

ITEM 4:

Consider a 10-year update to the Rainbow Springs State Park Management Plan (Lease No. 3900).

LOCATION:

Marion County

APPLICANT:

Division of Recreation and Parks (DRP)

STAFF REMARKS:

Background

Rainbow Springs State Park (RSSP) is in Marion County. Access to the park is from U.S. Highway 41 and Southwest 180th Avenue Road. Rainbow Springs State Park was acquired on October 24, 1990 with funds from the Conservation and Recreation Lands Program. Currently, the park comprises 1,584.43 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park and on March 19, 1991, the Trustees leased the property to the DRP under a 50-year lease (Lease No. 3900).

The purpose of Rainbow Springs State Park is to conserve and protect the natural value of the Rainbow Springs and the Rainbow River, for the benefit of the people of Florida. The park was acquired to protect the spring and river system by restricting development around the springhead and river and to use this exceptionally scenic area for active and passive public recreation.

Management Plan Overview

The Florida Natural Areas Inventory has identified ten distinct natural community types and nine altered landcover types at RSSP. The predominant natural community is scrub followed by hydric hammock. Seven species of imperiled plants and twelve species of imperiled animals have been identified at RSSP.

The Division of Historical Resources maintains a Master Site File that documents many of Florida's archaeological and historical features. Twenty-three archaeological sites, two historical cemeteries, five resource groups, and twenty-five historic structures have been identified at RSSP.

Rainbow Springs State Park offers visitors several resource-based recreation opportunities. The campground is one of the more popular in the state park system. Campground occupancy rates are relatively high in all months of the year with particularly high use in the winter and spring months. Swimming, snorkeling, canoeing, picnicking, interpretive programs, special events and sightseeing are the recreational activities occurring in the headspring area of Rainbow Springs State Park. Activities outside the park on the Rainbow River include swimming, snorkeling, scuba diving, canoeing, boating, tubing, fishing and sightseeing. Canoeing, kayaking and the use of other human-powered boats are allowed in the reach of the spring-run stream managed by the Division.

The Florida Legislature requires that all land management plans include long and short-term goals. These goals must be measurable objectives, and short-term goals must be achievable within a two-year planning period. Pursuant to section 253.034, Florida Statutes, the Division of

State Lands began compiling the short-term goals from each land management plan approved since July 1, 2016. The Division has included short-term goals from this management plan as part of this item.

While the 10-year management plan serves as the basic statement of policy and future direction for each park, several annual work plans provide more specific guidance for DRP staff to accomplish many of the resource management goals and objectives of the park. Where such detailed planning is appropriate to the character and scale of the park's natural resources, annual work plans are developed for prescribed fire management, exotic plant management and imperiled species management. Annual or longer-term work plans are developed for natural community restoration and hydrological restoration.

Public Involvement

DRP solicited public input by conducting an advisory group and public workshop meeting on August 21, 2021, and December 14, 2021, respectively. The purpose of the advisory group meeting was to provide the Advisory Group members the opportunity to review and discuss the management plan. The DRP staff recommended approval of the proposed management plan as presented.

Surplus Lands

The evaluation by the DRP determined that no portion of the RSSP is recommended for a potential surplus designation.

State Land Management Review Team

A Land Management Review (LMR) was conducted in October 2019. The review team found that the property is managed in accordance with the purposes for which it was acquired and the management practices, including public access, are in compliance with the management plan. Two consensus recommendations were offered:

- The management plan reviewed by this land management review team was prepared in 2002. This is the third time this plan has been reviewed. In order for the land management review process to function properly, the team recommended the management plan be updated in a timely manner.
- The team recommended the FPS resume southeastern kestrel monitoring and nest box maintenance in coordination with FWC.
- The team recommended the FPS resume Bachman's sparrow annual monitoring and brown-headed nuthatch monitoring in coordination with FWC.

The 2019 LMR notes were reviewed as part of developing this plan and the agreed upon changes and recommendations were made to this management plan.

STAFF RECOMMENDATION:

Approve the management plan.

ARC RECOMMENDATION:

APPROVE

APPROVE WITH MODIFICATIONS: _____

DEFER

WITHDRAW

NOT APPROVE

OTHER: _____

Rainbow Springs State Park

Land Management Plan Short Term Goals

Goal (ST)	Details of Goal	Objective	Details of Objective	Action	Details of Action	Measures
II	Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.	B	Monitor and Evaluate the natural hydrological conditions and functions within the headspring and improve approximately 0.1 discontinuous acres of Spring-run Stream natural community.	2	Develop a plan for experimental plantings of key species of SAV in the spring and spring run stream in areas that have experienced loss. Implement the plan if need is indicated.	Plan developed
III	Restore and maintain the natural communities/habitats of the park.	B	Conduct habitat/natural community restoration activities on 322 acres of sandhill community.	1	Develop a site specific restoration plan.	Plan complete
III	Restore and maintain the natural communities/habitats of the park.	D	Conduct habitat/natural community improvement activities on 10 acres of sandhill community.	1	Develop and implement a plan to remove off-site hardwoods	Plan complete
IV	Maintain, improve or restore imperiled species populations and habitats in the park.	B	Monitor and document 9 selected imperiled animal species in the park.	1	Implement monitoring protocols for the 9 selected imperiled animal species	# Protocols developed
IV	Maintain, improve or restore imperiled species populations and habitats in the park.	C	Monitor and document 1 selected imperiled plant species in the park.	1	Develop a monitoring protocol for giant orchid.	# Protocols developed

Goal (ST)	Details of Goal	Objective	Details of Objective	Action	Details of Action	Measures
V	Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.	B	Develop and implement measures to prevent the accidental introduction or further spread of invasive exotic plants in the park.	1	Develop and implement written guidelines to prevent the introduction and spread of invasive exotic plants. Provide staff with the tools to implement the guidelines.	# Measures developed
VI	Protect, preserve and maintain the cultural resources of the park.	A	Assess and evaluate 50 of 50 recorded cultural resources in the park.	1	Complete 50 assessments/evaluations of archaeological sites.	Assessments complete
VI	Protect, preserve and maintain the cultural resources of the park.	B	Compile reliable documentation for all recorded historic and archaeological sites.	2	Ensure all known sites are recorded or updated in the Florida Master Site File.	# Sites recorded or updated
VI	Protect, preserve and maintain the cultural resources of the park.	B	Compile reliable documentation for all recorded historic and archaeological sites.	3	Develop and utilize a Scope of Collections Statement.	Document completed
VI	Protect, preserve and maintain the cultural resources of the park.	B	Compile reliable documentation for all recorded historic and archaeological sites.	5	Prepare and submit the nomination of Rainbow Springs to the National Register of Historic Places at the local level under Criterion A for Settlement/Exploration and Entertainment/Recreation and Criterion C for Architecture.	Nomination Submitted
VI	Protect, preserve and maintain the cultural resources of the park.	C	Bring 11 of 50 recorded cultural resources into good condition.	4	Develop and implement a plan to manage or deaccession the submarine boats (MR3641)	Projects completed

Source: Florida DEP, Office of Environmental Services



RAINBOW SPRINGS STATE PARK

Draft Unit Management Plan

Executive Summary

Purpose and Significance of the Park

Park History

Rainbow Springs State Park was initially acquired on October 20, 1990 with funds from the Conservation and Recreational Lands (CARL) program. The park is currently 1,584.43 acres.

Park Significance

Rainbow Springs State Park is significant as a unit of the state park system due to the Rainbow Springs, Florida's fourth largest first magnitude spring group consisting of at least 87 spring vents. Uplands in the park provide habitat for a variety of imperiled wildlife and plant species including gopher tortoises, indigo snakes, Florida mice, southern fox squirrels, Florida pine snakes, and gopher frogs. The park contains an abundance of archaeological sites, representing periods of Florida's history from Paleo-Indian through the discovery and mining of phosphate rock to the development of tourism during the early to mid-twentieth century.





