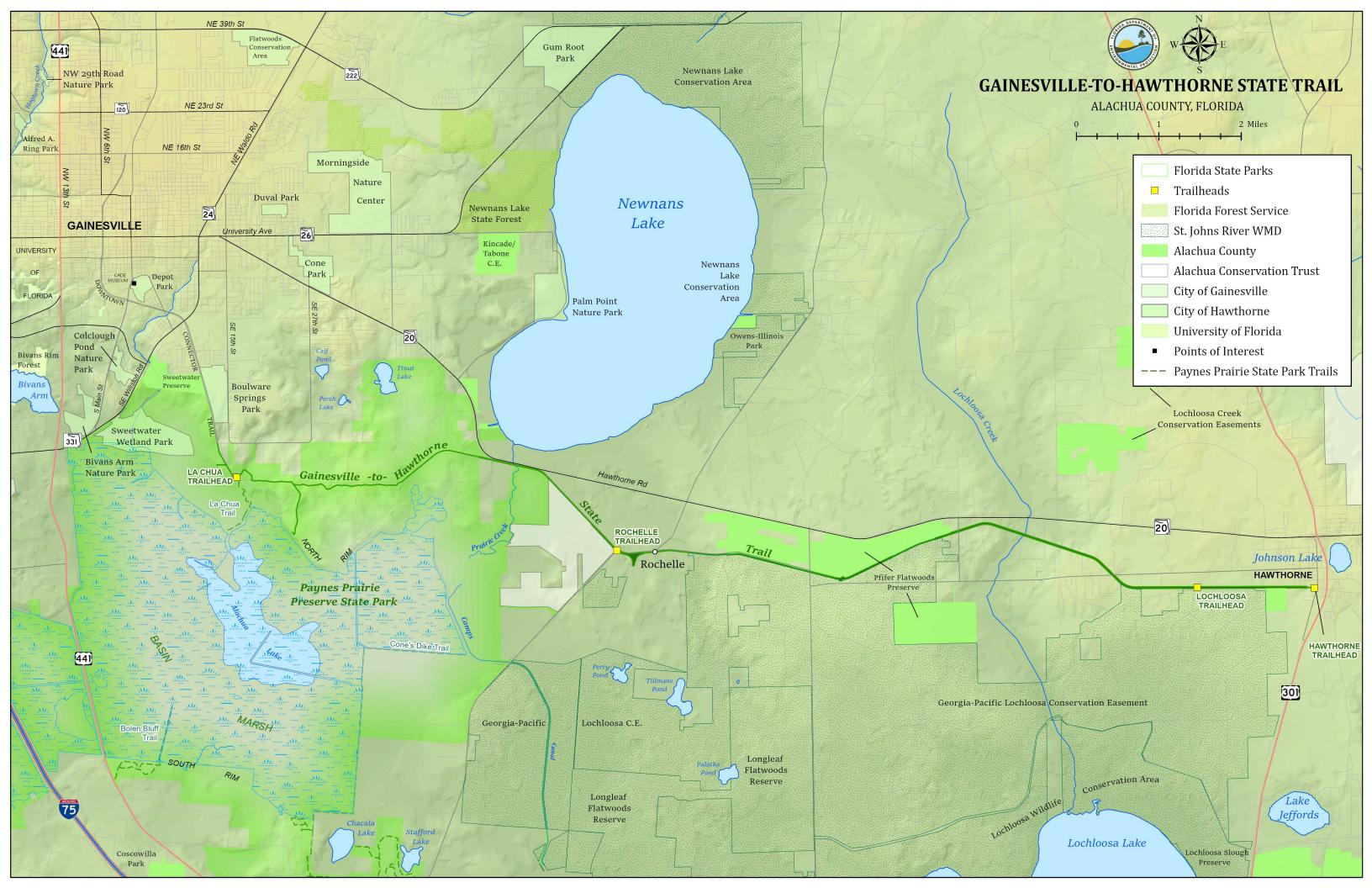


GAINESVILLE-TO- HAWTHORNE STATE TRAILPark Chapter

STATE TRAIL SYSTEM



INTRODUCTION

LOCATION AND ACQUISITION HISTORY

Gainesville-to-Hawthorne State Trail is located in Alachua County (see Vicinity Map). Access to the trail is available from multiple points. The Vicinity Map also reflects significant land and water resources existing near the trail. The following trailheads provide trailhead access and parking.

