

Weeki Wachee Springs State Park

2013 Conceptual Master Plan – Historic Attraction and Buccaneer Bay

November 2013



Florida Department of Environmental Protection Division of Recreation and Parks, Office of Park Planning

SPRING

Weeki Wachee Springs State Park

2013 Conceptual Master Plan - Historic Attraction and Buccaneer Bay

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Introduction

The Unit Management Plan (UMP) serves as the basic statement of policy and direction for the management of the park as a unit of Florida's state park system. The Weeki Wachee Springs State Park Master Plan defines a common vision for the park's future. It bridges the gap between the development concepts identified in the park's UMP and the site-specific designs created later in the development process. The plan presents a design framework, conceptual site plan and an implementation strategy. The combination of narrative text and graphic maps and drawings help the public visualize the recommendations for the park in a realistic setting.

The master plan will aid decision-making about future park improvements. The master plan lays out a potential work plan for the Division of Recreation and Parks (DRP). It summarizes the park's current needs and assets and targets particular projects. By clearly identifying capital projects, the master plan can provide the rationale and framework to raise funds for park needs and specific park projects. It also establishes a basis for fiscal planning that will support scheduled development.

Background

The property that comprises the park was purchased by the Southwest Florida Water Management District (SWFWMD) in 2008 and leased the property to the DRP that same year. Parklands were purchased as part of the Weekiwachee Preserve project, which consists of approximately 16,000 acres along the coastal



The boat tour gives visitors an opportunity to experience the river

region of Hernando and Pasco counties. The sovereign submerged lands within the park, including the Weeki Wachee headsprings and the upper segment of the Weeki Wachee River, were leased to the DRP by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida in 2010.

The park takes its name from Weeki Wachee Spring, a first-magnitude spring and the headwaters of the beautiful spring-fed Weeki Wachee River. The park preserves a rich mosaic of habitats. This includes several miles of river frontage and Twin Dees Spring, a secondmagnitude spring. The park contains a significant portion of scrub. Scrub is the primary habitat for numerous imperiled species and is increasingly rare in Florida. In addition to its natural attributes, the park provides for the perpetual preservation of a historic roadside attraction that developed during the early days of Florida's tourism industry.

The park currently offers a wide range of resourcebased recreation activities including swimming, picnicking, canoeing, kayaking, and nature observation. Visitors come from all over the world



Visitors enjoy the swimming area at Weeki Wachee Springs State Park

to experience the "Old Florida" represented by the historic attraction. The park prominently features performances by the world-famous Weeki Wachee mermaids. The famous underwater theater currently hosts three mermaid shows per day, weather permitting. Additional activities within the historic attraction include a wildlife show offered three times daily and a river boat cruise on the Weeki Wachee River. Boat rides are offered continuously throughout the day, from 10 am until 4:30 p.m. Special programs, such as Mermaid Camps, Junior Lifeguard Camp and the Mermaid Tea Party, are offered through the Friends of Weeki Wachee Springs State Park.

Buccaneer Bay, the park's swimming area, is a 1980s - era water park. Buccaneer Bay includes water slides, a lazy river float ride and a kiddle pool. The swimming area is open all year round. The water slides, lazy river and kiddle pool operate seasonally from late March through September. Buccaneer Bay is very popular with local residents and visitors, particularly in the summer. Paddling on the river is available through the park's canoe/ kayak concession. Park visitors may also launch personal watercraft from the park's canoe and kayak launch, located just downstream from the attraction.

THE UNIT MANAGEMENT PLAN

Vision/Goals

The current UMP for the park was approved in 2011. The park's UMP recognizes the opportunity to preserve a unique example of Florida's early tourism industry, and protect one of Florida's first magnitude springs. The UMP identifies recreational activities and interpretative programs



Weeki Wachee's Mermaid Culture

The famous mermaids of Weeki Wachee

The Mermaids of Weeki Wachee Springs made their debut in the underwater theater on October 13, 1947. There they performed synchronized ballet moves underwater while breathing through air hoses hidden in the scenery. It did not take long for the attraction to receive worldwide acclaim. Movies, like 1948's "Mr. Peabody and the Mermaid," were filmed at the spring and many famous visitors came to see the mermaids, including Esther Williams and Elvis.

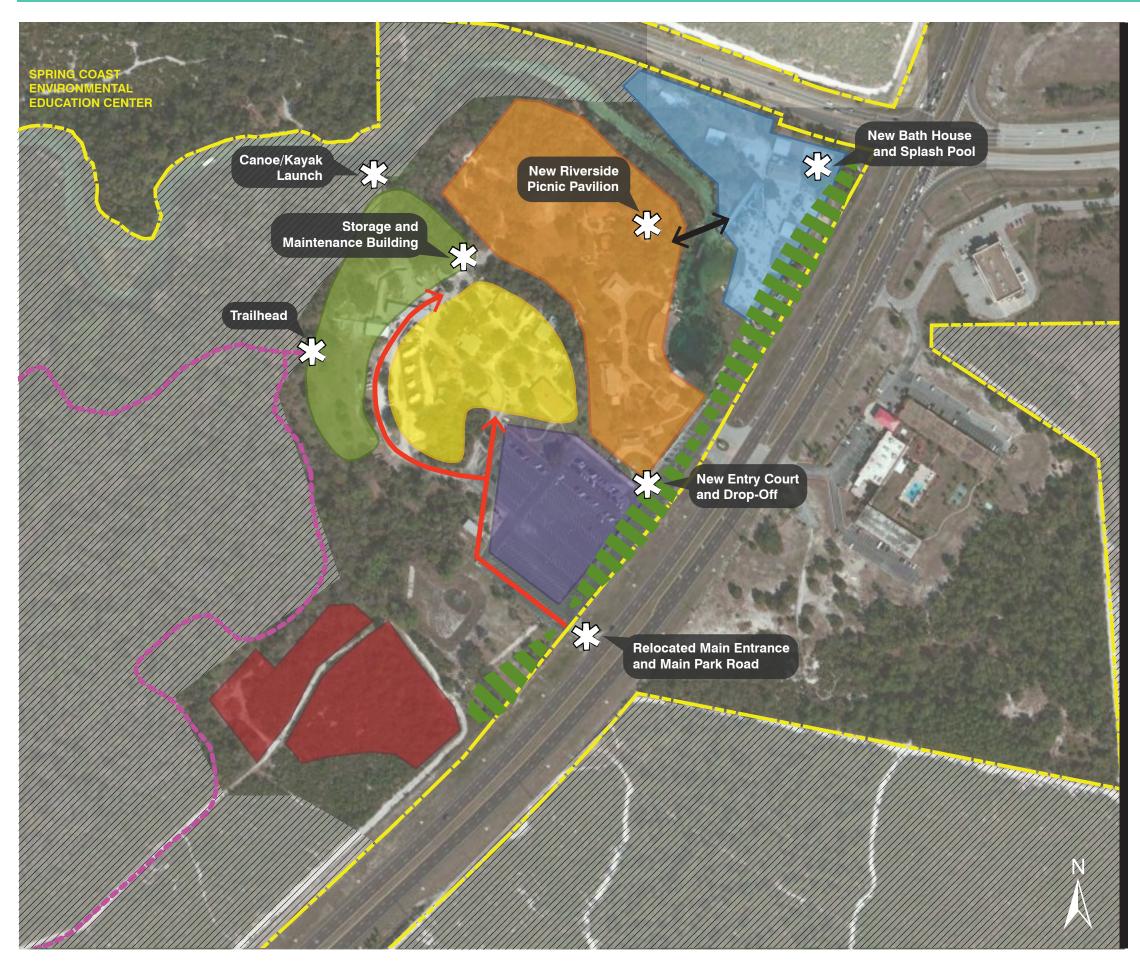
Like the sirens of ancient lore who lured sailors, the girls would stand by the road in their bathing suits to beckon drivers into the parking lot. Once they had an audience, they jumped into the spring to perform.

