



PALATKA-TO-LAKE BUTLER STATE TRAIL

Trail Chapter

NORTHEAST DISTRICT TRAIL SYSTEM

TABLE OF CONTENTS

Palatka-to-Lake Butler State Trail

Trail Chapter

Introduction	1
Location and Acquisition History	1
Secondary and Incompatible Uses	1
Purpose and Significance of the Park	2
Other Designations	3
Park Accomplishments	3
 Resource Management Component	4
Topography	4
Soils	4
Hydrology	9
Natural Communities	10
Imperiled Species	13
Invasive Species	15
Cultural Resources	18
Special Management Considerations	21
 Land Use Component	22
Visitation	22
Existing Facilities and Infrastructure	22
Conceptual Land Use Plan	23
Optimum Boundary	29

Palatka-to-Lake Butler State Trail

Planning Region: Trail System

County: Bradford, Clay, Putnam, and Union

Lease/Management Agreement Number: 4338

Overview: Designated as a National Recreation Trail and a key component in the Florida Greenways and Trails System, the Palatka-to-Lake Butler State Trail preserves and restores a historic railroad route and the natural and cultural values of the property. The trail repurposes this corridor as a healthy mode of transportation from Palatka to Lake Butler, enhancing the quality of life for visitors and nearby communities.

Total Acreage: 613.94

Altered Landcover	Acres
Developed	613.94

Acquisition: The Palatka-to-Lake Butler State Trail was initially acquired on Feb. 26, 2001, with funds from the Land Acquisition Trust Fund program. Currently, the trail comprises 613.94 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the trail and on July 16, 2002, the Trustees leased (Lease No. 4338) the property to the Division of Recreation and Parks (DRP) under a 50-year lease. The current lease will expire on July 15, 2052.

Resource Management Component

Hydrology

- Conduct/obtain an assessment of the park's hydrological restoration needs.

Imperiled Species

- Develop/Update baseline imperiled species occurrence inventory lists.
- Monitor and document 1 selected imperiled animal species (gopher tortoise).
- Monitor and document 1 selected imperiled plant species (Rainlily (*Zephyranthes atamasca*)).

Cultural Resources

- Assess and evaluate 2 of 13 recorded cultural resources in the park (GS & F Railroad Bridge 1 (PU01621) and GS & F Railroad Bridge 2 (PU01622)).
- Compile reliable documentation for all recorded historic and archaeological resources.
- Bring 1 of 13 recorded cultural resources into good condition. Regularly monitor the rail bed to check for possible erosion sites.

Land Use Component

Conceptual Land Use

General Trail Needs

- Create an interpretive plan that enhances wayfinding and sense of place.
- Comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- Rebuild the New River Bridge.
- Pave the entire trail.
- Consider removing wooden fencing.
- Prevent unauthorized entry points.
- Install 911 emergency system.

Support Areas

- Conduct a property survey to evaluate the possibility of an additional support complex along the trail.
- Acquire optimum boundary parcels to provide additional support facilities.

Palatka Trailhead

- Pave parking lot.
- Delineate parking spaces.
- Install permanent restroom with automatic locking doors.
- Connect restroom to municipal sewage system.
- Install a bike repair station and water fountains.
- Partner with FDOT and Putnam County to provide deceleration lanes on State Road 100.
- Provide interpretive elements.

Forest Hills Trailhead

- Provide interpretive elements.

Lake Butler Trailhead

- Install permanent restroom with automatic locking doors.
- Connect restroom to municipal sewage system.
- Install a bike repair station.
- Create interpretive elements.

U.S. Highway 301 Overpass

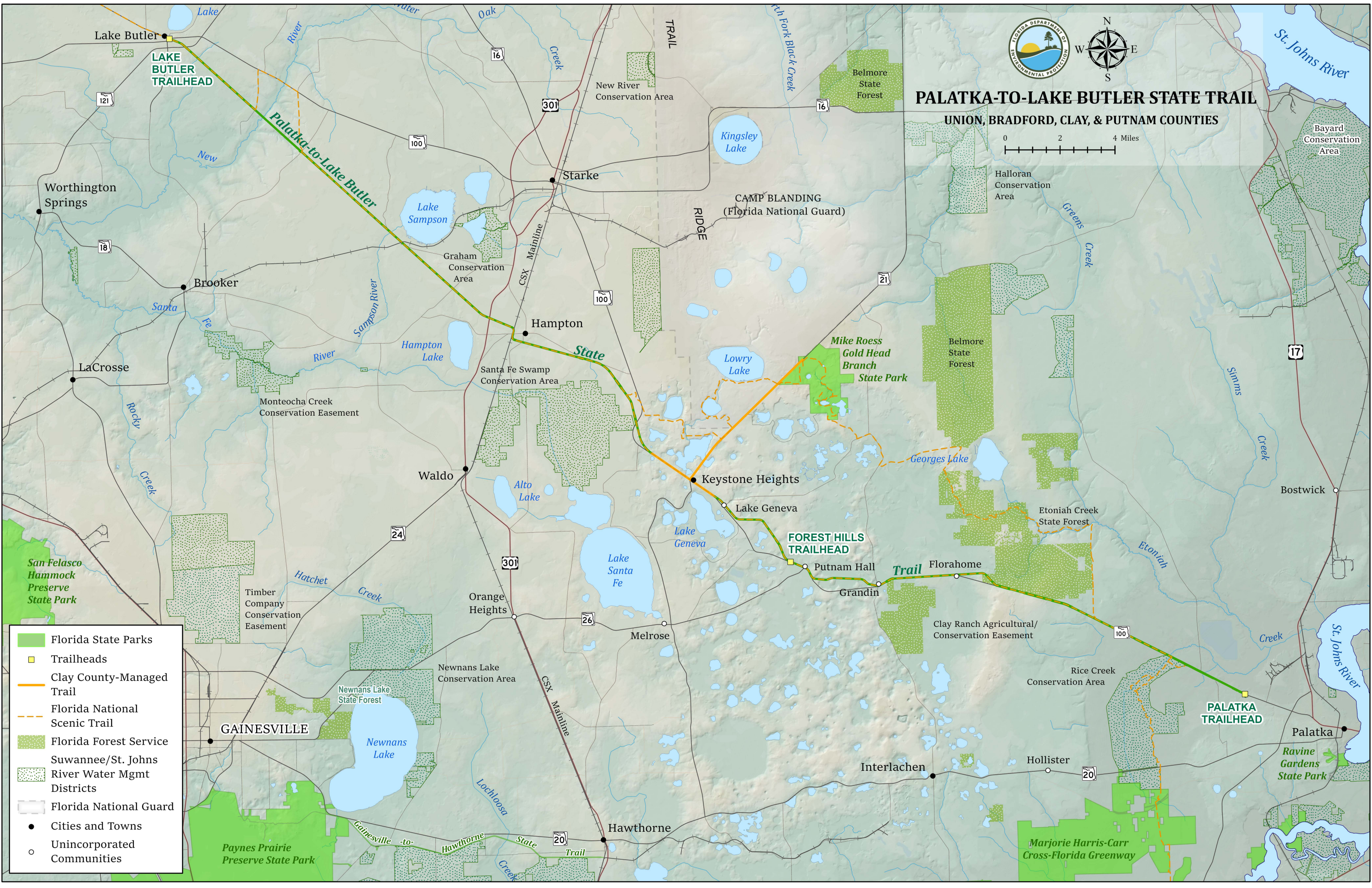
- Coordinate with FDOT to increase safety features at road crossings.

Optimum Boundary

Several parcels identified below would provide an ideal location for maintenance hubs along the trail. A swath of planted pine parcels owned by the U.S. Forest Service northwest of Keystone Heights, is an optimal location with respect to constructing a maintenance hub at a central location along the trail. West of Palatka, a vacant structure encroaches on the park boundary by about three feet. This structure, pending an assessment, would be ideally repurposed as a maintenance structure.

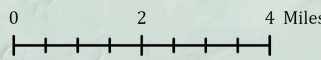
Palatka-to-Lake Butler State Trail

To support the Office of Greenways and Trails Priority Trail Network, acquisition of the Waldo Road Corridor will provide a connection to the Gainesville-to-Hawthorne State Trail. The Palatka to Hawthorne Corridor will also connect the two trails from Gainesville to Palatka at the trail's eastern terminus. West of the terminus in downtown Lake Butler, an additional Florida Forever Project, a component of the Strategic Managed Areas Lands List, would extend the trail corridor 21 miles northwest to Lake City. This addition would close gaps in the corridor to the Palatka to St. Augustine State Trail. By acquiring these Land Trail Priorities and Florida Forever Projects, long distance excursions to and from large cities like Lake City, Gainesville, Palatka, and St. Augustine will be provided.



PALATKA-TO-LAKE BUTLER STATE TRAIL

UNION, BRADFORD, CLAY, & PUTNAM COUNTIES



- Florida State Parks
- Trailheads
- Clay County-Managed Trail
- Florida National Scenic Trail
- Florida Forest Service
- Suwannee/St. Johns River Water Mgmt Districts
- Florida National Guard
- Cities and Towns
- Unincorporated Communities

INTRODUCTION

LOCATION AND ACQUISITION HISTORY

The Palatka-to-Lake Butler State Trail is located in Putnam, Clay, Bradford, and Union counties. Access to the trail is available at multiple points. The Northeast District Trail Network also reflects significant land and water resources existing near the trail. The following trailheads provide access and parking.