Boulware Springs City Park Trailhead:

N 29.621812, W -82.308380

Rochelle/ Prairie Creek Preserve Trailhead:

N 29.595920, W -82.227772

Lochloosa Trailhead:

N 29.587655, W -82.111511

Hawthorne Trailhead:

N 29. 587507, W -82.089022

Gainesville-to-Hawthorne State Trail was initially acquired on Sept. 1, 1970, from CSX Transportation, Inc. using the Land Acquisition Trust Fund (LATF). Currently, the trail comprises 140.2 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the trail and on Jan. 27, 1971, the Trustees leased (Lease No. 2515) the property to the Division of Recreation and Parks (DRP) under a 99-year lease. The current lease will expire on Jan. 26, 2070.

Gainesville-to-Hawthorne 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 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 Gainesville-to-Hawthorne State Trail is to preserve cultural resources found along the railroad and the railroad itself, continue the historic route travelers once took, and serve as a seamless transportation corridor. Healthy, accessible recreation from a small town to a large municipality is provided, and well-designed open spaces that support the region's economic development are created.

Park Significance

- Gainesville-to-Hawthorne State Trail has designation as a National Recreation Trail and is a key component in the Florida Greenways and Trails System, which plays an important role in advancing Florida's economy, tourism, health, transportation, recreation, conservation and quality of life.
- Gainesville-to-Hawthorne State Trail preserves the route where rail passengers once traveled. A
 significant component in the foundation of the city of Gainesville, the trail corridor and its
 preserved remnants like the restored pumphouse building near Boulware Springs remind
 visitors of how the city received potable water and became as large as it is today.
- This trail provides the opportunity for users to learn about archaic and historic sites like Red Wolf Pond, Prairie Creek and Lochloosa Creek and others and their relationship to Newnans Lake and Paynes Prairie.

Central Park Theme

Built upon a historic railbed and popular trade route, this winding trail still provides scenic vistas and relaxed passage through local preserves connecting the city of Gainesville and surrounding rural communities.

Gainesville-to-Hawthorne 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 it is not presently under study for such designation. The trail 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 the Department. 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

- 1. Staff, volunteers, and FLCC AmeriCorps members treated approximately 27 acres of invasive plants along trail corridors.
- 2. Shredded vegetation and trees over 11.5 miles of trail to improve sight lines and corner views for bike safety.
- 3. Rebuilt railings and select deck sections at terminus of Prairie Creek Boardwalk.

RESOURCE MANAGEMENT COMPONENT

Gainesville-to-Hawthorne State Trail Management Zones				
Management Zones Acreage Managed with Prescribed Fire Contains Known Cultural Resources				
GHT-1	10.75	N	Υ	
GHT-2	39.84	N	Υ	
GHT-3	89.61	N	Υ	

TOPOGRAPHY

The most extensive abandoned railway, which follows the north rim of the prairie basin, was converted into the Gainesville to Hawthorne Trail in the early 1990s. For several miles within the park, however, the trail detours away from a portion of the old railway bed in order to avoid ecologically sensitive areas. The surface of the 2.9-mile stretch of railroad bed within the park shows minimal elevation change despite its location along the topographically varied north rim of Paynes Prairie. When the railroad bed was originally constructed, excavators removed soil from higher elevations along the route and deposited it in lower areas in order to create a grade that was suitable for locomotives. About 6000 feet of the western end of the abandoned railroad bed was recontoured in 2003 using heavy equipment to restore the natural topography of the rim of the basin and in the Alachua Sink Hammock. The restoration area will be allowed to restore itself naturally with the native species from the adjacent upland hardwood forest. Additional work is still needed on the remainder of the railway from just east of Melton's Pond to where the Gainesville to Hawthorne Trail rejoins the railway corridor. Approximately 8500 feet of the railway corridor remains to be restored.

For additional details, see the *Topography* section of the Paynes Prairie Preserve State Park Resource Management Component.