The glamorous mermaids took etiquette and ballet lessons, performing as many as eight shows a day to sold out crowds. During the attractions heyday, half a million people a year came to see the Weeki Wachee mermaids. Thirty-five mermaids took turns swimming in the shows. They captivated crowds by playing

football and having picnics underwater. They wore one-piece suits and were treated like royalty wherever they went in Florida. In 1997, many former mermaids returned to Weeki Wachee Springs. Today, the Mermaids of Yesteryear shows, play to standing-room only crowds. The former mermaids may have moved on in life, but the enchantment of the Weeki Wachee Spring calls them back time and again.

Once a mermaid, always a mermaid.





Weeki Wachee Springs State Park

CONCEPTUAL LAND USE PLAN

LEGEND





Florida Department of Environmental Protection Division of Recreation and Parks Office of Park Planning

BACK OF MAP



The Mermaid Theater is a unique offering of Weeki Wachee Springs State Park

appropriate to the park's natural and cultural resources.

The UMP recommends gradual redevelopment of the former attraction in order to improve resource protection, provide greater enjoyment of the river and spring and improve interpretation of the famous mermaids and mermaid performances.

In the Historic Attraction Area, the focus is to preserve the park's pre-1970 era elements, enhance spring overlook opportunities, develop an interpretive center and improve visitor circulation. The UMP recommends rehabilitation of the park's landscaping and implementation of landscape best management practices.

In Buccaneer Bay, the long-term vision is to rehabilitate the swimming area with a new bathhouse, concession building and improved splash pool. The park will also enhance picnicking opportunities, incorporate stormwater improvements and reduce the overall amount of impervious surface. Universal accessibility is a management priority throughout the attraction. The UMP identifies the need to redesign the existing parking lot to improve safety and circulation, add landscaping and stormwater improvements. Outside of the former attraction area, the UMP includes primitive campsites, hiking trails, and new park support facilities.

CONCEPTUAL MASTER PLAN DEVELOPMENT

The UMP recommends a master plan focused on the park's attraction areas adjacent to the intersection of US Highway 19 and State Road 50. The master plan process began in earnest in March of 2013. Several key meetings and site visits were held with DRP staff as well as members of the park's Citizen Support Organization (CSO), and the SWFWMD. These interactive meetings included sessions on visioning, field review, design, and project prioritization.

The planning team reviewed historical information on the park and various agency plans affecting the area. The further research on the archaeological resources of the site to inform development of the master plan. OPP staff developed the draft master plan for review by DRP staff and the CSO in July of 2013.

Developing a single park vision identifies clear direction and helps ensure the best possible outcome during master plan implementation. The broad consensus achieved through the master planning process promotes continued involvement and support for the park.

Regional Context and Connectivity

The park is within the City of Weeki Wachee Springs, in Hernando County, approximately 45 miles north of Tampa and 60 miles west of Orlando. Rural and low-density suburban developments characterize the region between Tampa and Weeki Wachee Springs. The area is served by the Orlando and Tampa International Airports as well as the Brooksville-Tampa Bay Regional Airport. Hernando County is part of the Withlacoochee planning region, that includes a group of rural counties in transition.

This region has experienced tremendous population and housing growth, and the economic base is primarily dependent on service and retail opportunities (Withlacoochee RPC 2012). Hernando County is also becoming an important corporate and industrial community.

The area is also known as the "Nature Coast."

The Nature Coast extends from the eastern portion of Wakulla County to New Port Richey in Pasco County. The Nature Coast encompasses several small to mid-sized urban areas, including Brooksville, Crystal River, Homosassa Springs, Dade City, San Antonio, Tarpon Springs, Port Richey and New Port Richey. The region's abundance of natural and cultural resources, and outdoor recreation opportunities is the foundation for a wide range of ecotourism activities.

The City of Brooksville, the County Seat of Hernando County, is located 12 miles east of the park. This historic community, established in 1856, brings back the old town southern spirit of the 1800s with antebellum homes, antique shops and scenic brick lined streets. Fort DeSoto, a military fort established about 1840 to give protection to settlers from Indians, was located at the northeastern edge of present day Brooksville on Croom Road about one-half mile east of U.S. Highway 41.

Crystal River, located, about 30 minutes north of the park is known around the world as one of the best places to observe the imperiled Florida manatee. The town supports many opportunities for boating, diving, swimming as fishing.

Tarpon Springs is known as the "sponge capital of the world," having a long history of sponge diving and commercial fishing. Tarpon Springs revitalized the historic downtown. Art galleries, antiques stores and specialty shops are all housed in buildings dating from the late 1800s.

New Port Richey is a residential community with a revitalized historic downtown and Main Street. The Pithlachascotee River runs through the heart of the city. The city is recognized for its cultural heritage and unique riverfront landscape.