Palatka Trailhead:

N 29.668780, W -81.699718

Forest Hills Trailhead:

N 29.741777, W -81.971131

Lake Butler Trailhead:

N 30.022390, W -82.342873

The Palatka-to-Lake Butler State Trail was initially acquired on Feb. 26, 2001, with funds from the Land Acquisition Trust Fund program. Currently, the trail comprises 613.94 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the trail and on July 16, 2002, the Trustees leased (Lease No. 4338) the property to the Division of Recreation and Parks (DRP) under a 50-year lease. The current lease will expire on July 15, 2052.

The Palatka-to-Lake Butler State Trail is designated single-use to provide public outdoor recreation and conservation. There are no legislative or executive directives that constrain the use of this property (see the Appendix). A legal description of the trail property can be made available upon request to the Florida Department of Environmental Protection (DEP).

SECONDARY AND INCOMPATIBLE USES

In accordance with 253.034(5) F.S., the potential of the trail to accommodate secondary management purposes was analyzed. These secondary purposes were considered within the context of DRP's statutory responsibilities and resource values. This analysis considered the trail's natural and cultural resources, management needs, aesthetic values, visitation and visitor experiences. It was determined that no secondary purposes could be accommodated in a manner that would not interfere with the primary purpose of resource-based outdoor recreation and conservation.

DRP has determined that uses such as water resource development projects, water supply projects, stormwater management projects, linear facilities and sustainable agriculture and forestry (other than those management activities specifically identified in this plan) would not be consistent with the management purposes of the trail.

In accordance with 253.034(5) F.S., the potential for generating revenue to enhance management was also analyzed. Visitor fees and charges are the principal source of revenue generated by the trail. It was determined that multiple use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions and

similar measures will be employed on a case-by-case basis as a means of supplementing trail management funding. Generating revenue from consumptive uses or from activities that are not expressly related to resource management and conservation is not under consideration.

PURPOSE AND SIGNIFICANCE OF THE PARK

Park Purpose

The purpose of the Palatka-to-Lake Butler State Trail is to provide Florida's residents and visitors with a scenic multiuse trail while preserving and restoring the natural and cultural values of the property and providing a better quality of life for visitors and surrounding communities.

Park Significance

- The Palatka-to-Lake Butler State Trail has designation as a National Recreation Trail and is a key component in the Florida Greenways and Trails System (FGTS), which plays an important role in advancing Florida's economy, tourism, health, transportation, recreation, conservation, and quality of life.
- The Palatka-to-Lake Butler State Trail follows a route where rail passengers once traveled, Historic railroad reminders include historical markers of past events and abandoned railroad tracks. The route now travels through the countryside, communities and conservation land.
- Palatka embraces its history as a transportation connection. It was once a major port for steamboat traffic traveling along the St. Johns River, and then a bustling railroad stop. Today, the city and trail continue to serve as a multiuse corridor for north central Florida from St. Augustine to Lake Butler.

Central Park Theme

Tracing an old railroad, the peaceful Palatka-to-Lake Butler State Trail passes through open pastures and historic towns of the Florida countryside.

The Palatka-to-Lake Butler State Trail is classified as a state trail in the DRP unit classification system. In the management of state trails, primary consideration is given to providing opportunities for active recreational pursuits. Thus, user considerations are generally given priority over resource considerations. In areas where exceptional natural or cultural resources are included, however, resource considerations may become paramount even at the loss of some recreational use. Emphasis is placed on active recreational pursuits, although passive uses may be provided if suitable resources exist. Program activity is concerned with promoting use of the site for public recreation and with interpreting the trail and its surrounding area for public enjoyment. Development is aimed at enhancing the recreational appeal of the trail by providing basic facilities for access, user convenience and safety, and interpretation.

OTHER DESIGNATIONS

The unit is not within an Area of Critical State Concern as defined in section 380.05, Florida Statutes and is not presently under study for such designation. The park is a component of the Florida Greenways and Trails System, administered by the DEP Office of Greenways and Trails.

All waters along the trail have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302, Florida Administrative Code. Surface waters along the trail are also classified as Class III (suitable for fish consumption and recreation) waters by DEP. The trail is not within or adjacent to an aquatic preserve as designated under the Florida Aquatic Preserve Act of 1975 (Section 258.35, Florida Statutes).

PARK ACCOMPLISHMENTS

- Obtained invasives treatment grant from the Florida Fish and Wildlife Conservation Commission (FWC).
- Met 100% of invasive removal goals each year. In fiscal year 2018-19, treated 43.16 of 634 gross acres. In fiscal year 2019-20, treated 17.89 of 357 gross acres.
- Removed sod netting, which entrapped wildlife.
- Secured participation from AmeriCorps ANT for invasive plant treatment.
- Hosted annual Iron Horse Endurance Race.

RESOURCE MANAGEMENT COMPONENT

Palatka-to-Lake Butler State Trail Management Zones			
Management Zone	Acreage	Managed with Prescribed Fire	Contains Known Cultural Resources
PLB-01	53.95	N	Y
PLB-02	23.60	N	Unknown
PLB-03	49.08	N	Unknown
PLB-04	34.41	N	Unknown
PLB-05	20.75	N	Unknown
PLB-06	13.22	N	Unknown
PLB-07	85.45	N	Y
PLB-08	14.36	N	Unknown
PLB-09	22.19	N	Unknown
PLB-10	35.55	N	Y
PLB-11	34.83	N	Y
PLB-12	25.42	N	Y
PLB-13	29.27	N	Y
PLB-14	71.63	N	Y
PLB-15	50.28	N	Y
PLB-16	25.64	N	Y
PLB-17	24.29	N	Y

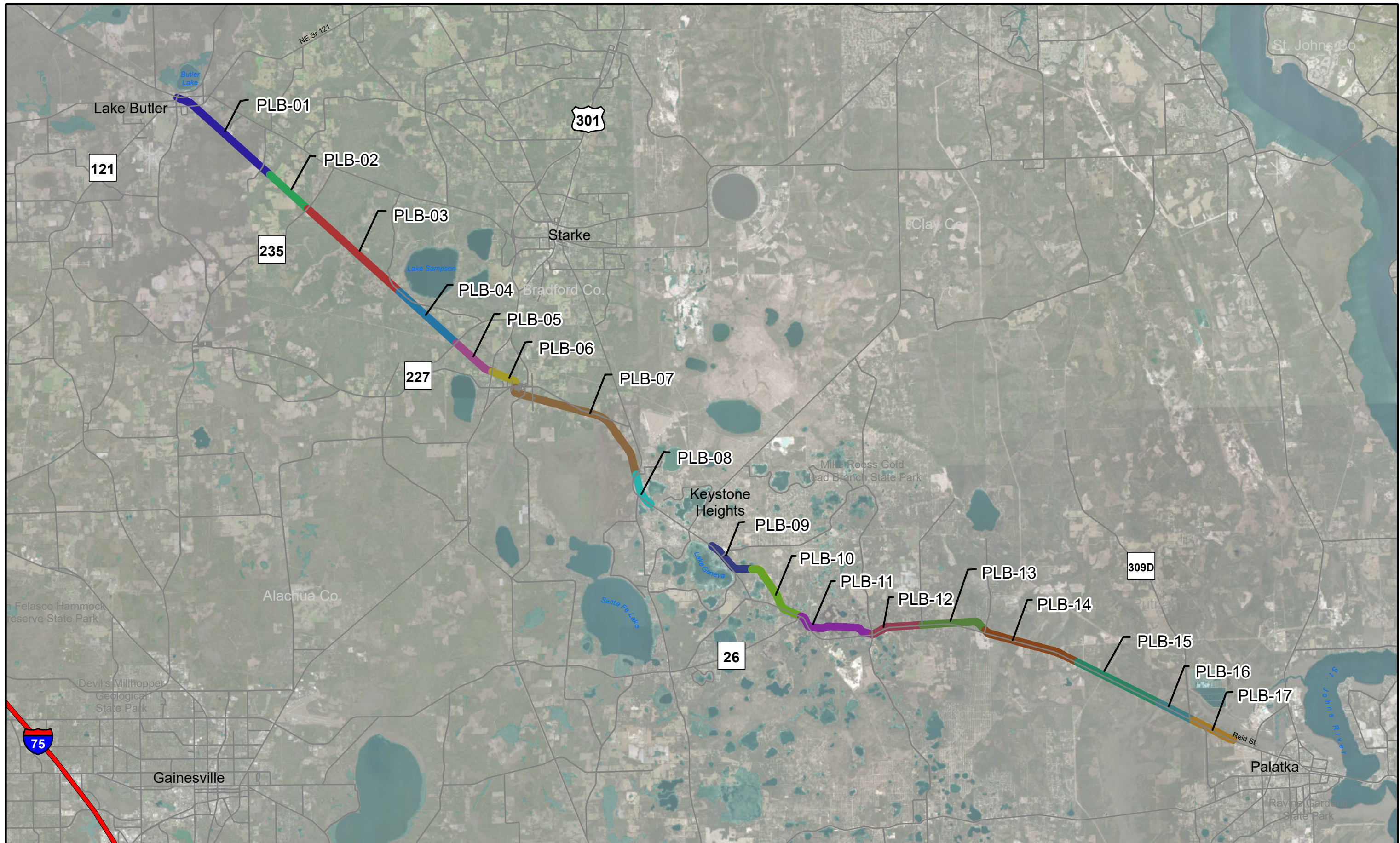
TOPOGRAPHY

The Palatka-Lake Butler State Trail traverses the Okefenokee Basin, Lakes, and Barrier Island and Sequence Geomorphological Districts of Northeast Florida. Along its course between Palatka and Lake Butler, the trail also crosses the Raiford Ridges, Hawthorne Lakes, Duval Upland, and Upper St. Johns River Valley geomorphological provinces.

