Graham Creek Nature Preserve

Master Plan - Foley, Alabama

February 2015

GOODWYN | MILLS | CAWOOD





ACKNOWLEDGEMENTS

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2008 Graham Bayou Park Conceptual Master Plan - SiteWorks Studio Landscape Architects

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INTRODUCTION

Graham Creek Nature Preserve

The city of Foley contracted Goodwyn Mills Cawood, Inc to update the 2008 Master Plan for Graham Creek Nature Preserve. GMC's landscape architects met with city staff and the Graham Creek Nature Preserve Advisory Board to review current opportunities, management problems, and the principles used to guide the master plan recommendations. This report summarizes the outcome of the discussions and the master plan recommendations.

The preserve is encompassed by almost 500 acres of beautiful natural habitats, biking and hiking trails, disc golf course, outdoor classroom, kayak launch and more. The property sits just East of the highly traveled Foley Beach Express and southeast of downtown Foley. The park is accessed via Wolf Bay Drive on the North side of the property and Philomene Holmes Boulevard on the West side. Single family residential neighborhoods are located to the north and east of the park.

Figure 2 - Graham Creek Nature Preserve open field.

Figure 3 - Graham Creek Nature Preserve entry signage. source: al.com

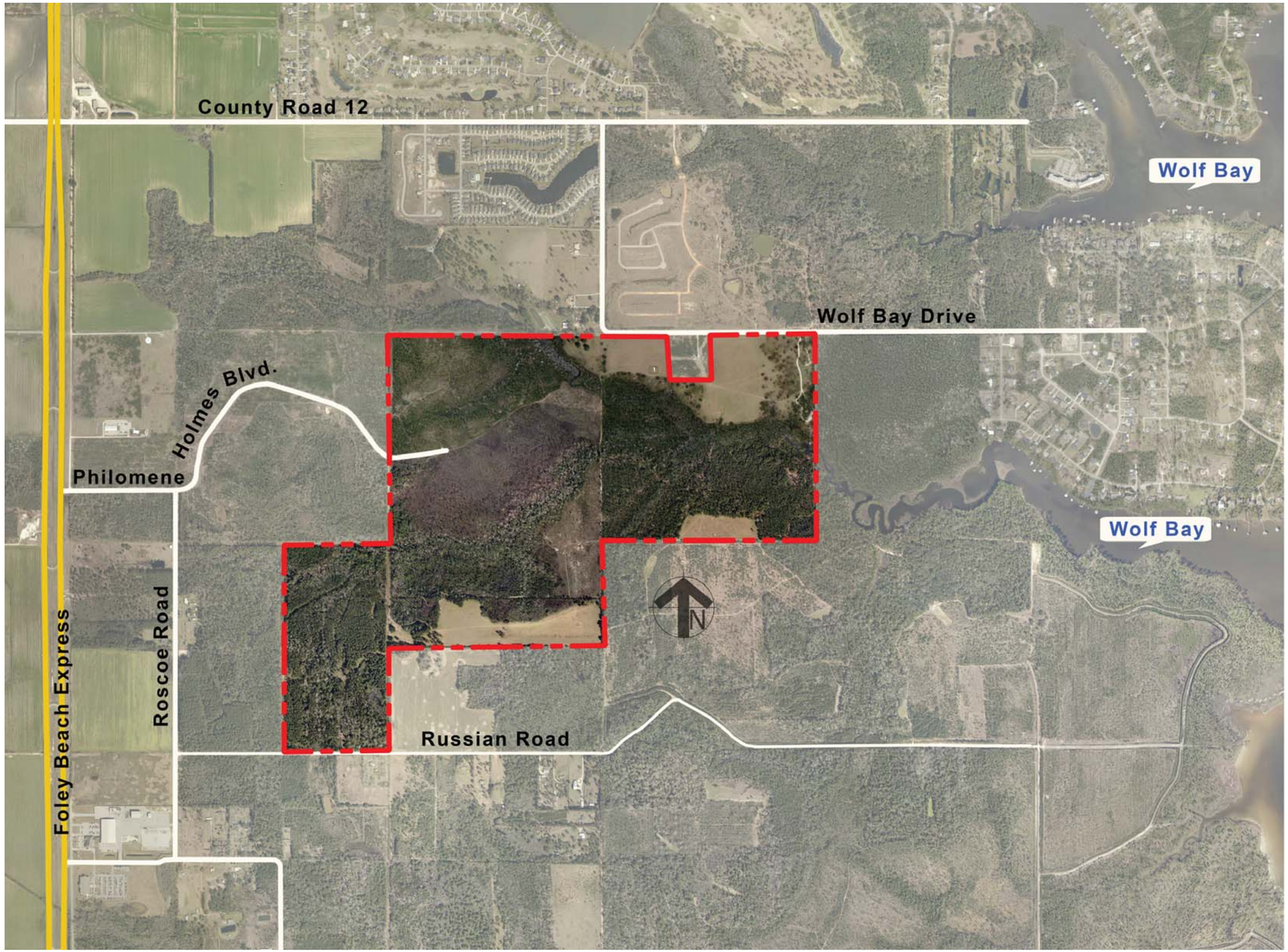


Figure 1 - Graham Creek Nature Preserve property boundary.

EXISTING CONDITIONS

Wetlands

The wetlands make up a large portion of the site acting as the primary drainage system. The wetlands shown on the map are based on soil type only so they are slightly overestimated. The majority of the wetlands in Graham Creek Nature Preserve are forested, with a dense understory, and aquatic plant life. They are an integral part of the preserve, as they decrease flooding, remove pollutants from water, recharge groundwater, provide habitat for wildlife, and serve important recreational and cultural functions.

Plant Communities

The plant communities in Graham Creek Nature Preserve include wetland mixed forest, bottomland forest, upland mixed forest, pine savanna, open mixed forest, upland flatwoods plantation and open turf grass. Conservation and management of native plant communities should be the priority of wildlife management efforts. Most wildlife species cannot exist without the appropriate native plant communities present. In this effort, managing invasive species is one of the utmost importance. Invasive species can take over and choke out the native species, thus creating a habitat unsuitable for wildlife.

Figure 6 - Educational tours offered by the Graham Creek Nature Preserve. Source: gulfcoastnewstoday.com