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Executive Summary

Park Interpretive Themes

Central Park Theme

A former roadside attraction, Rainbow Springs State Park's blooming azaleas and cascading waterfalls give way to the natural beauty of a first magnitude spring.

Primary Interpretive Themes

Habitats — The sandhills and diverse ecosystems surrounding the spring recharge the aquifer and river, which in turn nurtures a variety of terrestrial and aquatic wildlife.

Historic Use — The relics of the historic roadside attraction at Rainbow Springs remind us of how human actions in the past continue to affect our natural areas.

Recreational Opportunities — Responsible recreation on the Rainbow River is a safeguard for the water clarity and delicate vegetation of this ecological treasure.

Water Quality — The health of the Rainbow River relies on collaborative regional management efforts that prioritize nitrogen reduction and water conservation.





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Park Quick Facts

Natural Community Composition

- ◆ **Agency:** Department of Environmental Protection - Division of Recreation and Parks
- ◆ **Acreage :** 1,584.43
- ◆ **Location:** Marion County
- ◆ **Lease Management Agreement Number(s):** 3900
- ◆ **Use:** Single
- ◆ **Responsibility:** Public Outdoor Recreation and Conservation
- ◆ **Sublease:** None
- ◆ **Encumbrances:** See Appendix 1 for details
- ◆ **Public Involvement:** See Appendix 2 for details
- ◆ **Optimum Boundary:** Approximately 1,274 acres (See Optimum Boundary Page)

Natural Communities	Acreage	Percentage
Basin Swamp	35.13	2.21%
Depression Marsh	5.09	<1%
Altered Landcovers	702.80	44.36%
Floodplain Swamp	4.99	<1%
Hydric Hammock	141.63	8.91%
Mesic Flatwoods	145.45	9.15%
Scrubby Flatwoods	7.15	<1%
Sandhill	531.02	33.4%
Spring-Run Stream	13.64	<1%
Total Acreage	1,584.43	100%



RAINBOW SPRINGS STATE PARK

Draft Unit Management Plan

Executive Summary

Park Accomplishments: 2002 — 2021

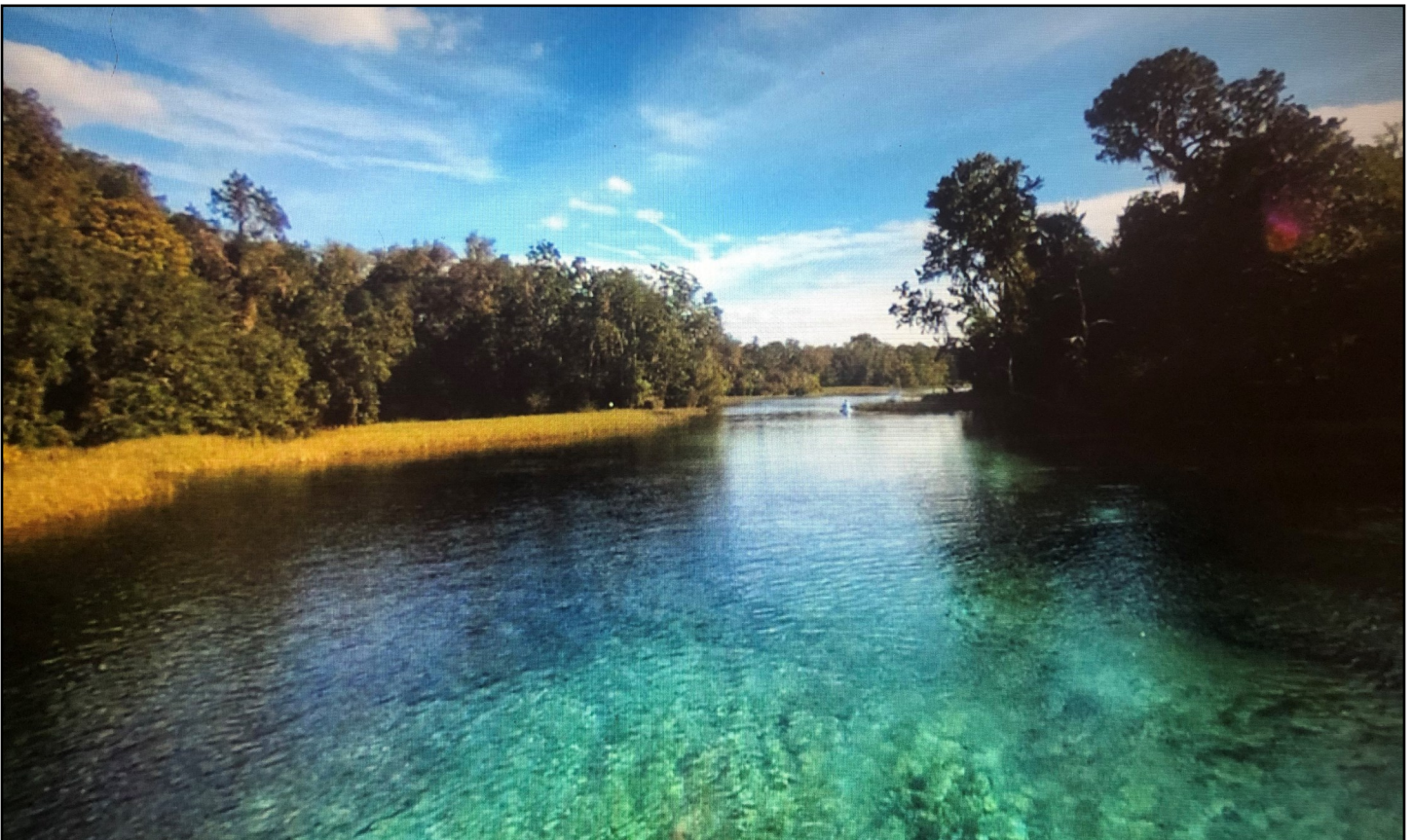
Ten-Year Planning Period Objectives

Previous Accomplishments

Since the 2002 Unit Management Plan for Rainbow Springs the park has made significant accomplishments in terms of resource management and continued protection of the park. The park has added approximately 504 acres to the park and has recorded over 285,000 volunteer hours. Since 2011, the park has treated 1,466 acres with prescribed fire and 428 acres of exotic species.

Future Objectives

Moving forward in the next 10 years, the park plans to continue resource management efforts by restoring altered landcover types to their desired future conditions. Restoration activities will be done through the continued use of prescribed fire applications, exotic species removal, and other management activities. To improve visitor use, the park will be making improvements to six use areas and creating one new use area.





RAINBOW SPRINGS STATE PARK

Draft Unit Management Plan

Executive Summary

Management Goals & Objectives

Hydrological & Natural Communities

Objective: Assess hydrological restoration needs, monitor SAV, soil erosion, and spring ecosystem health and restore natural hydrological condition.

To restore the natural hydrological conditions, steps include continued cooperation with partners involved in long term monitoring initiatives including but not limited to assessment of water quality and quantity, SAV, and spring ecosystem health. If it is determined that specific areas of the spring-run in the park boundary have experienced significant degradation, a restoration plan will be developed outlining the use of techniques such as experimental SAV plantings or spring erosion sediment control alternatives.

Objective: Restore and improve approximately 407 acres of sandhill and flatwoods natural communities, and apply fire to approximately 950 acres within the next 10 years.

To restore and improve the natural communities, steps include developing a restoration plan for 244 acres of sand pine plantation, 10 acres of offsite hardwoods, 75 acres of the Rainbow Ranch property, and burning between 291-858 acres of fire dependent natural communities annually.