SOILS

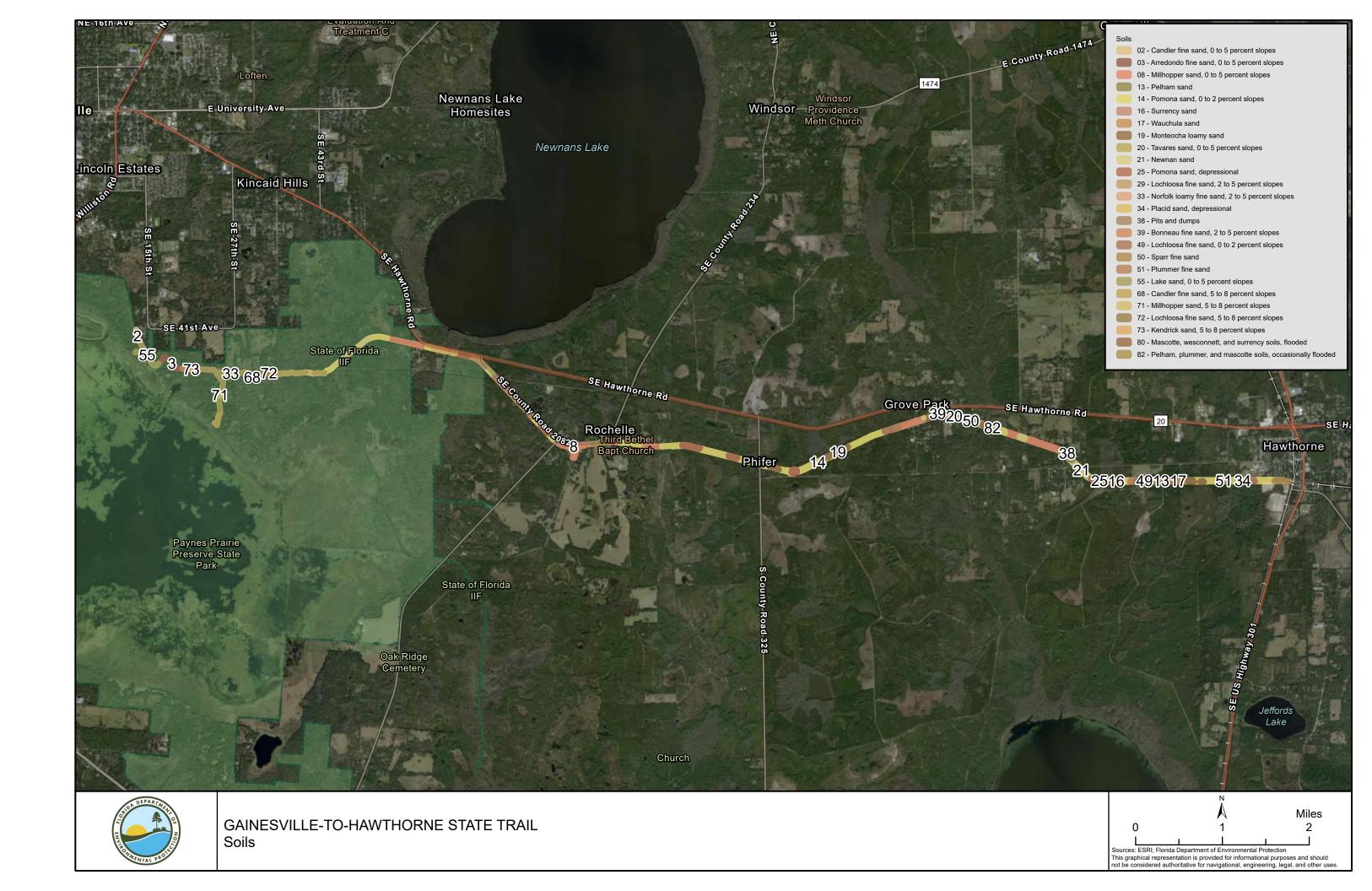
Gainesville-to-Hawthorne State Trail contains 24 soil types (see Soils Map). Descriptions of the soil types found along the trail are contained in the Appendix.

Some concern is warranted within the Alachua Sink Hammock, also known as Bartram's Hammock, which encompasses a nearly continuous field of steep-sided sinkholes stretching from the Alachua Sink to the north boundary of Paynes Prairie Preserve State Park. Foot traffic in this area is limited to protect the sinkholes from unacceptable levels of erosion.

Management activities will follow generally accepted best management practices to prevent further soil erosion and conserve soil and water resources on site.

For additional details, see the *Soils* section of the Paynes Prairie Preserve State Park Resource Management Component.





HYDROLOGY

Surface Water Sources and Drainage

Robinson Heights

The most significant feature in the Robinson Heights subbasin is Boulware Spring and its associated spring run. Boulware is the only spring run that flows onto the prairie basin and is one of the few springs in southeastern Alachua County (Rosenau et al. 1977). Boulware Spring once supplied the city of Gainesville with drinking water, and the city still manages the property. Currently, the site contains a historic water treatment building, a meeting facility and a city park that acts as the primary trailhead for the Gainesville-to-Hawthorne Trail.

Due to the narrow, developed nature of the trail, hydrological features are most commonly on the periphery or outside of the trail boundary.

For additional details, see the *Hydrology* section of the Paynes Prairie Preserve State Park Resource Management Component.