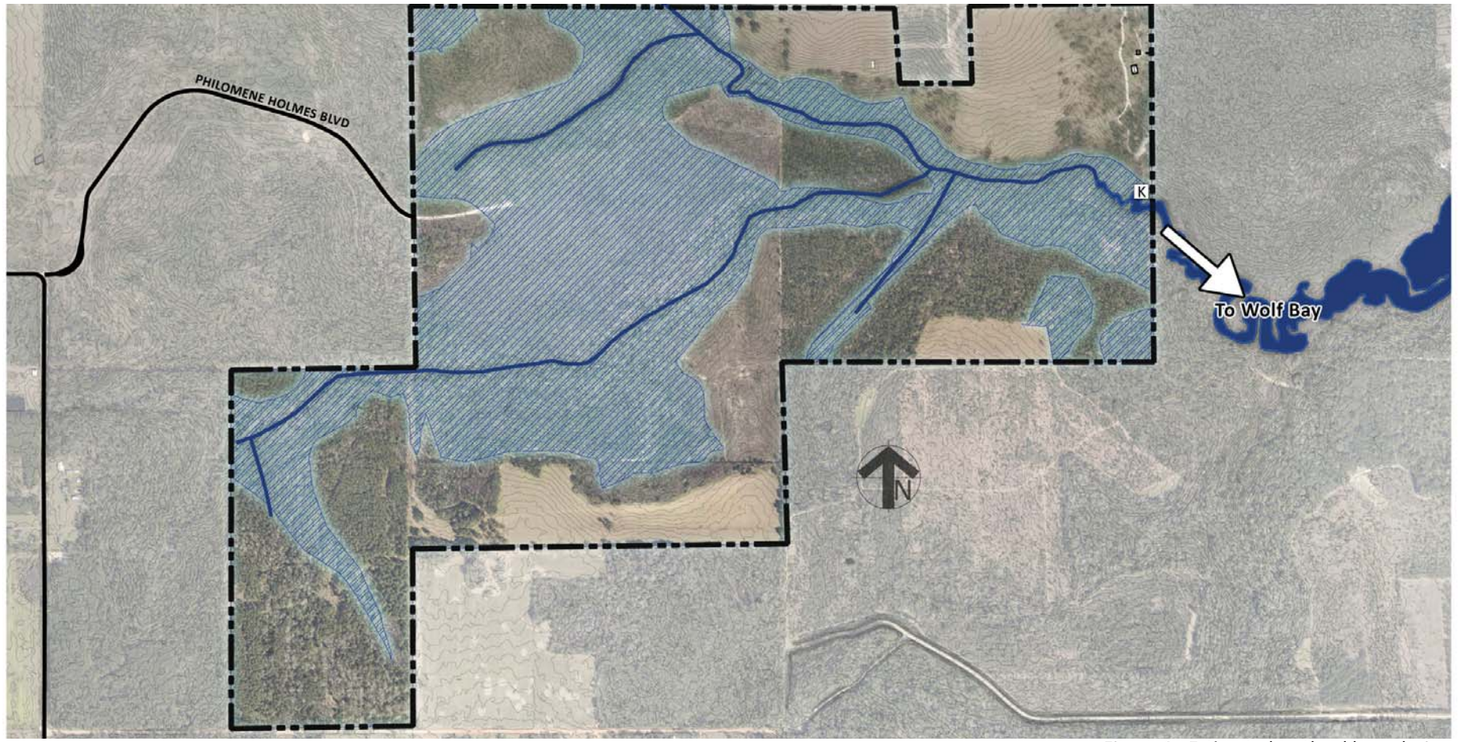


Figure 4 - Estimated wetland boundaries.