RAINBOW SPRINGS STATE PARK

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Executive Summary

Management Goals & Objectives

Imperiled & Exotic Species

Imperiled Species Management

Goal: Maintain, improve, and restore imperiled species populations and habitats.

Objective: Monitor and document 10 imperiled plant and animal species.

Rainbow Springs State Park has documented populations of a number of imperiled animal species that would benefit from additional monitoring. The giant orchid, southeastern fox squirrel, Florida mouse, southeastern kestrel, indigo snake, striped newt, gopher frog, gopher tortoise, Suwannee cooter, and Bachman's sparrow will be monitored or documented.

Exotic Species Management

Goal: Remove exotic and invasive species and conduct needed maintenance.

Objective: Annually treat 200 acres of exotic plant species in the park.

Various exotics including hydrilla, coral ardesia, and cogongrass are found within the park. Plans to remove these non natives include continuous treatment and survey. Removal will be done by park staff and contractors.





RAINBOW SPRINGS STATE PARK

Draft Unit Management Plan

Executive Summary

Management Goals & Objectives

Recreational Use & Infrastructure

Recreation and Facilities Management

Goal: Develop and maintain use areas and support infrastructure

Objective: Improve 6 use areas and Create 1 new use area.

To improve and expand visitor use at the park, plans include the improvements below:

Park Entrance

- Add Ranger Station

Parking Lot

- Additional Signage
- Redesign Parking Area
- Remove Excess Asphalt
- Restore Native Groundcover

Campground

- Connection to Central Waste
- Redefine Entrance

Tube Concession/Exit Area

- Potential Employee Trailer Site
- Redefine Entrance

Group Camping Area

- Develop Group Camping Area

Headspring Day Use Area

- Add Paddlecraft Dropoff
- Swimming Area Safety Improvements
- Landscaping Improvements

Ornamental Gardens

- Native Species & Cultural Interpretation





RAINBOW SPRINGS STATE PARK

Draft Unit Management Plan

Executive Summary

Management Goals & Objectives

Optimum Boundary

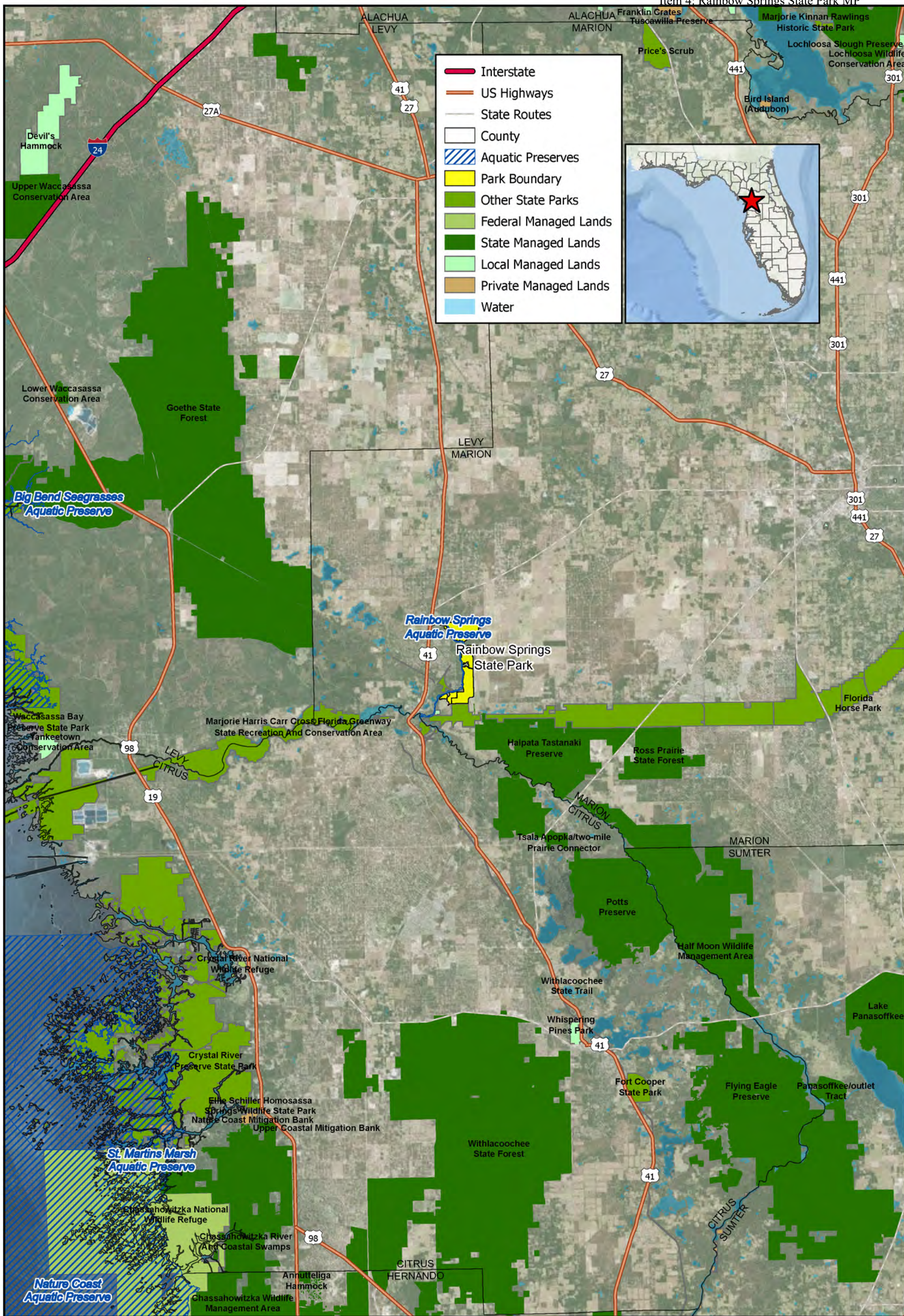
The optimum boundary map for Rainbow Springs State Park shows much more than the typical optimum boundary map. This map shows the normal identified optimum boundary parcels that the park is interested in acquiring and managing along with many other lands that are not for park acquisition but rather alternative managing agencies. The purpose of adding these additional properties is to show the importance of regional conservation efforts to help protect the Rainbow Springshed. Additional lands that are listed include Florida Forever projects, conservation lands, and a large area of lands that are within the primary protection zone of the Rainbow springshed and are a primary focus area for the conservation of the lands to further protect the integrity of the springs recharge areas.

Identified Optimum Boundary Parcels

The optimum boundary for the park consists of 40 parcels that total approximately 1,274 acres. The properties are divided between numerous areas both large and small. The Northwest Section would help protect the headsprings recharge area and could provide a suitable site for future park activities. The Northeast Section contain sandhill communities that would improve the buffer and the habitat protection potential of the park. They would also connect the current northern and southern tracts of the park, expand recreational opportunities for trails, and would protect a spring and spring-run that flows directly into the Rainbow River. The Central Section would bring remaining out parcels of undeveloped shoreline into state ownership and ensure the protection of the sensitive shoreline habitats. The South Section would provide further protection of the Rainbow springshed, protect additional habitat for imperiled species, and would facilitate additional fire and exotic management practices.

Crucial Lands for Springs Protection

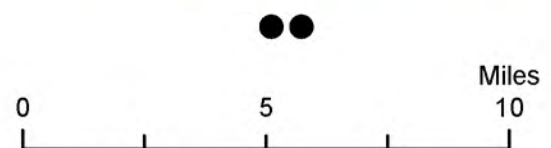
The goal of the primary focus area is to protect most of the undeveloped or minimally developed private land remaining along the Rainbow River. The southern parcels would bring a remaining large portion of undeveloped shoreline along the eastern side of the river into state ownership and provide a connection to the southern end of the Rainbow Springs State Park. Public acquisition of these lands will prevent further development and conflicting land uses that could further degrade the ecological value of this area. In addition, the potential restoration of altered habitats would help restore and maintain water quality and habitat along one of Florida's largest spring-run streams.



