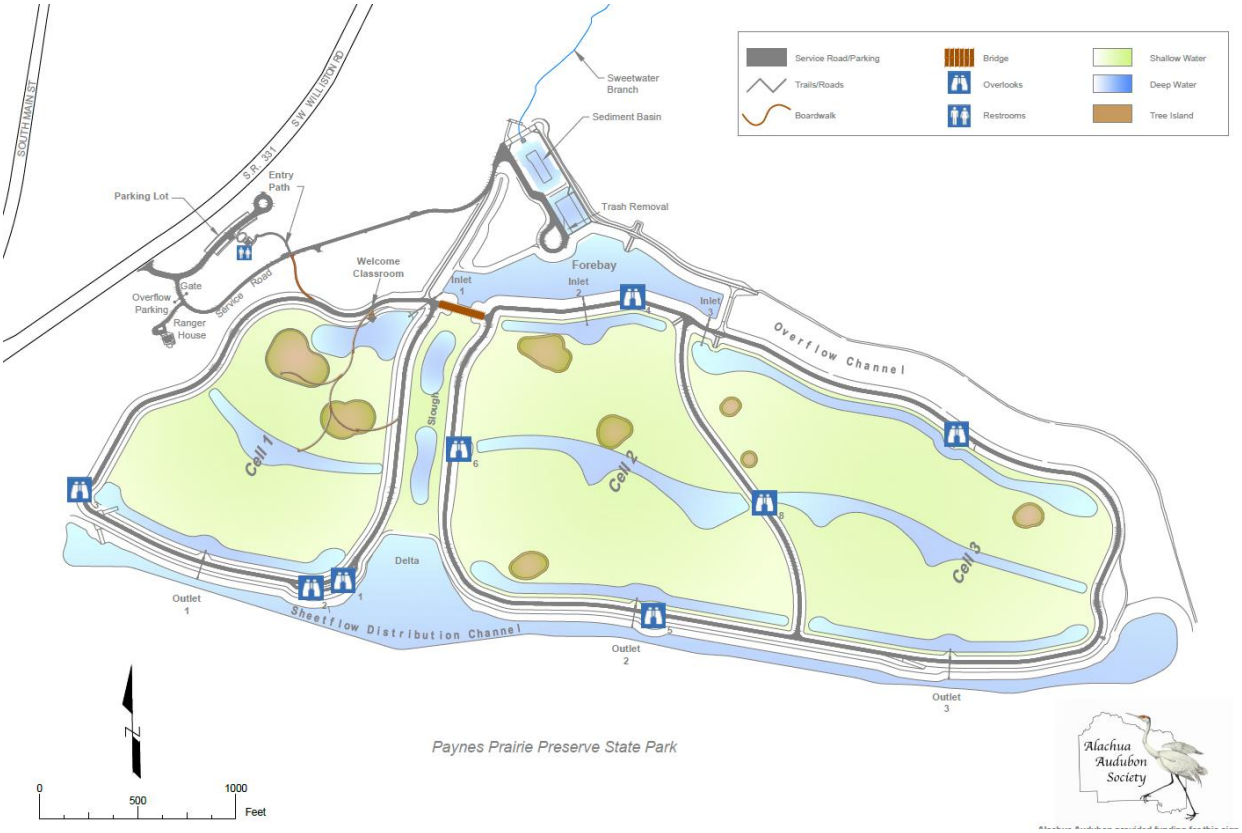

Why was Sweetwater Wetlands Park created?

Sweetwater Wetlands Park was created to improve the water quality of Sweetwater Branch, an urban creek, before flowing onto Paynes Prairie and eventually into Alachua Sink.

> Deeper Dive: Alachua Sink has a regulatory limit, known as a Total Maximum Daily Load, of how much nitrogen it can receive and still be healthy. That limit was being exceeded. In other words, too much nitrogen was entering Alachua Sink. Stakeholders, or entities that contribute flow and nitrogen loads to Alachua Sink, are required to reduce their nitrogen load in order for Alachua Sink to be at or below the regulatory limit for nitrogen. The City of Gainesville and Gainesville Regional Utilities partnered to create Sweetwater Wetlands Park to meet their nitrogen reduction requirements. The park provides many additional benefits such as creating abundant wildlife habitat, restoring the natural flow of Sweetwater Branch back onto Paynes Prairie, and providing a beautiful park for the public to enjoy.

How does Sweetwater Wetlands Park improve water quality?

