charter fishermen about regulations and their experiences; ensuring that reports of commercial fish landings provide accurate data; removing derelict traps from the water through the trap retrieval program; and making public comment on issues that may affect Florida anglers.

Division of Freshwater Fisheries Management

The Division of Freshwater Fisheries Management (DFFM) provides expertise on Florida's freshwater fish populations, angler use and other aspects of freshwater fisheries to ensure high quality fishing opportunities. Florida has more than 3 million acres of freshwater comprising 7,700 named lakes and 12,000 miles of fishable rivers, streams and canals. More than 200 species of freshwater fishes inhabit these waters and include many highly sought-after sportfish species.³⁰ The DFFM provides the public with information on freshwater fisheries management issues, fishing opportunities, aquatic education and outreach and other matters aimed at improving aquatic resources and promoting responsible life-long participation in sport fishing. Additionally, freshwater fish production facilities provide a dependable supply of the specific size, quantity and quality of freshwater fish to meet specific management objectives.

Division of Law Enforcement

FWC's Division of Law Enforcement protects residents and visitors who enjoy Florida's natural resources, and its officers enforce resource protection and boating safety regulations in the state's woods and waters. The Boating and Waterways Section is responsible for educating boaters about boating safety, ensuring boat access, installing and maintaining waterway signage and identifying

derelict vessels. The Boating and Waterways Section also administers several grant programs, including the Florida Boating Improvement Program and the Boating Infrastructure Grant Program.

The Federal Sport Fish Restoration Program is a "user pays, user benefits" program that is aimed at improving sport fishing and boating opportunities. Federal funds collected from taxes on fishing tackle, motor fuels and import duties on tackle and yachts are returned to appropriate state agencies for research, management, education and facility development related to sport fishing. These three programs funded more than 220 grants around the state, totaling more than \$33 million, to help construct boat ramps and related access facilities.

Division of Hunting and Game Management



Guana River WMA; Credit: David Moynahan, FWC

The Division of Hunting and Game Management (DHGM) uses scientifically proven game-management strategies and professional expertise to perpetuate sustainable hunting opportunities statewide, with an emphasis on waterfowl, small game, deer, wild turkey and alligators. The Division also develops rules and recommends wildlife management policies on nearly 6 million acres of public lands that provide various hunting opportunities. The Division also houses the Hunter Safety and Public Shooting Ranges section, which offers programs and facilities to teach people hunting laws, ethics, conservation and responsible use of firearms. Through these activities, DHGM strives to accomplish a high level of satisfaction among those who use and depend on healthy game wildlife resources.



Division of Habitat and Species Conservation

This division is responsible for the state's Wildlife Management Area (WMA) system, one of the nation's largest, which includes 147 tracts totaling approximately 5.9 million acres in public and private ownership.⁴⁷ The FWC is the lead manager of 54 areas that span 1.4 million acres, and is a co-manager of 93 areas that cover an additional 4.5 million acres. This system is vital to sustaining the fish and wildlife resources of the state. The state's WMAs also provide scenic and wild settings for a range of outdoor recreation opportunities including hunting, fishing, wildlife viewing and nature study.

In addition to managing the public lands of the WMA system, division staff also work with private landowners to assist them in keeping their lands healthy and rich with wildlife. Private landowner stewardship is extremely important to ensure that wild Florida, and the benefits it provides for Floridians and our economy, survives into the future. The Landowner Assistance Program, housed within the Office of Conservation Planning Services, offers a range of services to private landowners.

Public Access Services Office

The Public Access Services Office (PASO) plans and develops public use opportunities on FWC-managed areas. Staff develop enhancements such as trails, fishing docks and viewing blinds to support these opportunities. Among the trails managed by PASO is the nationally recognized Big Bend Saltwater Paddling Trail, an open-water route along Florida's coast from the Aucilla to Suwannee rivers. The PASO coordinates FWC's volunteer programs, engaging citizens in a range of citizen science and stewardship projects (see next page).

Another major focus of PASO is connecting people to wildlife through wildlife viewing. The Great Florida Birding and Wildlife Trail, managed by this office, is a network of more than 500 sites throughout the state selected for their excellent wildlife viewing. The trail uses special highway signs identifying designated sites, along with guidebooks and maps, a website and social media to highlight Florida's birding and wildlife viewing opportunities. The PASO staff also assists rural communities to plan and develop ecotourism opportunities focused on wildlife.



J.W. Corbett WMA, Credit: David Moynahan, FWC



FWC's Citizen Science and Stewardship



Volunteers work in many ways to help FWC accomplish its mission. Citizen scientists assist FWC staff to monitor fish and wildlife populations, control exotic species, improve habitat and teach conservation education and recreational skills programs. In the 2015-16 fiscal year, nearly 5,000 volunteers donated their time to conserving fish and wildlife, a contribution valued at more than \$2.5 million. Volunteers enjoy their work with FWC, reporting that the opportunity to make a difference, learn and spend time with other people committed to conservation keeps them engaged.

“As an FWC volunteer, I can combine my love for the outdoors with healthy physical work, sharing my interests with like-minded people and, most of all helping preserve the flora and fauna. I am privileged to go to areas not typically open to the general public, and I work with many wonderfully dedicated staff and volunteers. FWC volunteering is an incredible program and the dedicated staff that supports it is amazing!”

– Connie Sweet, retired zoologist and FWC volunteer.



The FWC's mission is “managing fish and wildlife for their long-term well-being and benefit of the people.” Its Wildlife Management Area system, one of the largest in the nation, celebrated its 75th anniversary in 2017.

Florida Department of Agriculture and Consumer Services

Florida Forest Service

The Florida Forest Service (FFS) is a major contributor to Florida's total outdoor recreation inventory. Areas managed by the FFS consist of 38 state forests and other lands totaling more than 1.1 million acres, all of which provide public access and ample opportunities for a variety of outdoor recreation experiences.

The FFS outdoor recreation objective is a balance of compatible recreational uses with other resource management activities under a multiple-use concept. Resource-based recreation opportunities offered by the FFS include camping, hiking, horseback riding, bicycling, off-highway vehicle use, hunting, fishing, paddling, nature study and wildlife viewing.

Hunting is permitted on most of the acreage managed by FFS, and is administered in cooperation with the FWC as part of their Wildlife Management Area program. Section 589.19 (4), Florida Statutes directs the FFS to designate specific areas of state forests as Operation Outdoor Freedom special hunt areas to honor wounded veterans and service members and provide them with valuable hunting and other outdoor experiences.

The FFS also administers the T. Mark Schmidt Off-Highway Vehicle Safety and Recreation Program, which was authorized by Chapter 261, Florida Statutes in 2002. The Act provides guidelines to promote safety and education, and project funding



for recreational use on public lands of off-highway motorcycles (OHM), all-terrain vehicles (ATV) and recreational off-highway vehicles (ROV).

In addition to directly providing resources and facilities for outdoor recreation, the FFS assists private landowners in developing forest management plans that often include an outdoor recreation component. At a landowner's request, the FFS will assess the land's potential for hunting, fishing, wildlife management, water access facilities, camping and related activities and assist in the development of a land management plan.

Florida Department of State

Division of Historical Resources

The Division of Historical Resources (DHR) is responsible for preserving and promoting Florida's historical, archaeological and folk culture resources. The DHR directs historic preservation efforts throughout the state in cooperation with state and federal agencies, local governments, private organizations and individuals. The director of DHR serves as the State Historic Preservation Officer, acting as a liaison with the national historic preservation programs conducted by the National Park Service. Chapter 267, Florida Statutes, directs DHR to develop a statewide historic preservation plan. Its primary purpose is to guide the implementation of sound planning procedures for the location, identification and protection of the state's archaeological and historical resources.

The Bureau of Historic Preservation (BHP) conducts programs aimed at identifying, evaluating, preserving and interpreting historic and cultural resources of the state. Programs include the Florida Main Street Program, Historic Preservation Grants-in-Aid Program, National Register of Historic Places/National Historic Landmark Program, Historical Markers Program, Certified Local Government Program and Florida Folklife Program. The BHP also reviews federal or state undertakings that may affect historical or cultural resources, and maintains the Florida Master Site File, the state's inventory of known historical and archaeological resources.

The Bureau of Archaeological Research (BAR) is responsible for the protection of archaeological and historical resources on state-owned and state-controlled lands, including sovereign submerged

lands. Bureau archaeologists conduct archaeological surveys and excavations throughout the state. The state's underwater archaeology program includes pre-Columbian sites and underwater archaeological preserves established to protect and interpret shipwreck sites to the public.

Florida Department of Economic Opportunity

The Florida Department of Economic Opportunity (FDEO) provides technical and financial assistance to local governments through a wide range of programs. These include Community Development Block Grants, Community Service Block Grants, the State Small Business Credit Initiative, Rural Development Grants and the Rural Infrastructure Fund. The FDEO's Bureau of Community Planning coordinates state-level review of local government comprehensive plans required by Chapter 163, Florida Statutes. The FDEO also assists local governments and regional agencies with land use planning issues.

Community Planning Technical Assistance



Main Beach Park, Fernandina Beach
Credit: Fernandina Beach Parks & Recreation

Subject to legislative appropriations, FDEO annually provides Community Planning Technical Assistance (CPTA) grants to local governments or regional planning councils working for or on behalf of local governments. These grants are generally in the \$25,000-\$40,000 range and fund a variety of land planning projects identified by the grantees, including land planning activities related to parks and recreation. For example, FDEO provided CPTA grant funding to the City of Fernandina Beach to update its Parks and Recreation Master Plan.





*C2C Pinellas Trail segment opening,
Credit: Office of Greenways and Trails*

The FDEO provided CPTA funding for development of an assets and opportunities inventory of cultural, natural and economic resources, and an Urban-Rural Design Overlay Study of the Coast-to-Coast Connector Trail (C2C). This 250-mile paved trail winds from the Gulf of Mexico to the Atlantic Ocean through Pinellas, Pasco, Hernando, Sumter, Lake, Orange, Seminole, Volusia and Brevard Counties. Up to 20 separate trail segments will be linked together to form the C2C. The Urban-Rural Design Overlay is intended to establish a unifying overall branding image for these linkages of the statewide network of greenways and trails.



*Torreya State Park,
Credit: Aaron Miller, FDEP*

In 2016-2017, FDEO provided CPTA grant funding for a feasibility study for a proposed Chattahoochee to Bristol trail. If established, the trail will connect to Torreya State Park and will create additional outdoor recreation opportunities in North Florida. Local governments interested in parks and recreation planning are encouraged to contact FDEO about CPTA grant funding.

Competitive Florida Partnership

The Competitive Florida Partnership assists communities through funding and technical assistance to create and implement an economic development strategy. Key to the strategy's creation is the input of stakeholders from across the community spectrum, including those representing parks and recreation. As of 2016 there were 16 designees, many of whom brought new outdoor recreation opportunities to fruition through planning and funding. In the case of White Springs, the town developed an idea from the strategy process and designed a project to attract eco-tourists to the area.

Another recreation project that developed from this partnership was the work to extend access to Torreya State Park into Gadsden County near Chattahoochee. The initial collaboration between FDEO planners and stakeholders evolved into a technical assistance grant (see CPTA grant 2016-2017 description, above).

Florida Department of Transportation

The Florida Department of Transportation's (FDOT) primary statutory responsibility is to coordinate the planning and development of a safe, viable and balanced transportation system serving all regions of the state, and to assure the compatibility of all components, including multimodal facilities. To provide for the state's transportation needs, FDOT (under Chapter 334, Florida Statutes) gives consideration to the preservation and enhancement of the environment and the conservation of natural resources, including scenic, historic and recreational assets.

The FDOT provides a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities. The FDOT builds and operates rest areas along interstate highways for public use and provides opportunities for water-based recreation on causeways and bridges. In addition to providing access, FDOT administers multiple programs to support community visions and values through initiatives such as the State Pedestrian and Bicycle Program, the Florida Scenic Highway Program, the Shared-Use Nonmotorized (SUN) Trail Program and the Transportation Alternatives Program.



Pedestrian & Bicycle Program



*East Central Regional Rail Trail,
Credit: Volusia County Parks, Recreation & Culture*

The FDOT develops initiatives and programs to improve safety, mobility and accessibility for pedestrians and bicyclists on Florida's roadways. As part of this program, the FDOT establishes design and maintenance guidelines for state bicycle and pedestrian facilities. The Florida Pedestrian and Bicycle Strategic Safety Plan provides detailed objectives and strategies to improve pedestrian and bicycle safety in Florida. The Florida Transportation Plan recognizes biking and walking as important ways to provide more transportation choices for people, and as transportation solutions that support quality places to live, learn, work and play.

Florida Scenic Highway Program



Credit: Florida Department of Transportation

The Florida Scenic Highway Program is a grass-roots effort to showcase and heighten awareness of Florida's intrinsic resources cultural, historical and archaeological, recreational, natural and scenic - which collectively enhance the overall traveling experience. Designated highways tell a story that is representative of Florida's past and present lifestyles.

Participation in the program is voluntary and benefits the communities along the routes in matters such as resource enhancement, protection and economic sustainability.

Proposals to designate scenic highway corridors are reviewed based on criteria established by the FDOT. Each designated corridor is managed by a byway organization made up of interested citizens, local government representatives and local business owners. As of October 2018, there are 26 designated scenic highways in Florida.

Florida SUN Trail Program

The SUN Trail program provides funding for the development of a statewide system of paved multi-use trails (SUN Trail network) for bicyclists and pedestrians, physically separated from vehicular traffic. The SUN Trail network aligns to the Florida Greenways and Trails System Plan's Priority Land Trail Network, modified by the removal of corridors that are not envisioned as paved trails.

The funding framework consists of a two-tier structure. One tier implements projects within the two major regional trail systems selected as priorities by the Florida Greenways and Trails Council, a statutory advisory body to FDEP. The top two Regional Trail Systems are the Coast-to-Coast Trail Connector (C2C), a 250-mile trail system linking the Gulf and Atlantic coasts through Central Florida, and the St. Johns River- to-Sea Loop (SJR2C), a 260-mile trail system that will link several communities including St. Augustine, Daytona Beach, Titusville, DeLand and Palatka. The second tier implements projects in the Individual Trail category. This allows SUN Trail funding distribution to other projects, within the network, to ensure a more general geographic distribution.

In October 2016, FDOT announced the selection of the first year of projects to receive funding under the program. A total of \$44.4 million was awarded to 45 separate projects located across 21 counties throughout Florida. The funds for fiscal year 2016-17 were immediately available to begin work. Twenty-two of the funded projects help to advance the two major regional trails systems. Five of these are part of the C2C and 17 are part of the SJR2C. Twenty-three projects are for individual trail segments throughout the rest of the state.

Established during the 2015 legislative session,





Upon completion, the Coast-to-Coast Trail (C2C) will be a 250-mile paved, multi-use trail across Florida. Running from the Gulf of Mexico to the Atlantic Ocean, the C2C will link communities between St. Petersburg and Titusville by connecting 20 existing and planned multi-use trails. As of 2017, the C2C was approximately 62 percent complete. The C2C includes two of the state's most popular trails, the Fred Marquis Pinellas Trail and the West Orange Trail, both of which have fueled economic transformation of communities, particularly those of Dunedin and Winter Garden. This corridor also includes significant portions of the developing 52-mile East Central Regional Rail Trail, the longest single rail-trail corridor ever acquired by the state. The C2C will be developed and managed by a broad range of communities and agencies.

the SUN Trail program provides an annual allocation of up to \$25 million for projects within the SUN Trail network. Once constructed, management of the multi-use trails are by other public agencies. Development of the Five-Year Plan, for funding projects through fiscal year 2023, is underway.

State University System of Florida

The State University System of Florida consists of 12 institutions that serve more than 300,000 students and contain almost 14,000 acres of land. Each university has an approved master plan that addresses the issue of outdoor recreation space. Recreational facilities maintained by each university provide opportunities for participation in a variety of athletic activities such as tennis, basketball, baseball, softball, soccer and football.

Many state universities also operate resource-based recreation areas detached from the main

campus for use by students, alumni and in some instances, the general public. These areas provide opportunities for both active and passive outdoor recreation activities, such as golfing, swimming, canoeing, hiking, camping, nature study and picnicking.

Regional Planning Councils

Sections 186.501 and 186.512, Florida Statutes, also known as the Regional Planning Council Act, divides the state into 10 regional planning councils. Each council provides a link between local and state governments, and is comprised of two-thirds county and municipal officials and one-third gubernatorial appointees. Additionally, the council includes ex-officio members from FDOT, FDEP, the corresponding water management district and a nominee from FDEO.

One of the primary functions of each council is the preparation and adoption of a strategic regional



Florida's Regional Planning Councils

Figure 3.4

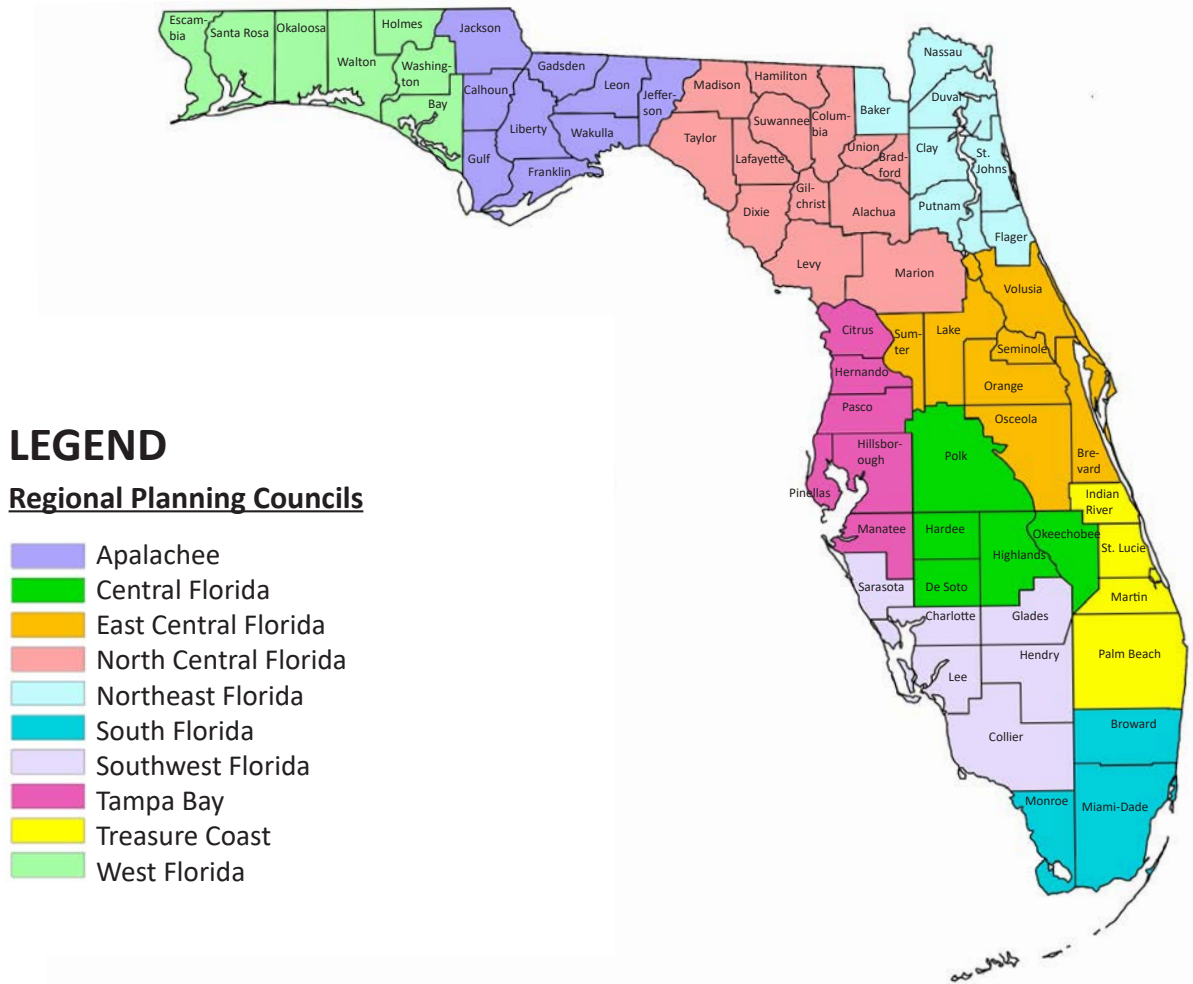


Table 3.4 Local Agency Outdoor Recreation Resources

Region	# of Recreation Areas	Land (in Acres)	Water (in Acres)	Acres Total
Northwest	826	9,639	824	10,463
North Central	654	34,114	1,984	36,099
Northeast	896	41,085	311	41,396
Central West	1429	94,439	1,851	96,290
Central	1366	52,936	34,595	87,532
Central East	1246	56,860	9,900	66,760
Southwest	1034	130,762	2,939	133,701
Southeast	2030	73,046	2,455	75,501
Statewide	9481	492,882	54,859	547,742



Orange County Highway 50 boat ramp, Credit: David Moynahan, FWC



policy plan, providing goals and policies which guide the economic, physical and social development of the region. Using this plan as a guideline, the councils review local strategic and development plans, link planning efforts of various entities to ensure regional consistency, and facilitate planning or growth management disputes.

Special Districts

Chapter 189, Florida Statutes, also known as the Uniform Special District Accountability Act of 1989, addresses the operation of special districts in Florida. More than 1,600 special districts exist statewide, providing infrastructure and services in a wide range of areas including fire control, libraries, ports and inlets, mosquito control, water control, community development, roads and hospitals. In some cases, special districts play an expanded role in providing outdoor recreation opportunities, conservation and resource management services.

Navigation Districts

Navigation districts in the state play a particularly important role in outdoor recreation. The Florida Inland Navigation District (FIND) and the West Coast Inland Navigation District (WCIND) provide assistance programs that develop waterway access projects such as boat ramps, marinas, boardwalks, fishing piers, waterfront parks, navigation channels, shoreline stabilization and environmental restoration projects. The FIND is the state sponsor of the Atlantic

Intracoastal Waterway from the Georgia border to the southern end of Miami-Dade County. The WCIND stretches from the northern border of Manatee County to the southern border of Lee County and contains the 152-mile long Gulf Intracoastal Waterway.

LOCAL GOVERNMENT PROVIDERS

Besides being the main provider of user-oriented recreation facilities and programs, local governments pursue opportunities to acquire open space and conservation areas for their communities, often in partnerships with state agencies or non-profit conservation groups. Although the size of the properties acquired under these programs may not be as large as those acquired for conservation by state and federal agencies, they can be critically important in achieving a community's goals for environmental preservation, recreation and open space or growth management.

Much of the success of the state's land acquisition programs is the result of the cooperative partnerships between federal, state and local governments and national and local land trusts. Many of the projects have been sponsored jointly by partnering arrangements, and such partnerships with local governments have increased in recent years. Acquisition programs enacted by local governments have generated billions of dollars to acquire conservation and recreation lands. In fact, 53 of Florida's 67 counties have conservation lands managed by local governments, comprising nearly 500,000 acres.⁴⁸



COUNTY ROLES

Florida's 67 counties vary in character from densely populated metropolitan areas such as Miami-Dade and Pinellas, to sparsely populated rural areas like Glades and Liberty. County governments are key components of Florida's recreation and park system. All counties do not have the same outdoor recreation needs nor have they all been able to fund responsive programs to the same degree, but every county in the state has an officially established outdoor recreation program. In some counties, user-oriented recreation programming is limited, but resource-based facilities such as roadside picnic areas or boat ramps are common amenities. In some counties, user-oriented facilities may be available only at public schools and municipal parks. More than half of Florida's counties, however, have undertaken sophisticated recreation programs involving the administration of numerous and diverse parks, facilities and program activities.

Counties are primarily concerned with the local outdoor recreation needs expressed by the unincorporated and incorporated populations within their jurisdictions. As a rule, counties are an ideal level of government to provide regional or large community parks. Unlike cities, the larger acreage of counties provides a wider range of resources and



Credit: Marion County Parks & Recreation

a greater variety of outdoor recreation venues. As a result, the typical county outdoor recreation program in Florida may offer a combination of resource-based and user-oriented activities. Beaches, swimming areas, boating access sites, picnic sites, scenic areas and, occasionally, campgrounds are among the more popular types of resource-based areas and facilities provided. However, in more populous counties, the availability of undeveloped land for recreational needs is shrinking. These entities must reimagine how to provide these opportunities for future generations.



*Vera Carter Environmental Center, Tibet-Butler Preserve
Credit: Orange County Parks and Recreation*

The Orange County Parks and Recreation Division oversees the Tibet-Butler Preserve, one of Orlando's greatest assets. This 438-acre property was purchased by the South Florida Water Management District through the Save Our Rivers program. Through this unique joint venture program, the county manages the preserve's diverse wildlife and natural areas, which include bay and cypress swamps, marsh, pine flatwoods and scrub, which can be enjoyed on 3.6 miles of interpretive hiking trails. Lake Tibet-Butler, for which the preserve was named, borders the park and has been designated an Outstanding Florida Water. The Vera Carter Environmental Center interprets the preserve's wetlands, uplands and fire ecology, and live animals are featured as well. Schools and other groups of all ages participate in hands-on interpretive programs focusing on plants, animals, outdoor sports, sciences and the environment. The center also offers free weekend programs for families.





HENDRY LaBELLE RECREATION BOARD

Sometimes cities and counties team up to provide better services. In 1990, the Hendry LaBelle Recreation Board (HLRB) was formed to oversee all recreation in western Hendry County. The Recreation Board manages both city and county parks, and an inter-local agreement between the City of LaBelle and the county was created to supervise daily operations and improvements to current and future parks. The HLRB's mission is "to keep all individuals of Hendry County active, healthy and entertained in the beautiful area of LaBelle by providing various sports and activities for everyone to participate in."

MUNICIPAL ROLES

Nearly all of Florida's 412 municipalities have developed recreation programs and facilities of one type or another. Many cities have established park and recreation programs with trained staff who administer parks, facilities and programs. Smaller cities may have only limited facilities and rely on the county government, local school system, private organizations or non-profit groups to carry out athletic programs.