Although the geological features, soil types, and natural communities along the trail corridor vary depending on the physiographic districts and provinces encountered along the route, the elevation of the old rail bed itself remains relatively constant all the way to Lake Butler. The natural topography along most of the trail corridor has been altered extensively, largely due to construction of the rail bed, adjacent roadways, powerlines, and access points. Construction activities along the historic rail bed were designed to provide consistent elevation grade and drainage, thus creating an artificially flat topography for the entire rail bed, albeit with swales scooped out on either side of the bed. Topographic disturbances adjacent to the trail corridor are attributable to the construction and maintenance of State Road 100, which closely parallels the trail for most of its length.

SOILS

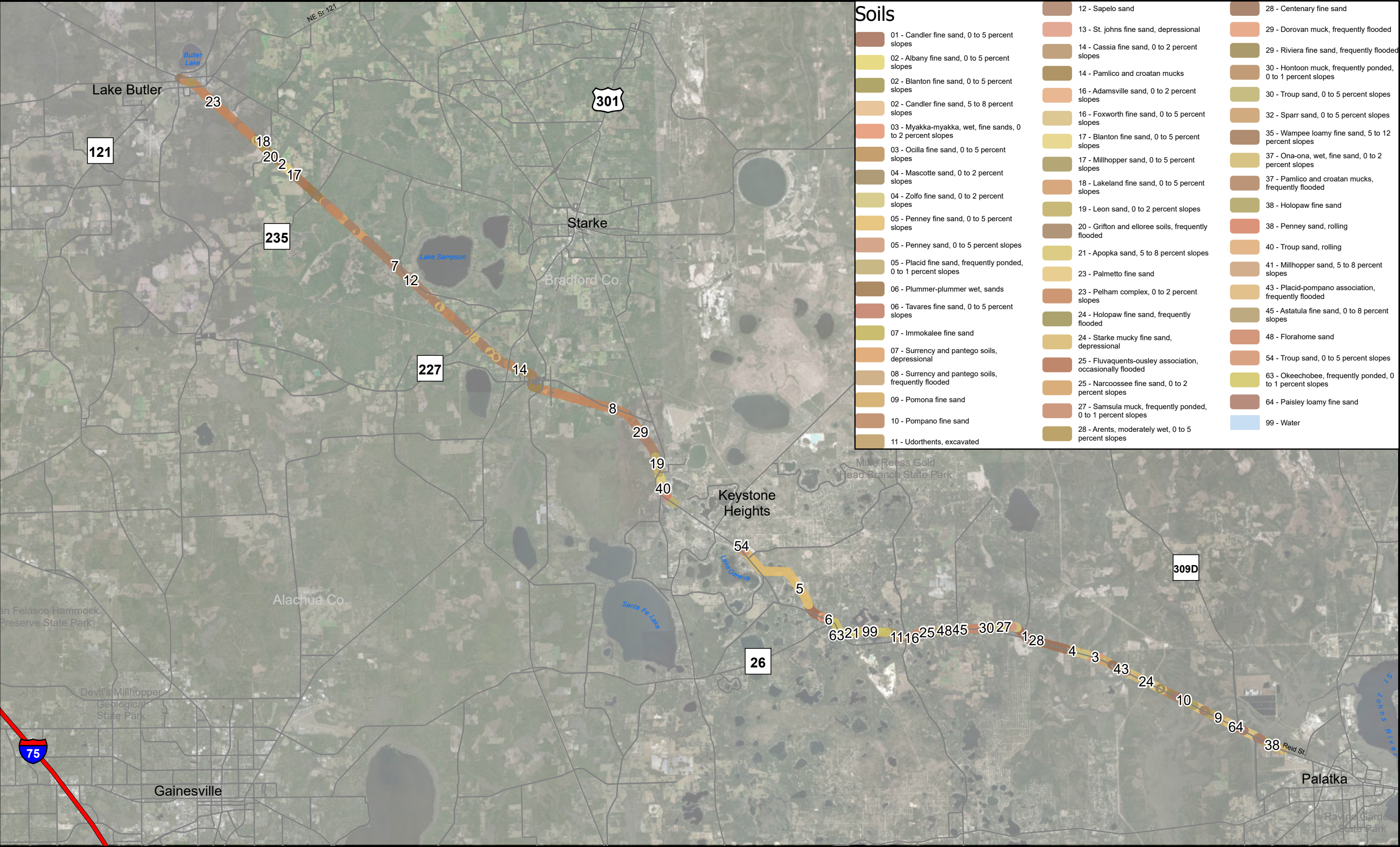
The Palatka-Lake Butler State Trail traverses sixty specific soil types along its 46-mile path (Dearstyne et al. 1991, Readle 1990, Weatherspoon et al. 1989). These soils represent a typical cross section of soil types found in Putnam, Clay, Bradford, and Union counties. The artificial berm that supports the rail bed and trail is composed of soils from adjacent ditches and borrow sites. Excavation and fill activities associated with construction of this berm have permanently altered or destroyed natural soil profiles



PALATKA-TO-LAKE BUTLER STATE TRAIL
Management Zones

0 3 6 Miles

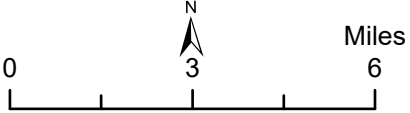
Sources: ESRI; Florida Department of Environmental Protection
This graphical representation is provided for informational purposes and should not be considered authoritative for navigational, engineering, legal, and other uses.



Soils		
01 - Candler fine sand, 0 to 5 percent slopes	12 - Sapelo sand	28 - Centenary fine sand
02 - Albany fine sand, 0 to 5 percent slopes	13 - St. Johns fine sand, depressional	29 - Dorovan muck, frequently flooded
02 - Blanton fine sand, 0 to 5 percent slopes	14 - Cassia fine sand, 0 to 2 percent slopes	29 - Riviera fine sand, frequently flooded
02 - Candler fine sand, 5 to 8 percent slopes	14 - Pamlico and croatan mucks	30 - Hontoon muck, frequently ponded, 0 to 1 percent slopes
03 - Myakka-myakka, wet, fine sands, 0 to 2 percent slopes	16 - Adamsville sand, 0 to 2 percent slopes	30 - Troup sand, 0 to 5 percent slopes
03 - Ocilla fine sand, 0 to 5 percent slopes	16 - Foxworth fine sand, 0 to 5 percent slopes	32 - Sparr sand, 0 to 5 percent slopes
04 - Mascotte sand, 0 to 2 percent slopes	17 - Blanton fine sand, 0 to 5 percent slopes	35 - Wampee loamy fine sand, 5 to 12 percent slopes
04 - Zolfo fine sand, 0 to 2 percent slopes	17 - Millhopper sand, 0 to 5 percent slopes	37 - Ona-ona, wet, fine sand, 0 to 2 percent slopes
05 - Penney fine sand, 0 to 5 percent slopes	18 - Lakeland fine sand, 0 to 5 percent slopes	37 - Pamlico and croatan mucks, frequently flooded
05 - Penney sand, 0 to 5 percent slopes	19 - Leon sand, 0 to 2 percent slopes	38 - Holopaw fine sand
05 - Placid fine sand, frequently ponded, 0 to 1 percent slopes	20 - Grifton and elloree soils, frequently flooded	38 - Penney sand, rolling
06 - Plummer-plummer wet, sands	21 - Apopka sand, 5 to 8 percent slopes	40 - Troup sand, rolling
06 - Tavares fine sand, 0 to 5 percent slopes	23 - Palmetto fine sand	41 - Millhopper sand, 5 to 8 percent slopes
07 - Immokalee fine sand	23 - Pelham complex, 0 to 2 percent slopes	43 - Placid-pompano association, frequently flooded
07 - Surrency and pantego soils, depressional	24 - Holopaw fine sand, frequently flooded	45 - Astatula fine sand, 0 to 8 percent slopes
08 - Surrency and pantego soils, frequently flooded	24 - Starke mucky fine sand, depressional	48 - Florahome sand
09 - Pomona fine sand	25 - Fluvaquents-ousley association, occasionally flooded	54 - Troup sand, 0 to 5 percent slopes
10 - Pompano fine sand	25 - Narcoossee fine sand, 0 to 2 percent slopes	63 - Okeechobee, frequently ponded, 0 to 1 percent slopes
11 - Udorthents, excavated	27 - Samsula muck, frequently ponded, 0 to 1 percent slopes	64 - Paisley loamy fine sand
	28 - Arens, moderately wet, 0 to 5 percent slopes	99 - Water



PALATKA-TO-LAKE BUTLER STATE TRAIL
Soils



Sources: ESRI; Florida Department of Environmental Protection
This graphical representation is provided for informational purposes and should not be considered authoritative for navigational, engineering, legal, and other uses.

within the trail corridor. For this reason, soils are listed in this plan (see Appendix), but descriptions are not included.

Erosion control is the primary management concern for soils along the trail. The steep slopes associated with the elevated rail bed are subject to occasional erosion, especially where vegetative cover is lacking. Management activities will follow generally accepted best management practices to minimize or prevent soil erosion and conserve soil and water resources on site.