- Interstate
- US Highways
- State Routes
- County
- Aquatic Preserves
- Park Boundary
- Other State Parks
- Federal Managed Lands
- State Managed Lands
- Local Managed Lands
- Private Managed Lands
- Water

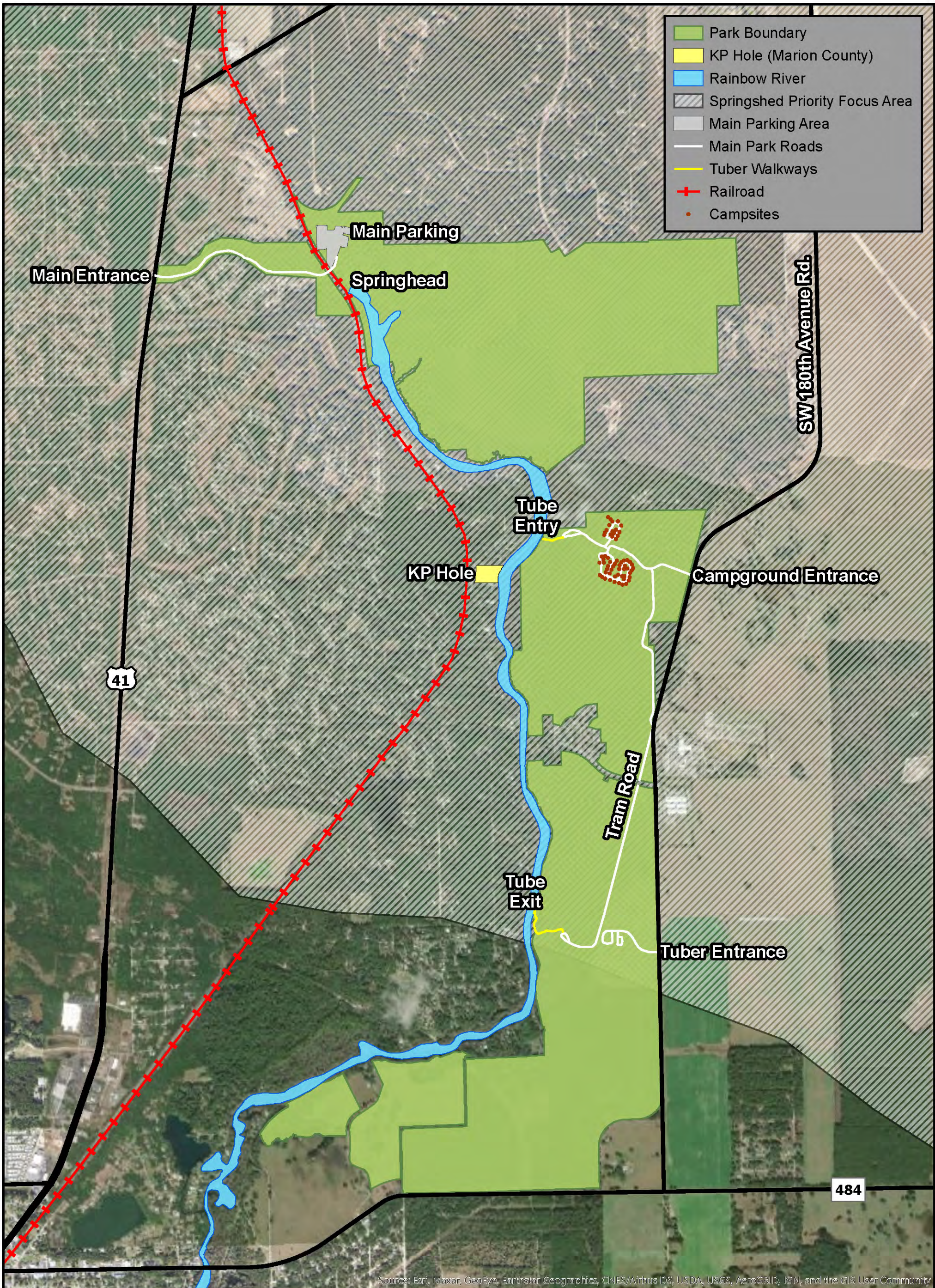


RAINBOW SPRINGS STATE PARK



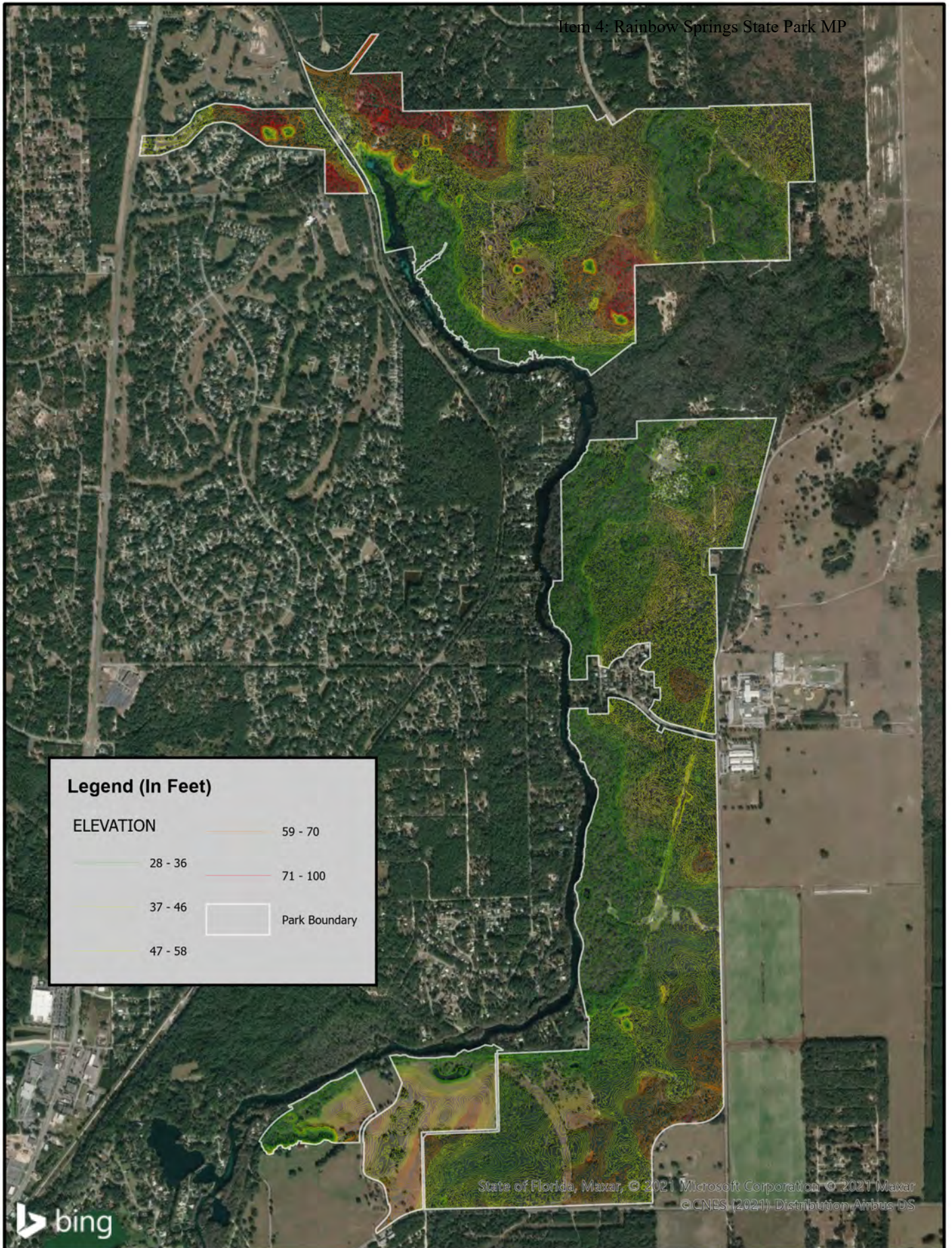