Due to population densities and the lack of large open space areas that support resource-based recreation opportunities, municipal recreation systems tend to concentrate on providing more intensive user-oriented facilities that require relatively little space. Typical municipal outdoor recreation facilities include playgrounds, swimming pools, ball fields, tennis courts and golf courses.

Given their heavy emphasis on user-oriented facilities and programs, Florida's municipalities have a smaller role in the statewide, resource-based outdoor recreation system. There are certainly exceptions, however, especially where cities or towns are located on bodies of water or along the coasts. For example, Atlantic and Gulf coastal communities provide many excellent public beach facilities, while those located on navigable waters (coastal or inland) operate marinas, boat ramps, docks, mooring fields and other boating facilities.

Municipal programs play a primary role in the provision of user-oriented recreation opportunities in Florida. The importance of the role of municipal programs will continue to grow as increased public

emphasis is placed on close-to-home recreation. Since Florida's municipal recreation agencies are the recreation providers closest to the people, they are usually the first to feel the pressures to establish programs for meeting the added demands of new residents.

PRIVATE SECTOR & NON-GOVERNMENT ROLES

In addition to the more conventional forms of outdoor recreation provided by all levels of government, the private sector affords Floridians and visitors an array of recreational opportunities. Private providers and facilities range from for-profit recreational enterprises such as campgrounds, golf courses, marinas, outfitters and attractions of all kinds to non-profit conservation and advocacy organizations.

Industries with extensive land holdings, notably the forest products industry in Florida, provide vast recreation resources and excellent facilities on their lands for the use of the public, often at only a nominal fee. However, this resource is quickly disappearing in many parts of the state as timber lands are being converted to private access leases or developed for residential and commercial purposes.

Private outdoor recreation, because of its size, complexity and the fact that it undergoes rapid and frequent change, is extremely difficult to inventory in a comprehensive manner.

In addition to its direct delivery of outdoor





recreation programs, rental equipment, tours and other opportunities, the private sector can respond quickly to opportunities for acquiring property for subsequent donation or resale. This capability makes the private sector a valuable partner with public agencies in the provision of resource-based outdoor recreation. Private companies and non-profit organizations have transferred thousands of acres to state government for recreation and conservation purposes. Those transfers represent a substantial contribution to the overall supply of outdoor recreational opportunities in Florida.

Private Organizations

This category includes private and quasi-public organizations such as the YMCA, 4-H, scouting organizations, faith-based and veterans groups and foundations. These groups provide a wide range of outdoor programs that include health and fitness, recreation therapy and life skills. Conservation organizations such as The Nature Conservancy, Audubon Society, Archbold Biological Station and Tall Timbers Research Station and Land Conservancy are included as well. These organizations not only acquire and manage conservation land, but they also conduct preservation, restoration research programs and educational activities. These groups provide land

and facilities primarily for the use of members, but in some cases for the public at large.

Commercial Providers

Florida's commercial outdoor recreation providers are a vital component of the state's economy. Commercial providers meet a significant portion of the overall demand for both resource-based and user-oriented outdoor recreation in Florida, particularly tourist-generated demand. Because of their capabilities and further potential for fulfilling demand, the private commercial sector must bear a large share of the responsibility for meeting demand for both resource-based and user-oriented recreation.

Clubs

Country clubs, tennis clubs, hunt clubs, yacht clubs and many others round out Florida's list of recreation providers. These groups manage land or facilities that are primarily available only to organization members, families or their guests. In addition, private industry lands are included (timber companies and other industries with extensive land holdings whose lands or portions thereof are open to the public). The majority of these lands are used for resource-based recreation, although some forms of user-oriented facilities are also available.



"Nothing compares to the simple pleasure of a bike ride."

- John F. Kennedy



Credit: Frank Weber, Orange County Government



Chapter 4

Outdoor Recreation Demand and Need

Florida Caverns State Park, Credit: Crawford Entertainment

Florida’s municipal, county, state and national parks, along with other conservation lands, are the crown jewels of our state. Together, these public spaces protect our natural areas and provide recreational opportunities; drive the economy through tourism, festivals, events and sporting tournaments; contribute to the overall health and physical activity of our citizens resulting in lower health-related medical costs; and build a sense of community by bringing together all cultures in a safe and enjoyable space.” – Florida Recreation and Park Association

From Adams Beach to Zolfo Springs, Florida’s recreation providers work hard to deliver the high-quality outdoor recreation experiences that residents and visitors have come to expect. However, both public and private suppliers of recreation must periodically assess demand and need for these activities, determine if the local supply is adequate and how to best go about making improvements. Keep in mind that many recreation providers (especially land management agencies) often do not furnish the activities themselves, but merely the settings for them.

Measuring current and future demand for Florida’s outdoor recreation resources and facilities is challenging. Resources and facilities are generally considered “free” goods and services, and “demand,” as an economic concept, is difficult to calculate. Whether on a statewide or regional basis, a method remains elusive for determining the amount of outdoor recreation a person would “consume” under certain conditions of cost and availability.

Consequently, the term “demand” in this document represents a means of expressing the actual participation in a recreation activity by a defined group or population over a fixed time period. These measurements can provide satisfactory estimates of recreation demand helpful for long-range planning efforts.

OUTDOOR RECREATION DEMAND

The Division of Recreation and Parks initiates periodic surveys of Florida’s residents and tourists to estimate recreation demand in Florida. The 2016-2017 Florida Outdoor Recreation Participation Study was conducted by the Institute for Service Research, a firm specializing in service sector research.⁵

For this study, Florida residents were interviewed between October 2016 and February 2017 regarding their participation in 35 different outdoor recreation activities. Similarly, a survey of tourists was conducted between December 2016 and February 2017. Respondents were asked to identify each activity they, or someone in their household participated in during the preceding 12 months. For the first time in Florida’s SCORP history, both household and individual participation data were collected.

The contractor completed 4,017 surveys with residents and 3,018 surveys with tourists. The methodologies used to conduct the resident and tourist surveys are described in Appendix E.

Based on the survey results, the percentages of



Florida residents and tourists who participated in each of the activities were calculated. These figures indicate the number of residents and tourists in each region who actually took part in an activity at least once during the preceding year. County-level participation was also measured for the first time, and although the results are not statistically significant (due to small sample sizes in some counties relative to their populations), a snapshot is provided as to where certain activities are particularly popular.

A summary of the results is presented in this chapter. For complete survey results, please see the contractor's final report posted on FDEP's SCORP web page at floridadep.gov/parks.

Top Recreation Activities

Household participation rates and estimates of resident and tourist populations for 2016 were used to calculate the number of people who participated in each activity statewide and within each planning region. These methods were repeated using resident and tourist population projections for 2025. Figure 4.1 shows the top 10 recreation activities for residents and visitors statewide for 2016-2017.

Appendix G provides the resident and tourist participation rates (household and individual), frequency of participation and a demand index for each measured activity. As would be expected, individual participation rates for each outdoor recreation activity are lower than their corresponding household rates. Household figures are used throughout this document unless otherwise indicated. Individual participation rates were used for level of service (LOS) calculations in Appendix H.

Fitness walking/jogging is the activity in which the largest percentage of residents participated. This activity was not tracked in previous Florida SCORPs. Wildlife viewing, saltwater beach activities, bicycling, visiting historical and archaeological sites, picnicking, hiking, bicycling on paved surfaces, swimming in outdoor pools, saltwater fishing and freshwater fishing had the next highest household participation rates. Resident participation for other activities ranged from 33 percent for paddling activities (canoeing/kayaking/stand-up paddleboarding) to 10 percent for horseback camping. Amongst residents, nature study, hiking and wildlife viewing showed the largest jump in participation since the previous SCORP (see Appendix G).



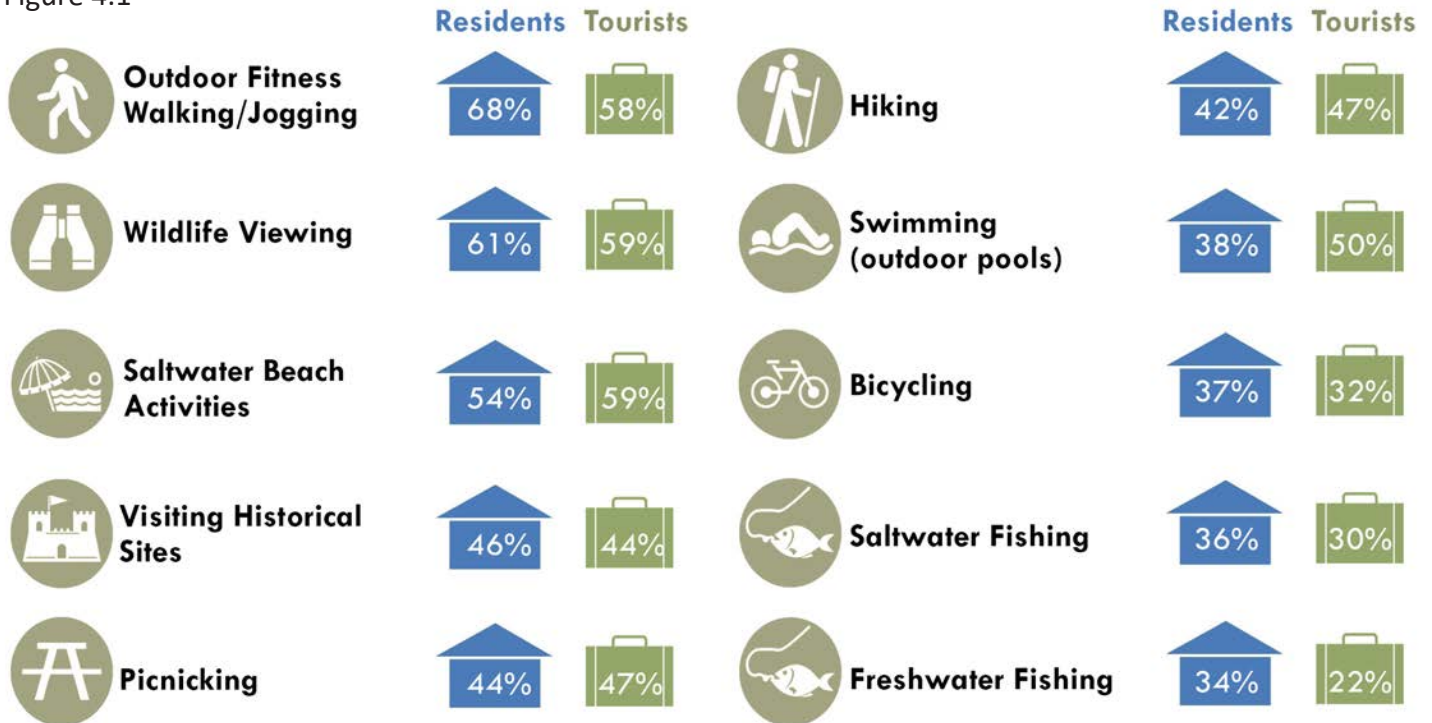
West Orange Trail, Credit: Dudley Witney, TPL



FLORIDA'S TOP OUTDOOR RECREATION ACTIVITIES

Household Participation Rates

Figure 4.1



Among tourists, saltwater beach activities and wildlife viewing had the highest level of participation (both at 59 percent). Fitness walking/jogging, swimming in public outdoor pools, picnicking, hiking, visiting archaeological and historic sites, canoeing/kayaking/stand-up paddleboarding, saltwater fishing and bicycling on paved surfaces had the next highest levels of household participation. Participation rates for the other activities ranged from 27 percent for nature study to 9 percent for horseback camping and for hunting.

Another way of gauging the popularity of an activity is the frequency of participation (number of days engaged in) during the year. The outdoor activity with the most days of resident participation was fitness walking/jogging (average 86.8 days), followed by bicycling (40.1 days) and wildlife viewing (22.6 days). Basketball and soccer ranked 4th and 5th (21.8 and 21.6 days, respectively). More than one-quarter of fitness walkers/joggers participated for >100 days during the past 12 months.

For tourists, the activities with the highest frequency of participation during their visit were fitness walking/jogging (average 8.8 days), followed by RV/trailer camping (5.1 days) and swimming in outdoor pools (4.8 days). Bicycling and saltwater beach activities (4.6 days each) rounded out the top 5.

A demand index was also calculated to measure participation for residents and visitors. The demand index is the household participation rate multiplied by the average days of participation. For both residents and tourists, the same six activities had the highest demand indices, although the order of the rankings were slightly different. These activities were fitness walking/jogging, bicycling, wildlife viewing, saltwater beach activities, swimming in outdoor pools and hiking (see Appendix G).

Importance of Recreation

According to the participation survey, nearly all Florida residents (95 percent) say that outdoor recreation is important to them; this includes 61 percent who think it is very important and 34 percent who think it is somewhat important. The results are similar among tourists: 98 percent say outdoor recreation is important to them personally (61 percent said very important and 37 percent stated somewhat important; see Figure 4.2).

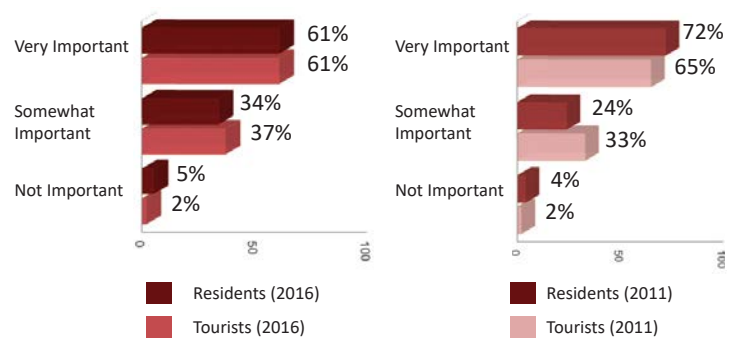
The number of respondents who think outdoor recreation is very important declined since the last SCORP. By comparison, in 2011, 72 percent of Florida residents and 65 percent of tourists thought outdoor recreation was very important.¹⁰





Importance of Outdoor Recreation 2016 vs. 2011

Figure 4.2



Motivations for Participation

A central aspect of planning for outdoor recreation is understanding why people recreate. What motivates someone to go outside and participate? According to the participation survey, Florida residents consider relaxation the most important reason for participation, followed by enjoying the scenery, general health, physical fitness and being with family and friends.

Top Reasons for Resident Participation

- 1) For relaxation
- 2) To enjoy the scenery
- 3) For my health in general
- 4) For my physical fitness
- 5) To be with family and friends

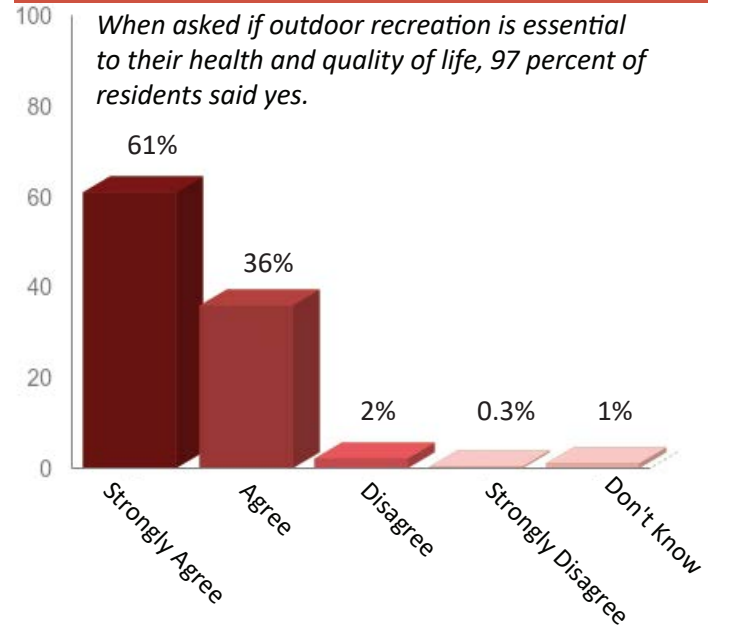
Relaxation is also the most important reason for tourist participation in Florida’s outdoor recreation activities, followed by being with family and friends, enjoying the scenery, being close to nature and for mental well-being.

Top Reasons for Tourist Participation

- 1) For relaxation
- 2) To be with family and friends
- 3) To enjoy the scenery
- 4) To be close to nature
- 5) For my mental well-being

Importance of Outdoor Recreation Health and Quality of Life

Figure 4.3



Satisfaction with Opportunities and Facilities

The participation survey found that the majority of Florida residents (81 percent) are satisfied with the outdoor recreation opportunities in the county where they live. Satisfaction was highest in the North Central region (86 percent) and lowest in the Northeast region (77.6 percent); see Table 4.1. Support for Florida maintaining its current levels of outdoor recreation services and opportunities is also high (89 percent statewide). This support was strongest in the North Central region (94.7 percent) and weakest in the Northwest region (86.9 percent).



Table 4.1 - Overall Satisfaction with Recreational Opportunities - Residents

Satisfaction Level	State wide	Central	Central East	Central West	North Central	North east	North west	South east	South west
Very Satisfied	37.6%	34.7%	37.6%	39.3%	46.3%	34.5%	35.7%	38.1%	38.3%
Somewhat Satisfied	43.6%	45.7%	43.5%	41.7%	39.7%	43.1%	45.4%	44.3%	42.5%
Neither Satisfied Nor Dissatisfied	12.1%	12.4%	13.8%	12.5%	5.7%	13.2%	11.2%	11.6%	13.7%
Somewhat Dissatisfied	5.4%	5.7%	3.7%	5.9%	7.5%	7.1%	6.3%	4.5%	4.5%
Very Dissatisfied	1.3%	1.6%	1.5%	0.6%	0.9%	2.2%	1.5%	1.5%	1.1%

Among tourists, satisfaction with opportunities is even higher (97 percent, see Table 4.2) and a large majority of tourists (92 percent) support maintaining the current levels of outdoor recreation services and opportunities in Florida. This does not mean there is no room for improvement, but rather emphasizes the need for at least maintaining current levels of service as the state’s population and number of visitors grow.

Table 4.2 - Overall Satisfaction with Recreational Opportunities - Tourists

Satisfaction Level	Tourist (Statewide)	Resident (Statewide)
Very Satisfied	75%	37.6%
Somewhat Satisfied	22%	43.6%
Neither Satisfied Nor Dissatisfied	2%	12.1%
Somewhat Dissatisfied	0.3%	5.4%
Very Dissatisfied	0.1%	1.3%

Quality

Respondents’ opinions of the quality of facilities in their home counties are also positive, with a 77 percent satisfaction rate statewide (29 percent indicated excellent and 48 percent rated them as good); see Table 4.3. Compared with the 2011 survey results, these responses are nearly identical.¹⁰ On the other hand, 16 percent rate the quality as fair and 3 percent rate it as poor, and without continued maintenance, dissatisfaction is expected to rise.

Regionally, satisfaction with quality of facilities was highest in the Southeast region (79.5 percent) and lowest in the Central East region (66.9 percent).

Table 4.3 - Satisfaction with Quality of Recreational Facilities - Residents

Rating	State wide	Central	Central East	Central West	North Central	North east	North west	South east	South west
Excellent	29%	31.1%	23.7%	28.5%	34.8%	27.4%	25.8%	29.8%	27.1%
Good	48%	45.8%	43.2%	48.7%	42.3%	44.6%	46.1%	49.7%	49.7%
Fair	16%	15.7%	21.9%	16.2%	15.9%	18.5%	19.8%	12.8%	16.8%
Poor	3%	2.5%	5.6%	2.2%	3.5%	4.3%	3.0%	2.2%	2.0%
No Opinion	5%	5.1%	5.6%	4.4%	3.5%	5.2%	5.2%	5.5%	4.5%



Table 4.4 Satisfaction with Quality of Facilities - Tourists

Rating	Tourist (Statewide)	Resident (Statewide)
Excellent	52%	29%
Good	42%	48%
Fair	4%	16%
Poor	0.5%	3%
No Opinion	1%	5%

Tourists had a more favorable impression of the quality of the facilities in the counties where they visited - 94 percent were satisfied, rating them either as excellent (52 percent) or good (42 percent); see Table 4.4. Less than 6 percent rated them as fair or poor. Opinions in 2011 were almost identical (54 percent rated them as excellent versus 42 percent rated them as good).¹⁰

Quantity

Regarding the quantity of facilities in their county of residence, only 66 percent of respondents were satisfied, indicating there is much room for improvement in terms of recreation supply; see Table 4.5. Twenty-four percent of residents rated the quantity of their local facilities as excellent and 42 percent rated them as good. In 2011, satisfaction amongst residents was 74 percent (31 percent replied "excellent" and 43 percent said "good").¹⁰ Regionally, resident satisfaction was highest in the Southwest region (67.8 percent) and lowest in the Northeast region (56.8 percent). More than 28 percent of respondents in the Northeast region felt the quantity of recreation facilities was fair, and 9 percent stated the quantity was poor.

Table 4.6 Satisfaction with Quantity of Facilities - Tourists

Rating	Tourist (Statewide)	Resident (Statewide)
Excellent	52%	24%
Good	39%	42%
Fair	7%	23%
Poor	0.7%	7%
No Opinion	2%	6%

In contrast, Florida's tourists were much happier with the amount of recreation facilities available where they visited (see Table 4.6). Ninety-one percent of visitors were satisfied: 52 percent stated the quantity was excellent and 39 percent rated it as good. Less than 8 percent of tourists thought that the quantity was fair or poor. By comparison, in 2011 tourist satisfaction with Florida's quantity of facilities was 95 percent.¹⁰

New Facilities

When asked what recreational facilities they would most like to see built or provided in their home county or counties visited, responses from residents and tourists were quite similar; differences were mainly in the order of importance. Trails represented the top three desired facilities for residents: hiking/walking trails were number one, followed by biking paths/trails and nature/interpretive trails. For tourists, beach access/parking was the most important improvement, followed by hiking/walking trails and nature/interpretive trails (see next page).

Table 4.5 Satisfaction with Quantity of Recreational Facilities - Residents

Rating	State wide	Central	Central East	Central West	North Central	North east	North west	South east	South west
Excellent	24%	23.7%	21.2%	24.1%	30.7%	23.5%	21.1%	25.4%	20.5%
Good	42%	43.2%	45.2%	40.3%	36.0%	33.3%	38.5%	42.0%	47.3%
Fair	23%	21.9%	19.5%	24.1%	20.9%	28.4%	27.2%	21.1%	20.2%
Poor	7%	5.6%	7.2%	5.9%	8.0%	9.0%	7.6%	5.5%	7.0%
No Opinion	6%	5.6%	6.9%	5.6%	4.4%	5.9%	5.7%	6.0%	5.0%



Top 10 Desired Facilities

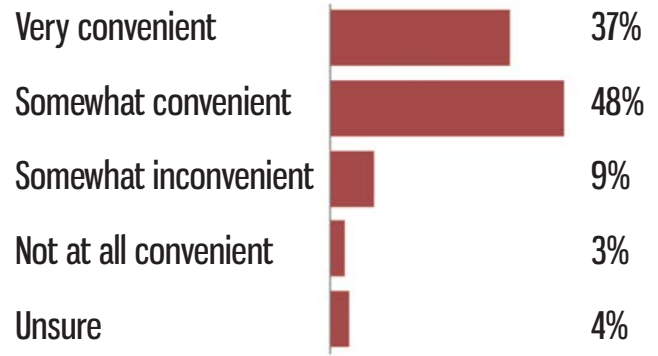
RESIDENTS

- 1) Hiking/walking trails
- 2) Biking paths/trails
- 3) Nature/Interpretive trails
- 4) Community parks
- 5) Wildlife viewing areas/overlooks
- 6) Paved walkways
- 7) Playgrounds
- 8) Beach access/parking
- 9) Off-leash dog areas
- 10) Campgrounds

TOURISTS

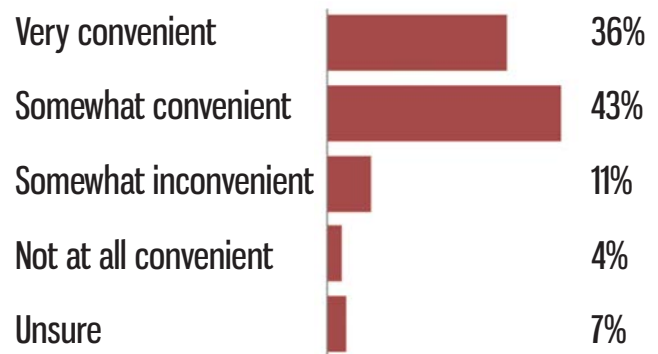
- 1) Beach access/parking
- 2) Hiking/walking trails
- 3) Nature/Interpretive trails
- 4) Wildlife viewing areas/overlooks
- 5) Biking paths/trails
- 6) Community parks
- 7) Playgrounds
- 8) Paved walkways
- 9) Campgrounds
- 10) Access for canoes/kayaks

Figure 4.4 - Resident Opinions – Public Access to Florida’s Coastlines and Waterways



Regarding access to trails, 36 percent of residents indicated access was very convenient and 43 percent said somewhat convenient (Figure 4.5).

Figure 4.5 - Resident Opinions – Public Access to Florida’s Recreational Trails



Public Provider Opinions

In addition to residents and visitors, public providers of outdoor recreation in Florida were also polled regarding their opinions on a variety of issues. When asked if their program’s primary governing body sees outdoor recreation as contributing to the overall health and quality of life of the citizens they serve, 73 percent agreed and 21 percent replied “somewhat agree.” However, public suppliers indicate they have serious concerns about their ability to provide adequate facilities and programs, primarily due to funding shortfalls.

In fact, when asked what their number one recreation-related issue was, the overwhelming majority of public providers stated it was inadequate funding for programs and facilities (the top seven issues are ranked on page 77 in order of concern).



Blackwater River, Credit: Liz Sparks, FDEP

Access to Waterways and Trails

Given that much of Florida’s outdoor recreation opportunities revolve around water, public access to coastlines and waterways is highly valued. When asked about access to Florida’s coastlines and waterways, 37 percent of residents indicated access was very convenient and 48 percent said somewhat convenient (see Figure 4.4).