Surrounding Natural Areas and Recreational Opportunities

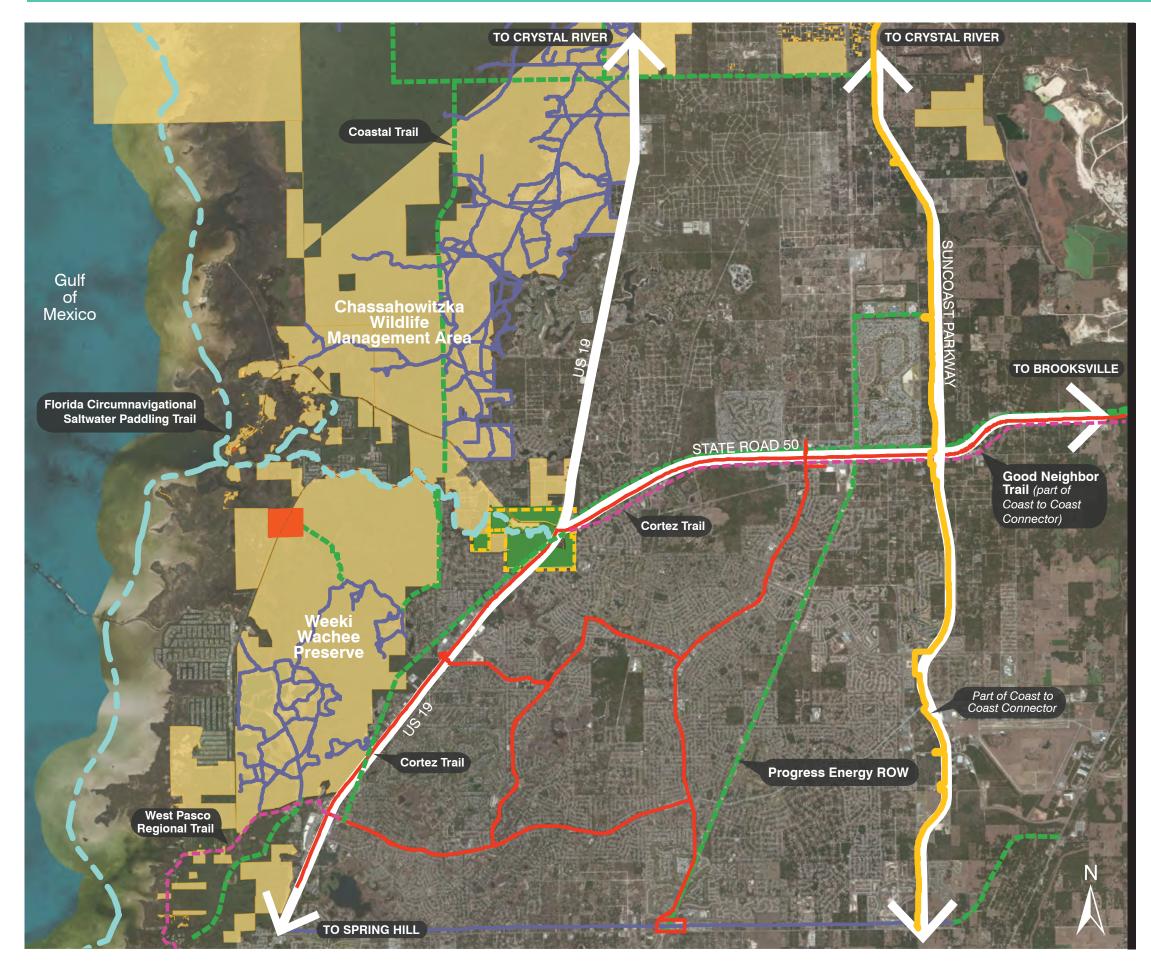
A wide range of natural areas and recreational opportunities surround the park, creating a network of diverse activities for visitors of all interests and abilities.



Manatees gather near the Weeki Wachee headspring

The Chassahowitzka River runs through the nearly 34,000-acre Florida Fish and Wildlife Conservation Commission (FWC) Chassahowitzka Wildlife Management Area (WMA) and 31,000-acre Chassahowitzka National Wildlife Refuge (NWR). Both managed areas are located northwest of Weeki Wachee Springs, along the Gulf Coast, and comprised of scrub, forested uplands, saltwater bays, brackish tidal creeks, and freshwater marshes. The NWR, is accessible only by boat, and was established primarily to protect waterfowl habitat. The WMA, accessible from land, allows hunting, fishing, picnicking and hiking. The FWC also manages a small recreational area on the Weeki Wachee River. It features a wildlife viewing platform, and nature trails through scrub habitat. The 11,206 acre Weekiwachee Preserve owned by the SWFWMD protects a diversity of habitats and a significant population of the imperiled Florida black bear. The preserve offers bike trails, boating, paddling, fishing, hiking, and nature study.

Paddlers and boaters are able to navigate the



Weeki Wachee Springs State Park

REGIONAL **CONNECTIVITY MAP**

LEGEND

Site Features

Weeki Wachee Springs
State Park

Other Conservation Land

County Parks

Weeki Wachee City Limits

Primary Road

Existing Bus Routes

Existing Trails

Proposed Trails

Suncoast Trail

Paddling Trail

Florida Greenways & Trails System Land Trail Opportunity



Florida Department of Environmental Protection Division of Recreation and Parks Office of Park Planning

BACK OF MAP

Weeki Wachee River until it reaches the Gulf. Two popular Hernando County parks are located along the Weeki Wachee River. Bayport Park, a sevenacre park located on the Gulf at the mouth of the Weeki Wachee River, offers a boat ramp, a canoe launch, a fishing pier and picnic areas. Rogers Park, a three-acre park on the Weeki Wachee River, offers a boat ramp, canoe launch, swimming area, picnic areas and a playground. One mile south of Rogers Park, the adjoining parks, Jenkins Creek and Linda Pedersen offer 140 acres of natural areas with springs, coastal marshes, uplands and waterways leading to the Gulf of Mexico. Recreational facilities offered at these two parks include a small boat launch, fishing pier, observation tower, boardwalk, swimming area, and picnic facilities.

Camping is widely available throughout Hernando County and near Weeki Wachee Springs. Primitive camping and tent-only campgrounds are available in the Withlacoochee State Forest, at the Silver Lake, Cypress Glen, and Crooked River campgrounds. Sixteen separate campgrounds throughout Hernando County can accommodate recreational vehicles and motor coaches.

Hernando County contains over 107,000 acres

of publicly accessible natural areas that are wellsuited for hiking. Cypress Lake Preserve and Lake Townsend Regional Park offer hiking trails through densely wooded areas bounded by the Withlacoochee State Forest and the Withlacoochee River. The Florida National Scenic Trail extends through Cypress Lake Preserve. The Preserve has long term plans for additional hiking trails and trailhead facilities, as well as a paddling launch on the Withlacoochee River.

Weeki Wachee Springs State Park is not the only "Old Florida" roadside attraction in the region. Other former roadside attractions are preserved within Ellie Schiller Homosassa Springs Wildlife State Park, Rainbow Springs State Park, and Silver Springs State Park.

Ellie Schiller Homosassa Springs Wildlife State Park, located 25 miles to the north, showcases native Florida wildlife. The park was originally centered on "Nature's Giant Fish Bowl," a floating observation platform, and further developed as a zoo-like park on the headspring of the Homosassa River. Several wildlife encounter programs are offered daily, and visitors can view wildlife from a floating observation platform, boardwalk and pontoon boat rides. The park also serves as a



Kayaking along the Weeki Wachee River

wildlife rehabilitation center.