VICINITY MAP

Florida Department of Environmental Protection
Division of Recreation and Parks



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



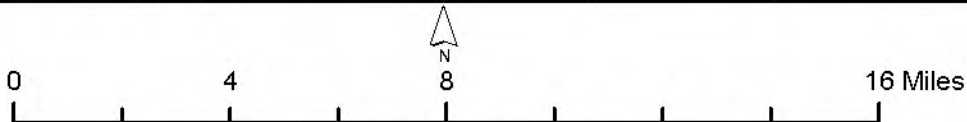
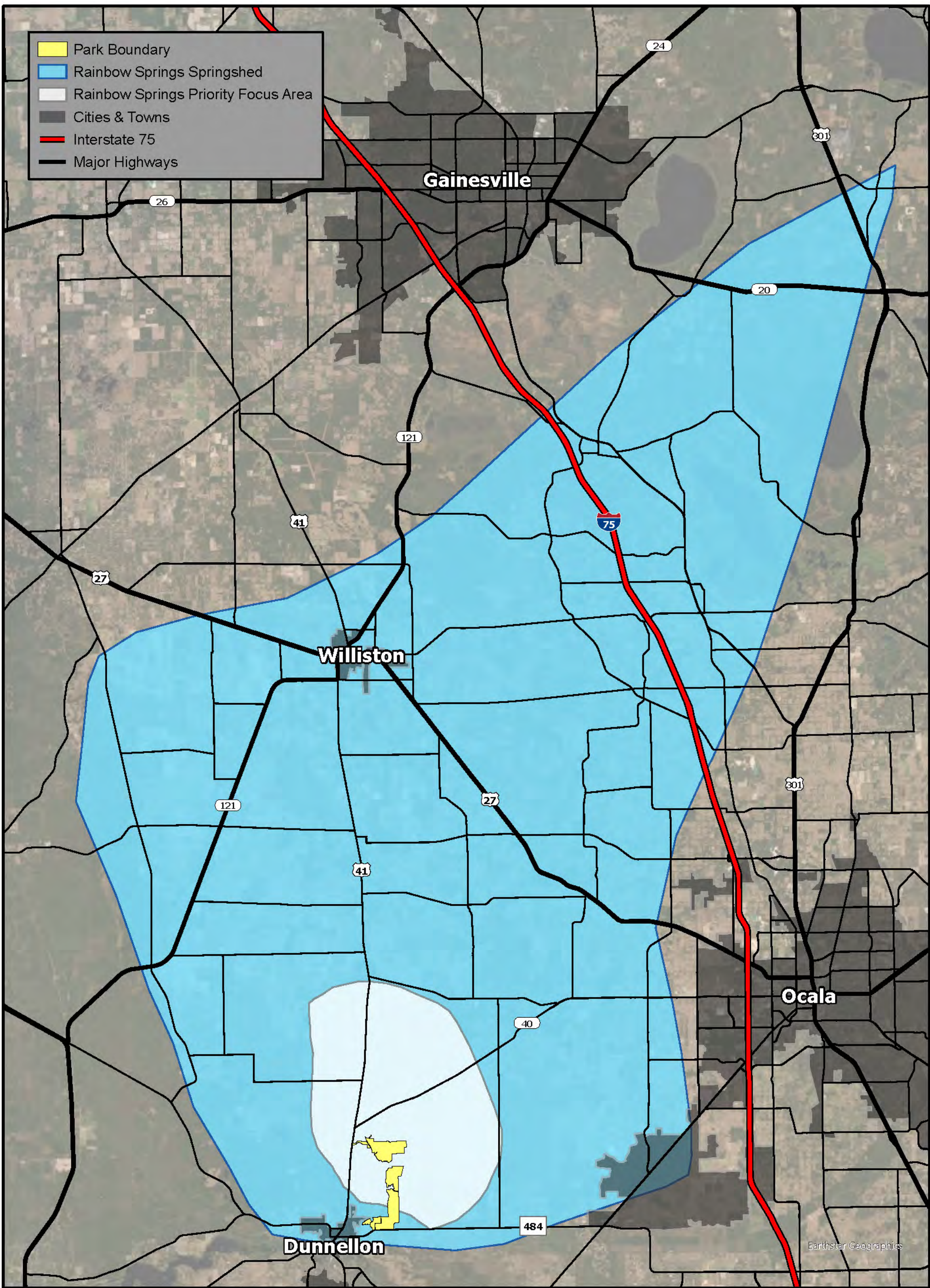


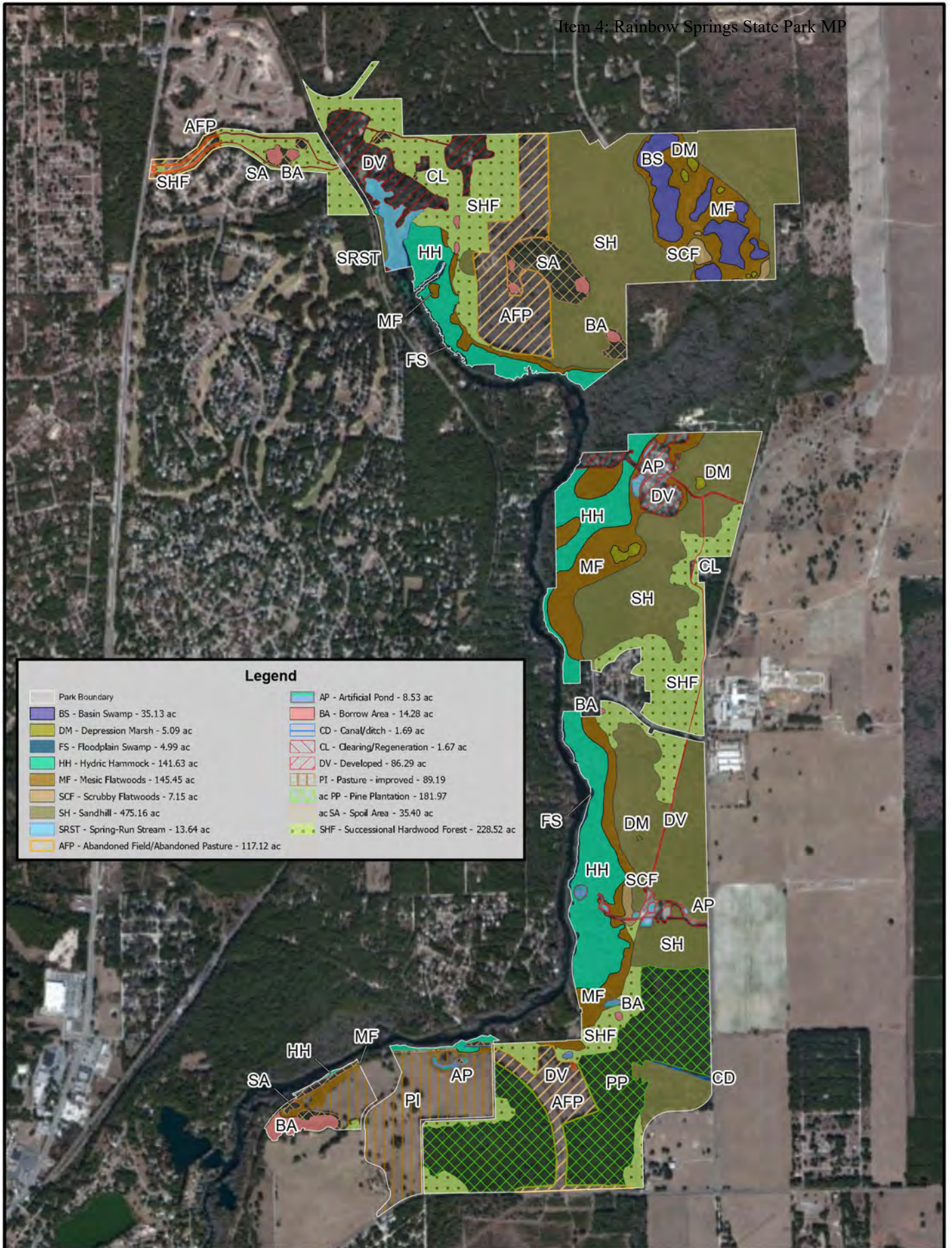
Legend (In Feet)