1. Inadequate funding for programs and facilities
2. Reconnecting youth to the outdoors
3. Impact of urban development on conservation of lands
4. Economic impact of recreation-based tourism on local communities
5. Inadequate access to public lands
6. Inadequate public access to waters
7. Rising energy costs

Nearly 43 percent of respondents stated funding was insufficient for acquisition of recreation lands, and 36 percent replied that funding was lacking for construction and development. More than 70 percent of respondents felt that the economic downturn had impacted their program’s staffing and maintenance; two-thirds said construction of new facilities had also been affected. The complete results of this opinion survey are found in Appendix F.

COMPARING SUPPLY AND DEMAND



Kayak camping at Chaires Creek, Credit: Doug Alderson

In order to evaluate current and future supply and demand regarding Florida’s outdoor recreation activities, the individual participation rates (for both residents and tourists) derived from the participation study were used in conjunction with the Florida Outdoor Recreation Inventory (FORI) data presented in Table 4.7, Chapter 3 and Appendix I. This analysis produced estimates known as level of service values.

“Level of service” as used in this plan means the amount of resources and facilities that are available to support an activity, expressed in terms of units of supply per 1,000 participants. For example, the level of service for hiking trails would be expressed as miles of trail per 1,000 participants.

The level of service that is currently provided by each region’s existing supply of resources and facilities was determined for each activity. Level of service estimates for 2025 were also calculated. These values are an expression of the additional outdoor recreation resources and facilities required to maintain current levels of services as resident and tourist populations grow.

Levels of service were not calculated for certain outdoor recreation activities, such as saltwater and freshwater boating, since the resources that support them (for example, the open waters of the Atlantic Ocean, the Gulf of Mexico and the state’s thousands of rivers and lakes) are so extensive that they can accommodate a virtually unlimited amount of demand.

Regional Comparisons: Assessing Need



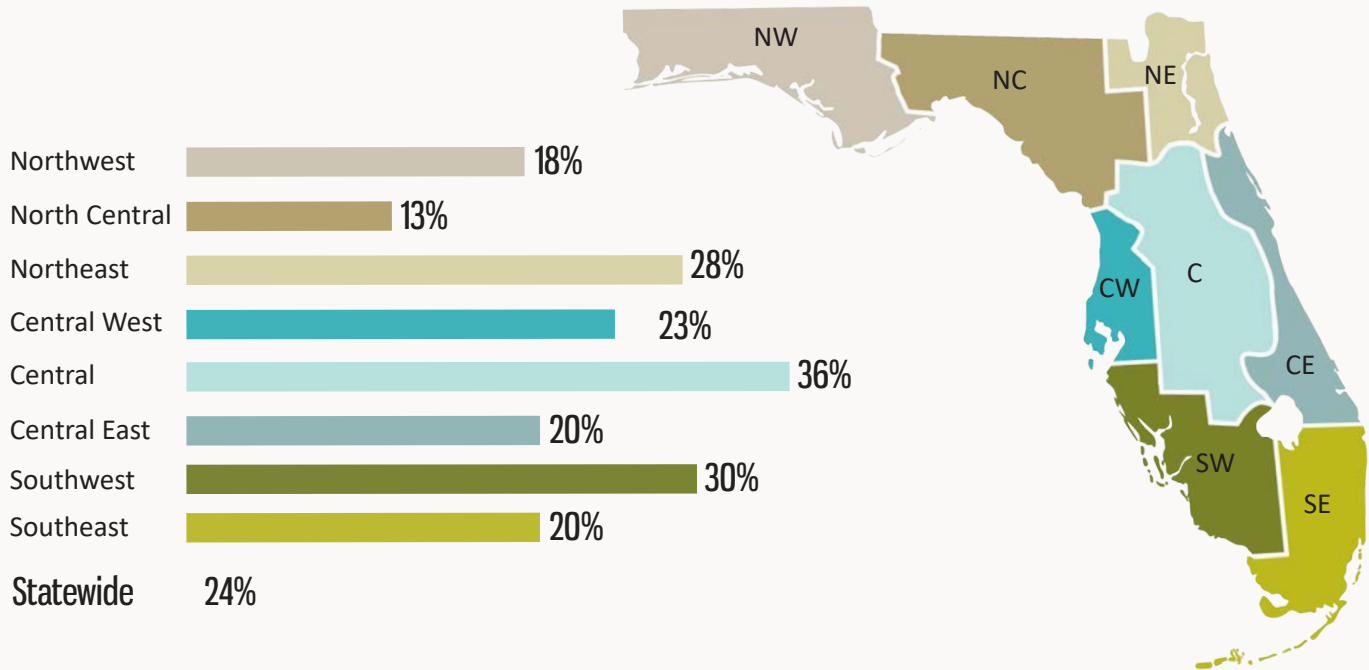
Credit: Frank Weber, Orange County Government

Each region’s level of service was estimated for 26 outdoor recreation activities. To provide a standard by which the regions could be compared, the statewide median level of service for each activity was calculated. Table 4.8 (page 81) identifies whether each region’s level of service falls above or below the statewide median for an activity.

The level of service comparisons are only one measure of outdoor recreation resource and facility needs in Florida. Outdoor recreation levels of service vary tremendously from community to community and are determined by complex factors that cannot be addressed feasibly at a statewide level. The analysis is intended to reflect conditions in the region as a whole and should not be applied to particular communities. Additionally, resident and tourist populations heavily influence level of service. A region with a lower level of service does not necessarily have fewer facilities, but often has a greater number of participants using those facilities.



Figure 4.6: Predicted Population Increases by 2035



Despite these limitations, the analysis presented in the 2019 plan is useful for identifying regional and statewide patterns of outdoor recreation supply and demand and offering a reasonably sound understanding of regions with the greatest needs. Increasing opportunities should be a statewide priority, and not solely focused on regions below the statewide median. While these regions have greater relative needs to adequately supply their constituents, all regions must continue to enhance their outdoor recreation opportunities to meet the needs of a growing population. The results of the assessment are presented in Appendix H.

Understanding Level of Service: An Overview of Demand and Supply

The same outdoor recreation resources and facilities that make Florida a great place to live are also a major reason why people visit the Sunshine State. Daily use by residents, combined with seasonal use by visitors, affect a region’s level of service by increasing the overall number of participants. Outdoor recreation resources and facilities see significantly greater use in regions with high tourism rates, which reduces the overall level of service for those regions.

Figure 4.7: Level of Service Formula

$$\text{Level of Service} = \frac{\text{Resources and Facilities for an Activity}}{\left(\frac{\text{Participants in the Activity}}{1,000} \right)}$$

Note: The participation study gathered data at the household level so that activities with high youth and adolescent participation rates were not under-reported (only adults were surveyed). The household participation rates were then converted to individual rates to calculate the levels of service figures in this section and in Appendix H.



Barber Park, Credit: Orange County Parks and Recreation



Figure 4.8: Regional Distribution of Residents (Potential Users)

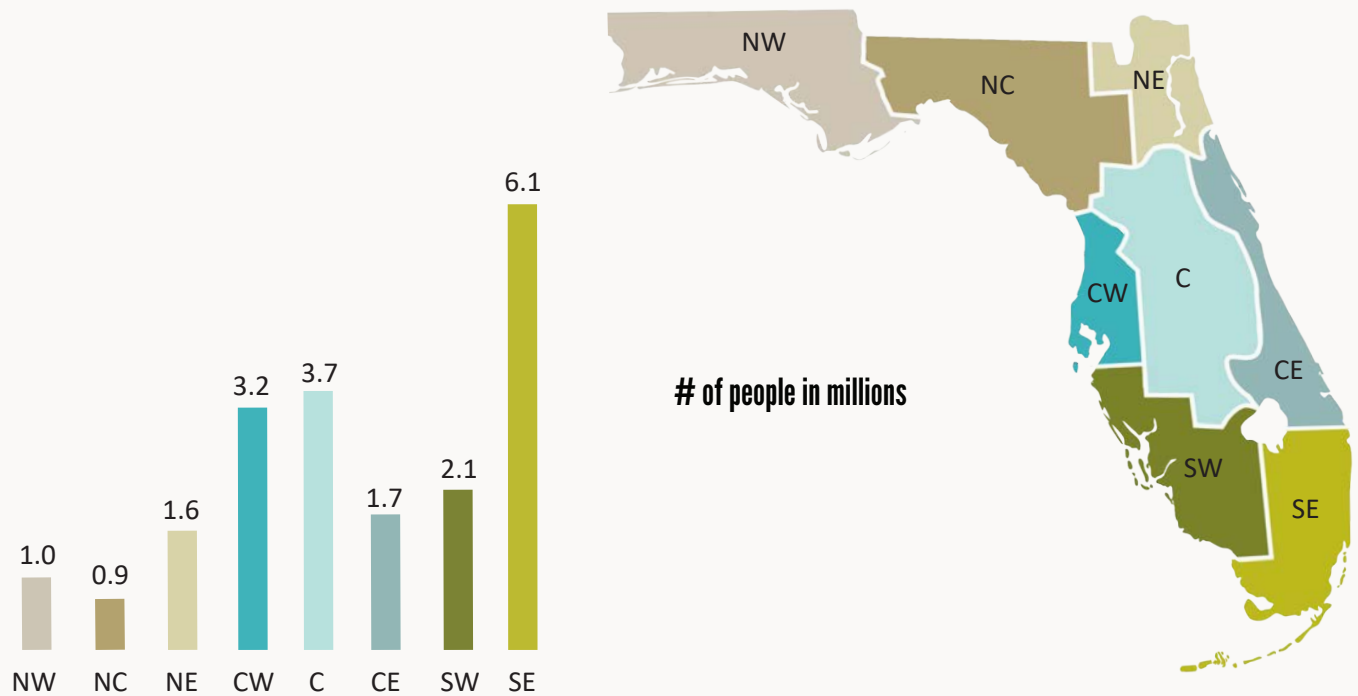
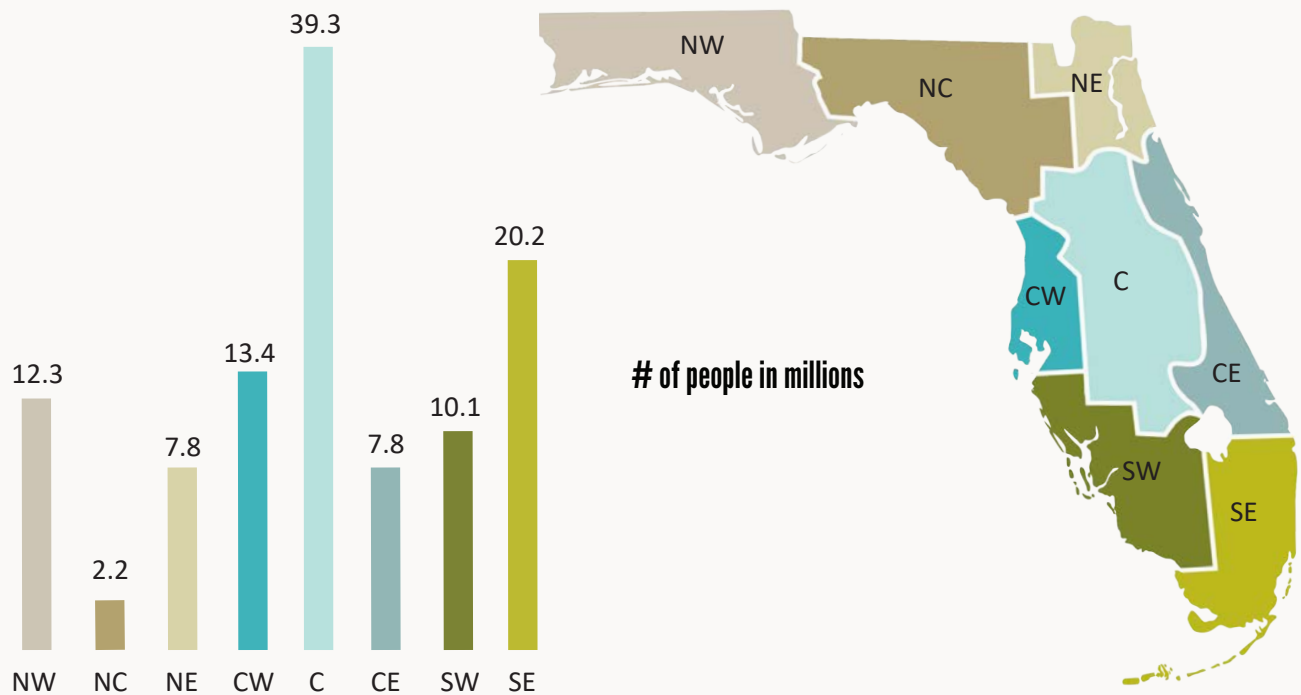


Figure 4.9: Regional Distribution of Tourists (Potential Users)



Regional distribution of recreation resources and facilities

Table 4.7 indicates the relative distribution of the supply of outdoor recreation resources and facilities by region. Additional supply charts organized by agency can be found in Appendix I. These data are derived from FORI.



Table 4.7 - Outdoor Recreation Supply Chart by Region 2017

TOTAL SITES										13,475
LAND ACRES										11,459,847
WATER ACRES										3,613,018
TOTAL ACRES										15,072,865
FACILITIES		Statewide	Northwest	North Central	Northeast	Central West	Central	Central East	Southwest	Southeast
RESOURCE-BASED (Land)	Cabins	3,437	265	516	501	363	996	241	243	312
	Tent Campsites	8,695	1,581	1,641	556	958	1,628	581	686	1,064
	Primitive Tent Campsites	1,083	104	232	73	61	253	235	77	48
	Primitive Camping (Acres)	7,771	180	1,563	138	2,000	2,384	721	607	178
	RV Campsites	123,671	5,743	3,805	3,567	23,600	37,055	13,255	25,303	11,343
	Equestrian Campsites	437	36	118	-	157	90	28	8	-
	Historic Sites	2,404	282	281	405	349	178	471	247	191
	Commemorative Structures	295	31	22	32	21	51	54	22	62
	Museums	529	43	46	78	60	74	79	58	91
	Picnic Tables	106,039	8,461	6,164	4,977	16,789	25,810	11,542	16,732	15,564
	Picnic Shelters	10,221	1,262	985	764	1,375	1,650	1,325	994	1,866
	Hunting Areas (Acres) *	7,241,862	1,783,037	785,045	303,954	386,984	880,327	493,530	1,011,105	1,597,880
	Bike Trails Paved (Miles)	1,680	62	176	117	286	257	257	256	269
	Bike Trails Unpaved (Miles)	4,836	263	904	447	642	944	804	613	220
	Hiking Trails (Miles)	9,400	576	1,343	670	1,116	2,724	1,171	1,205	596
	Equestrian Trails (Miles)	4,293	187	796	469	506	909	709	459	268
	Jogging Trails (Miles)	1,737	143	176	129	269	354	244	124	298
	OHV Trails (Miles)	877	376	70	17	31	129	32	218	4
	Nature Trails (Miles)	1,984	248	259	182	212	377	228	271	208
	Canoe Trails (Miles)	4,360	874	1,039	197	368	406	288	454	735
RESOURCE-BASED (Water)	Freshwater Beaches	437	53	73	20	32	159	34	21	45
	Freshwater Beaches (Miles)	40	6	2	1	1	10	5	2	13
	Freshwater Boat Ramps	1,695	277	243	132	119	528	136	91	127
	Freshwater Boat Ramps (Lanes)	1,837	283	276	153	149	593	163	94	168
	Freshwater Canoe Launches	282	33	66	22	35	50	27	22	27
	Freshwater Catwalks	800	72	91	89	106	226	97	44	75
	Freshwater Catwalks (Feet)	195,470	11,717	17,843	14,865	29,136	62,207	18,373	18,503	20,331
	Freshwater Jetties (Feet)	84,897	1,370	4,957	3,650	30,550	33,527	2,403	3,305	5,135
	Freshwater Marinas	300	9	18	43	25	139	35	18	13
	Freshwater Marinas (Slips)	10,634	144	610	2,363	634	4,041	1,416	597	829
	Freshwater Marinas (Dry Storage)	4,142	97	341	804	575	1,339	396	383	207
	Freshwater Piers	758	160	55	56	89	211	63	47	77
	Freshwater Piers (Feet)	112,532	9,576	7,346	8,551	5,949	22,720	6,497	32,811	19,082
	Saltwater Beaches	1,800	327	9	202	230	-	391	308	333
	Saltwater Beaches (Miles)	476	157	1	55	45	-	81	77	62
	Saltwater Boat Ramps	939	154	40	51	118	-	188	161	227
	Saltwater Boat Ramps (Lanes)	1,272	203	45	68	190	-	252	210	304
	Saltwater Canoe Launches	162	13	5	11	19	-	32	47	35
	Saltwater Catwalks	800	105	11	34	121	-	287	149	92
	Saltwater Catwalks (Feet)	209,909	26,508	2,964	6,569	25,990	-	54,683	45,227	47,968
	Saltwater Jetties (Feet)	69,300	6,898	376	6,301	12,861	-	1,470	8,195	33,199
	Saltwater Marinas	914	93	10	24	77	-	116	193	401
	Saltwater Marinas (Slips)	44,036	4,752	323	1,994	6,112	-	6,433	7,899	16,523
	Saltwater Marinas (Dry Storage)	33,204	2,636	268	1,117	4,818	-	4,782	5,841	13,742
	Saltwater Piers	486	74	16	27	63	-	110	100	96
	Saltwater Piers (Feet)	132,958	33,708	3,540	14,245	16,455	-	19,176	28,011	17,823
	Shoreline/Bank Fishing Areas	2,492	142	310	62	183	215	161	94	1,325
	USER ORIENTED	Baseball Fields	5,680	608	410	562	843	1,000	625	471
Basketball Goals		8,117	406	758	658	1,260	1,331	1,039	497	2,168
Equipped Play Areas		5,245	467	437	487	753	942	549	440	1,170
Football Fields		2,169	169	129	179	320	332	276	202	562
Golf Courses, 18-Hole		872	44	11	61	109	165	109	148	225
Golf Courses, 9-Hole		174	12	16	13	26	33	20	23	31
Golf Courses, Executive		204	46	2	4	22	30	20	32	48
Golf Holes (Total)		17,960	934	362	1,254	2,463	2,854	2,124	2,963	5,006
Multi-Use Courts		930	39	70	25	268	169	133	47	179
Multi-Use Fields		2,162	129	218	139	266	406	240	165	599
Outdoor Swimming Pools		2,006	113	79	130	273	367	186	313	545
Racquetball Courts		1,765	50	98	66	225	247	238	97	744
Recreation Centers		2,314	167	138	146	354	417	258	283	551
Shooting Ranges		13	3	1	-	1	3	1	2	2
Shuffleboard Courts		4,422	123	62	92	987	1,169	595	720	674
Skate Parks		37	6	6	4	5	5	2	5	4
Tennis Courts		9,074	470	342	594	1,199	1,163	986	1,164	3,156
Volleyball Courts		821	28	115	67	64	160	93	83	211

*Includes Land and Water



Table 4.8 Comparing Regional Levels of Service to Statewide Median*

Resource-Based Activities	Region							
	NW	NC	NE	CW	C	CE	SW	SE
Saltwater Beach Activities	●	○	●	○	NA	●	●	○
Freshwater Beach Activities	●	○	○	○	●	●	○	●
Saltwater Fishing Non-Boat	●	○	○	○	NA	●	●	●
Freshwater Fishing Non-Boat	○	●	○	●	●	○	●	○
Saltwater Boat Ramp	●	●	○	○	NA	●	●	○
Freshwater Boat Ramp	●	●	●	○	●	○	○	○
Paddling Activities (Canoe/Kayak/SUP)	●	●	○	○	○	●	●	○
Bicycling - Paved	○	●	○	●	○	●	●	○
Bicycling - Unpaved	○	●	●	○	○	●	●	○
Hiking	○	●	○	○	●	●	●	○
Horseback Riding	○	●	●	○	○	●	●	○
Off-Highway Vehicle Driving	●	●	○	○	●	○	●	○
Nature Study	●	●	●	○	○	●	○	○
Picnicking	○	●	○	○	●	●	●	○
Visiting Historical or Archaeological Sites	●	●	○	●	○	●	○	○
Tent Camping	●	●	○	○	○	●	●	○
RV or Trailer Camping	○	○	○	●	●	●	●	○
Hunting	●	●	○	○	○	●	●	○
Horseback Camping	●	●	○	●	○	●	○	○

User-Oriented Activities	Region							
	NW	NC	NE	CW	C	CE	SW	SE
Fitness Walking/Jogging	○	●	●	●	○	●	○	○
Swimming in Outdoor Pools	○	●	●	○	○	○	●	●
Baseball or Softball	●	●	●	○	○	●	○	○
Outdoor Basketball	○	●	●	●	○	●	○	○
Outdoor Tennis	○	○	●	●	○	●	●	○
Soccer	○	●	○	●	○	●	●	○
Football	○	○	●	●	○	●	●	○
Golf	○	○	●	○	○	●	●	●
Total number of LOS values above statewide median	13	20	12	10	7	23	19	4

*This table shows SCORP planning regions as either above or below the statewide median level of service, per activity. See Appendix H for regional level of service calculations per activity.



Outdoor Recreation User Groups and Associations

Recreation associations in Florida represent a wide spectrum of resource-based and user-oriented activities, from individual and team sports to aquatic and trail-related pursuits. Membership in an outdoor recreation-based user group or organization has many benefits, including sharing of knowledge (e.g. discovering new trails or fishing holes) and finding fellow participants to recreate with. Recreation user groups may also lobby or advocate for a particular outdoor activity; fund, construct, maintain or operate facilities; host skill clinics; and organize tournaments or other types of special events.

As part of the opinion/issues survey for residents, 13 percent of respondents indicated they are members of at least one outdoor recreation-based user group or association. Of these individuals, more than half (54 percent) belong to more than one group or association. The top 25 outdoor activities which these group memberships are affiliated with are shown in Table 4.9 below.

Table 4.9 Recreation Activities: Top User Group Affiliations

#1	Fishing (including fresh and saltwater)
#2	Walking/running
#3	Swimming
#4	Bicycling
#4 (tie)	Hiking
#5	Tennis
#6	Football
#6 (tie)	Camping (including RV camping)
#6 (tie)	Hunting
#7	Canoeing/Kayaking
#7 (tie)	Soccer
#8	Boating
#8 (tie)	Golf
#9	Bird watching
#9 (tie)	Kayaking
#10	Geocaching
#10 (tie)	Sailing
#10 (tie)	Sport shooting
#11	Baseball
#11 (tie)	Picnicking
#12	Basketball
#12 (tie)	Caving
#12 (tie)	Horseback riding
#12 (tie)	Pickleball
#12 (tie)	Scuba diving



CONCLUSION

Regional and statewide patterns of outdoor recreation supply and demand were identified, offering a reasonably sound understanding of regions with the greatest needs to support the demands of their population and visitation. Planning regions with the densest populations, such as the Central, Central West and Southeast regions, tend to have the greatest needs, a trend which will likely continue for the foreseeable future.

While satisfaction with the quality of Florida's outdoor recreation facilities and opportunities remains overwhelmingly positive for both residents and tourists, one third of residents are not satisfied with the quantity of facilities close to home. The number one concern for public providers of outdoor recreation is inadequate funding for their facilities and programs.

The steady rise of Florida's population and the number of visitors will lead to increased demand in all regions, calling for the continued provision of outdoor recreation facilities and for renewed commitment to the conservation of our shared natural and cultural resources. It is critical to ensure that these resources and facilities enjoyed by more than 100 million residents and tourists today are available in the decades ahead.



"If bread is the first necessity of life, recreation is a close second."

- Edward Bellamy



T.H. Stone Memorial St. Joseph Peninsula State Park, Credit: Misty Marshall



Chapter 5

Outdoor Recreation Issues and Recommendations

Eco-Ventures tour at Charlotte Harbor Aquatic Preserves, Credit: ORCP

Michael is frustrated. He likes to play basketball with his third-grade friends, but the two courts at his local park are usually occupied by adults on one end and older kids on the other. He also likes to hike in the woods with his best friend Anthony, but hiking trails are too far away to ride safely on their bikes, so they can only go on occasional family trips on weekends. So, Michael occupies himself with either playing computer games or skateboarding down his driveway and street.

Michael's situation is at the heart of SCORP – meeting the growing demands for outdoor recreation. We know that Florida is a mecca for outdoor recreation, but how equitable are the opportunities for people of all ages and backgrounds?



Credit: Frank Weber, Orange County Government

VISION FOR AN OUTDOOR RECREATION SYSTEM

Florida is among the most populous and dynamic states in the nation, and perpetual changes (social, technological, economic and environmental) continue to affect our lives, including how and where we recreate. Important tasks for the Sunshine State's recreation providers are examining these changes, anticipating emerging trends and determining how best to tackle today's outdoor recreation issues.

Florida's diverse public and private outdoor recreation lands, facilities, programs and managing agencies collectively contribute to the state's wealth of recreational opportunities and to the health and wellness of its citizens. Outdoor recreation providers and the natural and cultural resources upon which they depend face many challenges, however.

While tremendous progress has been made in acquiring the needed lands and providing the facilities and programs to support public use of these lands, more work is required to improve access and accessibility for all Floridians, and to bring high-quality recreation experiences to those living in underserved communities. Many neighborhoods, particularly those in low-income and rural areas, need additional parks and trails close to home, as well as the means to safely connect to them. Chronic diseases burden too many Floridians at present, and greater support is needed for natural, historical and cultural resource management and stewardship to conserve the state's invaluable assets which make outdoor recreation possible.





Apalachicola River Ramble Trail, Credit: Mike Vroegop

The statement below describes the vision for an ideal, but as yet unrealized, outdoor recreation system for the Sunshine State.

Florida's ideal outdoor recreation system will be a diverse, connected, accessible and balanced system of resources, facilities and programs that provides the state's residents and visitors with a wide range of local recreation opportunities. This outdoor recreation system will improve the health, well-being and quality of life of Florida's citizens, regardless of age, gender, ethnic background, economic status, physical or mental ability or location within the state. The system will be coordinated at the state level with all agencies and suppliers working in tandem, and with ample opportunities for the public to participate in decision making. Florida's outdoor recreation system will continue to be a major contributor to the state's economy and tourism industry, and it will further the public's understanding, appreciation and stewardship of our environment and outdoor recreation resources.