Rainbow Springs State Park, 50 miles to the northeast, is Florida's fourth largest spring. Rainbow Springs was a popular privately-owned springs attraction from the 1930s through the 1970s. Archaeological evidence indicates that humans have used the spring for nearly 10,000 years. The park currently offers swimming, snorkeling, picnicking and paddling in the headspring area. A walking trail leads visitors through the former gardens. Tubing (seasonal) and camping are also offered from a separate portion of the park located downstream from the former attraction.

Regional Transportation Network

The park is located at the intersection of US Highway 19 and State Road 50. Improvements are planned for both roads including the addition of sidewalks and bike lanes. These projects are intended to increase the transportation efficiency and safety of the County's most congested traffic corridors and intersections.

Hernando County proposes extensive expansion of its multi-use trail system, and improvements to the bicycle lane and sidewalk network associated with new roadway construction or expansions of existing roadways. These multimodal transportation improvements will be funded and implemented between 2015 and 2035



Scuba divers prepare to explore the Weeki Wachee headspring

(West Central Florida MPO Chairs Coordinating Committee 2010).

An existing paved multi-use trail extends five miles east from the intersection of US 19 and SR 50 along SR 50 to Mariner Blvd and the Suncoast Trail. This multi-use trail is planned to extend further east along SR 50 and then run north along US 98. The planned extension of this trail will facilitate bicycle and pedestrian access to Weeki Wachee Springs State Park from the City of Brooksville. Community connector and collector routes in the vicinity will provide spur connections to this trail from additional towns and neighborhoods. Another paved multi-use trail is planned along a northsouth powerline easement, which will also intersect with SR 50, the Suncoast Trail and the planned trail along County Line Road.

The Coast-to-Coast Connector is a proposed multi-use trail corridor that will span the 275-mile distance between St. Petersburg and Titusville. From St. Petersburg, the Connector will extend north through Clearwater, Pasco and Hernando counties and proceed east to the Atlantic Coast. Several of the state's major trails, including the Fred Marquis Pinellas Trail, the Suncoast Trail and the West Orange Trail, will serve as portions of the Coast-to-Coast Connector.

A local public bus route currently connects Weeki Wachee Springs to the City of Brooksville along US 19 and SR 50. Buses along this route, known as the purple line, arrive at each of the nearly 80 identified stops every 1.25 hours. There are two park and ride locations along this main route. Plans are in progress to increase the connectivity between small towns and neighborhoods in the Weeki Wachee, Spring Hill, and Brooksville area. This will increase the frequency of bus arrivals at each stop and facilitate ease of access between sites in the area for pedestrians and cyclists. These local transit routes would also connect with future express bus service into the Tampa Bay region, providing multiple opportunities for travel to the park.



The Weeki Wachee River, with a view towards the swimming area and headspring

Planning, Zoning and Regulatory Issues

The city limits of Weeki Wachee Springs encompass the state park. Land use and zoning matters are handled by the City's elected officials and their agents. The allowable land uses are identified in the City's comprehensive plan and further delineated in the zoning code. The specific comprehensive plan requirements and zoning regulations covering Weeki Wachee State Park are as follows:

Comprehensive Plan

The Comprehensive Plan for the City of Weeki Wachee was found to be in compliance (with State of Florida requirements) in February 1992 based on a Stipulated Settlement Agreement (SSA) with the state. According to the records from the Florida Department of Economic Opportunity, there have been no amendments to the plan other than those outlined in the SSA.

Future Land Use Element

The Future Land Use Map indicates that several different future land use categories are designated within the park property. The Future Land Use Element provides information on the purpose of these categories and allowable uses within them. They are as follows:

Within the historic attraction area:

- Tourist The Tourist land use category is reserved for the Weeki Wachee attraction and is supportive of commercial land uses.
- Within the state park boundary (and adjacent to the Tourist future land use):
- Residential, 5 du/per acre Allows residential uses and requires 15-foot setback from wetlands and water bodies.
- Residential, 3 du/per acre Allows residential uses and requires 15-foot setback from wetlands and water bodies.
- Community Commercial Located on arterial roads, maximum of 75 acres
- Regional Commercial Minimum of 80 acres, not to exceed 10,000 square feet per acre; internal access.
- Commercial Infill Limited and managed to minimize incompatible land use and improve traffic circulation. Requires esthetic quality through landscaping, setbacks, buffers, screening and limited signage. Will not extend to a greater depth than 600 feet west of U.S. 19 right-of-way.
- Natural Preservation Districts Reserved for conservation of natural systems including research, recreation, and open space. Included in this category are the following Future Land



One of Weeki Wachee's first animal shows featured Birds of Prey

Use Map categories: Nature Preserve A, Nature Preserve B, Riverine Protection Area.

Note: All commercial development (regardless of future land use category) requires a site plan prior to approval.

Conservation Element

Several other policies in the Conservation Element of the comprehensive plan are relevant to the master plan area, including the following:

- Development adjacent to nature preserve areas or lakes requires a 15-foot buffer.
- The City shall require conservation of and use of native plant species in the developed landscapes.
- A protected species survey is required on parcels greater than five acres in size submitted for development approval.
- To protect the Riverine Protection and Nature Preserve areas along the river from encroachment of incompatible land uses, a minimum 150-foot natural buffer from the water's edge is the river is required. The tourist area is exempt from this requirement.
- Support the continuation of the attraction

(structures, etc.) and permit flexibility in the types of events and exhibits by allowing a range of permitted uses in the zoning ordinance.

<u>Zoning</u>

Zoning Categories

All the zoning districts within the park boundary are planned development projects which require a site plan or plat to accompany the request for development. There are several different zoning districts shown on the zoning map. They are as follows:

Within the Master Plan area:

 Recreational Planned Development Project (REC. P.D.P.) - Allows a number of recreational uses ranging from golf courses to go-cart tracks, amusements, gun and archery ranges, as well as parks and other outdoor uses of a recreational nature specifically approved by the governing body.

Within the state park boundary:

- Residential Planned Development Project (RES. P.D.P.) - Allows residential uses at a density consistent with the zoning code and comprehensive plan.
- General Highway Commercial Planned Development Project (G.H.C. P.D.P.) -Allows Commercial uses consistent with zoning code and comprehensive plan.
- Natural Protection District (N.P.D.) There is no section in the zoning code that clearly states what uses are allowed in this category. This zoning district refers to the future land use map



A vintage bumper sticker advertising Weeki Wachee Springs

categories, as applicable, Nature Preserve A, Nature Preserve B and Riverine Protection Area.

 Riverine Protection District (R.P.D.) – There is no section in the zoning code that clearly states what uses are allowed in this category.

Other Zoning Code Requirements

All zoning districts are Planned Development Projects that require a site plan or master development plan to be submitted for the City's review and approval prior to commencing development..

All Planned Development Projects require the approval of a preliminary Plat (Plan) and a final Plat (Plan). Detailed requirements regarding process and content of the submittals are listed in the zoning code. Environmental control standards are noted in Article II, Section 5. The City contracts with land use planners to review development and site plans on an as needed basis.