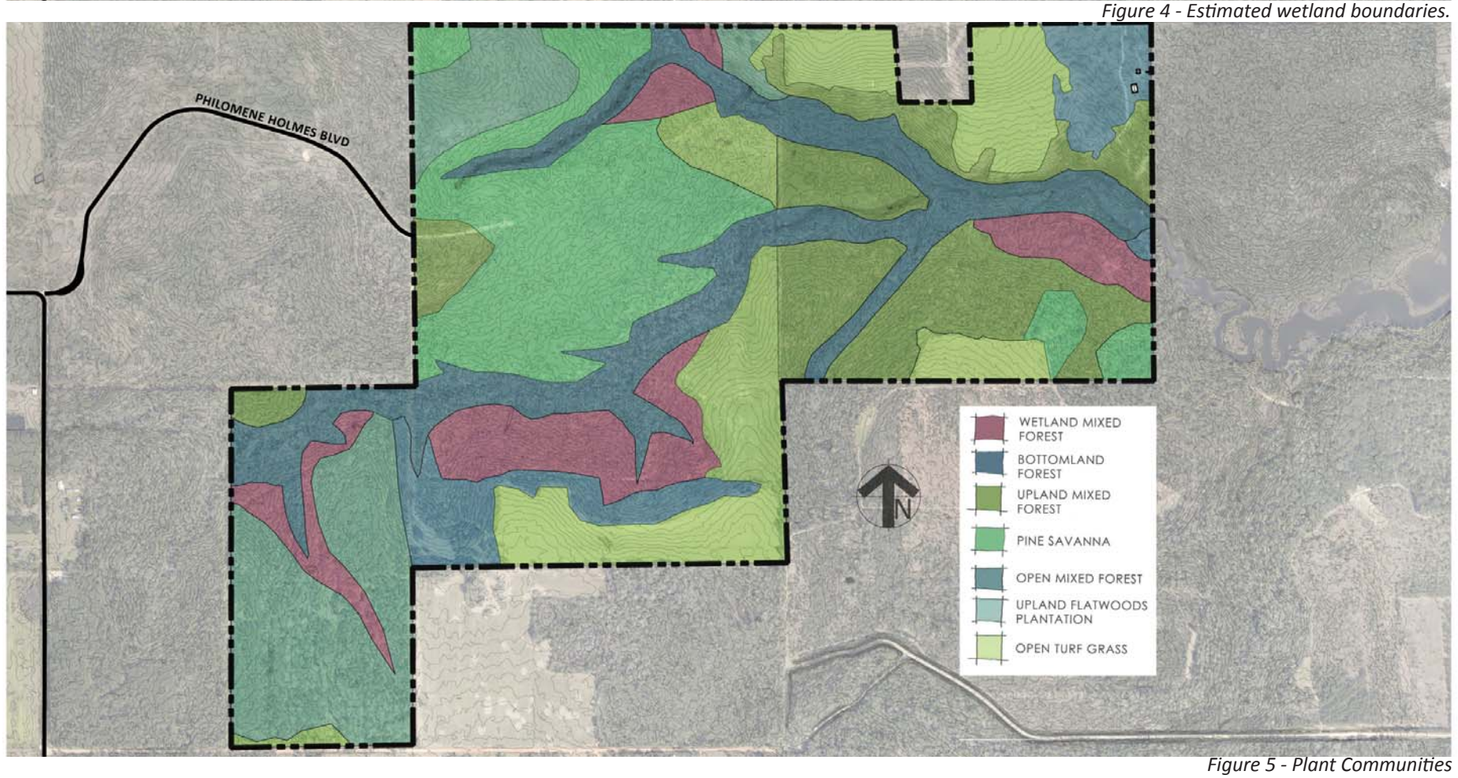


Figure 5 - Plant Communities

Current Activities

With its almost 500 acres of undeveloped land, the Graham Creek Nature Preserve proves to be a popular place for community outdoor recreation. A majority of the existing activities are passive in nature as they do not cause extensive environmental damage. Below is a list of the activities:

- Cross country 5k course, Hiking/Walking Trails, Bicycling Trails, Canoe/Kayak Trail, 18-hole Disc Golf, Outdoor Classroom, Playground, Archery.

Educational Programs

- Educational Tours - Youth, Seniors & Special Needs
- Our Wonderful Wetlands Continued with Tree Planting
- Pioneer Day Camp (Ages 10-14 on Environmental Topics)
- Outdoor Classroom and Educational Program for Preschool through High School. Curriculum Follows Alabama Science Course of Study. Programs are provided to schools as field trip at NO COST.