PRIORITY AREAS, GOALS AND STRATEGIES: A METHOD FOR IMPLEMENTATION

Since December 2014, the SCORP workgroup met quarterly to discuss progress on the 2013 plan and to chart the course for the 2019 plan. As a result of these meetings, four priority areas covering a broad range of outdoor recreation topics were chosen for Florida's 2019 SCORP. The goals and strategies in the 2019 plan also resulted from many additional forms of input, including the 2016-2017 Outdoor Recreation Participation Survey, research of nationwide trends and issues, public workshops, open house events, discussions with outdoor recreation stakeholders and

online questionnaires. The public was given numerous opportunities to comment on the 2019 plan, and those comments resulted in a much-improved SCORP.

Each priority area is discussed below, and specific goals and strategies are presented to address the identified challenges and issues. Appendix L presents the goals and strategies in a series of mini-posters. Current examples of how Florida is working towards its vision of an ideal recreation system are also provided. The recommendations in the 2019 plan go a long way towards enabling Florida to fulfill this vision.

To implement the plan, FDEP's Office of Park Planning staff will reach out to outdoor recreation providers, organizations and advocates at all levels to help coordinate activities. The FDEP will also create a new web page to demonstrate how each of the SCORP's strategies are being addressed. While some of the recommendations below are quite specific and intended for implementation by particular agencies or organizations, others are broader in scope, to be undertaken by a wide spectrum of public and private recreation suppliers. All recreation providers throughout Florida are called upon to help make the 2019 plan's implementation a reality.



Horse Whelk, Credit: Michael Sledjeski



Priority Area 1: Health and Well-being

Goal 1-1: Increase the promotion of active and healthy lifestyles in the outdoors.

Goal 1-2: Increase the number the recreation facilities, programs and opportunities in urban areas and rural communities.

Priority Area 2: Public Access, Accessibility and Connectivity

Goal 2-1: Promote the diversity of recreation participants through the development of inclusive and welcoming programs and facilities.

Goal 2-2: Improve universal accessibility on all public lands.

Goal 2-3: Ensure that appropriate conservation lands and waters are open and accessible for public use and are widely promoted.

Goal 2-4: Coordinate providers, agencies and organizations to better connect and promote lands and opportunities.

Goal 2-5: Promote local parks and trails, along with neighborhood and regional connectivity.

Priority Area 3: Economic Opportunities and Ecotourism

Goal 3-1: Promote the economic benefits of outdoor recreation and ecotourism in Florida.

Priority Area 4: Resource Management and Stewardship

Goal 4-1: Encourage the conservation and protection of Florida's natural, historical and cultural resources.

Goal 4-2: Support natural, historical and cultural resource management to ensure high quality outdoor recreation experiences for Florida's residents and visitors.

Priority Area 1: Health and Well-being

Summary: Promoting active lifestyles in the outdoors while improving recreation opportunities in underserved communities is essential to improving the health and well-being of all Floridians.

Quality of Life

Regular physical activity and time spent outdoors are essential to a person's health and overall quality of life. The connection between physical activity, exposure to nature and good health is widely acknowledged, yet given our busy schedules, it is sometimes easy to forget how important recreation is. One need only recall that the word "recreate" literally means a re-creation of ourselves. Recreation should be thought of not as a luxury, but rather as a necessity that improves our health and longevity.

The word "recreate" literally means a re-creation of ourselves.

Physical inactivity has consequences at the individual and societal level. According to the Centers for Disease Control and Prevention (CDC), only one-half of U.S. adults and about one-quarter of high school students meet the minimum guidelines for aerobic physical activity.⁴⁹ In addition, the Environmental Protection Agency (EPA) estimates that the average American now spends 93% of their entire life indoors and in automobiles, leaving only 7% for time in the out-of-doors.⁵⁰

Obesity, with its strong links to hypertension (high blood pressure) and heart disease, continues to be a nationwide epidemic for adults and youth. The CDC reports that one out of every two U.S. adults is now living with a chronic disease, such as heart disease, cancer or diabetes, and the incidence of diabetes among children and teenagers continues to rise annually.⁴⁹ Not only do these conditions contribute to disability and premature death, they also contribute to rising health care costs for everyone.





For some, the cost of gym memberships can be an obstacle to getting in better physical shape. To help, the Trust for Public Land is funding outdoor exercise equipment in parks across the nation (including the Fitness Zone[®] shown here at Leisure Lakes Park), “creating a fun, accessible, and social environment where people can enjoy getting fit” for free. Credit: Allana White, TPL

Healthwise, how does Florida compare with other states? Currently, only 36 percent of Floridians are at a healthy weight.⁵¹ Florida’s adult obesity rate is 27.4%, up from 18.4% in 2000 and 11.4% in 1990. Rates are even higher, however, for people of color (35.2% for Blacks, 26.8% for Latinos and 25.7% for Whites), which needs to be addressed.^{51,52} Florida ranks the 11th highest for adult diabetes (11.8%) and 16th highest for hypertension (33.5%). On the plus side, Florida’s adult obesity rate is currently the 14th lowest in the nation. Fifty percent of Florida’s adults meet the recommended minimum weekly aerobic physical activity, the same percentage as the U.S. population.^{51,52}

Tackling Obesity-Related Diseases

Getting more Floridians involved in outdoor recreation is good for everyone’s health, and wallets too. If Body Mass Indexes were lowered by just 5 percent, Florida could save 2.1 percent in health care costs, which would equate to savings of \$34.4 billion by 2030. In addition, the number of Floridians who could be spared from developing new cases of major obesity-related diseases includes:

- >500,000 people from type 2 diabetes
- >465,000 from coronary heart disease and stroke
- >400,000 from hypertension
- >218,000 from arthritis
- >43,000 from obesity-related cancer

Source: Trust for America’s Health⁵¹

There are additional factors that can limit opportunities to be active outdoors, however. For example, proximity to parks, public lands and open spaces should be considered when addressing the ability to be involved in sports activities or visiting parks and other natural areas. In Dudley Edmondson’s *The Black & Brown Faces in America’s Wild Places*, the author relates that safety concerns and lack of mentors are often cited as additional reasons why people of color are not involved in certain types of outdoor activities.⁵³

The health and societal challenges above seem daunting. The good news, however, is that recreation providers and health care professionals are in a good position, and are increasingly working together, to do something about it. While we can’t give people extra time during the week or force them go outside, we can empower them to make good decisions by providing the right information and motivation, as well as by improving the number and quality of local facilities and programs.

For starters, Florida’s existing parks, trails and other public lands offer excellent opportunities to reconnect with nature and to enjoy healthy exercise, physical activity, relaxation, reflection and even challenge and risk. Providing access to public lands through high-quality systems of parks, greenways, open space and other natural areas plays a major role in creating and maintaining active, healthy communities.

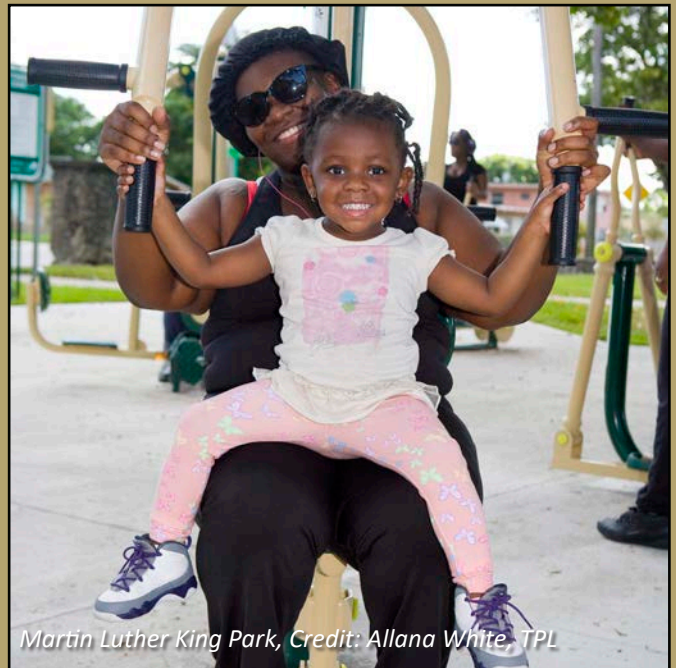
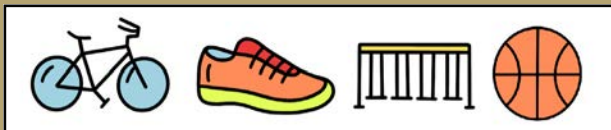




Blackwater Heritage State Trail, Credit: John Moran

Improved Access Leads to Better Health

What’s the best way to motivate people to get outside and get healthy? The answer may be as simple as improving access and increasing local opportunities. A group of studies reviewed in the American Journal of Preventive Medicine showed that “creation of or enhanced access to places for physical activity, combined with informational outreach” produced a 48 percent increase in frequency of physical activity, along with an “increase in aerobic capacity, reduced body fat, weight loss, improved flexibility and an increase in perceived energy.”⁵⁴



Martin Luther King Park, Credit: Allana White, TPL

“Park Prescription” programs, which use health care professionals to prescribe physical outdoor activity to prevent or treat health problems, are an increasingly popular means of convincing people to participate regularly in outdoor recreation activities. These federal, state and local initiatives, many of which use free park passes to encourage people to get outdoors, exercise and to take advantage of

nature’s physical and psychological benefits, should be continued. The Florida Park Service continues to participate in the Nature Play Prescription program in collaboration with Florida’s Department of Health (FDOH) and Get Outdoors Florida!; since 2014, more than 35,000 prescriptions have been issued. Other public providers are encouraged to take part in prescription programs as well.



Creating fitness zones within local parks is also part of this trend to encourage people to get outside, and to be more active and healthy. According to the Trust for Public Land (TPL), which is working with park and recreation departments across the U.S. to install outdoor exercise equipment, fitness zones are “a great way to mix some fresh air into your workout routine—and connect with neighbors, too.” The exercise machines used in TPL’s Fitness Zone® areas are similar to those found in private gyms, but are designed to resist weather and vandalism. Another plus is that use of the equipment is free to everyone in the community. The Fitness Zone® in Azalea Park in St. Petersburg goes one step further – the equipment is accessible to individuals with mobility impairments.

Nature Therapy

Parks and other natural areas are restorative environments, and decades of research confirm that parks, forests, gardens and other green spaces are essential to our health and well-being. Even short walks in natural settings support improved mood, vigor, cognition and positive emotions. Park visitation can therefore be thought of as a type of “nature therapy” or “ecotherapy.” Time spent in parks and communal green spaces also confers social benefits, strengthening interpersonal relationships and support networks. In their messaging, recreation suppliers should place stronger emphasis on the therapeutic effects of recreating outdoors.

Florida’s State Parks: A Healthy Choice

Florida’s State Parks have developed an identity as a partner in individual and public health. Programs which support this are Florida Park Fit, Fitness Trainers in Parks and Nature Play Prescription. Florida Park Fit encourages visitors to think of parks as outdoor gyms. From trail running to swimming and kayaking to 5Ks, parks are a great way to discover alternative paths to fitness. “Florida Park Fit” events account for nearly 10% of all scheduled programs. The Fitness Trainers in Parks program brings professional instructors into parks to teach yoga, CrossFit, running, tai chi and more. The program benefits park visitors and local businesses while providing a pass-through fee to the parks during non-peak times.

Future program goals include having health insurance companies rebate annual passes as gym memberships and to update existing fitness infrastructure. Currently in development is a print and social medial campaign for visitors, agencies and NGOs to view parks as a vital contributor to whole body health, including mental health. Serenity gardens and a children’s television program to teach recreation skills are the campaign’s current focus. Additional examples of ongoing health-related initiatives in conjunction with



the FDOH include Healthiest Weight Florida, Healthy Campfire Cooking, Go From Couch to 5K!, Small Steps to Living Healthy and Sun’s Up, Cover Up, all of which should continue to be promoted.



Nature Therapy: Shinrin-Yoku

SPOTLIGHT



John D MacArthur Beach State Park, Credit: Robert Bierley

Ample scientific evidence demonstrates that exposure to nature has both physical and mental health benefits. A type of nature therapy known as shinrin-yoku (literally translated as “forest bathing” or “immersing in the forest atmosphere”) which originated in Japan, continues to attract followers around the world as people look for techniques to combat daily stress and to reconnect with the natural world.

To help foster shinrin-yoku, Japan has set aside dozens of forest areas as designated health treatment locations, where practitioners take frequent “walks in the woods,” engaging their senses and immersing themselves in nature.

In a landmark 2017 study called *The Nature of Americans*, research indicated that while children and adults are still highly interested in nature and the outdoors, they are increasingly less connected to the natural world and are spending less time outside than did previous generations. Below are recommendations from this study to better connect Floridians of all ages with nature.⁵⁷

How does it work? Trees and plants give off compounds called phytoncides, that when inhaled, can provide therapeutic benefits such as lower blood pressure, stronger immune system and protection against anxiety, depression and attention disorders.

A 2015 study in the Proceedings of the Natural Academy of Sciences found that people who walked for 90 minutes in a natural setting, either a forest or a nature park, had lower anxiety and lower activity in the part of the brain linked to depression.⁵⁵ Another study found that walking through a cedar forest for 40 minutes could lower levels of the stress hormone cortisol more than by simply walking indoors.⁵⁶

- Promote regular and routine engagement with nature, the outdoors and wildlife.
- Promote nature as places for experiences, involvement and care.
- Foster the idea that time in nature can (and even ought to) be social.
- Reach adults through children.



- Support mentorship that extends beyond the parent-child relationship.
- Deepen local experiences in nature near home.
- Provide socially safe and satisfying places outdoors, especially for urban and minority adults and children.
- Work to lower the perceived cost of participation in recreational activities.
- Promote conservation as a means to improve community and quality of life.
- Recognize that expenditures for children’s engagement with nature are fundamentally important investments.

"Nature, without question, is for everyone. It knows no race, creed or gender and is cheaper than any therapist you could ever hire." – Dudley Edmondson

Combatting “nature-deficit disorder,” a term coined by Richard Louv in his 2005 book *Last Child in the Woods*,⁵⁸ must involve getting adults as well as children to set aside time for being outside more often. Increased family-centric programming offered by local recreation providers can help, as can parents giving kids more free time to explore nature in their backyards, neighborhoods and local parks. Other initiatives that encourage kids to get outdoors such as Every Kid in a Park (to get fourth-graders and their families to experience national parks, national forests, national wildlife refuges and more, free of charge), the U.S. Forest Service’s Discover the Forest campaign and the Get Outdoors Florida! programming should be continued and widely promoted.

"We need to change how we think about the outdoors if we want to get more people to connect to nature. That’s because how we experience the outdoors varies between culture and families." – Reth Duir, youth ambassador, USFWS

Whole-Health Benefits

More must also be done to ensure that the public recognizes and receives the whole-health benefits that outdoor recreation offers. Beyond the prevention of chronic diseases, additional benefits of outdoor activities and time spent in nature include relief from modern stress, increased workplace productivity and improved mental health. These issues can be addressed in part by strengthening ties between recreation planners and suppliers, public health departments and

health care providers, who all share the responsibility for promoting parks and green space as crucial to our collective well-being.

Although using different approaches, outdoor recreation and public health professionals work towards a similar outcome: active and healthy communities. The FDEP will continue to work with the FDOH to implement recreation-related objectives in the 2017-2021 State Health Improvement Plan (SHIP).⁵⁹ Other recreation providers in Florida are also encouraged to help implement the SHIP and to partner with local governments to more user-oriented recreation opportunities.

The Florida Recreation and Park Association (FRPA) and the Florida Department of Agriculture and Consumer Services (FDOACS) recently teamed up with other agencies and organizations (Florida Departments of Education, Environmental Protection, Children and Families, Elder Affairs and Health, Agency for Health Care Administration, United Health Care Community Plan and Florida Healthy Kids Corporation) to improve health and well-being through recreation and nutrition. Called “Florida’s Roadmap to Living Healthy,” this initiative uses an interactive, online map to visualize data, which can help government agencies, nonprofits and other organizations identify gaps in services.⁶⁰ This road map includes data on:

- Park and recreation locations
- Florida’s food deserts (areas with few grocery stores)
- Nutrition, healthy eating and much more



Bayard Conservation Area, Credit: SJRWMD



The map overlays data on the available resources, which enables both the public and decision-makers to see where resources are and where they are needed. Similar efforts to delineate where “park deserts” (areas with low park availability) occur would prove highly beneficial to recreation planners in the future to address park equity issues (see page 93).

Florida Recreation and Park Association



Lake Louisa State Park, Credit: Chris Taylor

The Florida Recreation and Park Association (FRPA) was formed in 1942 to bring together professionals who serve our citizens and visitors through park and recreation agencies. Today, FRPA’s membership is as diverse as Florida’s landscape and coastline. These professionals provide services to communities across the state, such as senior adult programming, childcare programs, aquatic facilities (including swim lessons and aquatic exercise programs), golf courses, dog parks, youth and adult athletic programs, nature centers, zoos, museums, libraries, cemeteries, natural area management, arts and cultural programs, and inclusion and therapeutic services.

Providing professional development, education, information and resources, FRPA exists to advance the field and increase the public recognition and understanding of the value of parks and recreation relative to the desired quality of life we all seek. The FRPA advocates for the benefits and positive impacts generated by the parks and recreation industry in the state of Florida.

The following strategies will help enhance health and well-being of Floridians by raising public awareness of and support for outdoor recreation.

Goal 1-1: Increase the promotion of active and healthy lifestyles in the outdoors.

Strategies:

- 1) Recreation providers should work with appropriate agencies and organizations to deliver effective programming that boosts physical activity, promotes family-centric health and wellness and exposes youth to nature.
- 2) Recreation providers should partner with county health departments and local health care providers to promote active, healthy lifestyles through community-level health improvement initiatives.
- 3) The FDEP should assist Florida’s Department of Health (DOH) in implementing recreation-related objectives in the State Health Improvement Plan.
- 4) Recreation providers should work with private sector companies and local governments to create healthy, active and walkable communities.
- 5) Recreation providers should collaborate to develop a statewide campaign that promotes the whole-health benefits of outdoor recreation, including improved mental health and workplace productivity.



Withlacoochee State Forest, Credit: Ann Hopta

“Walking for better health may seem simplistic, but sometimes the most important things we can do are also the easiest and the most obvious. It’s time to step it up, America! The journey to better health begins with a single step.” - Vivek H. Murthy, former Surgeon General, U.S. Department of Health and Human Services⁶¹



Park Equity

The National Recreation and Park Association defines social (park) equity as “ensuring that all people have access to the benefits of local parks and recreation.”⁶² As inner-city neighborhoods and rural areas typically lack the high-quality recreation opportunities and park acreage found in more affluent areas, these underserved communities would greatly benefit from concerted efforts to fund more local parks and green space as well as more walking paths, trails and pedestrian friendly-streets that allow one to safely access these resources.

The Miami-Dade Park and Recreation Department developed a park access and equity strategy based on the principles and goals of their Open Space Master Plan.⁶³ The “vision for the County’s parks system emphasizes equitable access for every resident, rather than the traditional measure of a certain number” of park acres or facilities per resident (see Appendix H). Instead, the County set Level of Service (LOS) standards based on distance, with 1/4 to 1/2 mile walking distance as the target for local (neighborhood) parks and 2 to 3 miles for regional parks. Tactics to implement this LOS policy include 1) public access improvements (e.g. sidewalks and bridges); 2) partnerships with schools, private recreation providers and community organizations; and 3) land acquisition to establish new parks.

In conjunction with its 2015 SCORP, California became the first in the nation to use GIS technology to show statewide, neighborhood-level park access and demographic information.⁶⁴ Florida needs a similar GIS application so that planners may better see where gaps in park availability exist and where resources should be focused to help underserved populations.

Similarly, more funding for user-oriented programs, as well as programs for underserved youth, should be allocated by local governments, which would go a long way to redressing the imbalance regarding park equity in low-income areas. Making recreation programs more welcoming and inclusive for all Floridians should also be a priority for Florida’s recreation providers.

Park and Recreation Funding

Funding, however, remains a perpetual challenge for public recreation providers (especially at the local

level), who increasingly must leverage resources and creatively tap into non-traditional sources to construct new facilities as well as maintain existing ones. Maintenance backlogs, inadequate staffing and even partial shuttering of facilities due to budget cuts are familiar issues to many park and recreation professionals.

Some of the more “traditional” alternative funding methods consist of donations (from private individuals, charitable foundations and corporations) and grants. Potential grant sources include federal agencies (e.g. NPS’ Community Assistance in Conservation and Recreation Grants; NPS’ Rivers, Trails, and Conservation Assistance program; NPS’ LWCF; U.S. Department of Housing and Urban Development’s Community Block Grant program; and the U.S. Department of Agriculture’s Community Facilities Direct Loan & Grant program), state agencies (FRDAP, RTP and FCT - see Chapter 3) and the private sector (e.g. Home Depot Foundation Community Impact Grants program; Lowe’s Charitable and Educational Foundation; National Fish and Wildlife Foundation’s Resilient Communities Program; Tony Hawk Foundation Skatepark Grants; and KaBOOM! Let’s Play Community Construction Grants).

Organizations such as the Trust for Public Land can help with legislative and ballot measures that create new public funds for parks and conservation. Commercial development/ground lease agreements and related revenue streams such as PILOT (payment-in-lieu-of-taxes) fees may be a good solution in some instances as well. Other options⁶⁵ include:

- Charge/raise user fees
- Parking fees
- Special events/Concession facilities
- Privately-contracted programming/amenities
- Equipment rentals
- Partnerships with government agencies
- CSOs/Friends groups/Volunteers
- Fundraising with other organizations
- Park Improvement Districts
- Sales tax initiatives
- General obligation bonds
- Municipal services taxing units
- Developer exactions/Impact fees



Goal 1-2: Increase the number the recreation facilities, programs and opportunities in urban areas and rural communities.

Strategies:

- 1) Local governments should seek funding to maintain and provide additional user-oriented facilities and programs in underserved communities.
- 2) Recreation providers and user groups should initiate collaborative efforts to reach underserved youth with programming that emphasizes a holistic, whole-health approach.
- 3) Together with the private sector, recreation providers should create initiatives for youth, minorities and seniors that develop outdoor skills and instill confidence in the out-of-doors.
- 4) The FDEP will create a new GIS application that depicts gaps in park availability at the community level, with demographic and socioeconomic information layers.

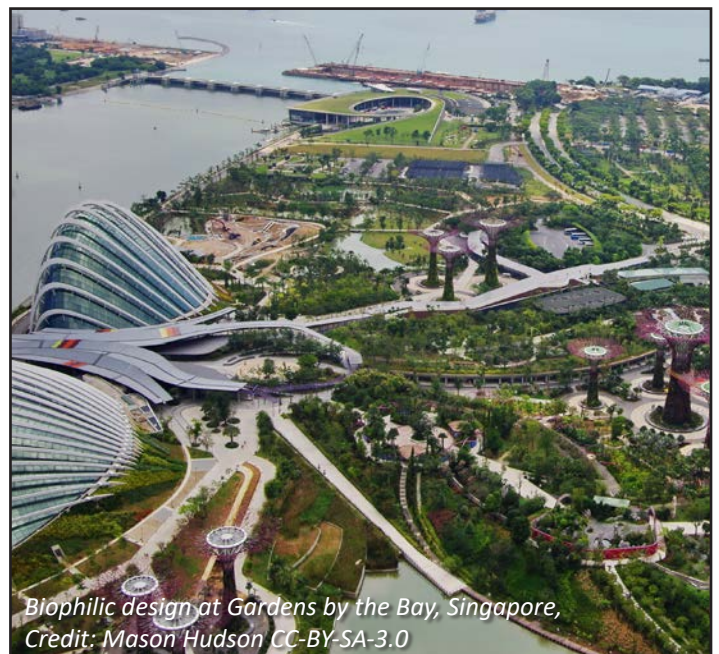


Tampa Riverwalk, Credit: Lee Hoffman

“Walking is an easy way to start and maintain a physically active lifestyle, and walkable communities make it easier for people of all ages and abilities to be active.” – Centers for Disease Control and Prevention

and Miami have published goals to increase walking, biking and physical activity. Other cities, both large and small, should set similar goals. Local governments should promote and plan for walkability in new communities, incorporating smart design decisions for roads and sidewalks.

Another method that planners can use to improve health and well-being and to help urban communities encourage participation in outdoor recreation activities is to blend the built and natural environments. This principle of “biomimicry” or “biophilic design” allows buildings, streets and parks to be constructed to perform the same functions as natural ecosystems. By integrating functions such as wildlife habitat, flood mitigation and carbon sequestration, this can, in effect, lead to better-



Biophilic design at Gardens by the Bay, Singapore, Credit: Mason Hudson CC-BY-SA-3.0

Planning and Public Health

City planners have multiple avenues for improving public health. The City of Tampa recently collaborated with real estate developers to become the first U.S. city to design a district with public health as the driving principle.⁶⁶ Every aspect of the 40-acre waterfront area — its buildings, walkability, low-pollen trees and more — will help its inhabitants live healthier lives. Designing communities to be healthy – walkable and connected – also helps cities to stay competitive and attract new businesses and residents.

A walkable community is one where it is “safe and easy to walk and where pedestrian activity is encouraged.” According to the Alliance for Biking and Walking, states with higher levels of bicycling and walking to work also see lower levels of diabetes, obesity and high blood pressure.⁵² Both Jacksonville



connected systems of parks and open spaces, more pleasant communities (with improved tree canopy cover, reduced air pollution and lower heat island effects in summer, for example) and happier and healthier citizens.

Outdoor Skills

Developing outdoor skills is also important in engaging and encouraging Florida's increasingly diverse population to be active outside. Programs intended to increase outdoor skill proficiency and that target youth, minorities and seniors, should be expanded. Skill development can lead to better health and self-esteem, as well as lifelong participation in those activities. The FWC's Florida Youth Conservation Centers Network (see also priority area 4) and the Becoming an Outdoors-Woman (BOW) workshops are great examples of programs that instruct those who may not have had the opportunity to participate in certain outdoor pursuits growing up such as camping, hunting, fishing and wildlife viewing. Providing additional opportunities for seniors to stay active

by participating in low-impact activities is similarly encouraged (see below).