Permitting

Zoning permits are required prior to construction or alteration of any structure. There are exceptions. No permit is required for reoccurring maintenance work or installation of improvements with an approved preliminary development plat, or for an approved plan development project.

The City is responsible for issuing permits within the city limits. PDCS, LLC, a consulting firm specializing in building department services, assists the City with building inspections and fire code inspections. The firm is also authorized to issue permits for minor alterations or structures, such as building a storage shed or adding a porch, as well as certain renovations that do not alter the footprint of a structure.

Water and Wastewater

The Park is currently served by Hernando County's central wastewater system. The Park is currently served by an on-site well that supplies water to the park.



Fall color reflected on the waters of the Weeki Wachee River

SITE ANALYSIS

DRP staff conducted several site visits to review the natural and cultural resources on the site. The locations and use of existing facilities and how visitors and staff move through the park was also noted. This brought understanding of the park's operation, main activity areas, and the current circulation patterns. The analysis of the park's current condition and operation indicated a need for specific improvements. Documentation of the current visitor experience, determines the look and feel promoted by the plan.

Natural Resources

Weeki Wachee Spring is a first magnitude spring that discharges and average of 112 million gallons a day. The spring feeds the crystal clear Weeki Wachee River that flows west towards the Gulf. The Weeki Wachee Spring and upper segments of the Weeki Wachee River are considered "impaired by nutrients" (FDEP, 2009). These waterbodies have elevated concentrations of nitrate indicated by algal smothering of the flora and fauna. This listing required the development of a Total Maximum Daily Load (TMDL) for nitrogen. The TMDL sets the level of nutrient loading needed to meet applicable water quality standards. (FDEP DRAFT TMDL 2013). The Weeki Wachee Spring consists of a conical pool that is 165 feet by 210 feet wide (Scott 2004). The pool slopes gently down 10 feet to the start of the main vent. Divers have been able to map and explore over 6700 feet of subterranean passages. (Karst Underwater Research, Inc. 2008).

The spring and river are habitat for a number of imperiled species, including the West Indian manatee, American alligator, striped mullet, bluegill, mangrove snapper, peninsular cooter and Florida red-bellied turtle.

Park lands affected by this master plan are primarily developed. Key features within the master plan area include:

- The river floodplain contains remnant portions of hydric hammock. It is heavily impacted by fill, previous development and invasive exotic plant species.
- A drainage swale traverses the west side of the attraction area. It currently directs runoff from the heavily developed areas of the park. It is unclear if this ornamental feature was created for stormwater management
- Two areas of steep slopes, the Buccaneer Bay picnic area and adjacent to the headspring.
 These areas create challenges for accessibility.
- Numerous large trees are found throughout the historic attraction.
- A portion of the Buccaneer Bay picnic area



An egret finds a resting spot in the Weeki Wachee River

is a remnant bluff that overlooks the river and headspring. This area may have once been scrub but is now characterized by an established canopy of sand live oak and cabbage palm.

Cultural Resources

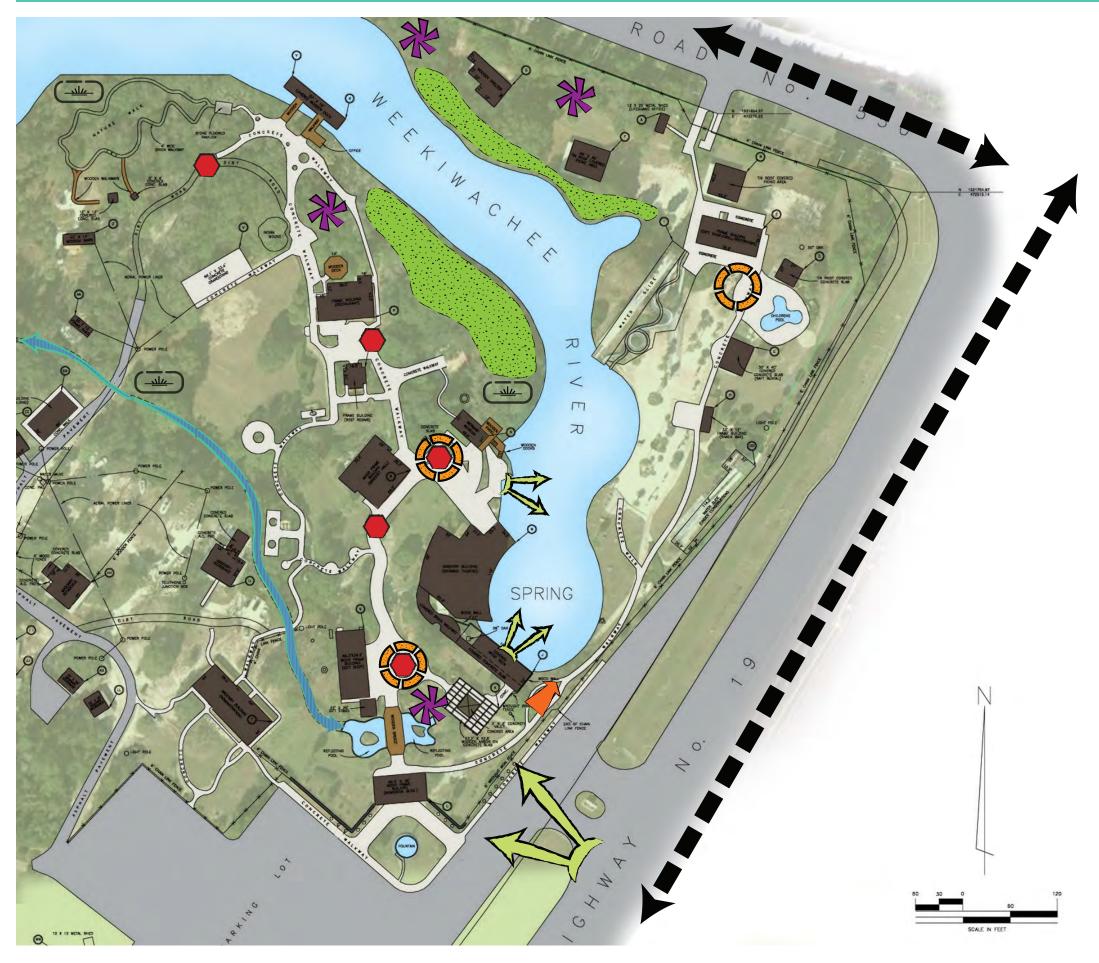
Since its founding in 1947, Weeki Wachee played an important role in Florida's tourist industry. The opening of Walt Disney World in 1971 led indirectly to the decline of Florida's famous roadside attractions. Today, several elements of the attraction area are considered historic and eligible for listing in the National Register of Historic Places. The Mermaid Theater (built in 1959) is significant for its original clamshell roof The building is located prominently on the spring. The Adagio Statue (constructed c. 1965) and the Mermaid Wall (constructed c. 1963) are considered historic because of their distinctive design and association with the Weeki Wachee attraction. The Star Garden is a historic remnant of the attraction's landscape. Props from mermaid performances were displayed and provided photo opportunities for visitors.