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

NATURAL COMMUNITIES

Limestone Outcrop

Limestone outcrops located near the Gainesville-to-Hawthorne Trail are at greater risk from disturbance due to unauthorized foot or bicycle traffic. Rare plants such as the brittle maidenhair fern require a humid and protected microclimate. The outcrops are typically found on the vertical sides of sinkholes between the Alachua Sink and the north boundary of the park. Impacts to the sinkholes from erosion and exotic plants, as detailed in the sinkhole description and assessment, also hold true for limestone outcrops.

Mesic flatwoods

The Jerevan addition in the northeast corner of the park has several areas of mesic flatwoods intermingled with successional hardwood forest and scrubby flatwoods. In many locations, hardwoods have increased in dominance due to fire exclusion. Firebreaks have been established in the Jerevan flatwoods, including new breaks creating two prescribed fire units. Some of this area between State Road 20 and the Gainesville-to-Hawthorne State Trail was treated with prescribed fire from 2015-19 but still needs increased fire intensity and frequency.

Sinkhole

The greatest concentration of active sinkholes occurs in the hammock north and east of Alachua Sink.

Where the trail traverses through Paynes Prairie Preserve State Park, the most disturbed sinkhole is located along the Gainesville-to-Hawthorne State Trail bypass within the power line right-of-way. It contains a concrete drainage structure designed to mediate the flow of runoff from the trail into the sinkhole. To the north of the trail, the chain of sinkholes continues relatively unbroken to the northern boundary of the park, while to the south the sinkhole complex extends to Alachua Sink itself. Several of the sinkholes have been colonized by invasive plant species such as coral ardisia (*Ardisia crenata*) and small-leaf spiderwort (*Tradescantia fluminensis*). Recent treatments have reduced the cover of these plants, but more work is needed to remove invasives from difficult-to-reach sinkhole slopes. Some of the sinkholes adjacent to the Gainesville-to-Hawthorne State Trail or along the abandoned railroad bed

have received untreated runoff from the trail or bed surface during periods of heavy rainfall, resulting in increased siltation and accelerated slope erosion.

Several of the sinkholes have been subjected to increased foot traffic since the trail opened. The park maintains a narrow, ranger-guided hiking trail within the Alachua Sink hammock that passes through the sinkhole field. Although the hiking trail has relatively little impact on the sinks due to the limited access, bicyclists have been documented leaving the Gainesville-to-Hawthorne State Trail, illegally entering these fragile areas and using the hiking trail as an off-road bike trail. Although all these sinkholes are considered restricted areas due to their sensitivity, they are attractive sites for exploration and, as a result, can be expected to receive impacts from unauthorized visitor access.

Basin swamp

Basin swamps occur in several locations along the Gainesville-to-Hawthorne State Trail. Restoration and maintenance of basin swamps depend primarily on restoring and maintaining the natural hydrology and hydroperiod of the wetlands.

Abandoned Pasture

Limited restoration of the upland pastures has occurred on the north rim of Paynes Prairie Preserve State Park along the Gainesville-to-Hawthorne State Trail with the planting of longleaf pines and wiregrass. A plan will be written for the restoration of abandoned pastures in the north rim. In the meantime, abandoned pastures will be managed with prescribed fire to discourage off-site hardwoods such as laurel oaks and sweetgums from becoming established in former fire-type communities.

Canal/ditch

Numerous canals and ditches were constructed in the prairie basin of Paynes Prairie Preserve State Park to enhance drainage to increase cattle production. Ditching also occurred in upland areas adjacent to the former railroad right-of-way, much of which is now part of the Gainesville-to-Hawthorne State Trail. Filling of these canals using adjacent spoil material began shortly after state acquisition and continues to be a high priority.