Part of the challenge in getting youth and other newcomers outdoors is addressing their fears and safety concerns. Fears regarding crime, the unknown, getting lost, wildlife interactions and diseases can make nature seem intimidating and scary, especially for those growing up in urban settings. Helping people overcome these fears and developing a greater comfort level with the natural world should be part of any outdoor skills programming.

Challenge Task – *In addition to the above recommendations, the following objectives will be accomplished:*

- The number of recreation facilities in Rural Areas of Opportunity will be increased by 3 percent.
- The FDEP's GIS application will also contain a layer depicting outdoor recreation grant recipients and locations.

Trending: Pickleball

While you may not have heard of pickleball, this game with the funny name is one of the fastest growing sports in the U.S. According to the USA Pickleball Association, there are more than 2.8 million pickleball participants in the nation, and more than 21,000 indoor and outdoor courts.⁶⁷

Suitable for all ages (even centenarians!) and easy to learn, pickleball contains elements of tennis, ping-pong and badminton. The game is played on a court around one-third the size of a badminton court, using a modified tennis-style net, large paddles and a lightweight plastic ball. Like tennis, it can be played either as singles or doubles. No nearby court to play on? No problem – with a



hard, flat surface, a roll of tape and a net, you can make your own court in half an hour.

While incredibly popular with seniors, the sport is picking up younger enthusiasts as well. It's a great form of exercise, and easier on the body than traditional racquet sports. Many players find it surprisingly addictive, and enjoy the strategy and finesse.



Priority Area 2: Public Access, Accessibility and Connectivity

Summary: Florida's outdoor recreation system will benefit from continued coordination efforts to improve access and inclusion, and to ensure communities are connected to parks and trails.

Floridians are fortunate to have abundant public lands and waters, along with thousands of parks in which to recreate. Most public lands have some type of access, but in some cases, recreational access is limited. When budgets are tight, land management agencies often choose to focus their resources on improving existing access points, amenities and infrastructure rather than investing in new facilities. Budget shortfalls can also create maintenance issues, which can result in site closures, along with staff cuts and reduced programming. With the U.S. economy expected to show continued recovery and growth for the next few years, the good news is that increased funding for parks and recreation could be available, which can be allocated for the expansion of new access points, community parks and infrastructure, as well as to address maintenance backlogs and programmatic gaps.

Agencies and other public recreation providers can sometimes improve access to their lands and waters by teaming up with outfitters and concessionaires to deliver supplemental services such as guided tours and equipment rental. Where appropriate, this option is worth exploring, as it can reduce costs or even provide a source of revenue.

Offering inclusive and welcoming facilities and programs for all individuals is another way to improve public access to conservation and recreation lands. Staff training may be required in some cases to create the needed programs and amenities. Ensuring that a diversity of users is actively recreating in our parks, forests and management areas begins with positive messaging and marketing that makes public lands feel like a safe environment for everyone to visit and enjoy.

Inclusiveness and Accessibility

Equitable access also dictates removing social and physical obstacles to participation. Recreation providers have made great strides to comply with the Americans with Disabilities Act (ADA), but equality of access to public lands, programs and facilities remains a challenge.

For example, traditional gender-specific programs and sports teams can serve as a barrier to broader involvement for certain individuals. Expanding programmatic offerings, and improving facilities through universal design, can make all members of the community regardless of age, ability or gender feel more welcome and respected. Lastly, it is important that efforts to create equitable access to programs and facilities are communicated to staff and the public.



Miracle Sports Baseball, Credit: FDOA

Goal 2-1: Promote the diversity of recreation participants through the development of inclusive and welcoming programs and facilities.

Strategies:

- 1) Outdoor recreation providers should develop and strengthen partnerships with organizations such as the Agency for Persons with Disabilities to educate themselves and the public, and to provide recreation activities and programs for people of all ages and abilities.
- 2) State land management agencies should partner with organizations such as the Florida Disabled Outdoors Association to establish specific programs for people with disabilities, and make these programs widely available throughout the state.
- 3) Organizations should seek ways to provide and market diversity and inclusion training for outdoor recreation professionals.
- 4) Citizens and recreation providers should work to strengthen federal, state and local initiatives that support the creation, enhancement and expansion of urban parks and open spaces.



Inclusive Facilities and Programs



Cyclist on adaptive bicycle, Credit: Hillsborough County PRD

Hillsborough County's All People's Life Center (APLC) opened in 2007 and is one of the county's showcase facilities. This recreation center offers indoor and outdoor activities and serves people of all ages and abilities. Every detail of the barrier-free facility exceeds ADA standards for accessibility. The APLC is home to the county's Therapeutic Recreation program and Paralympic Sport Tampa Bay (PSTB), which provides year-round sports and recreation programs for children and adults with physical disabilities. The APLC also has the only county-run Special Olympics teams and is one of several Camp Sparks (an after school and summer camp program for children with physical and mental disabilities) locations in the area.



William J. Rish Recreational Park, Credit: APD

Another facility that emphasizes inclusion is the William J. (Billy Joe) Rish Recreational Park near Port St. Joe. Operated by Florida's Agency for Persons with Disabilities (APD), this 100-acre facility on the Gulf of Mexico offers individuals with disabilities a safe beach experience that is completely accessible. The park has two miles of boardwalks and ramps leading to

and from the beach, plus cabins and family cottages for rent. Other amenities include an Olympic-size swimming pool, beach piers and an event hall. Future plans call for nature trails and camping facilities.

Florida's public lands belong to everyone, and where appropriate, should be accessible to all. Agencies and other recreation providers should continue to make the necessary changes to upgrade their facilities to accommodate visitors with special needs. Universally-designed sites and facilities provide equal opportunity not only for persons with disabilities, but also for parents with strollers and people with injuries. Where needed, funding and/or professional guidance should be sought or made available to assist providers with the design of universally-accessible facilities and amenities.

The following recommendations will help ensure universal accessibility on Florida's public lands.

Goal 2-2: Improve universal accessibility on all public lands.

Strategies:

- 1) To the extent possible, agencies and recreation providers should eliminate architectural and cultural barriers in existing facilities under their management, as well as incorporate universal design concepts when planning new facilities and amenities.
- 2) Agencies and recreation departments should identify funding sources and professional guidance to help outdoor recreation providers design universally-accessible facilities and amenities.



William J. Rish Recreational Park, Credit: APD



Public Access



While some areas with sensitive natural or cultural resources are off-limits to visitors, most of Florida's public lands are open to some type of recreational use.

Agencies and recreation departments should determine through internal review and through public opinion where deficiencies in access exist, and work towards improving existing access points or establishing new ones where appropriate. Creative funding methods are sometimes called for with these types of capital improvements, as well as for maintaining existing facilities, especially when budgets are tight.

Determining where to recreate, however, should be easy in today's digital world. The FDEP's Florida Outdoor Recreation Inventory (FORI) and its companion applications (apps) known as Outdoor Florida do their part by helping people locate destinations that match their activities of interest. The FORI has both a searchable database and an interactive map depicting more than 13,000 locations with public and private recreation facilities and opportunities. Improvements to make FORI and Outdoor Florida more user-friendly are ongoing, and FDEP will continue to make annual appeals to recreation providers to help update the database.

Locating parks and other destinations that offer wheelchair-friendly amenities and other accommodations for persons with disabilities is not always an easy task. Fortunately, the Florida Disabled Outdoors Association (FDOA) maintains a searchable Recreation Resource Database of accessible, inclusive destinations, along with programs, services, events and products, which is a good resource for trip-planning. Recreation providers should continue to help the FDOA update this database as new opportunities become available, and they should also clearly indicate via their own websites, apps and other media which facilities (especially beach access points and shoreline fishing

locations) and programs are accessible to those with disabilities. The FDEP will also explore means of adding this type of information to the FORI.

The following recommendations are proposed to help improve public access and the promotion of Florida's conservation lands and waters.

Goal 2-3: Ensure that appropriate conservation lands and waters are open and accessible for public use, and are widely promoted.

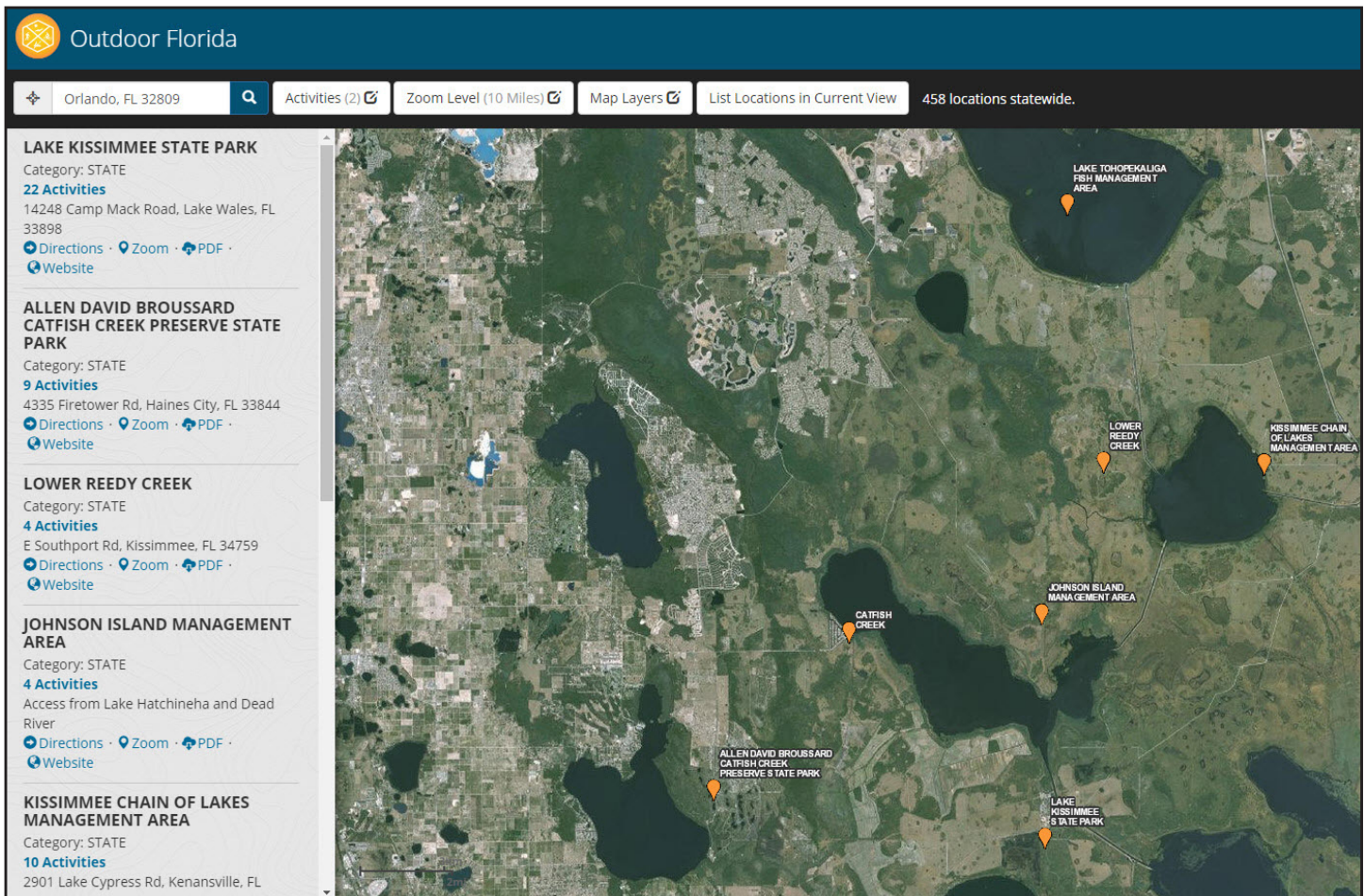
Strategies:

- 1) State agencies and local governments should identify lands and waters under their jurisdiction where inadequate recreational access exists or where existing access can be improved, and give priority to making the needed improvements.
- 2) Recreation providers should partner to advertise which facilities, amenities and programs are universally accessible to help consumers plan their trips.
- 3) Agencies and recreation departments should seek, coordinate and leverage funding for capital improvements to increase public access, as well as to maintain existing facilities.

Agencies and other organizations involved with outdoor recreation can certainly benefit from better coordination of efforts. Improving communication and coordination with city planners, transportation departments and land managers will lead to better-connected opportunities and will help implement lessons learned. At the community scale, improved coordination results in better distribution and connections between parks, green spaces and neighborhoods.

In 2015 and 2016, FDEP held a series of public workshops around the state to promote the SCORP and to facilitate information exchange amongst recreation providers and outdoor professionals. The FDEP plans to continue these workshops following the completion of the 2019 SCORP. The FDEP will also continue to maintain and strengthen connections among recreation professionals by holding quarterly SCORP workgroup meetings and by seeking out new partners to help implement the 2019 plan.





Trip-planning tools like Outdoor Florida help viewers locate places to recreate. Credit: FDEP

Technology and Information

Advances in technology continue to impact our daily lives in profound ways, and technology now influences many aspects of how we recreate in the 21st century. The average participant today uses some type of electronic device when recreating, from wearable devices that track fitness goals to handheld units and smartphones that help us navigate wilderness trails. Recreation providers must continue to find ways to use this technology to complement, but not replace, outdoor recreation experiences.

Mobile-friendly websites and smartphone applications place a wealth of information at our fingertips, enabling recreation providers to convey a wide variety of maps, educational information and other content to participants. Providers are encouraged to develop and update maps and apps like the FWC’s Public Boat Ramp Finder and Lake County’s Parks Finder that promote their parks, facilities and activities. Providers should also make their content as mobile-friendly as possible.

Outdoor Florida, an application developed by the FDEP as part of the Florida Outdoor Recreation Inventory (see chapter 3), is a trip-planning tool that helps people locate recreation sites of interest. Many other online trip-planning tools exist, and some have wider utility than their name might suggest. For example, the FWC’s trip-planning tool for the Great Florida Birding and Wildlife Trail contains information on horseback riding locations.

VISIT FLORIDA (VF), the state’s tourism marketing corporation and official source for travel planning, promotes tourism to the Sunshine State through a variety of means, including public relations and visitor services programs. As their main goal is to “maximize the economic impact of travel and tourism to Florida,” recreation suppliers should work with VF on issues of mutual interest, including promotion of travel to emerging Florida destinations.

The following recommendations are proposed to help ensure that Florida’s recreation providers are better connected to promote their lands, programs and recreation opportunities.





St. Johns River Bartram Frollic, Credit: Liz Sparks, FDEP

Goal 2-4: Coordinate providers, agencies and organizations to better connect and promote lands and opportunities.

Strategies:

- 1) Recreation agencies and providers should periodically update information about their facilities and lands in FDEP's Florida Outdoor Recreation Inventory (FORI).
- 2) The FDEP should continue to hold public events designed to encourage the exchange of information between recreation providers and user groups, including the promotion of SCORP, FORI and Outdoor Florida.
- 3) The FDEP should continue to strengthen coordination amongst agencies and recreation providers in conjunction with SCORP planning and implementation. This will keep open lines of communication on statewide recreation issues and trends, and methods of addressing them.
- 4) Recreation providers should develop web and mobile-friendly applications, interactive maps and guides and other technological aids to facilitate and encourage outdoor recreation participation.
- 5) Recreation providers should collaborate with VISIT FLORIDA to cross-promote mutual goals.



"No single park, no matter how large and how well designed, would provide citizens with the beneficial influences of nature; instead parks need to be linked to one another and to surrounding residential neighborhoods." — Frederick Law Olmsted

While not possible everywhere, an interconnected system of parks and open spaces is preferable to isolated parks in terms of preserving biodiversity and essential ecological functions. For example, large animals like the Florida panther and Florida black bear have big territories and must travel great distances to survive.

As most Floridians now live in urban areas, accessing and experiencing the outdoors depends upon the availability of nearby opportunities. Urban parks provide space for active pursuits as well as quiet areas where patrons can seek much-needed respite and solitude. For many, urban recreation also helps forge their earliest connections with natural landscapes – they are stepping stones into the great outdoors. As local governments are the main suppliers of urban recreation opportunities, they would benefit from additional resources to help them maintain existing facilities and programs and to create new ones. Programs such as the Florida Recreation Development and Assistance Program (FRDAP) and the LWCF grant program should be continued, and should receive additional support from Congress and the state legislature. In addition, state and federal resources should be expanded to provide greater support for local land acquisition and conservation planning efforts as well.



Florida Greenways and Trails System Plan

A well-planned trail system connects public lands, enhances recreation experiences and provides alternative transportation between and within communities. It also advances a state's economy, tourism, health, conservation and quality of life. The DRP's Office of Greenways and Trails (OGT) does all of the above and more by developing its statewide vision for Florida's trail network, which will connect numerous communities. The Florida Greenways and Trails System (FGTS) Plan, which has been updated for 2019, guides the implementation of this statewide trail system. Numerous funding sources such as the Florida Communities Trust and the Recreational Trails Program help support trail development (see Chapter 3 and the OGT website for more information).

"Greenways make our communities more livable; improve the economy through tourism and civic improvement; preserve and restore open space; and provide opportunities for physical activity to improve fitness and mental health." – American Trails



With more than 15,000 miles of land and water trails, Florida is a premier destination for hikers, cyclists, equestrians and paddlers. In 2008, the Sunshine State was awarded Best Trails State in America, and there continues to be significant progress to improve trail networks to connect cities and regions (see Chapter 3). One of OGT's new efforts to connect people with local parks and trails is a technical assistance program called Parks and Community Trails (PACT). The PACT program will help rural and small communities build new trails linking the FGTS Opportunity and Priority Corridors with local and state parks. While mapping is ongoing, potential connections have already been identified. The OGT plans to continue working with non-profit organizations and all levels of government to direct resources and secure funding to develop these new trail connections.

In October 2017, 134 mayors from around the U.S., together with the Trust for Public Land, National Recreation and Park Association and the Urban Land Institute, launched the 10-Minute Walk Campaign, an advocacy project with the goal that all Americans should live within a 10-minute walk (0.5 miles) of a high-quality park or green space.⁶⁸ Participating Florida cities include Boca Raton, Clearwater, Davie, Doral, Fort Myers, Gainesville, Lake Alfred, Miami



Wekiwa Springs State Park, Credit: Crawford Entertainment

Beach, Miami Gardens, Miami Lakes, Orlando, Pembroke Pines and Tallahassee. Additional cities should join this ambitious effort.

Florida's horseback riders and off-road bicyclists would also benefit from additional trail opportunities. Specifically, these user groups desire longer, unpaved trails and trail networks for extended rides and for travel between towns and regions. More camping areas along trails are also required to facilitate multi-day rides. Agencies and other recreation providers should work collaboratively with these and other user groups to establish new unpaved trails and facilities.

The construction of "complete streets" is another way that transportation and city planners



Little Manatee River State Park, Credit: Teresa Bass



WALKING AND BICYCLING IN FLORIDA

Figure 5.1

Source: Alliance for Biking and Walking⁵²

ONE OF 36

States with Vision Zero policies
which set a target of zero traffic fatalities or serious injuries on roadways.



ONE OF 30

States that have adopted complete Streets policies.



ONE OF 19

States with smart growth policies
that encourage both bicycle and pedestrian options.



Florida is the least safe state for walking (39 deaths per 10,000 daily commuting pedestrians).



Florida ranks 44th in bicycle safety for commuters (21.1 cyclist fatalities per 10,000 bicycling commuters).



Jacksonville has the highest bicyclist/pedestrian fatality rate of any major US city (50.8 fatalities per 10,000 commuters)

1st

Florida ranks first in State Highway Safety Funding (4.3% allocated to bicycle/pedestrian projects).

2nd

Florida ranks 2nd in percent of federal transportation dollars applied to bicycle/pedestrian projects.

17th

Florida ranks 17th for bicycling to work (0.6% of population).

19th

Florida ranks 19th in per capita spending on bicycle/pedestrian projects.

47th

Florida ranks 47th for walking to work (1.6% of population).



Florida's share of commuters who walk or bike to work: 2.2%.



In Florida, 24% of traffic fatalities are bicycle/pedestrian related.



In Florida, 4.3% of all traffic fatalities are bicyclists (highest in U.S.).



can help provide safe access for Florida’s bicyclists, pedestrians, public transit users and motorists. Bicycle and pedestrian advocates, along with planners and accessibility supporters have adopted the term “complete streets” because it indicates that a street is not fully complete unless it accommodates and provides safe access for all users.⁶⁹ The Florida Department of Transportation (FDOT) has adopted a Complete Streets Policy and developed a Complete Streets Implementation Plan for state roadways. Various local governments throughout Florida have also adopted Complete Streets Policies. The FDOT also has a Safe Routes to School program to encourage kids to walk and bike to school.

Goal 2-5: Promote local parks and trails, along with neighborhood and regional connectivity.

Strategies:

- 1) Local governments should identify gaps in outdoor opportunities, including equal access to parks, then work to improve access and increase the number of parks, greenways and land and water trails in urban areas and other underserved communities.
- 2) State and federal resources should be expanded to provide greater support for local land acquisition and conservation planning efforts.
- 3) Local planning and recreation departments, along with the Florida Department of Transportation, should continue to incorporate walking, biking and complete street projects into transportation plans, with a focus on connecting neighborhoods and communities to parks and open spaces.
- 4) The Florida Department of Transportation, along with local planning and recreation departments, should continue to develop initiatives and educational campaigns to promote the safety of Florida’s pedestrians and cyclists.
- 5) With input from user groups, agencies and other recreation providers should establish new unpaved trails and regional trail networks with camping facilities.

Florida’s Strategic Highway Safety Plan emphasizes the importance of safety for pedestrians and bicyclists. The Florida Pedestrian and Bicycle Safety Coalition prioritizes and implements strategies to reduce crash-related fatalities and injuries.

These strategies include the state’s Complete Streets Policy, intersection lighting plans, updated roadway design guidance, high-visibility enforcement efforts and a strong emphasis on pedestrian and bicycling safety through driver education and communication campaigns. Everyone from planners to retailers to user groups has a role to play to help promote safe cycling and walking opportunities.

Challenge Task – *In addition to the above recommendations, the following objectives will be accomplished:*

- The FDEP will seek to improve the utility of the FORI’s trip-planning capabilities by collecting and sharing data on locations with wheelchair-friendly amenities and facilities.
- The FDEP will contact recreation suppliers each August to update the FORI database; at least 300 existing records will be updated annually.
- The FDEP will hold a statewide series of events in 2019 that encourage the exchange of information between recreation providers, outdoor professionals and user groups.
- The percentage of public providers who use the SCORP (and understand its benefits) as a reference or planning tool will increase.
- The number of annual pedestrian and cyclist fatalities will be reduced.



Complete streets project, Credit: FDOT

Priority Area 3: Economic Opportunities and Ecotourism

Summary: Outdoor recreation and ecotourism have a major impact on Florida's economy, which in turn, helps benefit conservation of the state's natural and historical resources.

"Florida's natural lands are the state's greatest economic asset."

–1000 Friends of Florida

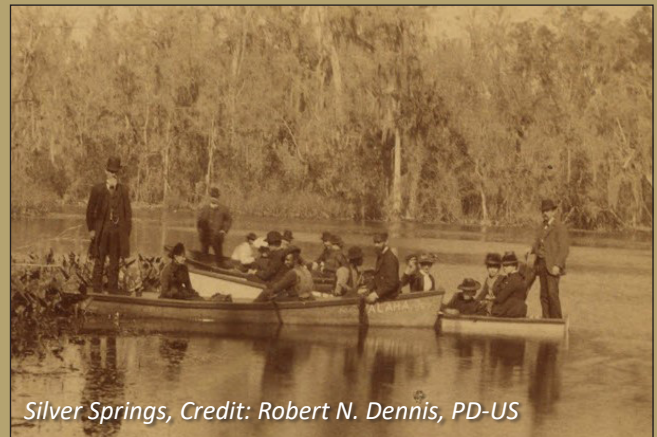
The Economic Impact of Outdoor Recreation and Ecotourism

Outdoor recreation is an integral part of everyday life for millions of Floridians and visitors. Given its widespread appeal, which stems from the fact that there is a tremendous variety of activities to participate in, outdoor recreation is big business for the Sunshine State. Directly and indirectly, outdoor recreation stimulates the economy through the purchase of equipment, access and user fees, accommodations and numerous other travel-related expenses.

– Early Florida Tourism



Credit: Mark Catesby, CC-PD



Silver Springs, Credit: Robert N. Dennis, PD-US



Credit: Florida Archives, CC-PD



Alligator Joe's tourist attraction, Credit: Detroit Photographic Co., CC-PD

Florida's wildlife and scenery have been major draws since the 1500s. Florida's crystal-clear springs have long been popular as swimming and bathing locales, and many were commercialized and marketed as health destinations in the 1800s.⁷⁰ Glass-bottom boat tours, which originated in Florida, were operating at Silver Springs in the 1870s.⁷¹ Railroads brought tourists from New York and other northern states to vacation resorts in coastal cities like St. Augustine and West Palm Beach in the 1890s.⁷²

Automobile and RV camping in Florida took off with the construction of the Dixie Highway to Miami in 1915, prompting the formation of the "Tin Can Tourists of the World" (TCT) organization in 1919 at De Soto Park in Tampa.⁷³ The TCT advocated for clean, safe campgrounds for its growing membership, and the influx of car tourists helped fuel development of better roads in Florida. This in turn gave rise to new roadside attractions and other service industries such as restaurants and visitor travel centers.