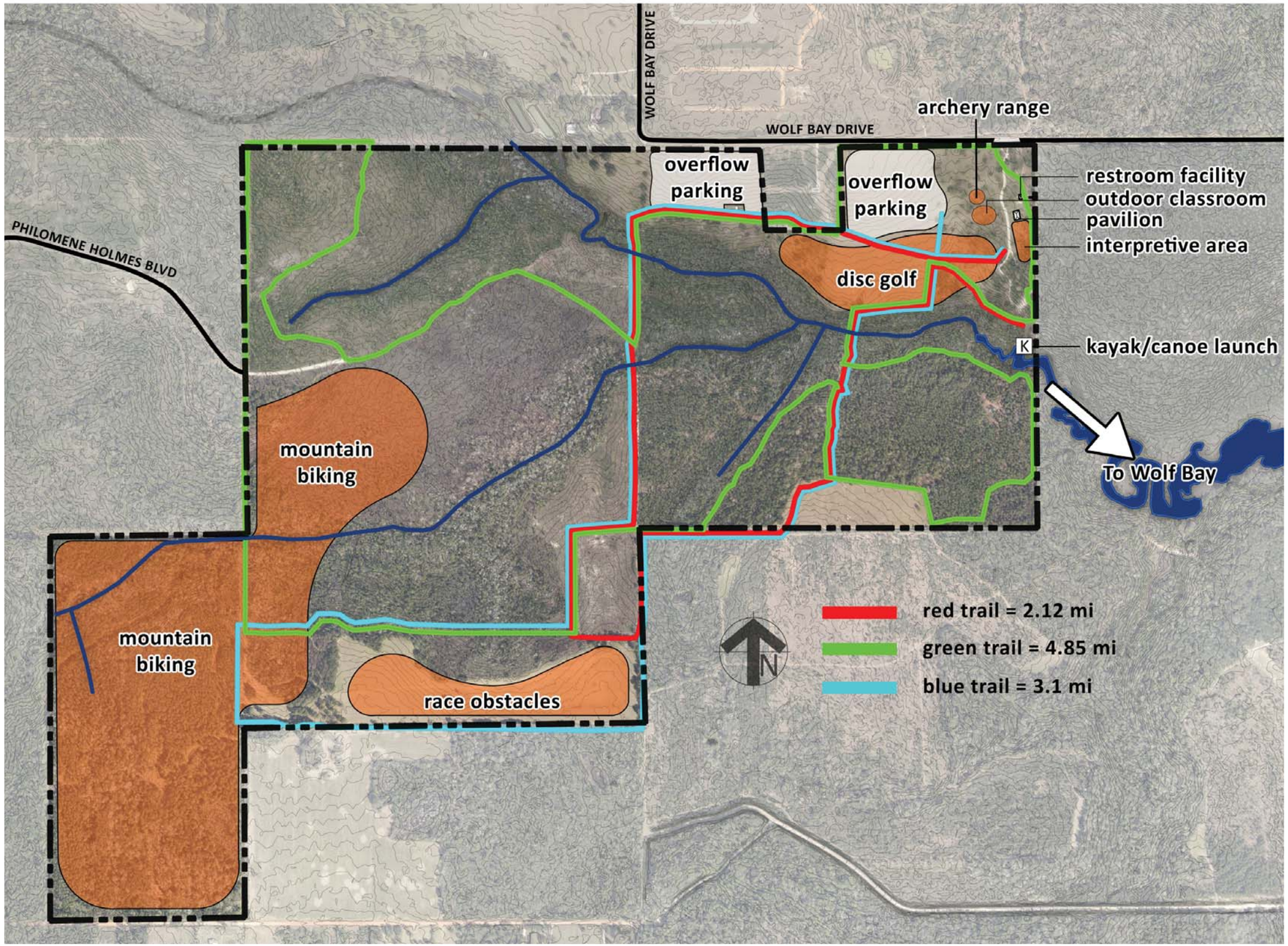


Figure 7 - Activities

Figure 8 - Existing large pavilion, playground and parking. This is a very popular location for birthdays, reunions and other gatherings.

MASTER PLAN RECOMMENDATIONS

GUIDING PRINCIPLES

Environmental

- Manage plant communities and wildlife habitats consistent with best management practices for each plant community/habitat.
- Develop standards of acceptable use for each plant community/habitat. Monitor impacts of existing and proposed activities. Adjust land/habitat management strategies as necessary. Limit intensity of use as required to maintain healthy wildlife habitats.
- Locate area of more intensive development outside the wetland areas. Mitigate all wetland related impacts on-site.
- Remove invasive species.
- Develop limits of acceptable use standards.
- Monitor impacts of existing and proposed activities. Adjust management strategies as needed.

Recreational

- Develop recreation opportunities at GCNP that are compatible with the plant communities/habitats.
- Develop a process to assess the positive and negative impacts of proposed events or activities on the plant communities and wildlife habitats in GCNP.
- Locate proposed park features such as picnic pavilions, parking and access roads in a manner which minimizes any adverse impacts on vegetation or wildlife habitats.

Education

- Provide educational programs for adults, children and those with disabilities on the ecosystems present at GCNP. Interpretive signage and educational programs could address the following topics:
  - On-going scientific research
  - Plant communities and land management strategies
  - Wildlife
  - Storm water management
  - Water quality

Economic