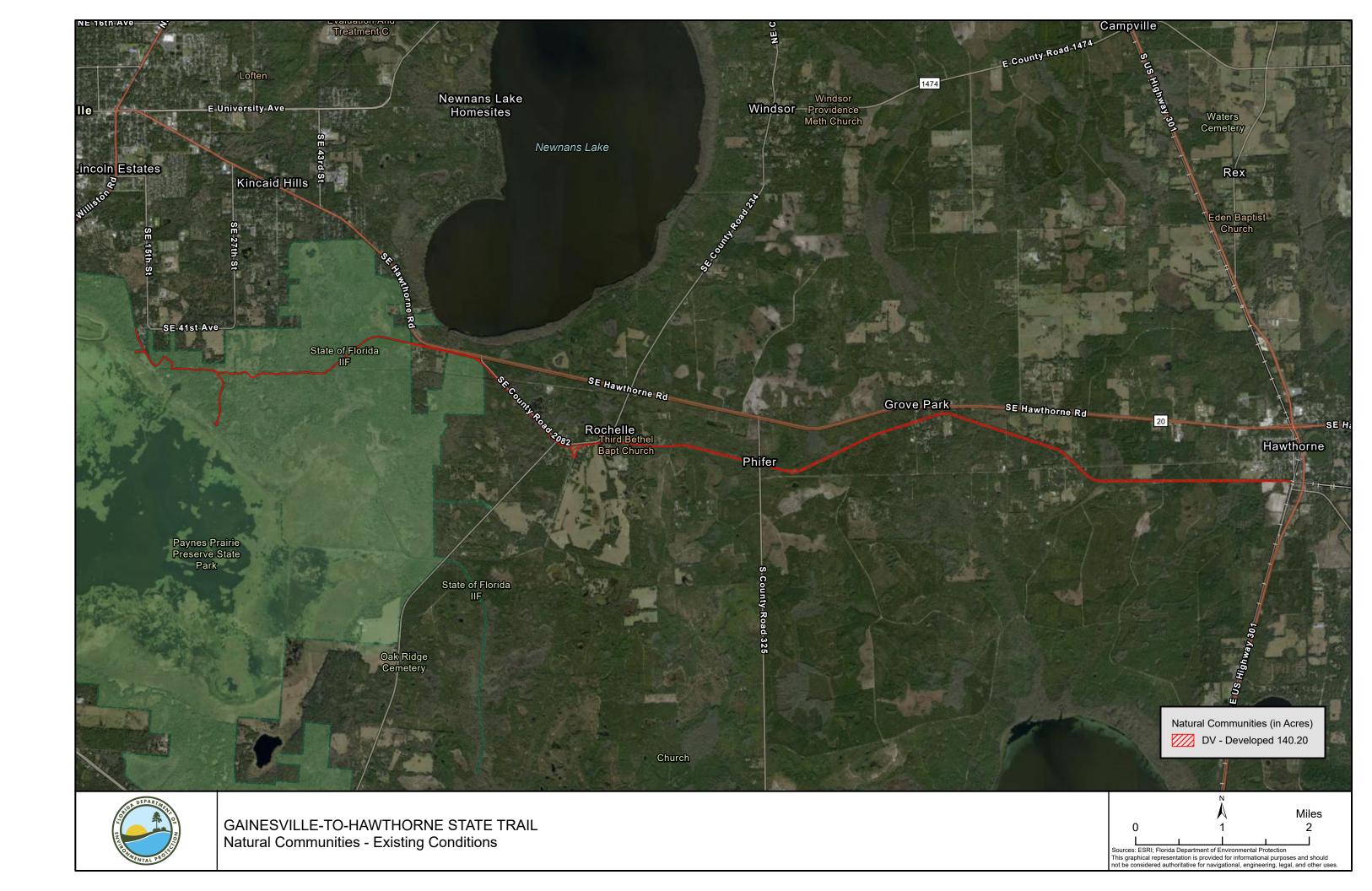
For additional details, see the *Natural Communities* section of the Paynes Prairie Preserve State Park Resource Management Component.

IMPERILED SPECIES

Gopher tortoises (*Gopherus polyphemus*) in the uplands of the north rim and south end of Paynes Prairie Preserve State Park are also of concern. Staff counted gopher tortoise burrows on the north rim prior to the opening of the Gainesville-to-Hawthorne State Trail in 1990. In 1990, many of the tortoises were located near the Gainesville-to-Hawthorne State Trail and along the abandoned railroad berm.

Recreational use of the Gainesville-to-Hawthorne State Trail may also have an impact on the gopher tortoises adjacent to the trail. Between 1990 and 2005, there was a decrease in the number of burrows outside the park along the Gainesville-to-Hawthorne State Trail, perhaps due to poaching. There was also an apparent movement of burrows away from the Gainesville-to-Hawthorne State Trail to within the park. It is likely that the increased recreational use of the trail caused the tortoises to move away from the trail. Additional recontouring and restoration of the abandoned railroad berm has the potential to impact tortoises that have burrowed into the berm.

For additional details, see the *Imperiled Species* section of the Paynes Prairie Preserve State Park Resource Management Component.



Objective A: Update baseline imperiled species occurrence list.

Staff will continue to document imperiled species and will work with researchers to expand the trail's imperiled species lists.

Objective B: Monitor and document one selected imperiled animal species.