There are several components of Sweetwater Wetlands Park that improves water quality. Starting from the where the water from Sweetwater Branch (an urban creek) enters the park:

- The ***sediment basin*** captures sand and debris, like logs, shopping carts and tires, which are carried by Sweetwater Branch during storm events.
- The ***trash removal*** system captures floating trash and litter that washes into Sweetwater Branch during storm events. The trash removal system prevents floating trash from getting into the forebay, wetland cells and Paynes Prairie.
- The 7-acre ***forebay***, or pond, equalizes and distributes the flow to the wetlands, slough and overflow channel. It also captures sediments, or particles of soil, that made it past the sediment basin.
- The three man-made ***wetland cells*** are constructed ecosystems dominated by aquatic plants that use natural processes to reduce nitrogen in the water.
- The 1 mile long ***sheetflow distribution channel*** at the south end of the park is the final place the water travels before flowing onto Paynes Prairie Preserve State Park. The distribution channel spreads the water out onto Paynes Prairie the way Sweetwater Branch historically flowed onto the prairie.

How does the sediment basin work and how is it maintained?

The sediment basin captures sand and debris carried downstream by Sweetwater Branch during storm events. Sediment is removed from this basin periodically with heavy equipment. The sediment basin keeps the sand and debris out of the forebay and wetland cells where it would be much more difficult to remove.

So, how does the sediment basin work? As water enters the basin, sediment is suspended or floating around in the water. The speed, or *velocity*, of the water slows down in the basin which causes the suspended particles to settle or fall to the bottom of the basin.

Another benefit of the basin is that it captures debris like logs, shopping carts and tires, carried downstream by Sweetwater Branch during storm events.

The City of Gainesville Public Works Department monitors the sediment basin after storm events and removes accumulated sediment every 12-24 months. To clean the basin, stream flow is routed around the sediment basin. Heavy equipment removes the dry sediment and debris. The material is tested and then disposed of in a licensed recycling and disposal facility.

How does the trash removal system work and how is it maintained?

Trash and litter from Gainesville washes into Sweetwater Branch during storm events. Heavy trash and debris falls to the bottom of the sediment basin. Floating trash like Styrofoam cups and plastic bottles is captured in the trash basin. A floating boom in the trash basin keeps floating litter from flowing into the forebay. The City of Gainesville Public Works Department cleans the trash basin as needed. A boat pushes floating trash into a floating basket. The basket is filled and emptied several times, until all the trash is collected. The floating trash is disposed of in a Class 1 lined landfill.

How does the forebay work and how is it maintained?

The forebay equalizes water and captures fine sediment. The flow of Sweetwater Branch is what is referred to as flashy. During days without rain the flow is steady and calm. When it rains the flow picks up quickly and can become intense and strong, similar to a flash flood. The forebay helps to buffer, or equalize, the changes in flow.

In dry conditions the water in the forebay goes to the 3 wetland cells. In storm events, the excess water flows to the forested slough and overflow channel. The forested slough and overflow channel protects the wetlands from having big surges in water depth, which would cause plant damage.

Gainesville Regional Utilities manages the vegetation in the forebay. Excess vegetation would reduce storage volume in the forebay and cause it to fill up, interfering with water equalization.

Why are there man-made wetlands and how are they maintained?

Sweetwater Wetlands Park has 125-acres of constructed wetlands. The man-made wetland areas are at the heart of why Sweetwater Wetlands Park was created. Natural bacteriological processes that occur in wetlands reduce nitrogen in the water to low levels; therefore, improving water quality.

Managing plants in the constructed wetlands is important. It helps maintain a mass of diverse and desirable plants and also limits the migration of undesirable and invasive plants onto Paynes Prairie. Undesirable and invasive plants come from a few different sources, including Sweetwater Branch transporting seeds and plant material into the wetland; birds and other wildlife carrying seeds and plants into the wetland on their legs, beaks, body and excrement; and the legacy seedbank from the plants that were there prior to the site being transformed into a man-made wetland park.

Gainesville Regional Utilities is responsible for managing the wetland areas, and uses contractors that specializes in aquatic systems and has the licenses required by Florida State. The contractors manage the vegetation within the wetland cells, open water areas, and berms.

Within the wetland cells, invasive and nuisance plants are monitored, spot treated and select areas are replanted with native wetland plants. Within the open water areas, invasive and nuisance plants like water lettuce and hydrilla are monitored and treated with aquatic herbicide using best management practices.

The berms are mowed regularly. During the summer and spring, berms are mowed twice a month. During the fall and winter, berms are mowed once a month, or as needed. Mowers are restricted in size so as not to scalp the steep slopes of the berms.

Sweetwater Wetlands Park – Frequently Asked Questions

What is a sheetflow distribution channel?