There are several archaeological sites in the area of the park covered by the master plan. Weekiwachee mound, is the most prominent of the sites in the park. This sand burial mound is located about 180 meters north of the spring, near the grandstand, and is currently roped off and marked by signage. Analysis of pottery from the mound indicated construction during the Safety Harbor period (AD 900–1650), the terminal pre-contact and initial contact cultural period. The presence of Spanish glass beads at the site indicates contact with the Spanish during the early 16th century (c. 1525 AD -1550 AD).

Implementation of the park's master plan will be dependent on close consultation with the Division of Historic Resources in order to limit potential disturbance to significant cultural resources.

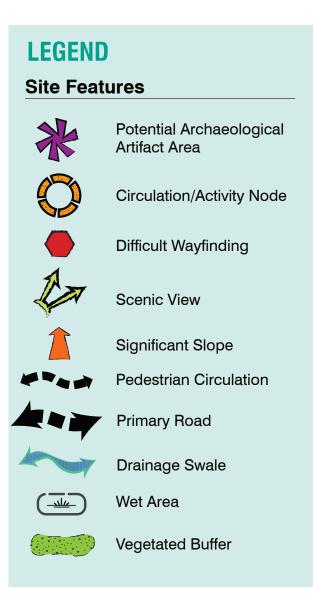
Historic Park Character

The historic attraction area preserves significant elements from the heyday of roadside attractions



Weeki Wachee Springs State Park

SITE ANALYSIS





Florida Department of Environmental Protection Division of Recreation and Parks Office of Park Planning **BACK OF MAP**



The historic mermaid wall greets visitors upon their arrival to the park

and automobile tourism in Florida. The signature architecture evident in key features at the park include the mermaid wall and Adagio sculpture as well as the mermaid theater (which will be restored with its original clamshell roof). The original attraction was quite small, focused directly on the entrance, mermaid theater, gift shop and swimming area. Over time, the original attraction expanded to add new features and services to increase visitation. As a result, the current compilation of buildings and use areas differ in style and character from the original attraction.

Current Park Facilities and Visitor Services

Numerous buildings provide locations for various activities at the park. The site analysis included an assessment of current facility locations and uses. This portion of the analysis determined the need for additional services or facilities. This analysis also considered if facilities might be more functional if they were relocated or renovated.

Existing facilities in the master plan area include the following:

• Attraction area: admission building, mermaid theater, gift shop, snack bar/ice cream shop, restaurant, banquet hall, grandstand (stadium), playground, rest room, boat dock, riverside theater and mermaid photo spot. The grandstand serves as the anchor for a large open event area where concerts and other special events are held. • **Buccaneer Bay**: water slides, beverage bar, concession building with rest rooms and snack bar, picnic shelters, floating dock, sunning beach, kiddie pool, volleyball court, tiki bar and lifeguard office.

CONCEPTUAL MASTER PLAN OVERVIEW

The conceptual master plan drawing includes the historic attraction area, Buccaneer Bay, and the parking area. The drawing is an illustrative depiction of the overall vision for the attraction area.

The conceptual master plan highlights the special features of one of Florida's historic roadside attractions, provides quality recreational experiences and preserves and interprets sensitive resources. The master plan focuses on the following principles throughout:

- Enhancing the park's natural and cultural resources
- Preserving historic elements and special features
- Inspiring a sense of discovery and delight
- Creating a tangible sense of place
- Providing a showcase for best management practices

The master plan seeks to accomplish these principles by incorporating the following features:

SPOTLIGHT

Florida's Roadside Attractions

Beginning in the late 19th century, tourists traveled to Florida to see lush gardens, to peer through glass bottom boats and to interact with the exotic environment. These early attractions provided a unique experience for visitors. Most focused on using the state's natural resources to generate profit and many were located near major highways, such as US 1, and US 41.

Promoters employed the myths and legends of Florida, such as the Fountain of Youth, to lure patrons. Attractions featuring water, such as springs, often competed with each other by featuring new gimmicks to showcase the clarity of the waters and the uniqueness of the features at a particular spring.



In 1947, champion swimmer Newton Perry opened Weeki Wachee. Perry constructed an Underwater Theater where tourists could sit and view the wildlife in the springs. To further differentiate Weeki Wachee from other roadside attractions, Perry trained women to perform stunts and ballet underwater, with the help of an unique underwater tubing system used for breathing. Perry advertised these women as the mermaids of Weeki Wachee.

The roadside tourist trade remained healthy into the 1960s, but the industry was showing signs of change. The Florida Turnpike, combined with new interstate highway segments opening in the mid 1960s, changed traffic patterns in the state. Most U.S. and state highways that had been the primary travel arteries became alternate routes for travel, leaving many roadside attractions isolated. A few of these roadside attractions survived and several, in addition to Weeki Wachee, are part of the Florida State Park system, such as Wakulla Springs, Silver Springs, Homosassa Springs and Rainbow Springs.

- Gathering places for visitors
- Clear and safe pathways and circulation patterns
- Efficient use of facilities and resources
- Opportunities for spaces with multiple and flexible uses
- Areas for play and picnicking
- Opportunities to view, preserve and interpret natural and cultural resources, including the attraction's history and culture
- Landscape and stormwater practices that
 enhance and protect water quality

HISTORIC ATTRACTION AREA

Throughout the park, the goal is to create an atmosphere of discovery from the moment the visitor passes through the park entrance. The plan preserves and highlights the historic elements of the former attraction and improves walkway alignments to enhance wayfinding.

A central promenade creates open sight lines that will draw visitors through the park to choose their destinations and activities. Buildings frame views but not block travel. Overlooks can be created at several locations to provide greater visual access to the head spring and river.

The mermaid theater once again becomes the dominant architectural element in the park. The existing banquet hall is removed and in its place is a large central fountain. This area will feature ample seating and gathering space to accommodate the large crowds that gather near the theater prior to mermaid performances.

A new interpretive center can serve multiple purposes. It will include space for interpretive programming and exhibits as well as special events. One portion of the exterior of becomes a stage area for performances. Its location also capitalizes on the potential of the Star Garden, one of the park's unique historic elements. The Star Garden will create a special approach to the new interpretive center. The renovated garden will once again contain props from vintage mermaid performances and provide photo opportunities for visitors.