Gopher Tortoise

The majority of the gopher tortoise burrows were located and mapped in 1990-91 in appropriate habitats within the Paynes Prairie Preserve State Park. These areas were censused again between 2004 and 2007 using a GPS, and a decline in the number of burrows was noted. Previous burrow counts relied on a complete census count using transects guided by GPS. Future surveys should be conducted using Line Transect Distance Sampling (LTDS) techniques (Smith et al 2009). As upland natural community restoration and improvement projects proceed, it will be increasingly important to track gopher tortoise numbers.

Action 1 – Staff will continue to refer to the Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Management Plan (FWC 2012) to guide management of this imperiled species.

CULTURAL RESOURCES

Historic Structures

The Atlantic Coastline Railroad: Gainesville-Hawthorne Trail (8AL05203) is a linear resource group recorded in the Florida Master Site File (FMSF). The trail has been formally evaluated by the State Historic Preservation Officer (SHPO) for significance and determined ineligible for the National Register. This resource group is listed within the table below as "not significant."

For additional details, see the *Cultural Resources* section of the Paynes Prairie Preserve State Park Resource Management Component.

Site Name and FMSF#	Culture/Period	Description	Significance	Condition	Treatment
Atlantic Coastline Railroad: Gainesville AL05203	20th Century American, 1900-present	Linear Resource	NS	G	Р

Objective A: Assess/evaluate this one linear resource group.

The trail will continue its regular program of assessing this linear resource group when assessing the cultural resources within Paynes Prairie Preserve State Park. If stabilization or preservation needs become apparent during the course of site assessments, the trail manager will identify and prioritize the needs.

LAND USE COMPONENT

VISITATION

The Gainesville-to-Hawthorne State Trail is a 16-mile paved trail that connects numerous conservation areas to the cities of Gainesville and Hawthorne. Growth in the city of Gainesville in the early 20th century was spurred by the construction of a pumphouse and the availability of potable water at Boulware Spring, which is now the centerpiece of a park operated by the city of Gainesville and the western terminus of the Gainesville-to-Hawthorne State Trail. Part of the Rails-to-Trails program, the trail follows a former railroad line which was a significant factor in the founding of Gainesville, as it provided a short route from the Atlantic Coast to the Gulf of Mexico.

There are several shared-use trail connectors to adjacent conservation areas, prairie overlooks and isolated rural spaces. Scenic views await trail users as they enter Paynes Prairie Preserve State Park. Two spur trails allow visitors access to overlook the north rim of the prairie basin. Numerous sinkholes are found along the trail, and its proximity to conservation lands allows visitors to observe native plant and animal species. To the north and west of Boulware Springs Park, spur trails connect to the core of downtown Gainesville and Depot Park, a significant hub of activity just south of the downtown core. Gainesville's growing network of multiuse trails and amenities, as well as a revitalized Depot Park, earned the city a designation as one of the Office of Greenways and Trails' many Trail Towns.

Trends

As the trail features many unmonitored access points, visitation is calculated using trail counters and park estimates based on historical trends. Annually, visitation remains consistent with about 20,000 trail users. Visitation is generally higher in cooler winter months. Free admission on Veterans Day, marathon events and other events along the trail generate regular visitation spikes over the course of the year.

EXISTING FACILITIES AND INFRASTRUCTURE

The 16-mile Gainesville-to-Hawthorne State Trail currently features four trailheads. From west to east, the trail features trailheads at Boulware Springs Park in Gainesville, the unincorporated community of Rochelle, the Lochloosa Wildlife Management Area (WMA), and the city of Hawthorne.

At the trail's western terminus, the city of Gainesville's Boulware Springs Park includes a paved parking lot with 28 spaces, bicycle racks, a large picnic pavilion with three tables and an informational panel. In Paynes Prairie Preserve State Park, the La Chua trailhead provides a stabilized parking lot with 35 spaces and a portable restroom. Along the trail, visitors can enjoy the Sweetwater Overlook and Alachua Lake Overlook, explore spur trails and rest at the Prairie Creek Boardwalk. The Rochelle trailhead, roughly a half-mile beyond Prairie Creek, offers an ideal rest area for cyclists. The Rochelle trailhead offers visitors a stabilized parking area with 15 spaces, an interpretive kiosk, a portable restroom and a bench. The Lochloosa trailhead offers visitors a stabilized parking area with 30 spaces. The Hawthorne trailhead, the trail's eastern terminus, accommodates equestrian users via a spacious stabilized parking area with approximately 25 spaces. Two benches, a portable restroom and an interpretive kiosk are also present in Hawthorne.

For most of its length, the trail follows a decommissioned railroad corridor. Deviations from the former railroad line occur at the Prairie Creek Bridge and near the eastern boundary of Paynes Prairie Preserve State Park. It rejoins the rail corridor near the Paynes Prairie Preserve State Park north entrance.