ELEVATION	
28 - 36	59 - 70
37 - 46	71 - 100
47 - 58	Park Boundary

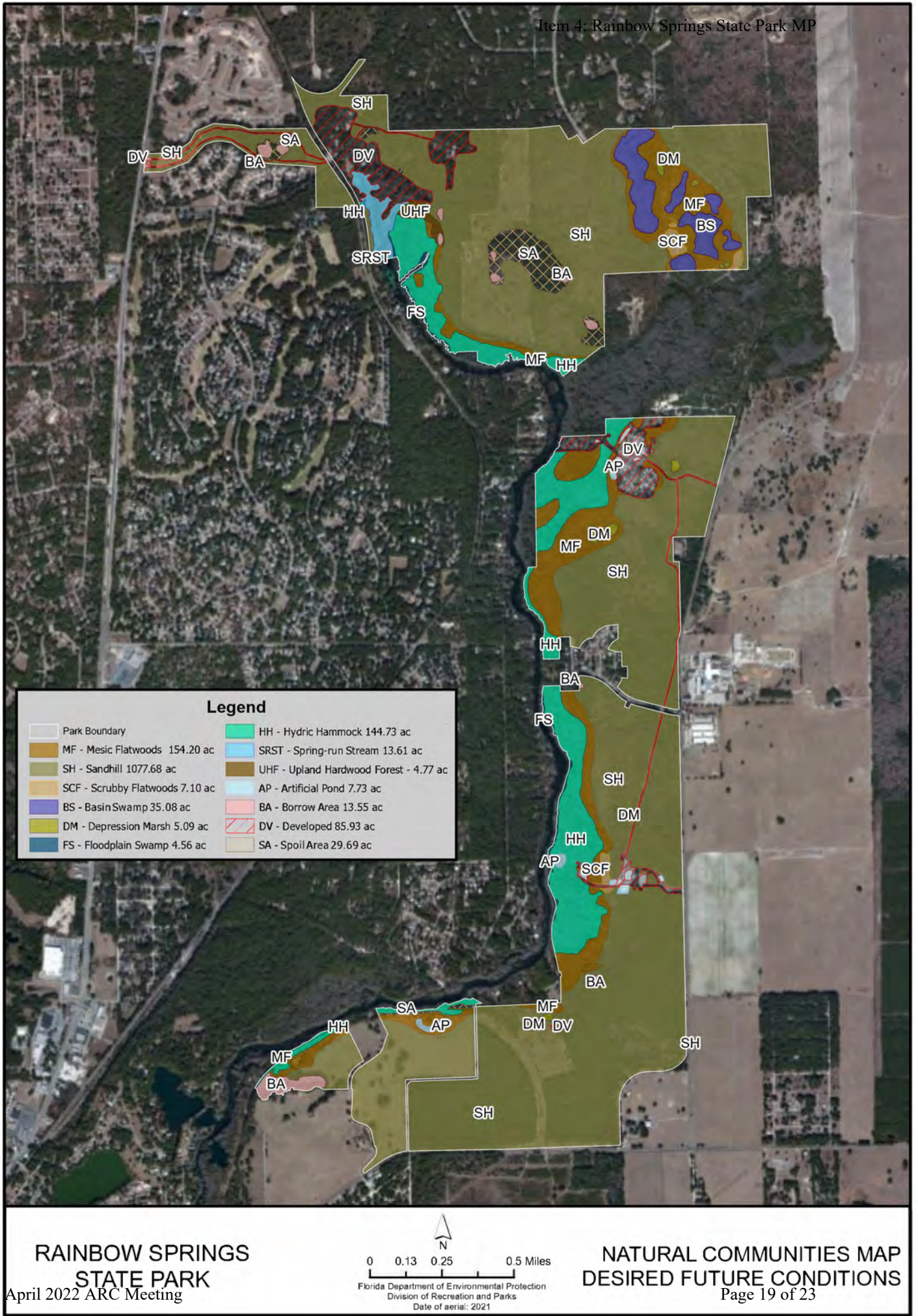


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