HYDROLOGY

The Palatka-to-Lake Butler State Trail passes through two main surface drainage basins, the St. Johns River, and the Santa Fe/Suwannee rivers. These basins are managed by the St. Johns River Water Management District (SJWMD) and the Suwannee River Water Management District (SRWMD), respectively.

From east to west, the trail begins near Palatka in the St. Johns River basin as it crosses the upper floodplain swamps of Rice Creek. Most of the main floodplain is bridged. The next drainage encountered is Etoniah Creek. Portions of the trail are bridged within the Etoniah watershed. From Etoniah, the trail enters a lakes and prairies region near the cities of Putnam Hall and Keystone Heights. As the trail bisects this region, a few sections can become inundated during high water conditions, causing staff to post public closure notices. These inundated sections should be reassessed for possible improvements to mitigate for these periodic inundations which ultimately cause trail damage and create altered lake hydrology.

From Keystone Heights, the trail runs adjacent to Santa Fe Swamp, part of the headwaters of and an important contributor to the Santa Fe River. The next major wetland encountered is the Sampson River. Here, the trail is bridged over the Sampson River and evidence of surface water flow disruption within its floodplain wetlands is evident. As the trail approaches the town of Lake Butler, it crosses the New River. The New River is also an important tributary of the Santa Fe River. The bridge over the New River has been badly burned and will have to be rebuilt.

The natural surface hydrology within and immediately surrounding the Palatka-to-Lake Butler State Trail is altered by the elevated berm and associated parallel ditches that were constructed for the rail bed. The berm impedes the natural overland flow of surface water and can impound water during times of heavy rainfall. As mentioned above, the rail bed passes through multiple low-lying and wetland areas and includes several bridge crossings.

Other crossings are outfitted with assorted culverts to facilitate flow through the berm. However, the effectiveness of these structures in maintaining the natural hydroperiod of adjacent wetlands and freshwater systems has not yet been ascertained. The parallel ditches constructed adjacent to the berm provide drainage for the infrastructure. However, they may also channelize water in times of high flow, further altering natural drainage patterns.

The natural surface hydrology of lands surrounding the Palatka-to-Lake Butler State Trail has been significantly altered by the construction of the elevated railway bed. Extensive excavation and filling were done to achieve consistent grade and alignment of the rail corridor.

Low areas such as wetlands and small intermittent streams were filled with borrow material and outfitted with various water control structures. While bridge and culvert structures do facilitate surface water movement from one side of the berm to the other, the elevated berm continues to impound

water during storm events or times of flooding. In addition, the ditch system associated with the berm may channel surface water away from naturally low areas. The natural hydroperiods of surrounding surface waters are affected to an unknown extent by these physical alterations.

Restoration of the original hydrology would entail removal of the railbed and restoration of the corridor to original grade and therefore is not feasible. Instead, a design is needed to alleviate the hydrologic alterations associated with the berm and to restore, to the greatest extent possible, the original flow and flow patterns which existed prior to construction. The hydrologic function of the surrounding watershed should be incorporated into the design, with special attention paid to identification of historic topographic features and natural surface water characteristics. Once defined, these features may be imitated utilizing engineered water control structures, including the existing structures where practical.

Assessment of Needs

Objective: Conduct/obtain an assessment of the park's hydrological restoration needs.

Actions:

- Cooperate and seek guidance from state/federal agencies engaged in hydrological research and monitoring programs within wetlands associated with the trail corridor.
- Provide timely response to any significant water quantity/quality issue within wetlands associated with the trail corridor.
- If necessary, seek guidance and mitigate any wetland issue using best management practices.

DRP will continue its tradition of close cooperation with state and federal agencies that monitor waterways intersecting the trail. DRP will rely on agencies such as the SJRWMD, SRWMD, U.S. Geological Survey (USGS) and DEP to keep it informed about any declines in groundwater or surface water quality or quantity that might have occurred in watersheds through which the trail passes.

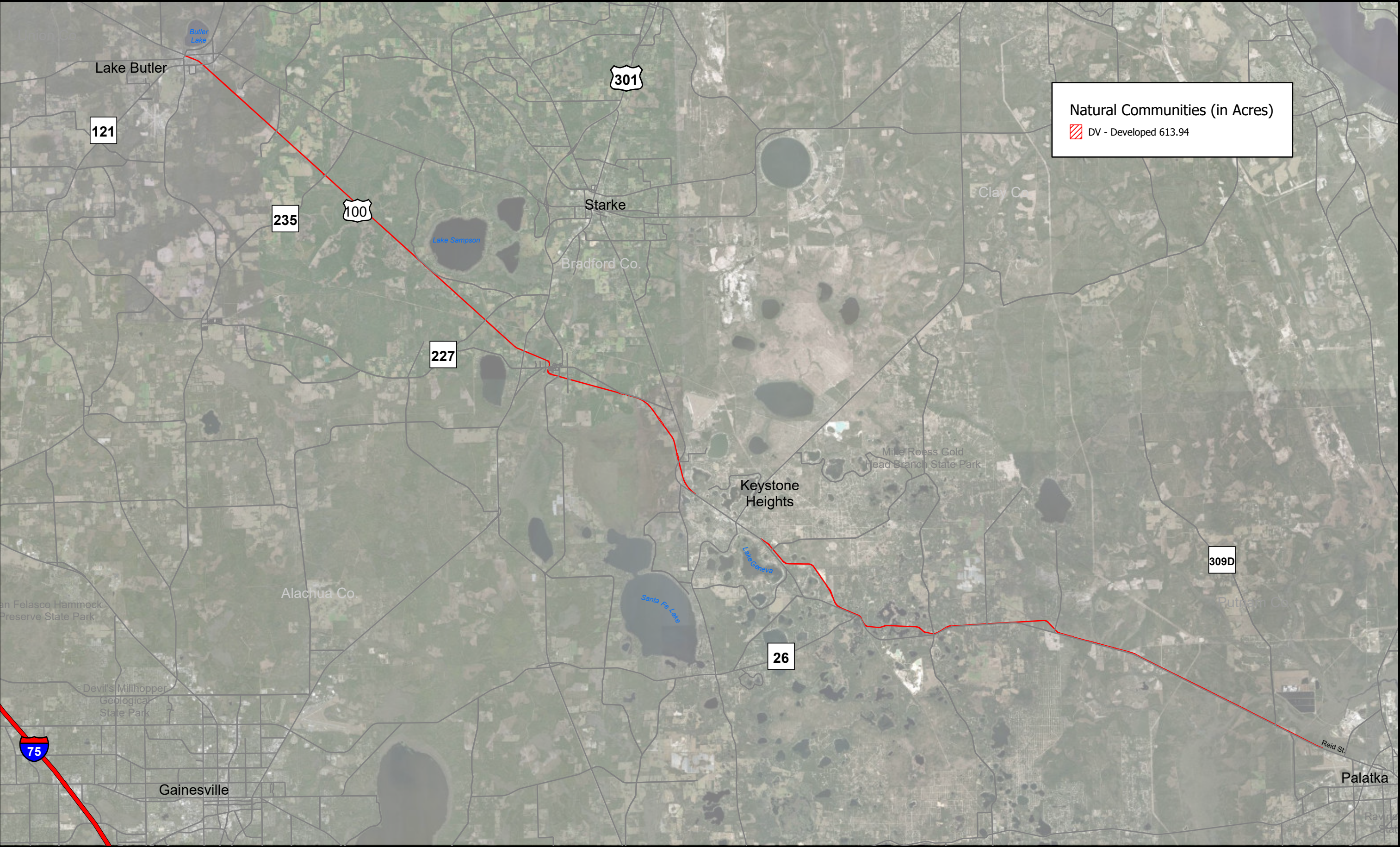
Restoration of the original hydrology along the trail route would likely entail removal of the rail bed and restoration of the corridor to original grade, which is not feasible. However, after a detailed assessment of natural flow rates and patterns, a project could be designed that would help mitigate the hydrologic alterations associated with the historic railroad berm and restore, to the extent feasible, the original flow patterns between wetlands. Improving the hydrologic function of the surrounding watershed should be a chief consideration in the design of any hydrological restoration project.

NATURAL COMMUNITIES

The trail intersects five distinct natural communities in addition to ruderal and developed areas. Construction of the rail bed and continual maintenance of the railroad right-of-way caused permanent alteration of the natural communities within the trail corridor.

Consequently, all lands within the trail corridor are classified as ruderal or developed. Natural communities adjacent to the trail have been subjected to varying degrees of disturbance from both public and private use.

Trail-specific characterizations of the natural communities adjacent to the trail corridor are provided below. A list of plants and animals occurring along the trail is contained in the Appendix.



Natural Communities (in Acres)

 DV - Developed 613.94



PALATKA-TO-LAKE BUTLER STATE TRAIL
Natural Communities - Existing Conditions

0 3 6 Miles

Sources: ESRI; Florida Department of Environmental Protection
This graphical representation is provided for informational purposes and should not be considered authoritative for navigational, engineering, legal, and other uses.

Floodplain Swamp

This community occurs primarily along the New River. It is dominated by red maple and water oak.

Sandhill

Prior to development of the rail bed and surrounding areas, this was the dominant natural community along the trail corridor.

Mesic Flatwoods

This community was common in a couple of areas along the trail. Today, most of it is in active silviculture.

Xeric hammock

Scattered hammocks, dominated primarily by live oak and diamond leaf oak, occur on private lands. The occurrence of this community is likely the result of fire exclusion in the sandhill community.

Blackwater stream

Numerous blackwater streams flow under the rail bed.