Facilities Inventory

La Chua Trailhead	
Stabilized Parking Area (35 spaces)	5
Portable Restroom	1
Rochelle Trailhead	
Stabilized Parking Area (15 spaces)	1
Interpretive Kiosk	1
Portable Restroom	1
Lochloosa Trailhead	
Stabilized Parking Area (30 spaces)	1
Interpretive Kiosk	1
Hawthorne Trailhead	
Stabilized Parking Area (25 spaces)	1
Interpretive Kiosk	1
Portable Restroom	1

CONCEPTUAL LAND USE PLAN

Detailed Conceptual Land Use Plan Objectives

Below are detailed descriptions of land planning proposals and considerations, organized according to use areas or other types of specific sites along the trail.

General Trail Needs

Objective: Update, assess, and improve infrastructure to ensure visitor safety along trail.

Action Items:

- Resurface the trail.
- Assess and repair bridges.
- Comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- Install 911 emergency system.
- Ensure effective gopher tortoise monitoring.

Tree roots appear to be encroaching under the pavement, creating cracks along the trail. The entire trail should be resurfaced, and an adequate right-of-way width should continue to be cleared to create an uninterrupted smooth path for cyclists.

Five bridges are provided along the trail. All crossings should be structurally assessed for their integrity and repaired as needed.

For much of the trail's length from Hawthorne to Prairie Creek Preserve, cyclists must cross several county roads. Cyclists do not always adhere to stop signs along the trail, which has caused severe safety issues. DRP should consult with the Florida Department of Transportation (FDOT) to improve the safety of cyclists at intersections. Solutions such as reducing speed limits, providing necessary traffic control

devices, or installing pedestrian crossing signs an adequate distance away from the trail crossing should be considered.

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

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.

Within the next 10-year planning cycle, DRP should seek guidance and funding from FDOT to resurface and improve the trail.

Construction and use of the Gainesville-to-Hawthorne State Trail has a detrimental effect on local gopher tortoise populations. In the past, gopher tortoise poaching has been documented along the trail outside of the park boundary. DRP should work with FWC to ensure there is effective monitoring to abate this issue.

Alachua Sink Hammock

Objective: Prevent unauthorized usage of trail.

The park offers a ranger-guided hiking trail in the Alachua Sink hammock area which passes through sensitive sinkholes. An unintended consequence related to this trail has been unauthorized use as an off-road bicycling hotspot because it is an attractive site to explore. This unauthorized activity is not compatible with the sensitive karst features in this area. Measures to prevent unauthorized use should be explored and implemented to protect karst features around this area.

Lochloosa Trailhead

Objective: Reduce park facility footprint, or consider updating interpretive elements.

Action Items:

- Consider removing this trailhead.
- Provide directional signs from State Road 20.

The Lochloosa trailhead, which only features a parking area, is underutilized. Removal should be considered, as the Hawthorne trailhead is only 1.5 miles east of this location and provides facilities necessary for trail users.

If the ultimate decision is to retain the trailhead, signage should be installed to highlight its location to travelers along State Road 20. An interpretive kiosk is present at the entrance of the trailhead. Light interpretation should be installed here explaining William Bartram's travels to Paynes Prairie. It should further detail how Bartram's path crossed Lochloosa Creek and documented evident signs and traces of an ancient and powerful settlement. A map of the entire trail that helps orient visitors with their surroundings should also be provided.

Hawthorne Trailhead

Objective: Update park infrastructure to support increased visitor use.

Action Items:

- Connect restroom to municipal sewage system.
- Install a permanent restroom.

This trailhead features heavy visitation and would benefit from a small, permanent restroom. If the infrastructure is available, a connection to the municipal sewage system should also be provided for the proposed restroom. The improvement should be prioritized, as the portable restroom at this location is inadequate with respect to its popularity.