Tourism: An Economic Force



Florida manatee, Credit: Geena Hill

Tourism remains Florida's number one industry,⁷⁴ and in fact, the state has been a tourist destination for centuries. Beginning with the Spanish explorers' earliest descriptions of the lands and waters, flora and fauna, followed by those of naturalists such as Mark Catesby, William Bartram and John James Audubon, visitors began flocking to Florida for its natural wonders and outdoor opportunities.⁷⁵

According to VISIT FLORIDA, the Sunshine State's tourism rates have continued to climb since the 2008 recession, with more than 118 million visitors in 2017.³ Outdoor recreation is a major component of the state's tourism market, and in 2016, recreation and/or leisure was the primary reason for 89 percent of domestic visits and 72 percent of international visits.²¹

Further reinforcing the strong ties between recreation and tourism are the results from multiple economic impact studies. While relaxing and enjoying Florida's outstanding natural and cultural resources, visitors are also making sizable contributions to the state's economy. Direct tourism spending in Florida for 2016 was estimated at \$111.7 billion by VISIT FLORIDA.⁷⁶

According to a 2017 study by the Outdoor Industry Association, Florida ranks second behind California in the amount of consumer spending on major resource-based outdoor recreation activities, which include camping, fishing, hunting, wildlife viewing, motorcycling, off-roading, trail sports, water sports and wheel sports (e.g. bicycling).⁴ Florida generated:

- \$58.6 billion in annual consumer spending
- 485,000 direct jobs
- \$17.9 billion in wages and salaries
- \$3.5 billion in state and local tax revenue

In 2016-2017, an even broader economic impact study was commissioned by FDEP as part of the 2013 SCORP's recommendations. This study looked at the economic impacts associated with 35 resource-based and user-oriented outdoor recreation activities in Florida. The results indicated these activities (the same ones included in the 2019 SCORP's participation study) generated an estimated \$145 billion in total economic output, with 1.2 million jobs supported.¹⁸ These findings are comparable to VISIT FLORIDA's and the Outdoor Industry Association's estimates. Statewide, regional and county-level assessments for each recreation activity can be found in Appendices J and K. The full economic report is posted on FDEP's SCORP web page. The results of this and other economic impact studies regarding outdoor recreation will be presented to key decision makers, and will also be disseminated via websites, social media, conferences and special events.

Outdoor Recreation in Florida: 2016-2017 Economic Impacts

- \$145 billion in total economic output
- \$70 billion in visitor spending
- \$20 billion in resident spending
- \$10 billion in tax revenue
- 1.2 million jobs supported
- \$60 billion in spending occurred in parks and on other public lands

Source: The Balmoral Group; see SCORP webpage at floridadep.gov/parks for full report.

Ecotourism

Nature-based tourism and ecotourism, used interchangeably here, continue to be integral components of Florida's tourism industry. Some of the most popular activities that depend upon our natural and cultural resources and attractions include hunting, fishing, boating, paddling, hiking, camping, nature study, birding, wildlife viewing and heritage tourism. Collectively, these activities have a huge impact, contributing billions to the state's economy. Some examples include:



- Boating \$10.3 billion
- Saltwater Fishing \$8.0 billion
- Hiking \$6.6 billion
- Heritage Tourism \$4.5 billion
- Wildlife Viewing \$4.2 billion
- Nature Study \$4.0 billion
- Paddling \$2.9 billion
- Freshwater Fishing \$2.2 billion*
- Tent Camping \$2.2 billion
- RV/Trailer Camping \$2.0 billion
- Horseback Riding \$1.7 billion
- Hunting \$1.6 billion

Sources: *The Balmoral Group*,¹⁸ *Florida Fish and Wildlife Conservation Commission*,⁴⁶ *National Marine Manufacturers Association*⁷⁷ and the *US Fish and Wildlife Service*,⁷⁸ *see Appendix G.



Box-R WMA, Credit: David Moynahan, FWC

Florida's flora, fauna and scenery are key reasons why so many people choose to live and recreate in Florida. Wildflowers, seashells, birds, butterflies, sea turtles and manatees, along with numerous sportfish and game species, are the major focus of many of our top recreation and tourism activities. Nature enhances the experiences of other outdoor pursuits as well, not to mention our yards and communities.

Florida's conservation and recreation lands, including our state park system, continue to play a critical role in encouraging nature-based tourism as well. In 2017-2018, Florida state park visitation rose to 28 million people, which generated more than \$2.4 billion in direct economic impact and supported 33,500 jobs.⁷⁹ Florida's state parks are managed and preserved for enjoyment through providing appropriate resource-based recreational opportunities, interpretation and education that help visitors connect to the Real Florida.



Buggy tour at Kissimmee Prairie Preserve State Park, Credit: Mark Kiser, FDEP

Ecotourism

Ecotourism, technically speaking, is a specific type of nature-based tourism. According to the International Union for Conservation of Nature (IUCN), ecotourism is "environmentally responsible travel to natural areas to enjoy and appreciate nature."⁸⁰ It is distinguished from other forms of tourism (including many forms of nature-based tourism) by its emphasis on conservation, sustainability, education, traveler responsibility and active community participation.

Ecotourism promotes low-impact visitor behavior, support for local conservation efforts and sensitivity towards and appreciation for biodiversity and local cultures. Interpretation is a key component of ecotourism ventures. The Florida Society for Ethical Ecotourism (Florida SEE), a non-profit organization, certifies tour providers who adhere to specific guidelines and are "committed to using best practices for ecological sustainability, natural area management and quality ecotourism experiences." Tour operators should seek certification and work towards making their operations as sustainable as possible.

Wildlife festivals are also an important part of the nature-based tourism equation. These events offer field trips and educational seminars, and they disseminate information about viewing sites in the surrounding area. Numerous festivals are held around the state, which benefit local economies. For example, the Space Coast Birding and Wildlife Festival (Florida's largest event of this type, and which celebrated its 20th year in 2018) attracts attendees from around the world, and contributes roughly \$1 million annually to Brevard County alone.⁸¹ Festivals not only introduce visitors to an area, but they also foster repeat visitation, thereby extending an event's economic impact. Existing and new wildlife festivals around the state should continue to work with the business community and should be widely promoted beyond Florida.





Fort Clinch State Park, Credit: FDEP

The FWC's Great Florida Birding and Wildlife Trail (GFBWT - see Chapter 3), a statewide ecotourism program, has numerous "clusters" of sites within each of its four regional guidebooks. Clusters encourage visitors to explore multiple locations while they are in the area, thereby extending their stay and their economic impact. The GFBWT's network of sites includes more than 500 locations, with at least one viewing site in nearly every county. In 2013, additional sites were added within each of Florida's Rural Areas of Opportunity (RAOs – see Chapter 2) specifically to promote ecotourism in rural counties. Communities should take advantage of opportunities to market their local natural areas to attract additional visitors.


The Florida Forest Service's Trailwalker Program uses a reward-based system with multiple achievement levels encouraging hikers to visit 28 participating state forests and to hike as many miles as possible. The FDEP's Operation Recreation GeoTour and Kids GeoTour programs also uses rewards to encourage geocachers to visit state parks. More than 70 Florida state parks participate in these programs, and have at least one cache to find inside their park. Other agencies and providers should create reward-based systems as a means of promoting their lands and waters.

Heritage tourism, which includes visiting historical, cultural and archaeological sites, is vitally important to the state as well, contributing more than \$4.5 billion to Florida's economy in 2016 (see Appendices J and K). This outdoor recreation activity is the sixth most popular among residents and visitors and the eighth highest in spending, according to FDEP's recent economic impact study. The Division of Historical Resources (DHR) has 12 online, heritage trail guidebooks to help travelers locate and learn more about historical and cultural sites of interest. These include:

- ***Black Heritage Trail***
- ***British Heritage Trail***
- ***Civil War Heritage Trail***
- ***Cuban Heritage Trail***
- ***Florida Historic Golf Trail***
- ***French Heritage Trail***
- ***Jewish Heritage Trail***
- ***Native American Heritage Trail***
- ***Seminole Wars Heritage Trail***
- ***Spanish Colonial Heritage Trail***
- ***Women's Heritage Trail***
- ***World War II Heritage Trail***



The Florida Panhandle Shipwreck Trail is another tourism opportunity created by the DHR, the Florida Public Archaeology Network, waterfront communities and diving-related enterprises in Northwest Florida. SCUBA divers can obtain an official “passport” from dive shops, charter boat operations and other partners, motivating them to visit all 12 sites on this underwater trail. Other shipwreck trails for divers and snorkelers are located within the Florida Keys National Marine Sanctuary and Biscayne National Park. These and other heritage tourism trails and special events help interpret Florida’s colorful past, and should continue to be widely advertised.

 Florida holds multiple “Capital of the World” titles linked to outdoor recreation, including Fishing, Golf and Theme Park. In addition, Ocala/Marion County is marketed as the Horse Capital of the World, and Key Largo is branded as the Diving Capital of the World.

City and county parks and other local attractions also drive tourism in Florida’s communities. Parks provide sites for sports tournaments, special events and festivals, and larger parks that have museums, memorials, botanical gardens, zoos and historical/cultural sites can be popular draws for tourists, too. Local governments should promote clusters of nearby parks and sites so that visitors will stay in an area longer and enjoy additional points of interest.

Land management agencies and other outdoor recreation providers should be cognizant of the important role they play in Florida’s efforts to market recreation opportunities to domestic and international travelers. Increased collaboration with Destination Marketing Organizations (DMOs) and the hospitality industry is encouraged to better promote ecotourism and heritage tourism experiences.

Where possible, agencies should prioritize funding towards Florida’s rural areas to promote tourism and to help diversify their economies. The Suwannee River Basin Outdoor Recreation Compact (SRBORC) is a good example of collaboration in this regard.⁸² Using a model championed by the Florida League of Cities, SRBORC participants in Florida’s North Central RAO worked with appropriate agencies such as FDEP’s Office of Greenways and Trails to develop and implement a region-wide, recreation and tourism promotion and marketing program. The goal of this program is to enhance and improve the greenways, trails and related infrastructure in their

communities to attract economic development and tourism.

As funding is a never-ending challenge for public recreation providers, finding ways to do more with less is par for the course. Park and recreation departments, agencies and other providers should continue to cultivate innovative partnerships with businesses and organizations fund outdoor opportunities (see priority area one for additional suggestions).

Collaborating with the outdoor recreation industry, including manufacturers, retailers and tour providers, is another means of promoting economic opportunities and ecotourism in Florida. For example, the Florida Forest Service works with representatives of the OHV community to promote responsible riding on public and private lands. The FWC partners with optics retailers to provide free “loaner” binoculars and scopes for daily use at selected wildlife viewing sites around the state. Public providers should cultivate similar partnerships to make loaner equipment available to the public at reduced or no cost. This would allow people to test equipment before they buy, and helps introduce people to new activities.



Ocala National Forest, Credit: Florida Forest Service

Local parks and trails have considerable economic value to homeowners and businesses as well. One study found that homes located in neighborhoods with above-average levels of walkability are worth \$4,000 - \$34,000 over houses in neighborhoods with just average levels of walkability.⁸³ The National Association of Homebuilders reports that trails are the most desired community amenity that



homeowners seek when buying a home. Clearly, neighborhood trails are important, popular and are good investments.⁸⁴

Lastly, given Florida's substantial number of visitors and seasonal residents, recreation planners should consider the tremendous demands placed on resources and facilities, particularly in heavily populated regions, where levels of service are typically lower. For an assessment of demand regarding each outdoor activity, please see the recreation demand index in Appendix G.

The following strategies will help recreation providers and stakeholders educate the public as to the benefits of outdoor recreation and ecotourism to Florida's economy.

Goal 3-1: Promote the economic benefits of outdoor recreation and ecotourism in Florida.

Strategies:

- 1) State and local governments, tourism organizations and recreation providers should promote the findings of economic impact studies that highlight the importance of outdoor recreation and tourism to Florida's economy.
- 2) State and federal conservation agencies should encourage greater collaboration and interaction with the outdoor recreation industry.
- 3) Agencies should prioritize planning, funding resources and opportunities towards Rural Areas of Opportunity to enable diversification of their economies and to promote outdoor recreation on their public lands.
- 4) Agencies and recreation providers should increase marketing coordination, and should engage destination marketing organizations, regional planning councils and the hospitality industry to stimulate job development in outdoor recreation and to foster unique Florida ecotourism and heritage tourism opportunities.
- 5) Agencies should partner with public and private entities to identify and develop funding sources for outdoor recreation opportunities.

Challenge Task – *In addition to the above recommendations, the following objectives will be accomplished:*

- Outdoor recreation economic impact findings will be distributed to all of Florida's Destination Marketing Organizations.
- A web page will be created that promotes outdoor recreation opportunities within each Rural Area of Opportunity.

Priority Area 4: Resource Management and Stewardship

Summary: Sound resource management policies and continued stewardship of Florida's natural resources are required to maintain public and private lands for both conservation and recreation purposes.

The most basic elements in Florida's outdoor recreation system are public and private lands and waters upon which to recreate. Thanks to a long history of government and private sector acquisition programs, along with good stewardship practices, Florida is blessed with an abundance of natural, historical and cultural resources to enjoy. It is imperative that these resources be interpreted and protected for future generations.



Forest regenerating after prescribed fire, Credit: Connor Howe

Acquisition, Conservation and Restoration

Continued funding to acquire and manage land, and to secure conservation easements to preserve the state's natural and cultural heritage, is crucial to Florida's future. One such effort is being undertaken by a non-profit organization known as the Florida Wildlife Corridor, which champions the public and partner support needed to permanently connect, protect and restore the Florida Wildlife Corridor – a statewide network of lands and waters that benefits wildlife and people. Providers and non-profit organizations should support the Florida Wildlife Corridor's efforts. Similar efforts at the local level



to protect open space should be encouraged and promoted as well.

Opportunities to acquire and restore recreation and conservation land come in many forms. Abandoned golf courses, for example, have excellent potential for local governments and non-profit organizations to conserve wildlife habitat, protect water quality, restore ecological functions and to create new recreational facilities.

Repurposed Land for Conservation and Recreation

South of Englewood (between Sarasota and Fort Myers) along the Gulf Coast lies the Wildflower Preserve, an 80-acre former golf course owned by the Lemon Bay Conservancy (LBC). The LBC purchased the overgrown, abandoned course following the 2008 recession and is actively working to restore the upland

- Florida Wildlife Corridor



In both 2012 and in 2015, Florida Wildlife Corridor staff trekked 1,000 miles across the state to demonstrate the need and opportunity to connect wild places. One of the organization's goals is to accelerate the rate of conservation in Florida by 10% annually to protect 300,000 acres within the Corridor network by the end of 2020. The Corridor includes 9.5 million acres that are already protected, and 6.3 million acres that presently do not have conservation status.⁸⁵





Miami Underline concept. Credit: James Corner Field Operations, courtesy of Friends of the Underline

habitats and wetlands. The LBC established four loop trails and uses volunteers and community groups to manage the property; projects include invasive species control, water quality monitoring, wildlife research and creating a butterfly and wildflower meadow. The preserve is open to the public during special events and during guided nature walks, which are offered seasonally.

Miami’s Underline, a 10-mile linear park, urban trail and art destination broke ground in 2018 and, once completed, will transform underutilized land below Miami’s Metrorail into a world-class trail.⁸⁶ As with New York City’s High Line and Atlanta’s Beltline, the Underline repurposes existing infrastructure and “adapts it into much-needed park space for city dwellers” to exercise and recreate. Once completed, this project will “connect neighborhoods, improve pedestrian and bicyclist safety, create open space, restore natural habitats and create a mobility corridor that integrates transit, car, biking and walking. The Underline also uses green infrastructure to manage storm water, improves urban air quality, mitigates heat and promotes biodiversity.” The Underline will connect to a future 250-mile, countywide trail network as well.

Nathan Benderson Park in Sarasota provides another example of repurposing land for recreation. Once a borrow pit used for road construction fill, the land now hosts a 600-acre park with year-round public access and a 400-acre lake. The Park began hosting regatta competitions in 2009 and is now a world-class rowing, training and recreational facility complete with a 3.5-mile running/biking trail, paddling opportunities and picnic areas.

Goal 4-1: Encourage the conservation and protection of Florida’s natural, historical and cultural resources.

Strategies:

- 1) State and local funding should be made available to maintain and acquire land or secure conservation easements to preserve the state's natural and cultural heritage, conduct environmental restoration and to protect the state’s water resources and supply.
- 2) Public schools in Florida, in partnership with the Department of Education, should continue to integrate environmental education throughout their curricula to increase awareness of the benefits of and threats to Florida’s natural systems, and to foster the next generation of outdoor enthusiasts and outdoor recreation professionals.
- 3) Agencies and local governments should work to reduce the amount of nutrients and pollution that enters Florida's waters through programs that teach citizens about where pollutants come from, and what they personally can do to help.
- 4) Agencies and recreation providers should maximize the use of volunteers to energize their advocacy and stewardship programs, and should coordinate the distribution of information regarding volunteer opportunities to potential volunteer groups.



Environmental and Outdoor Education

Environmental education increases public awareness and knowledge about important issues and emphasizes critical thinking skills so that participants may make informed decisions to solve challenging problems. All age groups may benefit, from young children to senior citizens, and lifelong learning is encouraged.

Topics associated with environmental education are quite broad and include such things as climate change, sea level rise, marine debris monitoring, combating invasive species, urban ecology, sustainability practices and environmental justice issues. Many of these issues impact outdoor recreation as well.

While schools are the ideal place to focus environmental education efforts for children, not all school systems can devote adequate time and resources for environmental education (especially for field trips), given competing priorities and budget constraints. Therefore, school boards and recreation providers must devise additional methods to connect youth to the outdoors and encourage a sense of stewardship. Outside of school, parents and numerous organizations such as faith-based providers, YMCAs/YWCAs and Boys and Girls Clubs can also play a role.

Current federal environmental education initiatives include the U.S. Fish and Wildlife Service's Let's Go Outside! program, the U.S. Forest Service's Junior Forest Ranger and Junior Explorer programs, the National Park Service's Junior Ranger and Young Scientist Programs, and the Hands on the Land (HOL) network, a "national network of field classrooms and agency resources" that connects students, teachers, parents and volunteers with public lands and waterways from Alaska to Florida. The HOL network is a collaboration of five federal agencies, the National Environmental Education Foundation, schools and private sector partners which use hands-on experiences to bring classroom learning to life. Additional funding should be made available to expand the number of schools enrolled in these programs.

Other environmental education initiatives in Florida include FDEP's Junior Ranger Program and Learning in Florida's Environment (LIFE) program, the FWC's Florida Youth Conservation Centers Network (FYCCN), the Get Outdoors Florida! coalition and 4-H programs. Various private and non-profit environmental education programs also exist around the state, such as the E.O. Wilson Biophilia Center in Walton County, which serves 4th and 7th graders from a five-county area, and the Environmental Learning Center in Indian River County, which engages



Environmental education program at Osceola Elementary School, Credit: GTM NERR





Junior Rangers at Kissimmee Prairie PSP, Credit: FDEP



The educational role that parks and conservation lands play as outdoor classrooms for field trips and as outdoor settings for curriculum-based experiences is extremely significant.

1st, 3rd and 4th graders through school field trips. The League of Environmental Educators in Florida (LEEF) website offers resources for educators like Eco-Cognizant’s Schoolyard Nature Study activity guide and the Florida Wildflower Foundation’s Wild About Wildflowers! classroom guide.

Time away from school is similarly influential on a child’s development, and programs which offer enriching outdoor activities to fill this time are beneficial. For example, the FWC’s FYCCN offers summer camps throughout the state, each with numerous conservation-centered recreation activities to choose from. The Hillsborough County Parks and Recreation Department partners with the FYCCN to provide saltwater fishing camps for kids each summer. Other park and recreation departments should partner with the FWC to serve additional youth.

Building skills and relationships with nature through a convenient, close-to-home setting is a good approach to getting youth outdoors. It is important that environmental and outdoor education efforts are not solely focused on youth, however, as family-centered programming will help foster a shared appreciation amongst generations for stewardship of our natural resources. The University of Florida’s Florida Master Naturalist Program and the FWC’s Wings Over Florida bird and butterfly identification program are but two examples that help fill this need; development of similar programs is encouraged.

For managers of natural areas and historic sites,

on-site interpretation is another important tool in the environmental education toolbox. Interpretation essentially connects a visitor’s interests with the meanings and values behind the resource. Outdoor interpretation can take many forms – from signs, guidebooks and other printed media to guided and audio tours to living history demonstrations and ranger programs. Land managers and other providers must make interpretation of our natural, historical and cultural resources a priority if future generations are to understand, appreciate and protect Florida’s treasures.

Stewardship and Advocacy

Taking part in recreation activities and enjoyment of natural resources is only one link in reconnecting people to the outdoors. A strong sense of stewardship, volunteerism and advocacy for both conservation and recreation opportunities brings the participant full circle as they not only enjoy our parks and wild places, but help protect them for future generations. Non-profit organizations, citizen support organizations and user groups are some of the strongest advocates for recreation and conservation, and given sufficient tools and information, they can provide tremendous help in securing support and financial resources.

For example, the Timucuan Parks Foundation (TPF), a Jacksonville-based non-profit organization, works to preserve, promote and protect 23 federal, state and local parks in Duval County. The TPF accomplishes these tasks via fundraising, marketing and advocacy. Among the TPF’s goals are fostering a stewardship ethic for the parks, supporting park partners (National Park Service, Florida Park Service and the City of Jacksonville’s Department of Parks, Recreation and Community Services) and interpreting the region’s unique story.



Timucuan Parks Foundation volunteers, Credit: TPF



Volunteer support is another critical resource for recreation providers. Volunteer programs and citizen support organizations contribute substantially to the management and education activities at numerous parks and conservation areas while connecting people directly with the resources. They also give a significant financial boost to a variety of sports and recreation programs as well.

For example, in 2016-2017, volunteers for the Florida Park Service donated 1.2 million hours, and volunteers for the Florida Forest Service contributed 145,372 hours towards the following categories: recreation/visitor services, emergency incident response, trail building and maintenance, facility maintenance and miscellaneous land activities.⁸⁷ Volunteers for the City of Lake Mary's senior center and recreation programs contributed nearly 1,600 service hours in 2017, a value of \$16,300 (sizable savings for a small city).⁸⁸ Recreation suppliers should continue to provide rewarding and enjoyable experiences to recruit and retain dedicated volunteers, who are invaluable assets even when budgets are not lean.

Resource Management

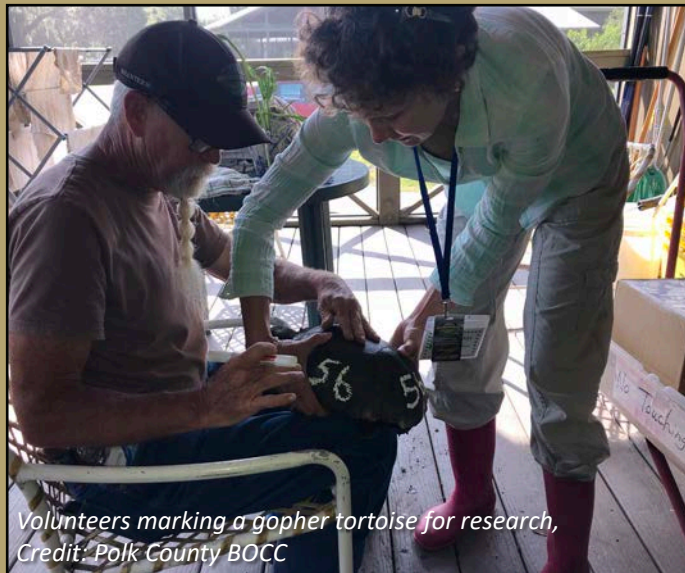


Collecting wiregrass seed for habitat restoration, Credit: FWC

Managing natural and cultural resources requires considerable staff time and funding for both public and private providers of outdoor recreation. Prescribed burning, exotic species removal, imperiled wildlife and plant species monitoring, trail building and trail maintenance, to name but a few examples, are major responsibilities for Florida's land-managing agencies, recreation departments and conservation organizations like The Nature Conservancy.

Land management agencies should continue to set aggressive targets for invasive species removal, prescribed fire management, hydrological restoration and other resource improvement activities. In June 2018, Florida State Parks broke their own record for the total number of acres burned in a single year, and in 2016-2017,⁹⁰ Florida State Parks set new agency records for acres of invasive plants treated and the most acres burned in one prescribed fire.⁹¹

Conservation land managers must also be cognizant of potential impacts to habitats and sensitive species resulting from recreational use, and take the necessary steps to safeguard those resources. Addressing disturbance to wildlife (particularly listed species such as sea turtles and shorebirds), along with illegal taking of plants and looting of artifacts are ongoing challenges. These issues may require the creation of buffer zones or posted areas; reconfiguring recreation use areas; increased educational programming; or increased staff/volunteer presence or law enforcement patrols. Where feasible, recreation suppliers should adopt additional sustainable practices, and explain why these efforts are important. Some suggestions include:



Volunteers marking a gopher tortoise for research, Credit: Polk County BOCC

Volunteers Make a Difference

The 197 volunteers at Circle B Bar Preserve in Polk County contributed 12,760 hours in 2016 by removing exotic plants, staffing the information desk at the nature center, narrating tram tours, helping at educational events for local school children, growing and planting native vegetation for habitat restoration and by participating in wildlife monitoring efforts at the preserve and other sites within the county's 26,000-acre network of environmental preserves.⁸⁹



- Providing more collection stations for trash, cigarette butts, recyclables
- Where fishing occurs, installing collection stations for discarded fishing line
- Providing pet waste disposal bags
- Adopting lighting and energy efficiency measures
- Practicing water conservation measures
- Planting butterfly gardens and landscaping with native plants
- Providing fewer paper brochures/handouts – incorporating more digital media

Florida’s cultural and historical resources span more than 14,000 years, and once lost, are impossible to replace. State agencies and other organizations should continue to work with the Division of Historical Resources to ensure that their cultural and historical resources are protected (to the degree possible), carefully inventoried and properly recorded in the Florida Master Site File as well.

Goal 4-2: Support natural, historical and cultural resource management to ensure high quality outdoor recreation experiences for Florida’s residents and visitors.

Strategies:

- 1) Agencies and other organizations should increase the amount of conservation land and water acreage where invasive species removal, prescribed fire management and hydrological restoration occurs.
- 2) Land managers should adopt best practices that ensure sustainable use of their recreation lands.
- 3) Public agencies and private organizations should continue restoration and rehabilitation efforts for all water bodies, while also highlighting the importance of clean water to outdoor recreation and tourism in Florida.
- 4) Agencies and planning organizations in coastal areas should develop sea level rise adaptation plans that include the protection of natural, historic and cultural resources, along with park and recreation facilities.