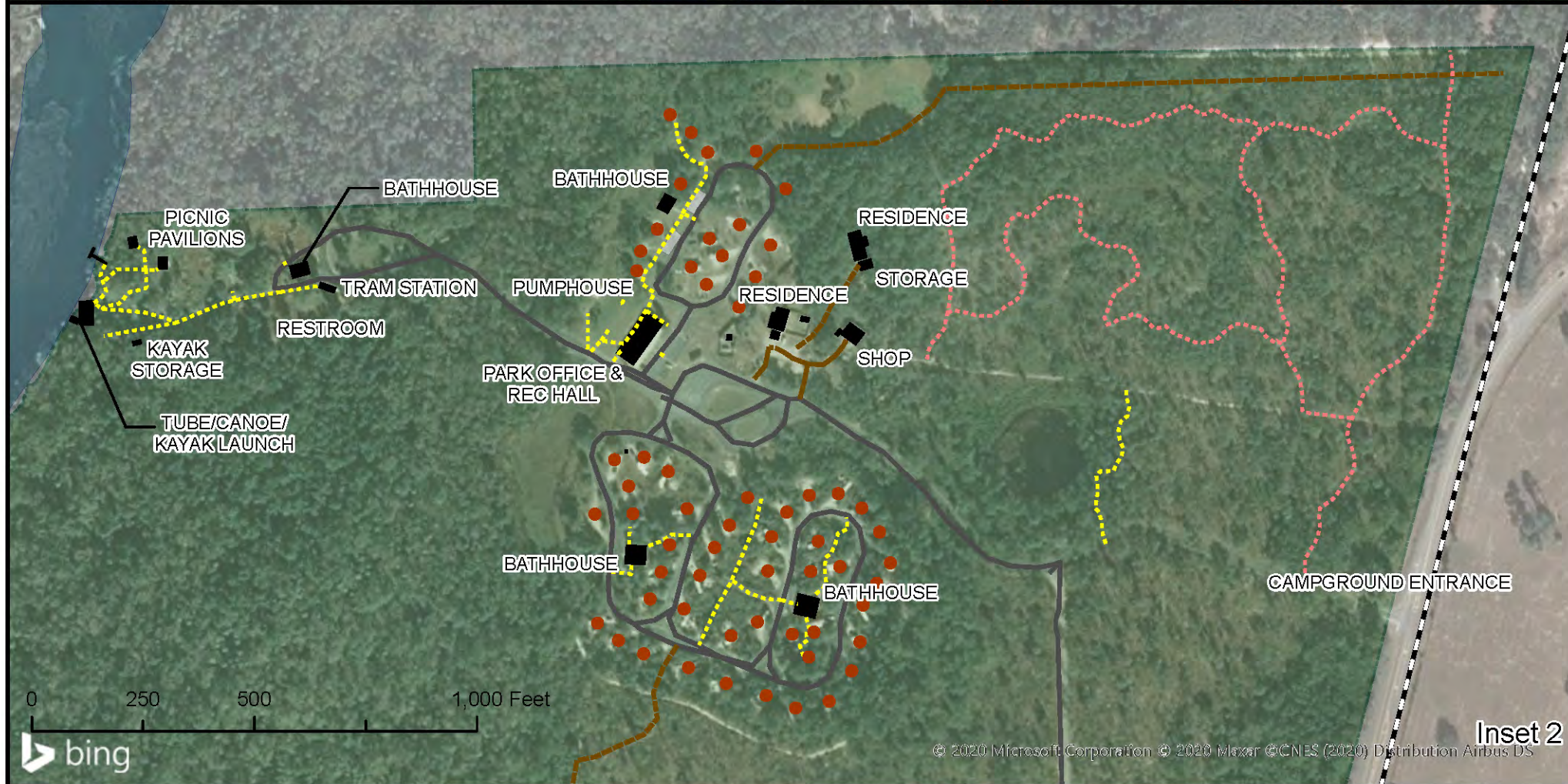
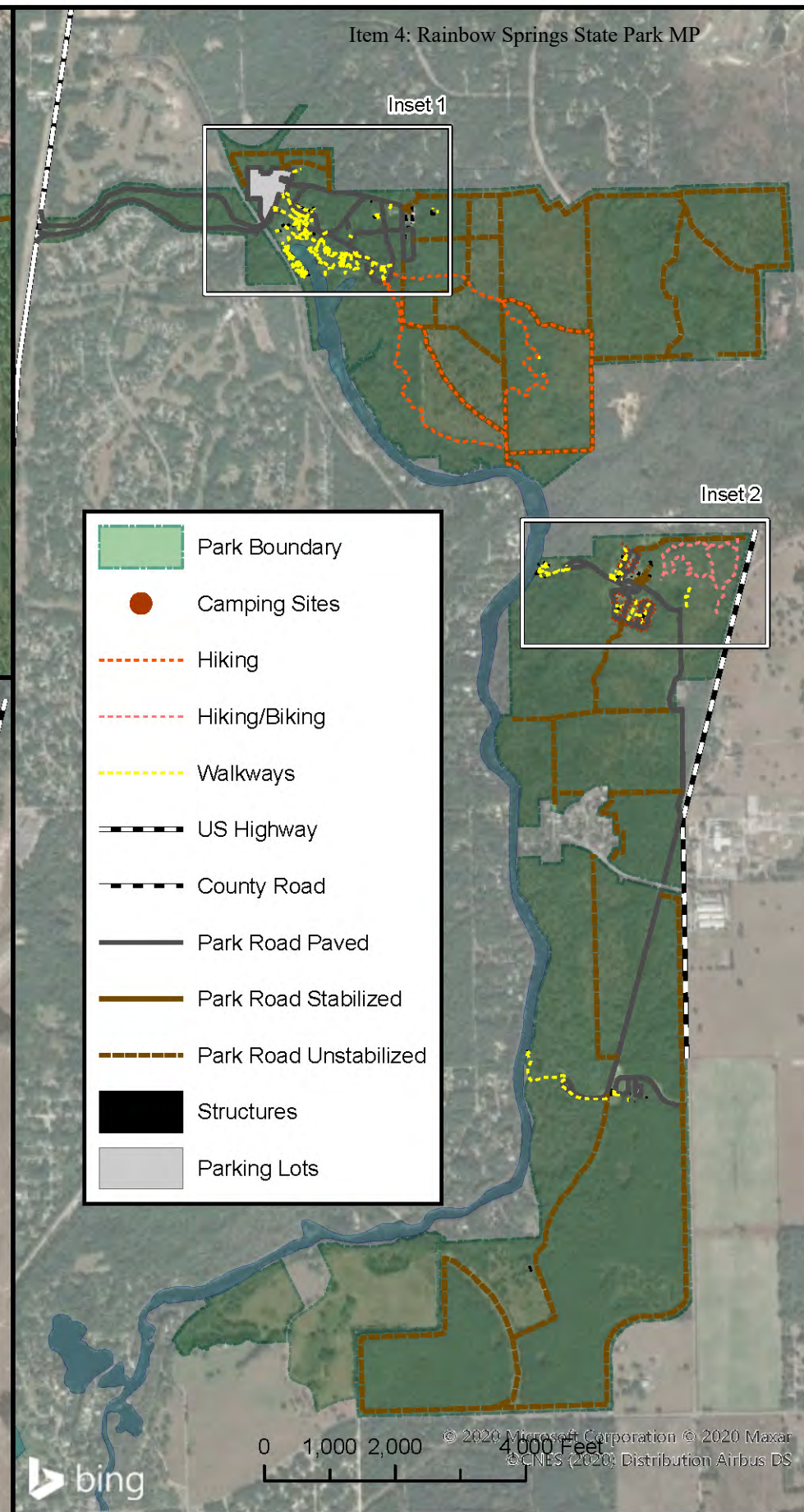
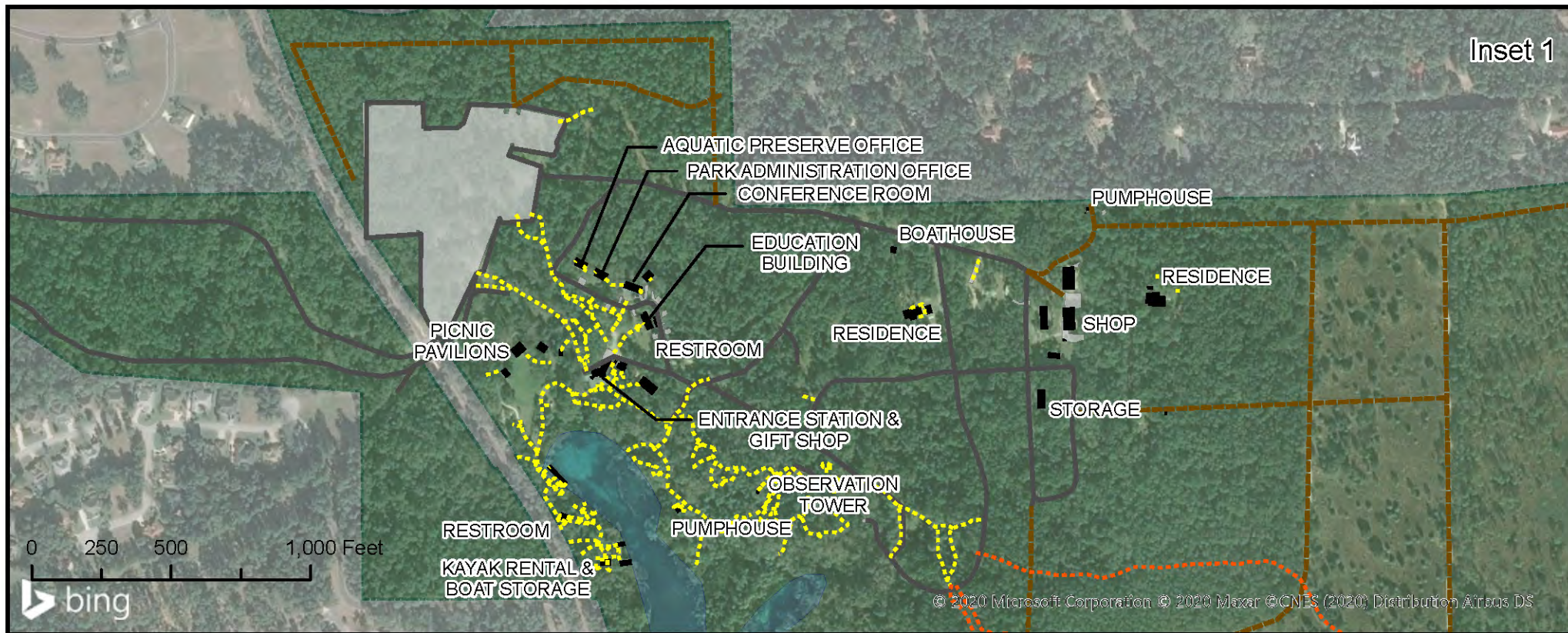