- Identify revenue producing recreation based opportunities which do not adversely impact the ecosystems or the surrounding neighborhoods.
- Develop a cost structure for the use of GCNP as a venue that covers the costs/impacts of event on the park.

Figure 9 - Wetlands provide many useful benefits to the site: beauty, clean water, and habitat.

Figure 10 - Recreational trails meander throughout the site.

Figure 11 - Educational opportunities are endless at Graham Creek Nature Preserve. Source: al.com

Figure 12 - The Graham Creek Crawl brings hundreds of visitors to the park for the annual mud run. Source: al.com

MASTER PLAN

A. Extend Philomene Holmes Blvd to Interpretive Center. This allows entry from Foley Beach Express.

B. Trailhead, 47 parking spaces, and mountain biking trails at the western Philomene Holmes Boulevard entrance. Gated access.

C. Manage this area, 17.2 acres, as a pine savannah to encourage pitcher plant bogs and habitat for the endangered red cockaded woodpecker.

D. Interpretive Center - See enlarged site plan. Construction to begin Spring 2015.

E. Walking trails, including a .25 mile paved ADA accessible walking trail behind the interpretive center.

F. Trailhead. 2 small pavilions and 47 parking spaces.

G. Site for proposed raptor center in association with Auburn University.

H. Large Pavilion to accommodate 75 + people.

I. Parking Improvements on Stan Mahoney Lane. with additional split rail fencing.

J. Pavilion and 10 parking spaces.

K. Kayak launch

L. Potential site for ropes course. This could be privatized with a lease agreement with a outfitter.

M. Clear the fenceline along Wolf Bay Drive and add split rail fencing, trees, additional landscaping and signage.

N. Small Pavilion.

* Additional disc golf course location to be determined.