Weeki Wachee Springs State Park: CONCEPTUAL MASTER PLAN

BACK OF MAP



Props from mermaid performances were displayed in the Star Garden

The gift shop will remain in its current location, near the park entrance. This location provides visitors with a convenient opportunity to purchase gifts and other items during their visit. A new separate exit is proposed adjacent to the entry building in order to better facilitate large crowds leaving the park after special events or on exceptionally busy days.

The attraction area also features a redesigned playground area adjacent to a new picnic pavilion and a new rest room facility. The restaurant remains in its current location but will be a renovated facility with improved outdoor seating.

Beyond the restaurant, visitors will enter an area focused on interpretation of the park's natural and cultural resources. Relocating the primary circulation away from the Weekiwachee mound site will improve conservation efforts and provide greater opportunity for interpretation of the park's archaeological sites. The central promenade terminates at the boat dock, and visitors may then choose to, take a boat ride, or attend a wildlife show. The historic attraction area is ultimately connected to Buccaneer Bay via a pedestrian bridge, creating a complete loop through the attraction.

BUCCANEER BAY

Buccaneer Bay is a former water park that is popular with local residents and visitors, especially families. The master plan envisions an enhanced swimming area complete with new amenities. This includes a new splash pool designed for kids ages 2-12. This exciting water feature will have a variety of age appropriate play areas for splashing and swimming. Additional amenities include a new bathhouse and concession building. The current picnic area is to be renovated. New picnic shelters will accommodate use by both small and large groups and provide greater enjoyment of the spring and river.

As with the attraction area circulation patterns and overall accessibility need improvement. New walkways will promote way finding and provide greater connectivity to amenities within Buccaneer Bay and between Buccaneer Bay and the historic attraction.

Landscape improvements will be particularly important and should be designed to direct the



Themed splash pool at a private resort



Bioretention area at the Tampa Aquarium

Photo: Ekistics Design Studio

circulation of users and compliment stormwater treatment. The final site design will reduce the overall amount of impervious surface and provide enhanced stormwater management.

PARKING AREA

Visitors begin and end their experience in the parking lot and entrance areas. The conceptual master plan creates an enhanced entry experience that emphasizes safety and circulation, integrated stormwater management and extensive landscape improvements. A new entrance to the park is created on US 19 and a large roundabout will facilitate vehicle entry. A landscaped boulevard centered on the historic Adagio sculpture will create a dramatic sense of arrival. The parking design facilitates improved access to the canoe and kayak launch and improved safety for cyclists and pedestrians. The new plan also provides areas for a bus drop off, and parking for buses and recreational vehicles.

Enhanced stormwater treatment will be required to mitigate the negative impacts of stormwater runoff from the parking lot, as well as other impervious surfaces within the park. Pervious paving will be utilized to the greatest extent possible. In addition extensive landscape areas will provide much needed shade and reduce the overall amount of impervious surface created within the parking area.

Through careful design and planning these landscape areas can also be integrated as part of the stormwater management system. These bioretention areas can be ecologically diverse, and aesthetically pleasing. When combined with interpretive signs and materials, they are educationally rich environments where visitors can learn about the many benefits and values of stormwater management. The goal is to create a parking area with dynamic landscape features that provide a number of conservation benefits.

INTERPRETATION AND VISITOR SERVICES

The master plan process identified a need for enhanced visitor services and improved interpretive experiences. Visitors should be able to create their own experience by encountering multiple opportunities to learn about the park's resources, to meet a mermaid, or participate in recreational activities.

The park's natural and cultural resources provide myriad opportunities for interpretation. The Weeki Wachee River provides the backdrop for boat rides downstream of the headwaters, to experience some of the park's natural areas. Both the boat tour and mermaid shows can highlight the river and its wildlife and the head spring.

It is important that the park's interpretative programming be dynamic in order to create generations of park visitors. The park's Statement for Interpretation developed in March of 2009



Recent animal shows feature species native to the area

SPOTLIGHT

Beauty and Benefits of Florida's Springs

Florida's springs are a unique and beautiful resource. The historically clear waters provide valuable habitat and recreational opportunities. Springs are an important component of the State's tourism economy. Springs also provide a "window" into a valuable resource – the ground water in the Floridan Aquifer. Our drinking water comes from the same aquifer that supplies water to our springs. The quality and quantity of water in springs indicates the quality and quantity of the State's drinking water.

Springs, where groundwater comes to the surface, are major sources of stream flow in a number of rivers such as the Weeki Wachee, the Rainbow, the Wakulla, and the Suwanee. Nineteen counties have first magnitude springs, ranging from well-known springs such as Weeki Wachee Springs, Rainbow Springs, and Silver Springs, to lesser known springs, often on private land and known only by a few.

Threats to Springs

Spring water is very high quality and lacks contaminants. It can be used directly for public water supplies or for irrigation. However, when pollutants are introduced on the land surface, they will travel into the aquifer and later appear in spring flow. The closer to the spring that nutrients are introduced, the more rapidly the impact on the spring can occur. Dissolved nutrients provide for rapid growth of algae and aquatic plants that obscure the spring bottoms and clog the surfaces. This diminishes the spring's ability to support wildlife and provide economic value.

identifies specific themes that should be covered by interpretive programming, including natural springs systems, Florida tourism history, mermaid culture, and unique underwater technologies. The statement also outlines various ways to deliver interpretive programming.

The amount of potential activities will require a variety of locations and methods of delivery. In addition to a dedicated interpretive center, opportunities for expanding the programming offered at the mermaid theater itself are to be explored. This could include programming focused on water quality and springs protection, to be offered regularly and as alternative programming when inclement weather forces cancellation of mermaid shows for safety reasons.

As new facilities and circulation routes are



developed, the detailed site plans should include outdoor locations suitable for interpretive programming such as mermaid encounters, interpretive signage or other exhibits. In addition, throughout the park, small areas appropriate for mobile interpretive activities or mobile concessions should be sited, creating an ongoing sense of discovery and excitement as visitors move through the park from one destination to another.

The plan provides several locations for food service. The future vision for these services will be consistent with the overall theme and character outlined in this master plan and implemented jointly by the DRP and visitor service providers operating within the park. Some flexibility and mobility in the location and specific services offered is also key to providing exceptional services and adapting to changing conditions and visitor preferences.



The Mermaid Theater and Mermaid Villa in 1960

PARK CHARACTER

A well designed space has a distinct character or "sense of place" that is anchored in the landscape, history and culture of a particular area. It is the result of the relationship between people, the landscape, and the built environment. It can be created with a careful approach to site layout and design.

Design Theme: Water

The park would not exist without the Weeki Wachee Spring and River. The various activities, resources and important interpretive messages at the park can all be tied to water. This includes the famous mermaids, swimming, the importance of water quality, and the wildlife. For this reason "water" is an excellent central design theme. Water also creates patterns that can be repeated throughout the park. Incorporating this theme into the design of facilities, signage, and walkways unifies all the disparate site elements. Visitors will have a visual reminder that they have entered a special place tied to the springs and river, through the sights that they experience throughout the park.