Aquatic Resources



Silver Springs State Park, Credit: Tony Cristofano

Much of Florida’s recreation revolves around water, and preserving this essential resource is crucial to the state’s recreation system, not to mention our personal health and the sustainability of our communities. Maintaining freshwater and saltwater resources in a swimmable, fishable condition requires a complex, science-based system of regulatory and enforcement programs, as well as citizen efforts and personal responsibility, to ensure their protection and quality.

Florida’s springs, lakes, rivers and lagoons are immensely popular resources, yet they continue to be threatened by nutrient pollution from excess fertilizer use, septic systems and storm water runoff. Community-based programs which combine education and stewardship opportunities along with regulation and enforcement are necessary to ensure Florida’s waters remain healthy and available for public enjoyment. The City of Tallahassee’s Think About Personal Pollution (TAPP) campaign is a good example that provides numerous ways for residents to protect water quality, starting with their own yards.

Access to Florida’s waters faces increased pressure from shoreline development as both our population and visitation continues to grow. A combined effort by federal, state and local governments is necessary to secure adequate funding for land acquisition, which in turn provides much of the needed recreational access to waters. While the regional analysis of demand and need in this plan is not intended to identify local needs, it is evident that additional infrastructure such as boat ramps, canoe launches, docks, catwalks and piers, as well as support facilities such as parking areas and restrooms, will be required to keep pace with the expected increase in visitation.



SPOTLIGHT



Kissimmee River restoration, Credit: SFWMD

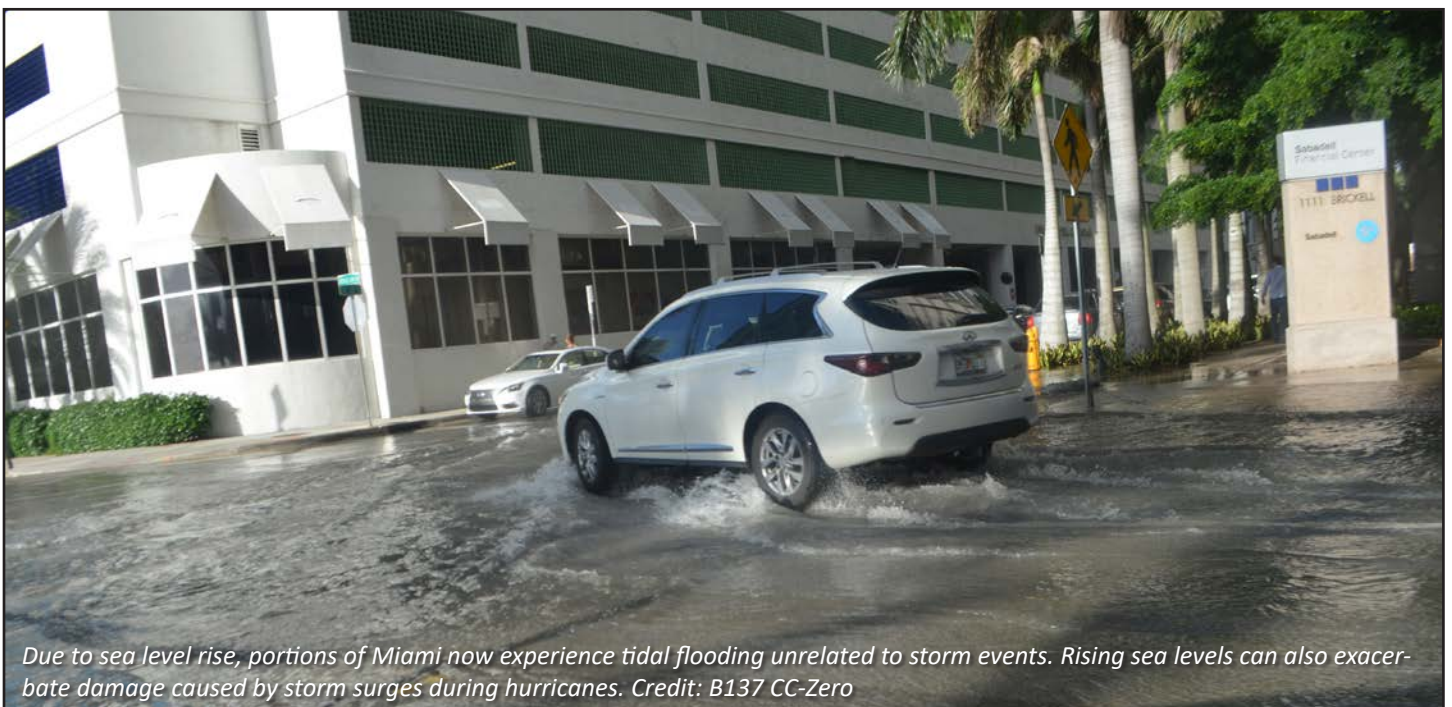
Aquatic Restoration

Although Florida's hydrology was substantially altered in the 19th and 20th centuries by dredging, canal building and development of wetlands, ongoing restoration projects are repairing some of the damage. The Comprehensive Everglades Restoration Project (CERP, see Chapter 3), the world's largest environmental restoration project, aims to restore this "river of grass" and return the flow of water to Florida Bay.⁹² Improved water quality for Lake Okeechobee and the Caloosahatchee and St. Lucie Rivers are also part of CERP. The Kissimmee River Restoration Project, the largest of its type attempted to date, will restore more than 40 square miles of the river's floodplain ecosystem, nearly 20,000 acres of wetlands, and 44 miles of historic river channel by 2020.⁹³ Once completed, these efforts will substantially improve outdoor recreation opportunities including fishing, boating and wildlife viewing in south Florida.

Coastal Planning and Sea Level Rise

Coastal conditions are ever-changing in Florida. Barrier islands, for example, continually gain and lose sand along their beaches, and over time, an island's size and shape will shift. There is increasing evidence, however, that the state's coastal communities will see more dramatic changes in the future. Monitoring gauges stationed around Florida's coasts are documenting slowly rising ocean levels. Some coastal cities such as Miami are already experiencing tidal flooding impacts unrelated to storm events.

Only a handful of Florida's cities and counties have initiated the process of adaptation planning, which is part of a long-term resiliency strategy to ensure that communities, along with their infrastructure, parks and historic sites are prepared for the impacts of sea level rise. Other coastal communities and counties should begin their own adaptation planning efforts to develop and implement policies that will best prepare their citizens and protect their resources and facilities.



Due to sea level rise, portions of Miami now experience tidal flooding unrelated to storm events. Rising sea levels can also exacerbate damage caused by storm surges during hurricanes. Credit: B137 CC-Zero





Following tropical storms and hurricanes, some parks may be closed for extended periods of time, which further impacts local economies. Dr. Julian G. Bruce St. George Island State Park. Credit: Mark Kiser, FDEP

Coastal Resilience

Resilience is the ability to recover or “bounce back” following an incident or natural disaster such as a tropical storm or flood, and to adapt to future conditions such as sea level rise. Depending on the severity of an event, rebuilding and recovery can take months or even years. Careful planning can theoretically shorten this recovery time, however, and better prepare communities in the long term. When communities create an adaptation plan, recreation providers should ensure they have a seat at the table, to ensure that outdoor recreation needs and resources are addressed and protected to the degree possible.

The FDEP’s Florida Resilient Coastlines Program is part of a continuing effort to help ensure collaboration among coastal communities. This program also offers technical assistance and funding to communities dealing with increasingly complex flooding, erosion and ecosystem changes. Staff from FDEP’s Florida Coastal Management Program recently published the Florida Adaptation Planning Guidebook,⁹⁴ which is another helpful resource for decision makers. The guidebook resulted in a 5 year effort by planning experts statewide to identify best practices for coastal resilience planning. This guide includes information about identifying stakeholders, handling public outreach and conducting vulnerability assessments, as well as advice for formulating both adaptation and implementation strategies.

While barrier islands, beaches and coastal wetlands are vulnerable to hurricanes and sea level

rise, they play an important role in protecting the mainland. As such, efforts to preserve and restore them should be increased. Coastal wetlands such as salt marshes, mangrove swamps, mollusk reefs, coral reefs and Keys tidal rock barrens serve as critical buffers against damage to property and infrastructure caused by storms. Adaptation planning can preserve flood-prone lands and allow coastal wetlands to migrate inland, maintaining their protective capabilities and essential ecosystem functions. For more information about Florida’s wetlands, see Chapter 6.



*Riverfront Park, City of Apalachicola,
Credit: Martin Haeusler CC-BY-SA-3.0*

As concerns mount regarding sea level rise, it is important for coastal communities to draft appropriate measures to protect their natural and cultural resources, as well as their infrastructure and recreational amenities. Some cities such as Apalachicola have already begun the adaptation planning process.





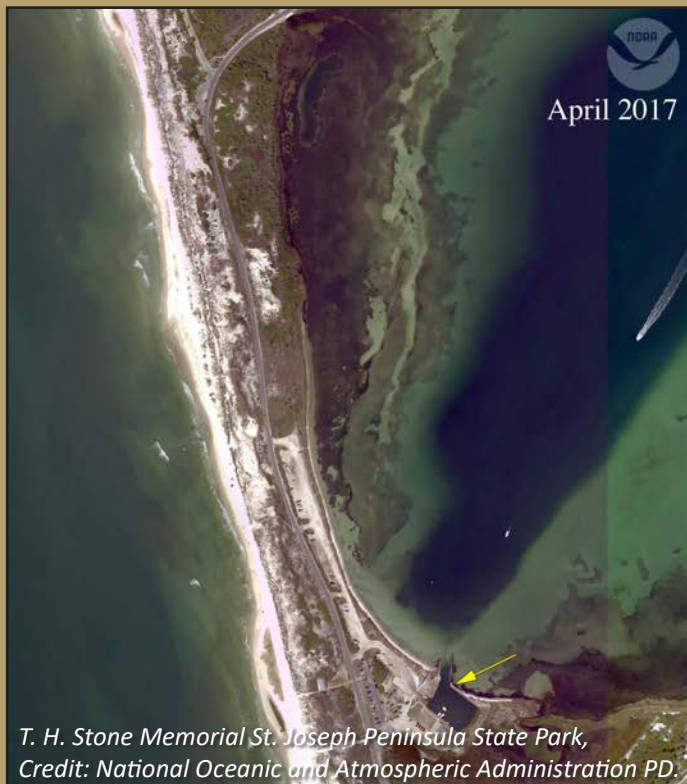
Curtis Hixon Waterfront Park, Tampa. Credit: Barthebuilder CC-BY-SA-3.0

The creation of waterfront parks is another tactic to address the impacts of sea level rise. According to the Naturally Resilient Communities partnership.⁹⁵ “Waterfront parks are communal recreational spaces that are intentionally designed to be flooded with minimal damage during storm or flood events. Waterfront parks are often spaces which were

previously developed...and have suffered repeated flood damage over time and whose original use no longer serves its function.”⁹⁵ Wetlands can be added or enhanced at waterfront parks, and the parks can be designed to divert water to other areas if necessary.

In addition to providing much-needed recreation

— Our Changing Coasts —



T. H. Stone Memorial St. Joseph Peninsula State Park, Credit: National Oceanic and Atmospheric Administration PD.



Beaches, dunes and coastlines may be radically altered following hurricanes; changes due to sea level rise are gradual and much more subtle. Adaptation plans may require that amenities and infrastructure in coastal parks such as roads, boardwalks and campgrounds be re-engineered and relocated. For more information, see floridadep.gov/resilience.

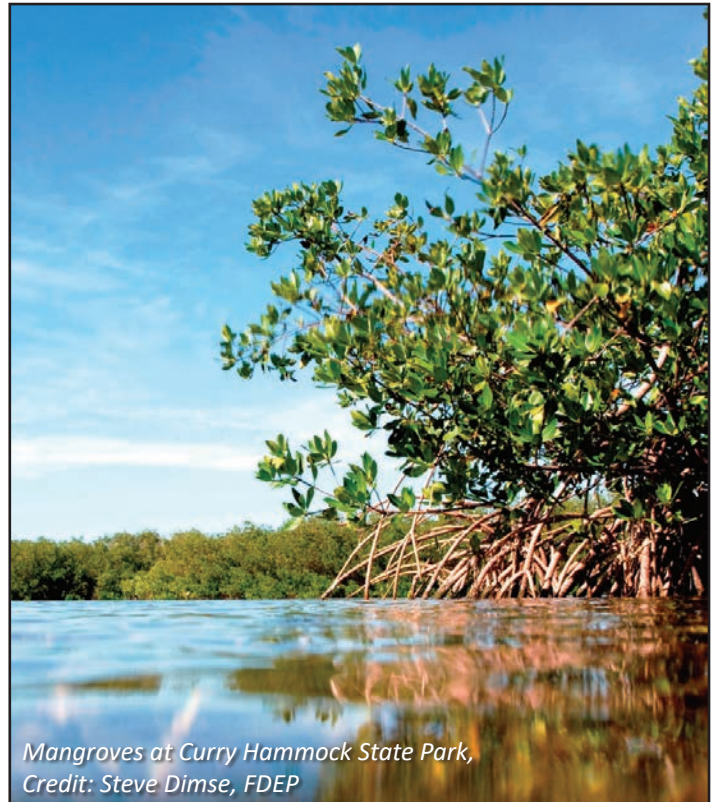


space, waterfront parks can increase the value of adjoining properties as well. To further promote awareness about sea level rise, managers of waterfront and coastal parks could install interpretive panels with information about how people can help, along with elevation markers that indicate projected sea levels at future points in time.

For coastal parks, recreation providers may need to elevate structures and utilities, or to reinforce or relocate them. Parks can also be designed to hold or absorb flood waters, where required. Other measures to guard against future floods and disruption of services may also be necessary. For example, the National Park Service is building structures that can be disassembled prior to a storm and rebuilt later.⁹⁶ The NPS is also considering using ferry services where roads may become submerged at locations such as Gulf Islands National Seashore.⁹⁶

Some coastal areas may suffer less from wind and storm surges than from secondary effects. Saltwater intrusion, for example, can alter natural communities, contaminate drinking water supplies and damage cultural resources such as underground artifacts. Historic preservation professionals should be consulted as needed during the adaptation planning process to determine appropriate protective measures.

Coastal resilience also touches on love of place, and the intertwined park and recreation experiences and emotional ties that people have with their community. This affection for local parks and recreation may also motivate residents to return and rebuild after a catastrophe, whereby the community





Oyster reef construction project, Tampa Bay. Credit: NOAA CC-BY-2.0

Rebuilding oyster reefs, beach and dune restoration and replanting mangroves are just a few examples of shoreline protection activities that can be integrated into adaptation plans.

emerges “stronger and more economically viable than before.”⁹⁷ In addition, recreation centers sometimes are called upon to serve as shelters and supply hubs following natural disasters. Local park and recreation centers can be seen as “safe and convenient places where citizens can feel a little bit of relief following a tragedy.”⁹⁷

Challenge Tasks – *In addition to the above recommendations, the following objectives will be accomplished:*

- Each recreation provider will adopt at least one sustainable practice.
- Additional coastal counties and cities will develop adaptation plans to address sea level rise.

CONCLUSION

As with previous SCORPs, Florida has set ambitious goals for its 2019 plan. Building upon its long history of outdoor recreation planning, the recommendations in this SCORP will enable providers to build a more robust,

balanced and equitable outdoor recreation system for the Sunshine State.

To help implement the plan, FDEP’s Office of Park Planning will reach out to recreation providers at all levels, and will create a new web page dedicated to highlighting how SCORP’s recommendations are being addressed. Many challenges remain, and more work needs to be done to tackle the recreation-related issues identified in the 2019 plan, including improving park equity and access for all; securing funding for programs, maintenance and acquisition needs; and safeguarding our natural, cultural and historic resources for future generations.

Outdoor recreation in Florida deserves to be recognized for its contributions to our quality of life and for the substantial economic engine that it is. Florida’s recreation providers continue to demonstrate that quality parks, trails and green space are necessities rather than luxuries. The ideal outdoor recreation system that Florida envisions, however, cannot be achieved until everyone has access to a wide variety of outdoor opportunities close to home. Florida’s outdoor recreation professionals stand ready to meet this challenge and to help implement the 2019 SCORP.



“Leave all the afternoon for exercise and recreation, which are as necessary as reading. I will rather say more necessary because health is worth more than learning.” - Thomas Jefferson



T.H. Stone Memorial St. Joseph Peninsula State Park, Credit: Stephanie McLeish



Assessment and Protection of Wetlands

Lake Louisa State Park, Credit: Jennifer Workman

The Emergency Wetlands Resources Act of 1986 (PL 99-645), requires each state comprehensive outdoor recreation plan to include a component that identifies wetlands as a priority concern within that state. To fulfill these requirements, sections of Florida's 2016-2020 Coastal Zone Management Act (Section 309 Assessment and Strategies) and information from the Florida Department of Environmental Protection (FDEP) Office of Submerged Lands and Environmental Resources are used. This chapter identifies Florida's wetlands communities, discusses major threats and describes the state's current wetlands protection programs and efforts.

Introduction

Given their many economic, environmental and aesthetic benefits, wetlands are some of Florida's most important natural resources. Not only do wetlands protect against storm surge, flooding and erosion, they filter pollutants, reduce siltation of rivers and lakes, furnish food and habitat for wildlife and provide ideal places for a multitude of outdoor recreation activities. Wetlands also contribute to Florida's scenic beauty – from majestic bald cypress swamps to tranquil salt marshes. As some of the most biologically productive ecosystems on Earth, wetlands serve as valuable nurseries for fish and shellfish that are vital to Florida's seafood industry. In light of their importance, and the significant threats they face today, numerous agencies,

organizations and citizens are making concerted efforts to safeguard Florida's wetlands for the future.

Type and Extent of Florida's Wetlands

Prior to European settlement, Florida contained an estimated 20.3 million acres of wetlands covering approximately 48% of the state's total land surface.⁹⁸ Once viewed as useless wastelands, development of wetlands occurred virtually unchecked during much of the 19th and 20th centuries. As a result, almost half of Florida's wetlands have been lost since 1845.⁹⁸ Beginning in the early 1970s, however, passage of federal and state legislation brought increased protection for wetlands and surface waters. Among the most important legislation for Florida wetlands protection were the Federal Clean Water Act in 1972, the Warren S. Henderson Act of 1984 and the Environmental Resource Permitting rules in 1995, all of which significantly slowed Florida's loss of wetland acreage.

As of 1996, Florida contained approximately 11.4 million acres of wetlands covering 29% of the total land area.²⁴ Ninety percent (90%) of those wetlands were freshwater, including approximately 49% forested wetlands (swamps), 23% emergent (marshes and sloughs), 16% shrub and 2% ponds. The other 10% were marine and estuarine wetlands.²⁴ Table 6.1 shows the wetland types of Florida and their ranges, and Table 6.2 shows the extent (acreage) remaining as of 1996. Figure 6.1 portrays the wetland acreage lost, created, improved and preserved from 2011 to 2016.



Wetland Types of Florida

Table 6.1

Wetland Type	Florida Range
FRESHWATER NON-FORESTED WETLANDS	
<i>PRAIRIES AND BOGS</i>	
Seepage Slope	Panhandle and North FL
Wet Prairie	Statewide except extreme South FL
Marl Prairie	Extreme South FL
Shrub Bog	Statewide except extreme South FL
<i>MARSHES</i>	
Depression Marsh	Statewide
Basin Marsh	Statewide
Coastal Interdunal Swale	Portions of Panhandle, Gulf and Atlantic Coasts
Floodplain Marsh	Statewide south to Lake Okeechobee
Slough Marsh	Central and South FL
Glades Marsh	South FL
Slough	Statewide
FRESHWATER FORESTED WETLANDS	
<i>CYPRESS/TUPELO</i>	
Dome Swamp	Statewide except FL Keys
Basin Swamp	Statewide south to Lake Okeechobee
Strand Swamp	South FL
Floodplain Swamp	Statewide along river systems
<i>HARDWOOD</i>	
Baygall	Statewide along river systems
Hydric Hammock	Statewide south to the Everglades
Bottomland Forest	Statewide
Alluvial Forest	Panhandle; scattered areas in peninsula south to Lake Okeechobee
MARINE AND ESTUARINE VEGETATED WETLANDS	
Salt Marsh	Coastal areas statewide, except portions of South FL
Mangrove Swamp	Gulf Coast: Cedar Key and southward; Atlantic Coast: Volusia County and southward
Keys Tidal Rock Barren	FL Keys
LACUSTRINE	
Clastic Upland Lake	Statewide
Coastal Dune Lake	Coastal areas of Western Panhandle
Coastal Rockland Lake	FL Keys
Flatwoods/Prairie Lake & Marsh Lake	Statewide
River Floodplain Lake & Swamp Lake	Statewide
Sandhill Upland Lake	Statewide
Sinkhole Lake	Karst regions statewide



Wetland Types of Florida

Table 6.1

Wetland Type	Florida Range
RIVERINE	
Alluvial Stream	Mostly Northern Panhandle
Blackwater Stream	Statewide
Seepage Stream	Mostly North FL
Spring-run Stream	Statewide
MARINE AND ESTUARINE	
<i>MINERAL BASED</i>	
Consolidated Substrate	Coastal areas
Unconsolidated Substrate	Coastal areas
<i>FAUNAL BASED</i>	
Coral Reef	Gulf Coast: Tarpon Springs and southward; Atlantic Coast: Cape Kennedy and southward
Mollusk Reef	Coastal areas
Octocoral Bed	Coastal areas
Sponge Bed	Coastal areas, mostly South FL
Worm Reef	Coastal areas of South FL
<i>FLORAL BASED</i>	
Algal Bed	Coastal areas, extent not well known
Seagrass Bed	Coastal areas
<i>COMPOSITE SUBSTRATE</i>	
Composite Substrate	Coastal areas

*Source: Florida Natural Areas Inventory: 2010 Natural Community Guide²⁹



Troy Spring State Park, Credit: Jeanette Ciesla



Table 6.2 - Extent of Florida's Wetlands

Freshwater - 10.3 Million Acres	Marine and Estuarine – 1.1 million acres
Forested – 5.6 million acres	Salt marsh, mangrove swamp and Keys tidal rock barren, combined – 1.1 million acres <i>*1996 data; figures are approximate²⁴</i>
Emergent – 2.6 million acres	
Shrub – 1.8 million acres	
Pond – 0.3 million acres	

The data do not provide a full picture of wetland gains and losses in Florida. This is because those status and trends reports, based on permitting data, do not account for:

- Wetland losses from exempt activities (for which work may occur without notice to the agencies) or activities qualifying for general permits. This is particularly significant considering wetland losses from exempt agricultural activities.
- Unauthorized dredging and filling.
- Whether the dredging, filling or mitigation, once permitted, was ever implemented.
- Whether the permitted mitigation was successful or the degree of success.

Florida's Wetlands 2011-2016: Gains & Losses

The FDEP and Florida's five water management districts track the acreage of wetlands permitted to be dredged, filled and mitigated through their permit application tracking systems. Wetland status reports are prepared annually. The results for 2011-2016 are as follows:

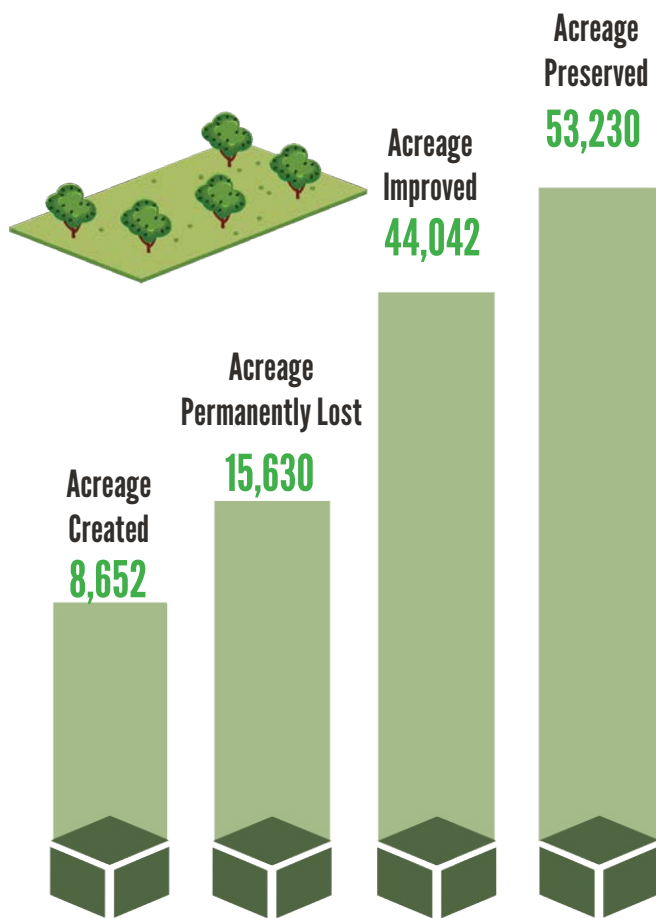


Figure 6.1



The reported data also do not account for the gains or losses of wetland functions. They do not, for example, provide status and trends for:

- Wetland acreage degraded by drainage or impoundment.
- Wetland acreage degraded by exotic infestation.
- Wetland acreage restored or in need of restoration.



Today's federal dredge and fill program and the statewide environmental resource permitting (ERP) program work toward a goal of no net loss of wetland functions. To obtain a dredge and fill or ERP permit, an applicant must eliminate or reduce their wetland impacts to the greatest extent practicable, and then provide mitigation to offset any loss of wetland functions that cannot be avoided. Wetland functions include flood storage; fish, wildlife and listed species habitat; and water quality. Mitigation may include creation, enhancement, restoration or preservation of wetlands that provide similar functions to those that are lost through development.

Wetland functions are different than wetland acres. Wetland functions are assessed using a rapid assessment method called the Uniform Mitigation Assessment Method (UMAM). The UMAM is used to determine the amount of wetland functions that will be lost through permitted impacts, and to determine the amount of wetland functional gain that can be expected to be provided through mitigation. Often, more acres of wetland creation, enhancement, restoration or preservation are required to be provided as mitigation than acres lost.