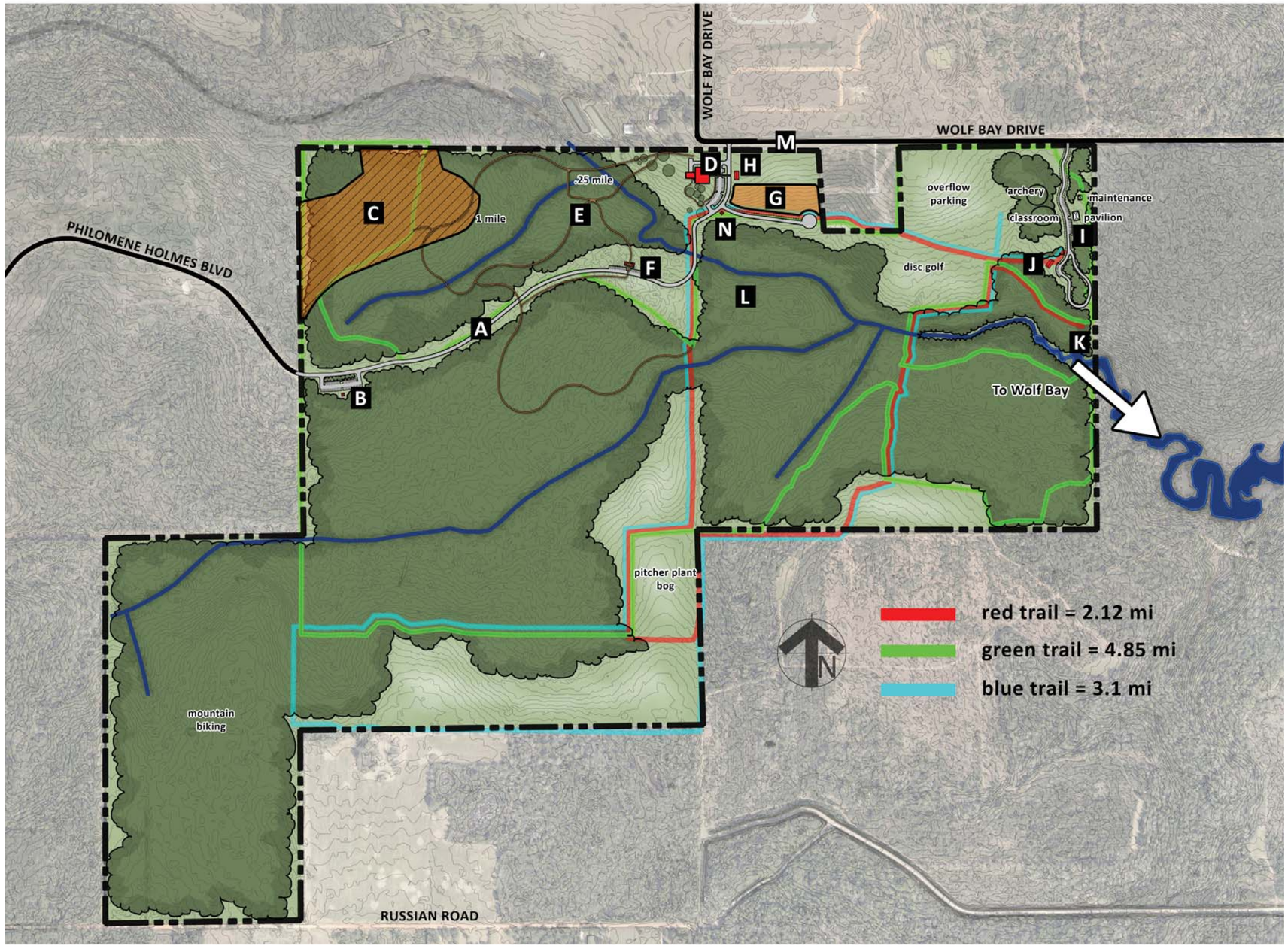