Ruderal

The maintenance of the rail bed over the years has led to the ruderal condition found in the areas adjacent to the bed.

Developed

The central berm of the railroad bed constitutes the major developed feature in the trail right-of-way. Multiple bridges situated in wetland areas also occur. Except for the roads and power lines that intersect the trail, other developed areas along the route are located just outside the trail boundaries. Currently there are portions of several structures that have encroached on park property. Most of this development consists of small businesses associated with adjacent urban and suburban areas.

IMPERILED SPECIES

One imperiled plant species and two imperiled animal species have been recorded within the Palatka-to-Lake Butler State Trail corridor. The gopher tortoise (*Gopherus polyphemus*) and Sherman's fox squirrel (*Sciurus niger shermani*) are the two imperiled animal species that reside within the trail corridor. Edges of the old railway berm and its associated swale provide suitable open habitat for fox squirrels and for tortoises to excavate burrows and forage for food. The only imperiled plant species recorded within the trail corridor is the rain lily (*Zephyranthes atamasca*) (see table below). Other than keeping the rain lily habitat free of invasive plants and protecting them from recreational impacts, there is no management action applicable to them. Appropriate management of natural communities in public lands adjacent to the trail will benefit most of the imperiled species that use the trail for foraging or passage.

Imperiled Species Inventory						
Common and Scientific Name	Imperiled Species Status				Management Actions	Monitoring Level
	FWC	USFWS	FDACS	FNAI		
PLANTS						
Rainlily <i>Zephyranthes atamasca</i>			LT		6	Tier 1
REPTILES						
Gopher tortoise <i>Gopherus polyphemus</i>	ST			G3, S3	2,10,13	Tier 2
MAMMALS						
Sherman's fox squirrel <i>Sciurus niger shermani</i>	SSC			G5T3/S3	2,10	Tier 1

Management Actions:

1. Prescribed Fire
2. Invasive Plant Removal
3. Population Translocation/Augmentation/Restocking
4. Hydrological Maintenance/Restoration
5. Nest Boxes/Artificial Cavities
6. Hardwood Removal
7. Mechanical Treatment
8. Predator Control
9. Erosion Control
10. Protection from visitor impacts (establish buffers)/law enforcement
11. Decoys (shorebirds)
12. Vegetation planting
13. Outreach and Education
14. Other

Monitoring Level:

Tier 1:

Non-Targeted Observation/Documentation: includes documentation of species presence through casual/passive observation during routine park activities (i.e. not conducting species-specific searches). Documentation may be in the form of Wildlife Observation Forms, or other district specific methods used to communicate observations.

Tier 2:

Targeted Presence/Absence: includes monitoring methods/activities that are specifically intended to document presence/absence of a particular species or suite of species.

Tier 3:

Population Estimate/Index: an approximation of the true population size or population index based on a widely accepted method of sampling.

Tier 4:

Population Census: A complete count of an entire population with demographic analysis, including mortality, reproduction, emigration, and immigration.

Tier 5:

Other: may include habitat assessments for a particular species or suite of species or any other specific methods used as indicators to gather information about a particular species.

Inventory

Objective: Develop/update baseline imperiled species occurrence inventory lists.

Actions:

- Conduct a plant survey along the trail corridor to augment the trail's species list.

No extensive plant survey has been conducted along the Palatka-to-Lake Butler State Trail. An inventory would augment the trail's species list and may reveal hitherto unknown populations of imperiled plants.

Animal Species Monitoring

Objective: Monitor and document one selected imperiled animal species.

Actions:

- Implement monitoring protocols for one imperiled animal species.

Conduct at least one gopher tortoise survey (burrow count) along the trail corridor within the next 10 years. There have been no formal surveys for gopher tortoises on the trail. Consequently, there are no baseline population estimates for that species within the corridor. Periodic burrow counts along the trail might be useful in determining whether DRP management activities are affecting resident gopher tortoises. Park staff should also continue to document observations of fox squirrels and their locations.

Plant Species Monitoring

Objective: Monitor and document one selected imperiled plant species.

Actions:

- Survey the trail for additional populations of *Zephyranthes atamasca*.

One population of *Zephyranthes atamasca* is known to exist along the trail in a power line right-of-way. Staff should communicate the location of this population to power line managers and express concerns about the possible effects that power line management could have on this species. The population should be monitored regularly for signs of decline possibly related to power line management activities.

INVASIVE SPECIES

The ruderal nature of the Palatka-to-Lake Butler State Trail, its linear configuration with extensive edge and the proximity of adjacent private lands preclude permanent eradication of invasive species. Despite aggressive control efforts, encroachment of invasive species is expected along the route. Parts of the trail next to public natural areas will be managed cooperatively with their respective management agencies. Invasive species along the rest of the trail will be controlled as time and staffing permit.

Eight invasive plant species are known to exist along the trail. Further surveys will likely reveal more. The Florida Invasive Species Council (FISC) lists all eaglet as Category I or Category II plants, which are known to disrupt natural communities and therefore require special attention where present. A removal program will be developed, targeting all of these species, which includes cogongrass, Japanese climbing

fem, Chinaberry, paper mulberry, camphor tree, loquat, Chinese tallow tree and castorbean. The highest priority will be on cogongrass and Japanese climbing fern, tile species that have the greatest potential to spread rapidly along the length of the trail or into adjacent natural areas. Special attention will be given to infestations near or adjacent to natural managed areas.

Several invasive animal species have been documented within the trail corridor. Most are presumed to be transient. Of those recorded, domestic/feral dogs and cats, feral hogs and armadillos pose the most significant threats to the park's resources. If appropriate, an invasive animal species control program will be developed.

Inventory of FISC Category I and II Invasive Plant Species			
Species Name <i>Scientific Name</i> - Common Name	FISC Category	Distribution	Zone ID
PLANTS			
Mimosa <i>Albizia julibrissin</i>	I	2	PLB 01, PLB 02, PLB 04, PLB 05, PLB-07, PLB 08
Coral ardisia <i>Ardisia crenata</i>	I	2	PLB-01, PLB-07
Paper mulberry <i>Broussonetia papyrifera</i>	II	2	PLB-09
Camphor-tree <i>Cinnamomum camphora</i>	I	2	PLB 01, PLB 03, PLB 04, PLB 06, PLB 07, PLB 16
		3	PLB-14, PLB-17
Wild taro <i>Colocasia esculenta</i>	I	2	PLB-01, PLB-02, PLB-07
Winged yam <i>Dioscorea alata</i>	I	2	PLB-07
Air potato <i>Dioscorea bulbifera</i>	I	1	PLB-11
		2	PLB-02, PLB-07, PLB-10, PLB-15
		3	PLB-09, PLB-12, PLB-13, PLB-14, PLB-17
Cogongrass <i>Imperata cylindrica</i>	I	2	PLB 14, PLB 16
		3	PLB 08
Flamegold tree <i>Koelreuteria elegans</i>	II	2	PLB-04
Lantana <i>Lantana camara</i>	I	1	PLB-01
Glossy privet <i>Ligustrum lucidum</i>	I	2	PLB 02
Chinese privet <i>Ligustrum sinense</i>	I	2	PLB-01, PLB-04, PLB-06, PLB-07

Inventory of FISC Category I and II Invasive Plant Species			
Species Name <i>Scientific Name</i> - Common Name	FISC Category	Distribution	Zone ID
Peruvian primerosewillow <i>Ludwigia peruviana</i>	I	2	PLB-05
		3	PLB-06
Japanese climbing fern <i>Lygodium japonicum</i>	I	2	PLB-01, PLB-02, PLB-03, PLB-04, PLB-05, PLB-06, PLB-07, PLB-08
		3	PLB-16
Bottlebrush <i>Melaleuca viminalis</i>	II	1	PLB-07
Chinaberry <i>Melia azedarach</i>	II	2	PLB-01, PLB-02, PLB-07, PLB-16
Skunkvine <i>Paederia foetida</i>	I	3	PLB-01
Torpedograss <i>Panicum repens</i>	I	3	PLB-10, PLB-13
Chinese tallowtree <i>Triadica sebifera</i>	I	1	PLB-09
		2	PLB 06, PLB 07, PLB 11
Purple sesban <i>Sesbania punicea</i>	II	2	PBL-05
Tropical soda apple <i>Solanum viarum</i>	I	2	PLB-07
Wedelia <i>Sphagneticola trilobata</i>	II	2	PLB-04
Small-leaf spiderwort <i>Tradescantia fluminensis</i>	I	2	PLB-01
		3	PLB-12
Chinese wisteria <i>Wisteria sinensis</i>	II	1	PLB-01
		2	PLB-02
Arrowleaf elephant's ear <i>Xanthosoma sagittifolium</i>	II	2	PLB-07

Distribution Categories:

- 0 No current infestation: All known sites have been treated and no plants are currently evident.
- 1 Single plant or clump: One individual plant or one small clump of a single species.
- 2 Scattered plants or clumps: Multiple individual plants or small clumps of a single species scattered within the gross area infested.
- 3 Scattered dense patches: Dense patches of a single species scattered within the gross area infested.
- 4 Dominant cover: Multiple plants or clumps of a single species that occupy a majority of the gross area infested.
- 5 Dense monoculture: Generally, a dense stand of a single dominant species that not only occupies more than a majority of the gross area infested, but also covers/excludes other plants.
- 6 Linearly scattered: Plants or clumps of a single species generally scattered along a linear feature, such as a road, trail, property line, ditch, ridge, slough, etc. within the gross area infested.