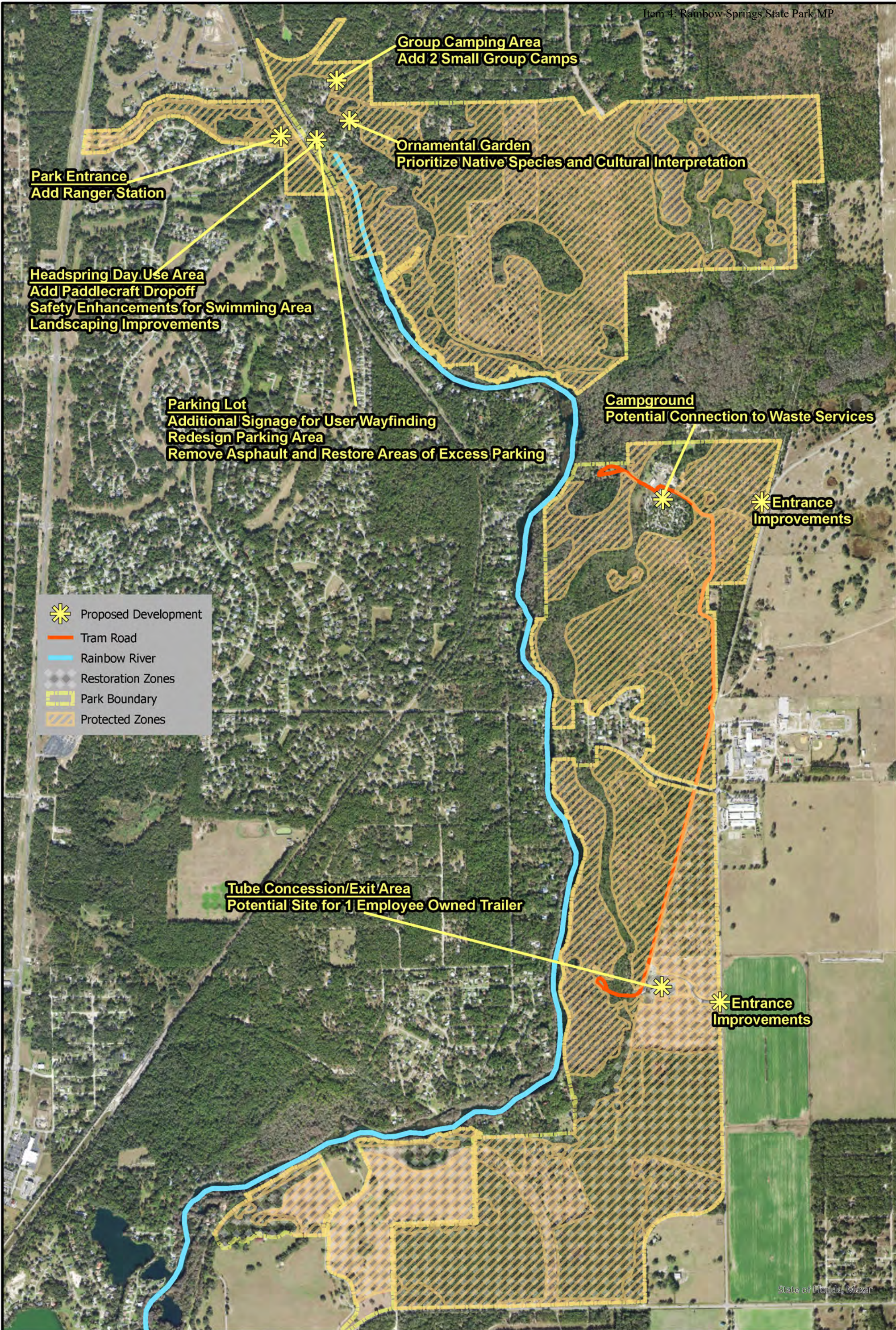
Legend	
Park Boundary	AP - Artificial Pond - 8.53 ac
BS - Basin Swamp - 35.13 ac	BA - Borrow Area - 14.28 ac
DM - Depression Marsh - 5.09 ac	CD - Canal/ditch - 1.69 ac
FS - Floodplain Swamp - 4.99 ac	CL - Clearing/Regeneration - 1.67 ac
HH - Hydric Hammock - 141.63 ac	DV - Developed - 86.29 ac
MF - Mesic Flatwoods - 145.45 ac	PI - Pasture - improved - 89.19 ac
SCF - Scrubby Flatwoods - 7.15 ac	ac PP - Pine Plantation - 181.97 ac
SH - Sandhill - 475.16 ac	ac SA - Spoil Area - 35.40 ac
SRST - Spring-Run Stream - 13.64 ac	SHF - Successional Hardwood Forest - 228.52 ac
AFP - Abandoned Field/Abandoned Pasture - 117.12 ac	



Legend

Park Boundary	HH - Hydric Hammock 144.73 ac
MF - Mesic Flatwoods 154.20 ac	SRST - Spring-run Stream 13.61 ac
SH - Sandhill 1077.68 ac	UHF - Upland Hardwood Forest - 4.77 ac
SCF - Scrubby Flatwoods 7.10 ac	AP - Artificial Pond 7.73 ac
BS - Basin Swamp 35.08 ac	BA - Borrow Area 13.55 ac
DM - Depression Marsh 5.09 ac	DV - Developed 85.93 ac
FS - Floodplain Swamp 4.56 ac	SA - Spoil Area 29.69 ac





Park Entrance
Add Ranger Station

Group Camping Area
Add 2 Small Group Camps

Ornamental Garden
Prioritize Native Species and Cultural Interpretation

Headspring Day Use Area
Add Paddlecraft Dropoff
Safety Enhancements for Swimming Area
Landscaping Improvements

Parking Lot
Additional Signage for User Wayfinding
Redesign Parking Area
Remove Asphalt and Restore Areas of Excess Parking

Campground
Potential Connection to Waste Services

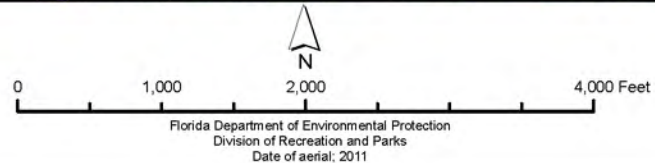
Entrance Improvements









Tube Concession/Exit Area
Potential Site for 1 Employee Owned Trailer

Entrance Improvements

- Proposed Development
- Tram Road
- Rainbow River
- Restoration Zones
- Park Boundary
- Protected Zones

State of Florida, Maxar



	Optimum Boundary
	Undeveloped Lands for Springs Protection
	Rainbow Springs Priority Focus Area
	Cross Florida Greenway Boundary
	Conservation Lands
	Florida Forever Boundaries
	Rainbow River
	Park_Boundary