OPTIMUM BOUNDARY

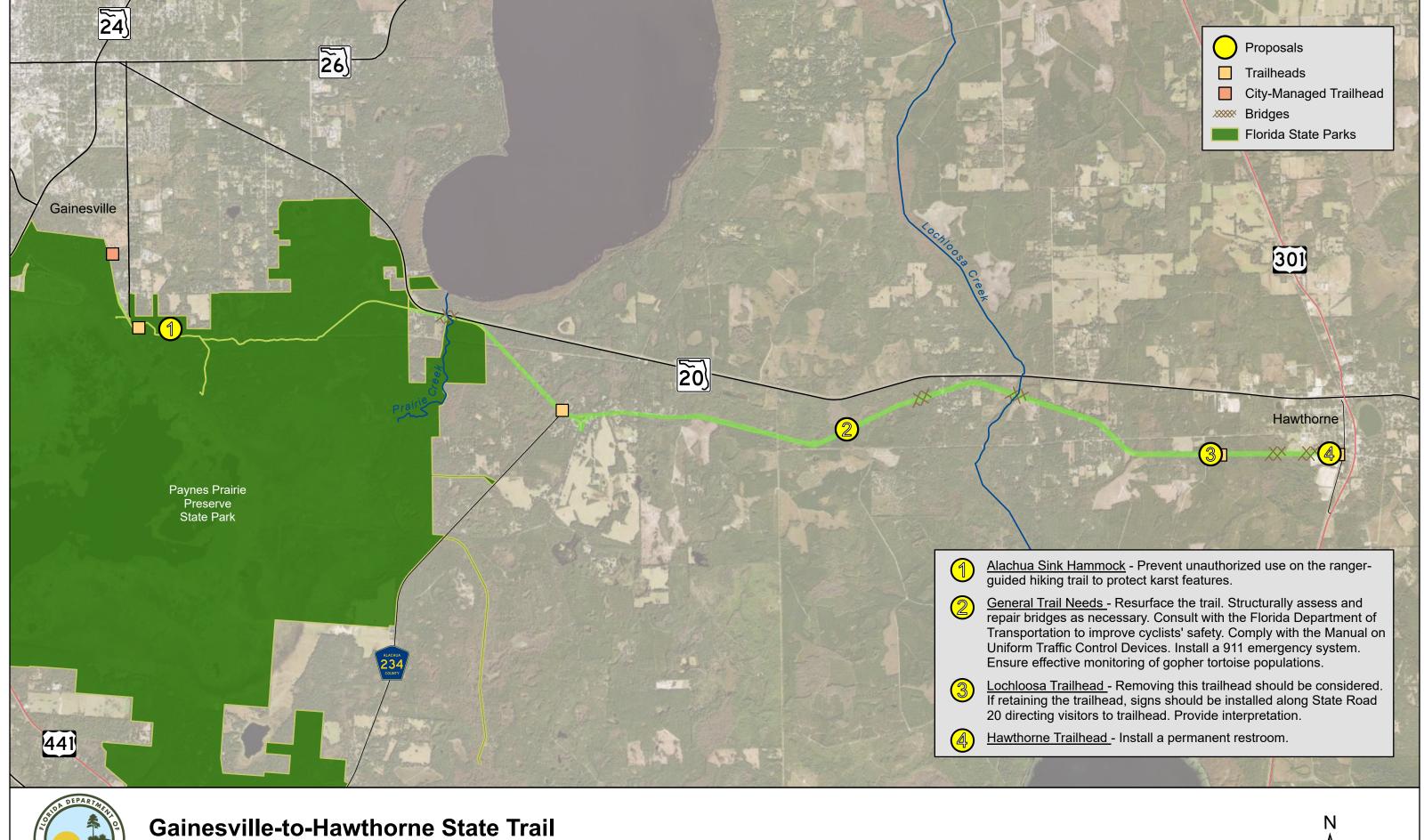
Much of the Gainesville-to-Hawthorne State Trail is surrounded by conservation lands and natural areas, and the two farthest ends are connected to Gainesville and Hawthorne, two large Alachua County cities. A priority for DRP will be to connect and form trail corridors to expand recreational opportunities with intact, protected natural features for visitors.

Several trail corridors that would extend the Gainesville-to-Hawthorne State Trail to the east and west are proposed to be acquired and maintained by another managing entity (see Optimum Boundary Map for additional details).

By acquiring the Nature Coast Trail Corridor Florida Forever Board of Trustees Project and the Gainesville to Newberry Corridor, the Nature Coast and Gainesville-to-Hawthorne state trails will be conveniently connected and provide for long-distance cycling from Trenton to Newberry to Gainesville. A key connection from the corridors to the Gainesville-to-Hawthorne State Trail relies on the use of several other trails in the vicinity, including the city of Gainesville's Alachua Rail to Trail corridor and the Gainesville Hawthorne Downtown Connector.

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. Eventually, this extension will also provide cyclists a connection to the Palatka-to-St. Augustine State Trail to the east.

By acquiring these Land Trail Priority projects, these state trails will support a regional trail network that connects the Tallahassee-Nature Coast-Peace River Greenway to the St. Johns River-to-Sea Loop.





Conceptual Land Use Plan

0 1 2 Miles