Invasive Plant Treatment

Objective: Annually treat 29 acres of invasive plant species.

Actions:

- Annually develop/update an invasive plant management work plan.
- Implement the annual work plan by treating 29 acres on the trail annually, and by continuing maintenance and follow-up treatments as needed.

Annually, DRP staff will develop and implement a management plan for non-native invasive plants. The number of acres of invasive plants treated per year is likely to vary depending on the status of established infestations and any new infestations that might occur or be detected during the management plan period. However, the annual goal will remain the same: to treat all infestations that are in maintenance and treat any new infestations before they can increase in size.

Priority should be given to FISC Category I and II species when treating invasive plant species along the trail. A plan and schedule should be developed that complies with DRP standards for scouting and mapping invasive invasives in every zone within the park. Areas that contain sources of particularly aggressive species will need to be scouted more frequently. Finding new populations of invasive plants before they become established will help prevent larger infestations from occurring and reduce the cost and effort needed to control them. Outreach to neighbors who have high priority invasive plant species on their property should be part of the annual treatment plan, particularly in areas where they are the primary source of invasive species infestations along the trail.

CULTURAL RESOURCES

Archaeological, Historical and Cultural Resources

There are no documented sites within the trail that are recorded with the Florida Master Site File (FMSF). However, nine recorded sites are located within a half-mile of the trail, and an additional 27 sites are within 1 mile.

In the 1870s and 1880s, timber was becoming a valuable commodity in southern Georgia and northern Florida. In 1881, the Georgia Legislature authorized the formation of the Georgia Southern and Florida Railroad Company (GS&F). Its charter was to build a line south from Macon, Georgia, to Clinch County, Georgia, near the Florida border. There, it would tie into the Savannah, Florida and Western Railroad.

In 1884, the Florida Legislature granted a charter for the Macon and Florida Air-Line Railroad Company to extend the GS&F tracks from the Georgia-Florida line to Tampa/Charlotte Harbor on the Gulf Coast, with a branch line to run to the St. Johns River. In 1888, the two companies merged into the Georgia Southern and Florida Railroad. The decision was made for the line to go to Palatka, a busy river port on the St. Johns River. The GS&F reached Palatka by March 1890. This turned out to be a lucrative rail line.

Due to poor management of funds and heavy mortgages, the GS&F went bankrupt in 1891. In 1895, J.P. Morgan attempted to gain control of the GS&F and reorganized the railroad into the GS&F Railway.

In 2002, the Norfolk Southern Corporation sold a stretch of the dismantled GS&F railroad corridor to become the Palatka-to-Lake Butler State Trail.

The trail has one historic structure (PU01413), five bridges (PU01412, PU01621, PU01622, PU01623 and UN00174) and five linear resources (BF00165, BF00728, PU01411, PU01620 and UN00175) recorded with the FMSF. These resources are mostly associated with the abandoned railroad line of the Georgia Southern and Florida Railroad (PU01411, UN00175), whose construction was initiated in the late 1800s during Florida's railroad boom. BF00728 is a spur line constructed during WWII to connect the main rail line to the WWII US Army Air Corps Operation at present-day Keystone Air Park. The Etoniah Canal (PU01620) was a land reclamation project important to the establishment of the community of Florahome.

The Florida Railroad Corridor (BF00165), built by David Yulee, ran from Fernandina Beach to Cedar Key. Construction began in 1855 and was completed in 1861. This rail line crosses the Georgia Southern and Florida Railroad line (PU01411) west of Keystone Heights. Other than the section in Lake Butler, the Georgia Southern and Florida Railroad line west of Keystone Heights has not been recorded with the FMSF.

The five historic bridge structures are all associated with the railroad. Two of the bridges (PU01621, PU01622) support the railroad as it crosses the Etoniah Canal (PU01620). The only recorded historic structure is PU01413, which represents a culvert associated with the railroad line and dates to about 1944.

All structures and resource groups are in good condition except for the bridges. The primary threat to these structures will be ongoing repair and maintenance of the rail trail. As bridges are repaired or replaced, their construction style should be documented and information in the FMSF should be updated. Park staff should record new structures as they find them but leave them in place along the rail trail to provide historic context.

Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
BF00165 Florida Railroad Corridor	Nineteenth century American, 1821-1899	Linear Resource	NHR	G	RH
BF00728 GS+F RR to Keystone AAF RR	World War II & aftermath, 1941-1950	Linear Resource	NS	G	RH
PU01411 Georgia Southern + Florida Railroad	Nineteenth century American, 1821-1899	Linear Resource	NS	G	RH

Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
PU01412 Bridge 760031	ca 1956	Bridge	NS	G	RH
PU01413 Georgia Southern + Florida Railroad	ca 1940	Historic Structure	NS	G	RH
PU01573 Parcel 102 Site	Twentieth century American, 1900-present	Archaeological Site	NS	P	P
PU01620 Etoniah Canal	Late nineteenth- and early twentieth-century	Linear Resource	NHR	G	P
PU01621 GS & F Railroad Bridge 1	1940s	Bridge	NS	F	RH
PU01622 GS & F Railroad Bridge 2	1940s	Bridge	NS	F	RH
PU01623 GS & F Railroad Bridge 3	ca 1940	Bridge	NS	F	RH
UN00173 GS & F RR Bridge Remains	Twentieth century American, 1900-present	Archaeological Site	NS	F	P
UN00174 GS & F Bridge over Richard Creek	ca 1940	Bridge	NS	P	RH
UN00175 Georgia Southern & Florida Railroad	American	Linear Resource	NS	G	RH

Significance:

NRL National Register listed
 NR National Register eligible
 NE not evaluated
 NS not significant

Condition:

G Good
 F Fair
 P Poor
 NA Not accessible
 NE Not evaluated

Recommended Treatment:

RS Restoration
 RH Rehabilitation
 ST Stabilization
 P Preservation
 R Removal
 N/A Not applicable

Condition Assessment

Objective: Assess and evaluate two of 13 recorded cultural resources in the park.

Actions:

- Complete assessments/evaluations of two railroad bridges (PU01621 and PU01622) that cross the Etoniah Canal (PU01620), which is eligible for the National Register of Historic Places.

Documentation of Recorded Sites

Objective: Compile reliable documentation for all recorded historic and archaeological resources.

Actions:

- Record the section of the rail line west of Keystone Heights to Lake Butler and any associated bridges and rail line features.

Preservation Measures

Objective: Bring one of 13 recorded cultural resources into good condition.

Actions:

- Implement a regular monitoring program for the rail bed to check for possible erosion sites.

In some areas, the rail bed is raised significantly above the level of the surrounding terrain. These areas should be regularly checked for erosion so that the integrity and safety of the rail bed are protected.

SPECIAL MANAGEMENT CONSIDERATIONS

Arthropod Control Plan

All DRP lands are designated as “environmentally sensitive and biologically highly productive” in accordance with Ch. 388 and Ch. 388.4111 Florida Statutes. If a local mosquito control district proposes a treatment plan, the DRP works with the local mosquito control district to achieve consensus. By policy of DEP since 1987, aerial adulticiding is not allowed, but larviciding and ground adulticiding (truck spraying in public use areas) is typically allowed. The DRP does not authorize new physical alterations of marshes through ditching or water control structures.

The Palatka-to-Lake Butler State Trail does not have an Arthropod Control Plan. Mosquito control plans temporarily may be set aside under declared threats to public or animal health, or during a Governor’s Emergency Declaration.

LAND USE COMPONENT

VISITATION

This former rail corridor is still under construction and connects Lake Butler to Keystone Heights and, eventually, Palatka, providing an economic boost to northeast Florida's State Road 100 corridor. Once fully paved, the Palatka-to-Lake Butler State Trail will traverse 11 incorporated and unincorporated small towns, hamlets and villages, allowing unbroken long-distance cycling across more than 52 miles.

Functioning as a short segment of the 1,500-mile Florida National Scenic Trail, this rail trail provides statewide recreational connections from the Florida Panhandle to South Florida. Extended excursions from developed areas to timberlands and state forests are available, as well as numerous other natural areas. In downtown Keystone Heights, a 7-mile connector trail branches to the northeast, following State Road 21 to Mike Roess Gold Head Branch State Park and Camp Blanding Wildlife Management Area.

Palatka is an emerging trail mecca and designated Trail Town that, if extended, will allow for more than 100 miles of uninterrupted cycling from the Atlantic Coast to Lake City and the opportunity for visitors to paddle the St. Johns River along the St. Johns River Blueway (see Optimum Boundary section for additional details). Eventually, the trail will also connect to the St. Johns River-to-Sea Loop to the east along the Atlantic coast, providing a 260-mile trail loop. In addition to providing immense recreational opportunities, this trail leads visitors through dense tree canopies, wet prairies and agricultural lands and allows for visitors to observe remnants of the city of Lake Butler's Union Depot.

Trends

Annually, the Palatka-to-Lake Butler State Trail receives around 90,000 visitors. The trail sees an uptick in visitation during the spring and early summer months as outdoor recreation becomes more comfortable. In January and April, the Palatka Bike Club holds Florahome-to-Etoniah trail events which also attracts visitors to the state trail during the cooler spring months.

EXISTING FACILITIES AND INFRASTRUCTURE

There are currently no structures owned or managed by DRP along the trail. Paved, formalized parking is available at the western terminus of the trail in downtown Lake Butler, along Southwest 1st Street. Pervious parking is available at several locations along the trail, including designated trailheads which are located on the north shoulder of State Road 100, 5 miles west of Palatka and 4 miles east of Keystone Heights at the intersection of Forest Hills Road and State Road 100 (see Introduction for more details).