Enhancement, restoration or preservation of existing wetlands may not increase the number of acres of wetlands in Florida, but may provide higher quality functions instead. Wetland creation

as mitigation is often discouraged, because creation carries a high risk of failure. This type of assessment makes it difficult or impossible to track the actual number of wetlands lost or gained through permitting with any statistical accuracy. In addition, many activities in wetlands are exempt from permitting, or are minor activities that qualify for general permits without mitigation requirements. The wetland acreage lost through these exempt or minor activities is not tracked by agencies.

Increasing human populations will of course result in increased water withdrawals. According to the Florida 2060 Report (produced for the 1000 Friends of Florida), the state's population is projected to more than double by 2060.⁹⁹ Consequently, without significant policy changes, the additional land devoted to urban use will also more than double. If 7 million acres of additional land are converted to urban use, then 2.7 million acres of agricultural land along with an additional 2.7 million acres of native habitat will be lost.⁹⁹

Wetland losses in Florida's coastal areas are expected to persist due to the continuation of permitted impacts. Development of uplands in coastal zones continues to fragment remaining wetlands and other habitat types. Mitigation has often occurred in areas of lower land value inland from permitted impacts.



Troy Spring State Park, Credit: Jeanette Ciesla



Monitoring Efforts



Arthur Marshall Loxahatchee National Wildlife Refuge, Credit: FWC

The Florida Geological Survey (FGS) conducts field work to characterize the interaction of coastal wetlands with groundwater and the near-shore environment, with special emphasis on karst settings. This activity is largely research-oriented and its continuation will depend upon the availability of research funds, primarily from federal sources. Another FGS effort is the maintenance of a downloadable database known as the Subsidence Incident Report. This project tracks sinkholes and other subterranean events, and is expected to continue for the foreseeable future.

Florida's three National Estuarine Research Reserves (NERRs) – Apalachicola, Guana Tolomato Matanzas and Rookery Bay - map and monitor the resources within their designated areas. Several of the state's aquatic preserves also regularly monitor seagrass and water quality within their boundaries.

The Florida Fish and Wildlife Conservation Commission (FWC), in partnership with FDEP's Office of Resilience and Coastal Protection (ORCP), has completed extensive mapping projects in southeast Florida, the Dry Tortugas, Biscayne National Park and the Florida Keys National Marine Sanctuary. Now a more robust and comprehensive dataset is available for resource managers, stakeholders and the public.

This multiyear project was funded using Coastal Zone Management (CZM) 309 funds.

The Florida Department of Transportation (FDOT) provides mitigation for unavoidable wetland impacts in accordance with Section 373.4137, Florida Statutes. This statute requires FDOT to provide mitigation through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements. When mitigation bank credits are not available for a project, FDOT funds mitigation services through the state's water management districts. For example, the Northwest Florida Water Management District (NFWFMD) offers mitigation services, as an option, to the FDOT for transportation projects with wetland impacts, when the use of mitigation banks is not feasible.

The NFWFMD created a regional Umbrella Mitigation Plan to address FDOT mitigation needs. Components of the Umbrella Plan include the Sand Hill Lakes Mitigation Bank (NFWFMD owned and managed), the In-Lieu Fee Program and other mitigation projects. Since 1997, the NFWFMD has implemented 31 projects across the Florida Panhandle.¹⁰⁰ In rare circumstances, the FDOT will restore or create wetlands as mitigation for a project when no other mitigation option is available.



Significance of Threats to Florida's Wetlands

Type of Threat	Severity of Impacts (H,M,L)	Geographic Scope of Impacts	Irreversibility (H,M,L)
Development/Fill	H	Extensive	M
Alteration of hydrology	M	Extensive	M
Erosion	M	Extensive	M
Pollution	M	Extensive	M
Channelization	M	Limited	M
Nuisance or exotic species	M	Extensive	M
Freshwater input	M	Limited	M
Sea level rise	H	Extensive	H
Other (Changing rainfall patterns due to climate change)	Unknown	Unknown	Unknown
Other (Ditching)	Unknown	Unknown	Unknown
Other (Transport of river/surface water out of watersheds for consumptive use)	M	Extensive	L
Other (Use of natural wetlands as storm water holding areas)	M	Unknown	L
Other (Fragmentation)	H	Extensive – sprawling development patterns	H
Other (Onsite sewage treatment and disposal systems)	H	Extensive	L
Other (Agriculture)	H	Extensive	M



Significance of Threats to Florida's Wetlands

Threats to Florida's wetlands are both natural and anthropogenic (see Table 6.3). The predominant sources of naturally-caused impacts are tropical storms, hurricanes, sinkholes and subsidence. Human-caused threats include excessive withdrawal of ground water, mining, toxic spills, runoff, boating activities and development in vulnerable areas. Development can result in multiple impacts such as paving of groundwater recharge areas, increased water usage, and increased runoff containing nutrients, bacteria, pesticides, fertilizers and other chemical pollutants.

Agricultural runoff, along with septic tanks and lawn nutrients, have been a major cause of algae blooms and changes to wetland plant communities and habitat types because of added nutrients. The continued use of natural springs by the bottled water industry is expected to put additional demand on groundwater supplies, eventually lowering water levels in aquifers that, in turn, play a critical role in maintaining the health of wetlands.

Of critical importance in addressing the issues outlined above is the need to develop a water budget for Florida's coastal watersheds. Water budgets are essential for the effective implementation of environmental regulatory programs such as Minimum Flows and Levels (MFL) and Total Maximum Daily Loads (TDMLs) for these watersheds.

The rating for alteration of hydrology is based upon the prevalence of mosquito and drainage ditches in certain areas. These impacts are less severe in other areas. Isolated and ephemeral wetlands, especially in pine flatwoods and sandhills, are important breeding sites for amphibians, including the flatwoods salamander, striped newt, gopher frog and chorus frogs. Isolated and ephemeral wetlands are often overlooked as resources important to wildlife and may be degraded or lost through fire suppression, logging, ditching and other hydrological alterations. For example, wetlands may be lost due to draw-down of aquifers from development, agriculture and industry.

Loss of seasonal flooding alters plant composition; future impacts may continue from changes in rainfall patterns due to climate change. Karst (limestone) wetlands, including freshwater caves and sinkholes that connect to underground aquifers are habitat for rare species (crayfish, cave shrimp, isopods, amphipods and cave salamanders). Wildlife associated with karst features are threatened by changes in water quality (surface-derived contaminants and siltation) and quantity (groundwater removal to support development and agriculture). Coastal wetlands may be threatened by saltwater intrusion due to sea level rise and groundwater removal.



Silver Springs State Park, Credit: Sabrina Snyder



Wetlands Management Programs and Efforts

Management Categories	Employed by State (Y or N)	Significant Changes Since Last Assessment (Y or N)
Wetland regulatory program implementation, policies and standards	Y	Y
Wetland protection policies and standards	Y	Y
Wetland assessment methodologies (health, function and extent)	Y	N
Wetland restoration or enhancement programs	Y	Y
Wetland policies related to public infrastructure funding	Y	N
Wetland mitigation programs and policies	Y	Y
Wetland creation programs and policies	Y	N
Wetland acquisition programs	Y	N
Wetland mapping, GIS and tracking systems	Y	N
Special Area Management Plans	Y	Y
Wetland research and monitoring	Y	N
Wetland education and outreach	Y	Y



Wetland Regulatory Program Implementation, Policies and Standards

The statewide environmental resource permitting program came into effect on October 1, 2013. Isolated wetlands became protected statewide when the Northwest Florida ERP program came into effect in 2010. Prior to 2010, impacts to isolated wetlands in northwest Florida were not regulated. The legislature directed the Florida Department of Environmental Protection (FDEP) to roll the northwest ERP and ERP in the rest of the state into a statewide environmental resource permitting program. The entire state now uses Chapter 62-330, F.A.C. to regulate wetland impacts. Amphibians that use ephemeral and isolated wetlands for breeding now benefit from this statewide protection effort. See Table 6.4 for more information about Florida's wetlands management programs.

Wetland Restoration and Enhancement Programs

The Florida Coastal Management Program (FCMP) has partnered with several state and local programs using Section 306 CZM funds to undertake various wetland restoration projects. The FDEP's Northwest Florida Aquatic Preserves (NFAP) are restoring submerged aquatic

vegetation (SAV) populations in the Panhandle region through the utilization of salvaged and laboratory-grown SAV materials. Salvaged SAV is acquired only from marine construction activities that are exempt from regulation or have met applicable permits for avoidance and minimization.

The SAV salvage program has obtained 12-inch seagrass cores from dock and pier construction projects for restoration purposes since 2006. Widgeon grass (*Ruppia maritima*) is propagated at the NFAP laboratory and planted at restoration sites.

Since 2005, FDEP's Division of Recreation and Parks has continued seagrass restoration activities in the 10,000-acre Lignumvitae Key Submerged Land Managed Area to restore habitat damaged by boat groundings. In addition to restoration measures at 26 sites, the park continues to maintain navigation markers and "No Motor Zone" signs where needed. Additional law enforcement presence on the water acts as a preventive measure and aids in the protection of the park's submerged communities. Education also plays an important role in the protection of this habitat. Park staff is involved with the Seagrass Outreach Partnership, a consortium of government, non-government, private and local citizens whose goal is educating the public on the importance of protecting Florida's seagrass beds.

Another effort to protect coastal wetlands is the Pensacola Bay Living Shoreline Project, a joint effort between the Deepwater Horizon Natural Resource Damage Assessment Trustees (including FDEP) and the National Oceanic and Atmospheric Administration. The FDEP will use living shoreline restoration techniques to provide shoreline habitat and reduce erosion at the Project GreenShores Site II within Pensacola Bay.¹⁰¹ Approximately 6 to 8 acres of salt marsh habitat and 4 acres of reef habitat will be created along this urban shoreline; completion is expected in 2019.

The FWC's Florida Wildlife Research Institute (FWRI) has continued development of the Seagrass Integrated Mapping and Monitoring (SIMM) Program to enable resource managers to track changes in the distribution, abundance and species composition of seagrass meadows around the state. Approximately 2.4 million acres of seagrass have been mapped in estuarine and nearshore Florida waters as of 2015.¹⁰² Several aquatic preserves on both coasts of Florida are conducting sampling and supplying data from within their preserves to this FWC program.



Students visit a FDEP project in Niceville as part of the Choctawhatchee Basin Alliance's educational programs. Credit: Northwest Florida Aquatic Preserves, FDEP



Elements of the SIMM program include:

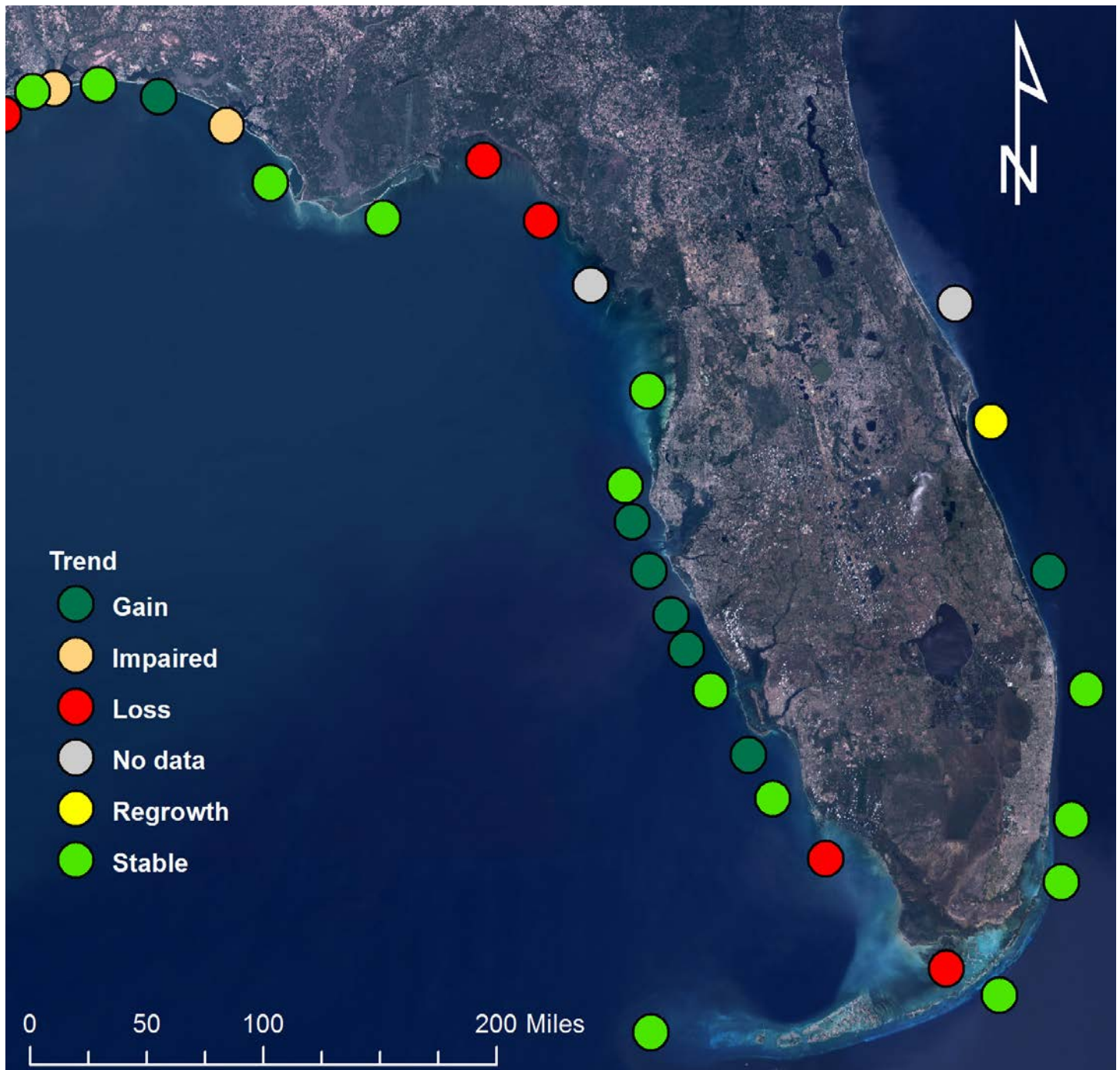
- Mapping all seagrasses in Florida waters every six years (or less).
- Annual monitoring of seagrasses throughout Florida.
- Publishing a comprehensive report every two years.

Future SIMM reports will combine site-intensive monitoring data and trends with statewide estimates of seagrass cover and maps showing seagrass gains and losses. Figure 6.2 shows current trends for seagrass acreage in Florida.¹⁰²

Significant changes to seagrass beds continue along portions of Florida's coasts due to extensive population growth, increased recreational boating and effects from multiple hurricanes and tropical storms. Overall, however, seagrass acreage increased from 2013 to 2016 by approximately 13.8 percent; Tampa Bay and Pensacola Bay showed the greatest improvement. Florida's seagrasses provide ecological services worth more than \$20 billion annually.¹⁰²

Trends in Seagrass Acreage in Florida Coastal Waters

Figure 6.2



Special Area Management Plans



Dr. Von D. Mizell - Eula Johnson State Park; Credit: Jon-Paul Carew

The FDEP's Office of Resilience and Coastal Protection (ORCP), in cooperation with the National Oceanic and Atmospheric Administration, manages 41 aquatic preserves, three National Estuarine Research Reserves and the Florida Keys National Marine Sanctuary, totaling more than four million acres of sovereign submerged lands and select coastal uplands. The ORCP manages and restores submerged and upland resources through adaptive, science-based resource management programs such as prescribed burning, removal of invasive species, re-vegetation and restoration of degraded habitats and water regimes. The ORCP also conducts applied coastal research to contribute valuable knowledge that addresses ORCP's management program needs and those of the coastal and ocean science community at large.

Management plans for each of ORCP's areas have either been recently updated or are in the process of being updated. Updates are based on data and information on current ecosystem health, land use, water resource management, human activities and geophysical conditions affecting the managed areas. The management plans identify issues effecting the managed area and strategies to address those issues within a ten-year timeframe. Public involvement in the management plan development process is extremely important and a valued component to the process.

Wetland Education and Outreach



Credit: Apalachicola National Estuarine Research Reserve

Education and outreach are just as critical to the protection of Florida's wetlands. If the public are not cognizant of the importance of wetlands to our economy and environment, and to our health and well-being, then protection efforts will face additional challenges. Fortunately, there are numerous agencies and organizations working to raise awareness and appreciation of wetlands; below are a few examples.

At Audubon Florida's Corkscrew Swamp Sanctuary, a 14,000-acre Ramsar Designated Wetland of International Importance, naturalists and partner educators take elementary school and university students through a unique outdoor classroom to study and explore this exemplary conservation area. The sanctuary includes wet prairie, freshwater marsh and the largest intact stand of virgin bald cypress in the U.S.¹⁰³ Staff and volunteers also provide guided walks, and interpretive programs for adults at the sanctuary's nature center. Other non-profit organizations, like the Conservancy of Southwest Florida and the Environmental Learning Center, also have nature centers and educational programs about wetlands for kids and adults, along with summer camp experiences for youth. They also offer a variety of guided walks, canoe/kayak tours and ecotours by pontoon boat.

Both the National and the Florida Park Service's missions include interpreting natural and cultural resources, and wetlands are an important focus of





Outstanding Florida Waters are designated as worthy of special protection because of their natural attributes. These special designations protect existing good water quality. Florida depends on clean, healthy and abundant water resources. Rainbow Springs State Park, Credit: KossinaCreative

those efforts. On-site interpretive programs, guided walks as well as educational kiosks and panels provide park visitors with a plethora of natural history information on everything from springs to wetland plants to wildlife. Naturalist-led swamp walks at Big Cypress National Preserve and at Fakahatchee Strand Preserve State Park (which protects the world’s largest strand swamp) are but one way for visitors to literally “immerse” themselves in learning about Florida’s wetlands (“high and dry” tram and boardwalk tours are also available for the less adventurous).

The St. Johns River Water Management District (SJRWMD), through its Blue School Grant Program, awards funding to middle and high school teachers to enhance student knowledge of Florida’s water resources through hands-on learning. The University of Florida’s Institute of Food and Agricultural Sciences (IFAS) Extension makes available a series of educational materials for teachers and students, including activities for classrooms and outdoor settings, such as Project WET and the USGS’ The Fragile Fringe – A Guide for Teaching About Coastal Wetlands.

The IFAS Extension service also offers the Florida Master Naturalist Program (a statewide, adult education program), with courses in freshwater and coastal wetlands. These courses are taken by resource management professionals, volunteers and ecotourism guides, all of whom help interpret the

significance of Florida’s wetlands to the public. All three Florida NERRs offer a Coastal Training Program (CTP) designed to help natural resource professionals, leaders and other attendees make informed, science-based decisions regarding coastal resources. Single-day classes and multi-day workshops cover topics such as best management practices, coastal community resilience, watershed planning, stormwater management and ecosystem studies. The CTP also fosters networking and collaboration between stakeholders across each region. The FCMP has provided Section 306 funds to assist in CTP activities.

Priority Needs and Information Gaps

In Table 6.5, major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) are described regarding enhancement area objectives proposed by the Coastal Management Program and its partners.

While the state’s regulatory program is effective in protecting wetlands, several needs have been identified that should be addressed to provide a comprehensive wetlands protection effort. For example, one major gap is a lack of consistent wetland survey and mapping. Wetlands also provide essential habitat for threatened and endangered species, which continue to be impacted by habitat loss.



Priority Needs and Information Gaps

Gap or Need Description	Type of Gap or Need	Level of Priority (H, M, L)
Statewide estuarine habitat restoration and guidance	Data, policy, communication and outreach	H
Sediment loss or gain in estuaries	Data	H
Mapping of sea floor features	Data	M
Mapping of conduits	Data	H
Research on forest response to saltwater intrusion	Data	M
Statewide protection of isolated and ephemeral wetlands for amphibians	Regulatory, policy, communication and outreach	M
Protection of karst wetlands	Data	M
Improve understanding of links between groundwater withdrawals and wetlands	Data/research, regulatory and communication/outreach	H
Research and specify Florida-specific riparian buffer zone BMPs: tiered according to terrain, gradient, soil type, vegetative cover, stream flow and proximity to imperiled or declining species of wildlife or fishes	Regulatory, communication and outreach	H
Statewide periodic coastal wetland resource surveys (sea grass, mangrove, corals, etc.)	Data	H
Restoration-specific facilitated permitting criteria (living shoreline, hydrology reconnections, etc.)	Regulatory	M
Climate change and coastal resource retreat policy	Policy	M
More frequent and detailed wetland mapping	Data and capacity	H
Assessment of health, status and trends	Data and capacity	H
Uniform Mitigation Assessment Method (continue staff training)	Training	M
Train and support government entities to set up Regional Off-site Mitigation Areas	Training, regulatory, communication and outreach	H
Protection and restoration of coastal upland habitats that affect coastal waters and wetlands through storm-water runoff and nonpoint source pollution	Regulatory and planning	H
State and federal mapping and monitoring of cumulative wetland impacts and mitigation	Regulatory, data and research	M
Modified Critical Lands and Waters Identification Project (CLIP) for coastal lands in need of acquisition or conservation	Identification	H



Wetlands protection continues to be a high priority in the state. Florida has a comprehensive state regulatory program that regulates most land (upland, wetland and other surface water) alterations throughout the state. The regulatory program also includes a State Programmatic General Permit from the U.S. Army Corps of Engineers along with implementation of a statewide National Pollutant Discharge Elimination System program. In addition, activities located on or using state-owned submerged lands also require applicable proprietary authorizations (including Consent, Leases and Easements).

Florida does not have a goal of no net loss or gain of wetland acreage. However, the regulatory rules are written so as to be implemented in a manner that achieves a programmatic goal, and a project permitting goal, of no net loss in wetland or other surface water functions (not including activities that are exempt from regulation or that are authorized through a general permit).

Although a variety of public and private estuarine habitat restoration activities (submerged aquatic

vegetation, oyster reef, salt marsh, mangroves, coral reef) occur in Florida primarily as stand-alone or regional efforts, Florida had lacked a statewide planning and guidance document focused on coordinated estuarine habitat restoration. As a collaborative effort, the SJRWMD, the ORCP and the FWC staff developed a statewide planning and guidance document focused on coordinated estuarine habitat restoration called Estuarine Habitat Restoration Planning Guide for Florida (Guide).

The Guide provides a basic planning and guidance template for estuarine habitat restoration that can be used throughout Florida. The restoration team then tested the Guide through the preparation of the Northeast Florida Estuarine Habitat Restoration Plan. It followed a vision-based planning approach in which the stated mission, vision and goals established were used to develop applicable objectives and strategies. The Guide can now be utilized in other regions to develop regional specific restoration plans. The development of the Guide and Plan was funded through CZM 309 funds.



A limpkin forages for snails at Wekiwa Springs State Park, Credit: Meryl Green



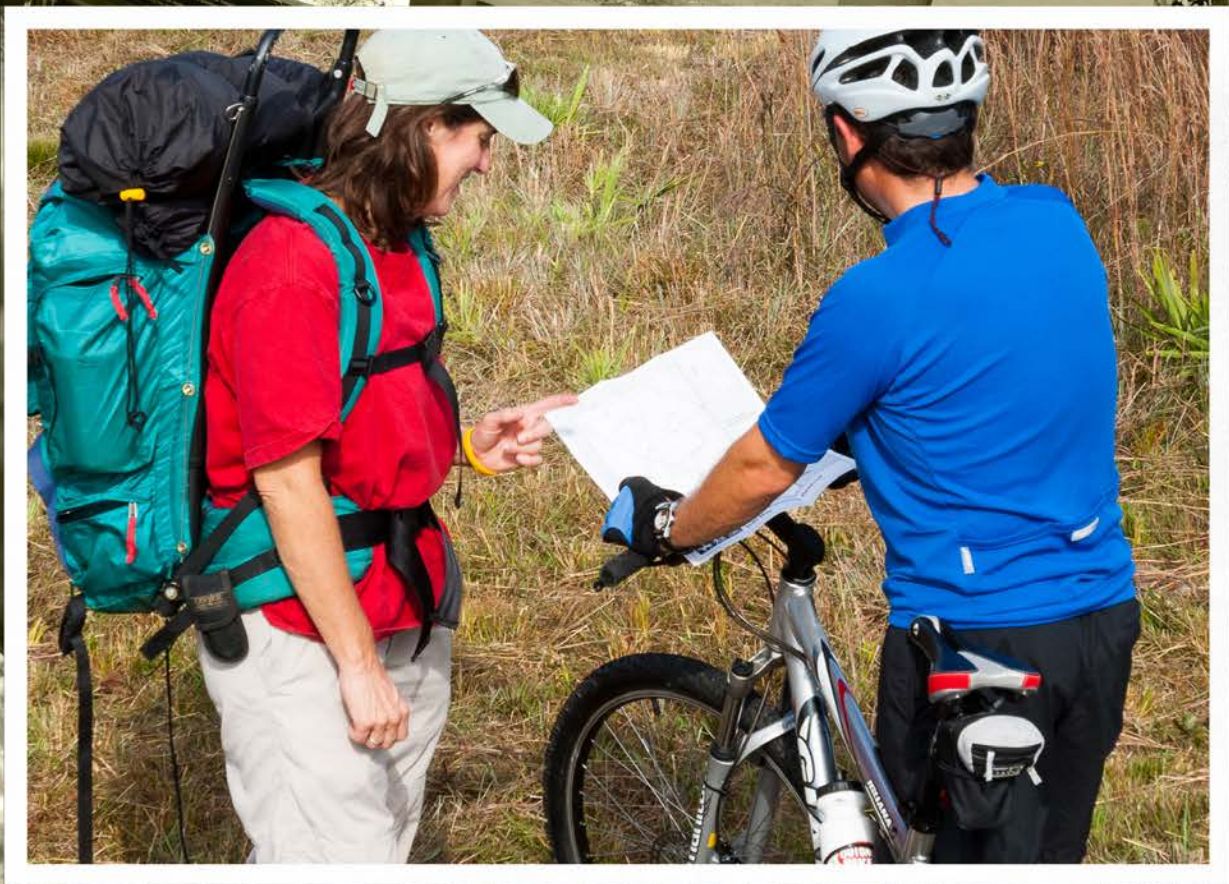
"Water is life, and clean water means health."

- Audrey Hepburn



Wes Skiles Peacock Springs State Park, Credit: Jill Heinerth





SCORP