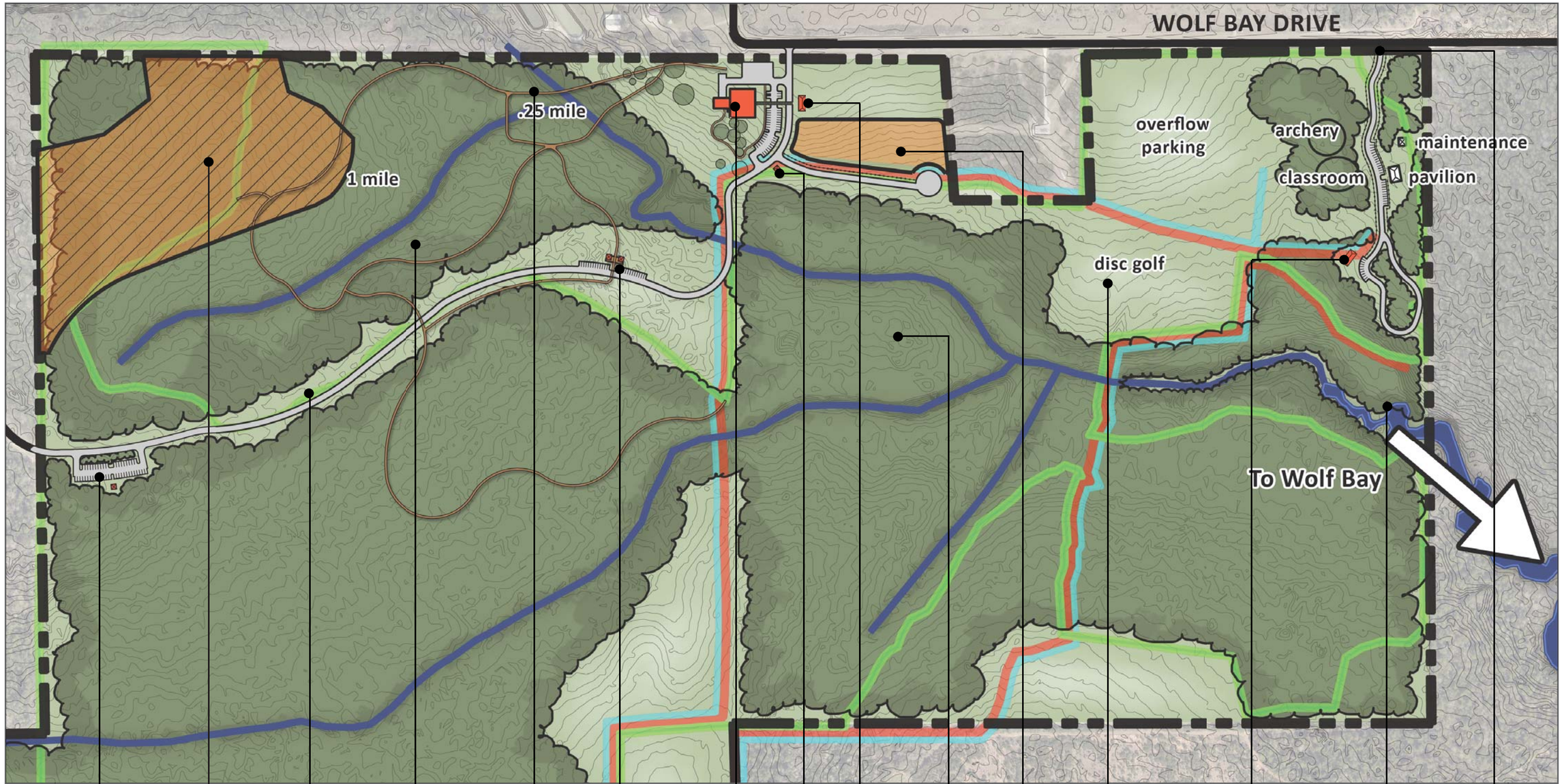