City and county parks along the trail provide additional trail access points and feature an assortment of amenities, including picnic areas, restrooms, ballfields, playgrounds, potable water and additional parking. Notable locally managed parks are located in Florahome and Hampton.

Certain segments of the trail are still not paved. The easternmost paved section stretches approximately 26 miles from Palatka to Keystone Heights. Currently, a traffic control device is being installed across State Road 100. Other disjunct paved sections currently exist as well, including a 2-mile stretch east of Bobby Shepard Ball Park in the town of Hampton and another 4-mile stretch southeast of the Lake Butler trailhead, ending just before New River.

A roughly 3-mile stretch of the trail through the city center of Keystone Heights continues to parallel State Road 100. This portion of the trail is maintained by Clay County. From the center of Keystone Heights, a spur trail follows State Road 21 for 6 miles to the northeast, connecting trail users to the entrance of Mike Roess Gold Head Branch State Park. This spur trail is also managed by Clay County.

Facilities Inventory

<i>Lake Butler Trailhead</i>	
Paved Parking Area (25 spaces)	1
<i>Forest Hills Trailhead</i>	
Stabilized Parking Area (5 spaces)	1
<i>Palatka Trailhead</i>	
Unpaved Parking Area (10 spaces)	1

CONCEPTUAL LAND USE PLAN

General Trail Needs

Objectives:

1. **Create an interpretive plan that enhances wayfinding and sense of place.**
2. **Update trail infrastructure and coordinate with Florida Department of Transportation (FDOT) to increase safety efforts.**

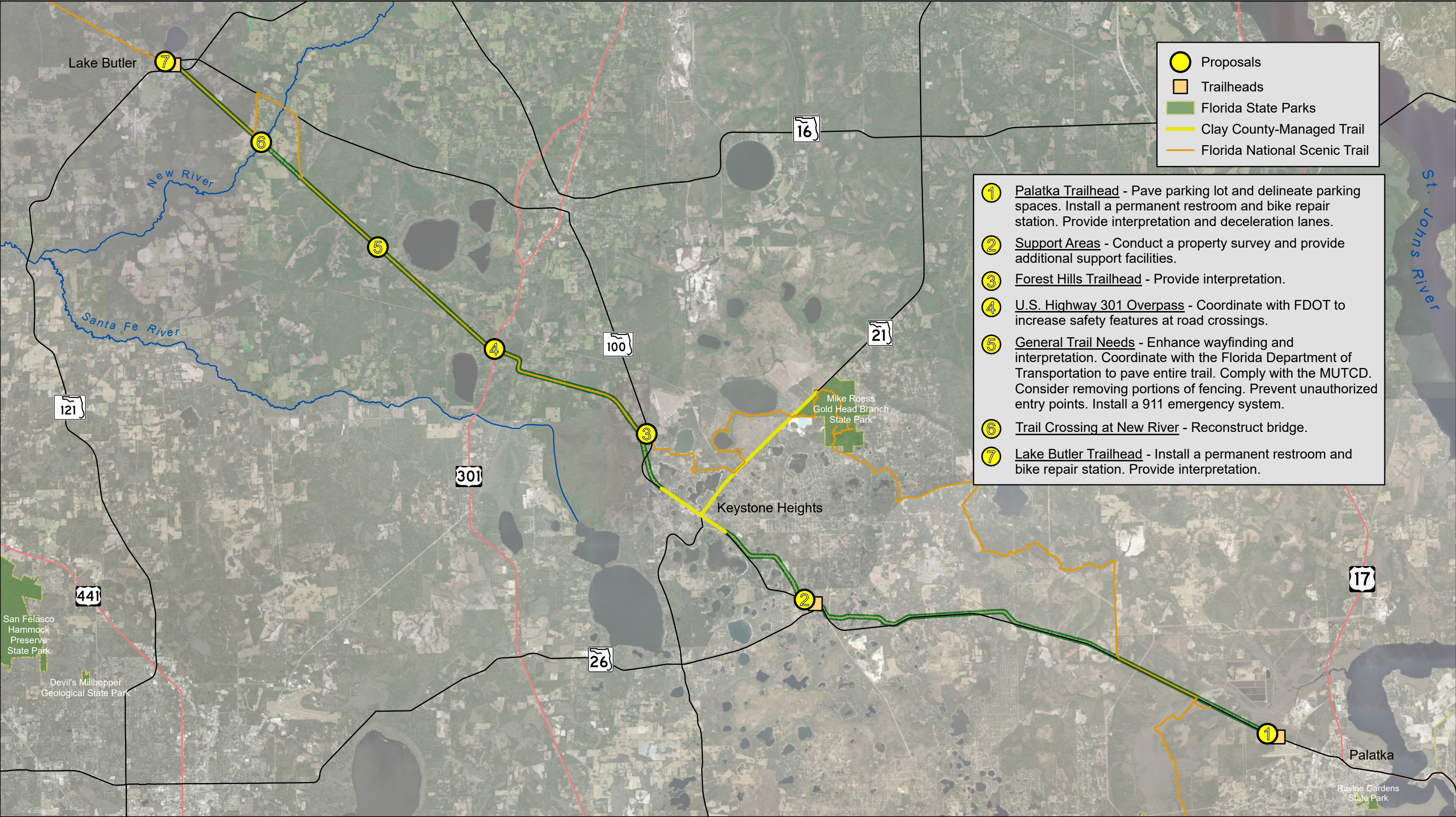
Actions:

- Comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- Rebuild the New River Bridge.
- Consider removing wooden fencing.
- Prevent unauthorized entry points.
- Install 911 emergency system.

There are currently no wayfinding or interpretive elements associated with the trail. DRP should prioritize enhancing wayfinding and sense of place at key trailheads. A series of comprehensive trail maps with locational points specific to individual trailheads should be standardized and installed. The trail map should highlight amenities, highway junctions, key cities and towns, DRP-managed trailheads, city and county-managed trailheads, county-managed portions of the trail, and the paved spur trail to Gold Head Branch State Park. Key facilities such as restrooms should be highlighted. Locally managed restrooms should be highlighted on the map with permission of managing entities.

Additionally, the trail bridge over New River, southeast of Lake Butler, requires reconstruction. This should be a priority construction project for DRP as it is a key component in the completion of this paved trail.

Paving for the entire length of the trail is currently underway in some sections and planned in other sections. The DRP should continue to ensure with the FDOT that this process is completed in a timely manner, with asphalt 10-12 feet in width and appropriate water crossings where necessary. Funding will continue to be sought to complete this project.

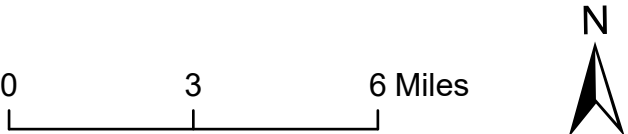


- ① Palatka Trailhead - Pave parking lot and delineate parking spaces. Install a permanent restroom and bike repair station. Provide interpretation and deceleration lanes.
- ② Support Areas - Conduct a property survey and provide additional support facilities.
- ③ Forest Hills Trailhead - Provide interpretation.
- ④ U.S. Highway 301 Overpass - Coordinate with FDOT to increase safety features at road crossings.
- ⑤ General Trail Needs - Enhance wayfinding and interpretation. Coordinate with the Florida Department of Transportation to pave entire trail. Comply with the MUTCD. Consider removing portions of fencing. Prevent unauthorized entry points. Install a 911 emergency system.
- ⑥ Trail Crossing at New River - Reconstruct bridge.
- ⑦ Lake Butler Trailhead - Install a permanent restroom and bike repair station. Provide interpretation.



Palatka-to-Lake Butler State Trail

Conceptual Land Use Plan



The MUTCD ensures uniformity of traffic control devices by setting minimum standards and providing guidance for safe and efficient transportation. All improvements and developments made to the trail should be followed with the proper MUTCD-compliant signage.

Wooden fencing is found along certain segments of the trail and requires more maintenance or replacement. Fencing should remain in areas where needed and park staff should consider removing unnecessary portions of fencing that provide no value.

Along certain portions of the trail, adjacent private properties are creating makeshift trail connections for convenient access. Motorized vehicles are prohibited from driving along the trail. Unauthorized entry points create erosion scars which should be revegetated. Appropriate signage should be installed, and effective enforcement should be implemented with a focus on preventing the entry of motor vehicles, to deter people from creating these eroded paths.

A 911 emergency system should be implemented. Installation of the system would involve the placement of decals or mile markers along the trail to identify the exact location of multiple “station numbers” assigned to the trail. The use of station numbers will enable 911 call takers to know the exact location (using geographic coordinates) of trail users in need of emergency response services. Call takers will immediately know which units to dispatch and the best way for emergency responders to reach the incident.

Support Areas

Objective: Delineate park boundary and increase support facilities.

Actions:

- Conduct a property survey.
- Provide volunteer campsites and one residence where available.

The trail is currently maintained using a single storage structure that is located within the maintenance complex that serves the city of Keystone Heights. To optimize maintenance and facilitate development and upkeep of proposed infrastructure at DRP-sanctioned trailheads along its 52-mile length, a central maintenance hub near Keystone Heights should be pursued in addition to satellite support areas in Lake Butler to the east and Palatka to the west (see Optimum Boundary section for more details).