Historically, the flow from Sweetwater Branch spread out onto Paynes Prairie. This spreading of water is called sheetflow and is similar to when you see water flowing across grass or pavement during a rainstorm.

Ranchers in the 1930s created a ditch to drain part of Paynes Prairie to expand grazing areas. The ditch connected Sweetwater Branch directly to Alachua Sink. This caused dehydration of more than 1,300 acres of prairie wetlands.

Part of creating Sweetwater Wetlands Park included filling in the ditch and creating a 1 mile distribution channel to spread the water out onto Paynes Prairie the way Sweetwater Branch historically flowed. Restoring the sheetflow to the prairie will rehydrate approximately 1,300 acres of wetlands.

What is the purpose of a slough and overflow channel?

The wetland areas are designed to receive the dry weather flow (i.e. base flow) and some storm flow. During large storm events with significant increases in flow, the system is designed for the excess flow to go to the slough and overflow channel. By diverting large flow events to the slough and overflow channel, it protects the wetlands from having big surges in water depth, which would cause plant damage.

How long are trails?

The trails total 4 miles including a ½ mile boardwalk.

- Cell 1 – 1 mile
- Cell 2 – 1 mile
- Cell 3 – 1.25 mile

How accessible are the trails?

The walking trails around the wetland cells are ADA accessible. The path along Cell 1 is partially paved with porous concrete and is good for wheelchairs and mobility scooters. The path surface around Cell 2 and Cell 3 is coarse gravel and is more difficult for wheelchairs and scooters. Mobility tours are available. Call 352-554-5871 at least 48 hours in advance to make arrangements.

What other routine maintenance is performed?

Boardwalks are pressure washed and bird scat is sprayed/scrubbed off railings as needed. Terrestrial plants are monitored and park rangers check for invasive plants along the service drive and dry areas and remove them by hand.

Sweetwater Wetlands Park – Frequently Asked Questions

How much is the park admission and how do I pay?

The park admission fee is $5 per vehicle or $2 per pedestrian or bicyclist. Bicycles are not allowed in the park and must be parked at the bike rack.

Park admission payment options:

1. Insert cash into the payment box located at the entrance of the parking lot.
2. Use Passport Parking app, select 32601 as the main lot zone number.
3. Online payment at https://ppprk.com/park. The patron will need to verify information by either text message or phone call. Select 32601 as the main lot zone number. The fee will cover the entire day the payment is made.
4. Purchase an annual pass by calling 352-334-5067 (Mon.-Fri. 8 a.m.-5 p.m.)

How can I contact a Park Ranger?

The contact information of the ranger on-call can be found at the restroom area. The office phone number is 352-554-5871.

When can I visit the park?

The park is open from 7 am to sunset seven days a week. Closing time is at sunset, and therefore changes seasonally. The sunset time is posted in the park. Sunset occurs *before* nightfall.

What should I bring for my visit?

Water, comfortable walking shoes, a hat and sunscreen are recommended to bring with you during your visit. There is very little shade within the park and it can get quite hot, especially in summer.

Is anything prohibited in the park?

Pets, bikes, drones, motorized vehicles on trails (except those used for mobility purposes), horseback riding, collecting, swimming, boating, camping and fishing are prohibited in the park. Please refer to City of Gainesville, Code of Ordinances, Chapter 18 for a full list of rules and regulations.

How much did it cost to build the park?

Several options were evaluated by City of Gainesville and Gainesville Regional Utilities to meet the regulatory requirement to reduce nitrogen loading to Alachua Sink. Creating Sweetwater Wetlands Park was the lowest cost option and most environmentally beneficial. Additional benefits of the park beyond water quality improvement include creating wetland habitat,

restoring sheetflow onto Paynes Prairie, rehydrating 1,300 acres of wetland, and creating a beautiful park for the public to enjoy.

Creating Sweetwater Wetlands Park cost approximately $28 million and was funded by City of Gainesville and Gainesville Regional Utilities. Project funding partners include the US EPA, Florida Department of Environmental Protection, St. Johns River Water Management District, Florida Fish and Wildlife Conservation Commission, Florida Department of Transportation, and Alachua County.

What wildlife might I see during my visit?

Sweetwater Wetlands Park is home to an abundance of native wildlife like alligator, deer, opossum, otter, and raccoon. The wetlands also attract a wide variety of birds - over 250 species that change through the migratory seasons. Don't forget to bring your binoculars!

Where can I see alligators?

Staying on the clearly marked trails and looking over the water from one of our 6 observation decks is the safest and best way to enjoy your visit. Seating is available on the decks as well as along our boardwalk.