Figure 13 - Proposed master plan



50 parking spaces and small pavilion. Gated access at property line on Philomene Holmes Blvd.

Extend Philomene Holmes Boulevard to connect to Wolf Bay Drive. This will provide another access point and allow navigation through the park.

.25 mile ADA walking trail loop. Paved surface that loops back to the interpretive center.

Interpretive Center with a construction start date of February 2015. This building will increase pedestrian activity on the western side of the park.

Large event pavilion. Will seat 75+ people.

Potential site of the raptor center. To be built in conjunction with Auburn Univ. School of Veterinary Medicine.

Pavilion and 10 parking spaces.

Wolf Bay Drive entrance to current facilities, playground, restrooms, pavilion, archery, outdoor classroom, and parking.

Manage area as a pine savannah to encourage pitcher plant growth and provide habitat for endangered species

Proposed walking trails. Trails could provide a defined area for walking and is conveniently located next to the new interpretive center.

Trailhead. 2 small pavilions and 47 parking spaces. With great views across the open wildflower field and located at the nexus of the new trails, this area could prove to be a very popular area.

Small pavilion

Potential ropes course. Outsourced.

Existing disc golf course. Disc golf is one of the most popular and economical activities in the park.

Existing kayak launch. This launch provides access to Wolf Bay.

STRATEGIES FOR IMPLEMENTATION

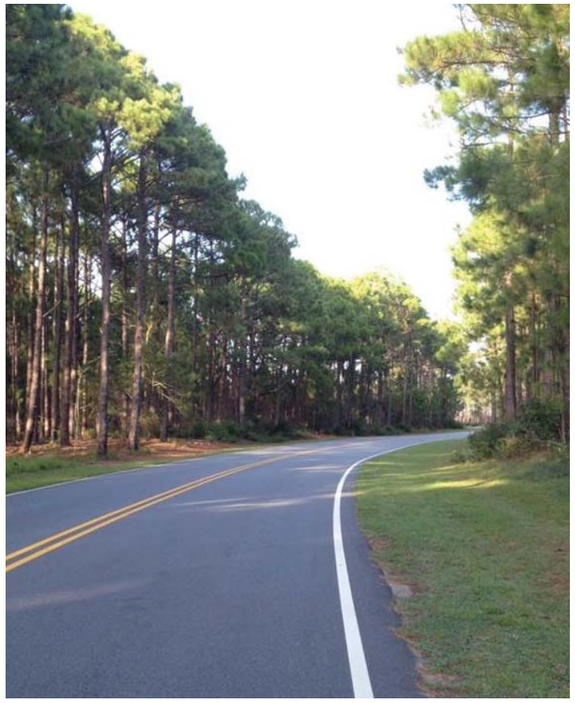


Figure 14 - Character image featuring Outer Banks, NC. This is how Philomene Holmes Boulevard could look.

Figure 15 - Character image featuring Town Creek Park in Auburn, AL. This is a great example of how to provide access through a wetland without being overly intrusive to the existing habitat.

With the strategies for implementation, Goodwyn Mills Cawood has identified a list of potential projects to incorporate into the preserve in the future and organized them according to their priority. This list also identifies an estimated cost and potential funding sources.

PROJECT DESCRIPTION	FUNCTION	PRIORITY	ESTIMATED COST	POTENTIAL FUNDING SOURCE
Philomene Holmes Blvd., Phase 1	Entrance from the Foley Beach Express	2014		
Philomene Holmes Blvd., Phase 2 (unpaved)	Entrance from the Foley Beach Express	High		City
Trailhead and parking, #1 at Philomene Holmes Blvd. entrance	Access	High	40 spaces @ $500 = $20,000	City
Trailhead and parking, #2, near Interpretive Center	Access	High	20 spaces at $500 = $10,000	City
Interpretive Center		High	$1,000,000	City
Parking improvements, east	Provides more efficient parking for existing facilities	High		GCNP annual budget
Controlled burns	Habitat Management	High		GCNP annual budget
Invasive species control	Habitat Management	High		GCNP annual budget
ADA trail .25 miles	Interpretive Trail with Signage	Medium	$100,000	RTP, LWCF grants
ADA trail .75 miles	Interpretive Trail with Signage	Medium	$500,000	RTP, LWCF grants
Small pavilion, 20'x20'		Medium	3 @ $30,000 = $90,000	RTP, LWCF grants
Enhancements along Wolf Bay Drive, (new fencing, landscaping, signage)		Medium	$200,000	City
Walking trails		Medium		RTP, LWCF, Coastal zone management grants
Way finding signage	Directional	Medium	$25,000	RTP, LWCF grants
Site furnishings	Benches, Trash Receptacles, Picnic Tables	Medium	Estimate $1000-$1500/element	RTP, LWCF grants, private donations
Disc Golf Course	New Activity	Medium	25,000	GCNP annual budget
Ropes course, tree tops	New Activity	Low	Vendor Relationship	RTP, LWCF grants
Large pavilion with restrooms		Low	$350,000	RTP, LWCF grants
Large pavilion, 30'x60', no restrooms		Low	$200,000	RTP, LWCF grants
Interpretive signage	Educational	Low	$35,000	RTP, LWCF and environmental grants
Raptor center		Low	City of Foley to provide site	Federal grant