DRP should aggressively explore properties for acquisition in the immediate vicinity of all three locations to facilitate construction. The construction of a staff residence, volunteer campsites and storage structures are recommended. The staff residence and volunteer campsite should be located near the midpoint of the trail, with storage structures located near the midpoint, eastern terminus, and western terminus. This will facilitate a support “hub and satellite” support layout across the length of the trail. Parcels under consideration for construction of support structures should prioritize staff and volunteer safety and convenience.

In order to evaluate feasible support facility locations, a formal property survey should be conducted in areas along the trail that offer the possibility to accommodate a support complex. Optimum boundary parcel identification efforts are closely related to the development of a support complex.

Palatka Trailhead

Objective: Formalize the Palatka Trailhead.

Actions:

- Pave parking lot.
- Delineate parking spaces.
- Install permanent restroom.
- Connect restroom to municipal sewage system.
- Install bike repair station.
- Provide deceleration lanes.
- Provide interpretive elements.

The current unstabilized informal parking area on the north shoulder of State Road 100 west of Palatka should be featured as a primary trailhead. To accomplish this, paving and painting of the parking lot with clearly delineated spaces, the addition of one ADA compliant parking space, the installation of a permanent restroom facility, the addition of a bike repair station, and the addition of drinking water fountains is recommended. If a permanent restroom is constructed, a connection to the municipal sewage system should be provided and automatic locking restroom doors should be installed.

Partnering with Putnam County and FDOT is recommended to plan a deceleration lane for westbound traffic and a central turn lane for eastbound traffic on State Road 100. As a formalized trailhead, an interpretive element that displays a trail-wide map and provides historical information is recommended.

Forest Hills Trailhead

Objective: Formalize the Forest Hills Trailhead.

Actions:

- Add wayfinding elements.

This trailhead provides stabilized parking and one ADA parking space. To further improve this trailhead, an interpretive element displaying a trail-wide map and historical material should be installed.

Lake Butler Trailhead

Objective: Further formalize the Lake Butler Trailhead.

Actions:

- Install permanent restroom.
- Connect restroom to municipal sewage system.
- Install a bike repair station.
- Create interpretive elements.

Paved parking is available at this centrally located trailhead in downtown Lake Butler. Further formalization efforts, including the construction of a permanent restroom and the addition of a bicycle

repair station would be helpful and likely be well-received by trail users. If a permanent restroom is constructed, a connection to the municipal sewage system should be provided and automatic locking restroom doors should be installed. One ADA compliant parking space will also be provided.

In addition to the Palatka and Forest Hills trailheads, the Lake Butler trailhead would benefit significantly from the installation of an interpretive element that displays a trail-wide map and historical information.

U.S. Highway 301 Overpass

Objective: Coordinate with FDOT to increase safety features at road crossings.

West of Hampton and south of Starke, the trail crosses U.S. Highway 301, a heavily trafficked four-lane divided highway that serves as the primary connection between Gainesville and Jacksonville. The speed limit on this rural stretch of highway is 65 miles per hour. The Palatka-to-Lake Butler State Trail is currently unpaved at this highway junction. However, in conjunction with paving, a safe and feasible trail crossing solution will require significant attention to trail user safety. Any viable solution to completing this trail connection would involve no interaction between cyclists and motorists on U.S. Highway 301, indicating a significant need for a bridge or tunnel-based solution. This crossing should replicate the U.S. Highway 98 bridge crossing along the Withlacoochee State Trail. If a trail bridge is constructed, welded wire fencing will be required as a buffer between trail users and the busy highway below. This fencing could also be used for signage to indicate to motorists utilizing U.S. Highway 301 that a state trail passes overhead.

Road crossing options should be planned and implemented in close coordination with the Florida Department of Transportation as the trail becomes fully paved and trail usage steadily increases.

Trail Crossing at New River

Objective: Reconstruct bridge over New River

The bridge that formerly carried the Palatka-to-Lake Butler Trail over the New River was damaged in a fire. The DRP should coordinate with FDOT and other stakeholders to ensure that the bridge is reconstructed during the current planning cycle.

OPTIMUM BOUNDARY

Land uses adjacent to the Palatka-to-Lake Butler State Trail include agricultural, rural, commercial, industrial, residential, and conservation uses. Numerous conservation lands and Florida Forever Board of Trustees (BOT) projects are underway in lands adjacent to the trail, including the Etoniah/Cross Florida Greenway Project and the Lake Santa Fe Project.

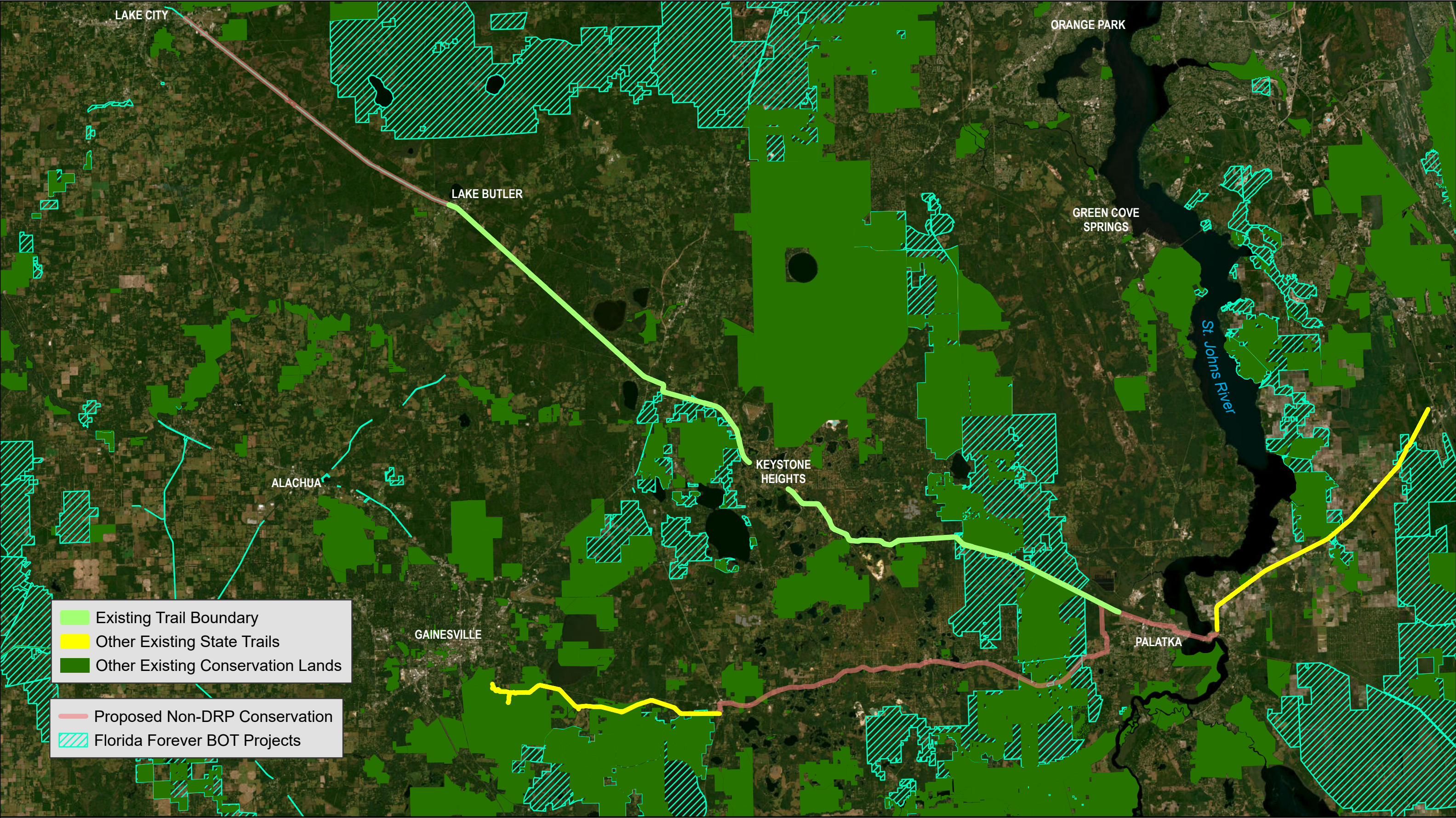
Where the trail intersects Southeast 75th Street, 2.5 miles northwest of Keystone Heights, DRP should consider approaching the U.S. Forest Service regarding its current swathes of planted pine parcels in the area. This location would be optimal with respect to constructing a maintenance hub at a central location along the length of the trail.

To support the Office of Greenways and Trails' Priority Trail Network, the Palatka to Hawthorne Corridor should be acquired to connect the eastern terminus of the Palatka-to-Lake Butler State Trail to the

Gainesville-to-Hawthorne State Trail. This extension would also provide cyclists a connection from Gainesville to the St. Johns River-to-Sea Loop to the west.

West of the terminus in downtown Lake Butler, the Palatka to Lake City Corridor, a Florida Forever BOT project and component of the Strategic Managed Areas Lands List, would extend the trail corridor 21 miles northwest to Lake City. This potential addition, along with closing additional trail gaps further west, would allow uninterrupted cycling from St. Augustine to Lake City.

DRP should only explore trail extension options that would not result in direct DRP management, as identified in the Optimum Boundary Map. By acquiring the Land Trail Priority and Florida Forever BOT project, long-distance excursions to and from Lake City, Gainesville, Palatka, and St. Augustine would be provided.



Palatka-to-Lake Butler State Trail

Optimum Boundary

0 5 10 Miles