Architecture

Future park facilities will be designed to link to the park's central theme and be complementary to the historic mermaid theater, with its restored dramatic white clamshell roof. Constructed during the 1960s the mermaid theater was considered an engineering marvel. The building illustrates the clean lines and connection to the landscape typical of mid-century modern architecture. The design of future park facilities should be inspired by this important architectural period. White, blue, concrete, glass, and steel are all colors and materials that should be found throughout the architecture of the park. The architectural possibilities are numerous but most importantly the buildings should address the environmental qualities of the site. Features such as large windows to provide views and generous overhangs to provide shelter from thunderstorms are examples of architectural elements that should be considered.

Landscape

Interesting visual details, textures and even fragrances also establish park character. A redesigned landscape will improve the aesthetic appeal of the entire area and retain some of "roadside attraction" character of the park. Visitors to the park will experience the colorful "tropical" ambiance common in Florida's mid-20th century tourist attractions. Diverse plantings enhance the aesthetic qualities of the landscape. The ever-changing forms, colors, and textures of the wildflowers, grasses and other native plants create dynamic landscape patterns and visual interest in all seasons. Landscape plantings should be composed of native plants found within the park in aesthetically appealing groupings, and may include non-native species that are not considered invasive. Plant species should be selected in order to minimize the use of water. fertilizer and pesticides in order to protect water quality. The landscape itself will serve to interpret environmentally sensitive landscape management techniques for the park's visitor's. Additionally landscape structures such as signs, fencing, and hardscape materials should incorporate products and patterns that evoke the primary design theme...

DESIGN THEME: WATER

If there is magic on this planet, it is contained in water. - Loren Eiseley

- Focus on Springs and River
- Unites Mermaids and natural features of the park through the common theme of water
- Incorporate Mermaids as magical feature directly related to the Springs/water
- Shades of blue and white used throughout the park
- Curvilinear shapes/lines throughout park
- Mid-Century Modern Architecture with clean lines throughout the park
- Opportunity to interpret and educate on water supply, quality, the water cycle and its role in people's lives















Landscape Best Management Practices (BMPs)

Landscaping and lawn care affect springs in several ways. Maintaining lawns and landscaping typically involves large amounts of water, which can ultimately reduce spring flows. Fertilizers and other chemicals used in managing lawns and landscaping are a source of pollution and contribute nitrates to the aquifer. Invasive species may be introduced that result in rapid growth of the vegetation, choking springs and spring runs. Sediment resulting from erosion can choke springs, damage aquatic vegetation and destroy fish-spawning beds. Landscape BMPs to protect water quality are easily implemented and have proven to be effective in reducing the off-site transport of sediment, nutrients, and pesticides. The BMPs presented here provide general guidelines for lawn and landscape maintenance practices to protect Florida springs. More detailed information, in terms of specific techniques and practices, can be found in the references section.

Florida-friendly best management practices (BMPs) address the protection of water resources where pesticides, nutrients, and sediments enter the surface water and ground water as a result of nonpoint source pollution. BMP goals are to promote the efficient use of water and reduce non point source pollution through (1) the use of appropriate site design and plant selection; (2) the use of appropriate rates of irrigation and fertilizer application; and (3) the use of integrated pest management (IPM) to minimize pests with chemicals, only when appropriate. The application of these BMPs in the proposed redevelopment and management of the Weeki Wachee Springs State Park landscape will contribute significantly to the protection of this unique and beautiful spring system.



Site Design and Plant Selection

- Group plants with similar cultural requirements, particularly irrigation demand.
- Limit high maintenance plantings to high visual impact zones.
- Limit sod areas to high traffic/activity zones.
- Low maintenance, naturalistic plantings should be used in peripheral areas and zones with lower visitation.
- Select plants that are well adapted to the soil and microclimate of the site.
- Select native and/or well-adapted non-native plants that will achieve the overall goals of the landscape project and incorporate areas of natural vegetation into the landscape design to the greatest degree possible.
- Avoid planting invasive species as listed by the Florida Exotic Pest Plant Council.
- Bioretention areas, including berms, swales, and rain gardens, should be incorporated into the landscape design.
- A maintenance-free zone, a minimum of 10 feet in width, should be established between lawn and landscaped areas and shoreline vegetation where the application of fertilizers and pesticides is prohibited.

Irrigation

- Irrigation systems should be designed and calibrated to meet a site's peak water requirements.
- Prevent irrigation runoff, do not exceed the ability of the soil to absorb and retain the water applied during any one application.
- Irrigation systems should be designed to serve turf and non-turf areas separately.
- Micro-irrigation should be used where feasible. Drip or micro-spray irrigation systems apply water directly to the roots of plants and lose minimal water to evaporation or wind drift.
- Apply irrigation only when plants show signs of stress. Apply just enough irrigation to support healthy plant growth and water deeply to encourage deep root systems.



• Install rain shut-off devices on all automatic irrigation systems as required by Florida law.

Fertilizer

- Avoid regularly scheduled fertilizer applications; develop a plan where fertilizer formulations and application rates are based on the needs of plants.
- If plant nutrient deficiencies arise, soil testing should be conducted to determine which nutrients should be applied.
- Follow UF/IFAS recommendations for ideal rates, application timings, and formulas.
- Designate a fertilizer free zone, a minimum of 10 feet in width, between landscaped areas and riparian zones.
- Do not apply fertilizer if heavy rain is expected.

Integrated Pest Management (IPM)

- Encourage healthy plant growth by irrigating and fertilizing only when necessary.
- Monitor for pests and diseases on a regular basis to detect problems early before significant damage occurs.
- Use natural or low-toxicity products that are least harmful to people, pets, and wildlife.
- Spot treat only the affected areas of plants or lawn. Never use blanket treatments or broad-spectrum insecticides and always encourage and promote beneficial insects.

Conceptual Mas	ter Plan - Development Program	Proposed	Total
		Units	Cost
PHASE ONE	Historic Attraction		
	Partial Sidewalk Improvements	1	\$350,000
	Large Pavilion	1	\$85,000
	New Food Service Building	1	\$700,000
	Partial Landscaping Improvements	1	\$100,000
	Wayfinding and Interpretive Kiosks	1	\$50,000
	Parking Lot Improvements	1	\$2,000,000
	Buccaneer Bay		
	New Bathhouse and Concession Building	1	\$1,500,000
	New Splash Pool	1	\$500,000
	Picnic Pavilions	1 large	\$85,000
		3 medium	\$120,000
	Phase One Estimated Total Cost		\$5,485,000
PHASE TWO	Historic Attraction		
	Interpretive Center	1	\$1,500,000
	Central Fountain	1	\$250,000
	New Restroom	2	\$250,000
	Spring Overlooks and Special Event Pavilion	1	\$500,000
	New Playground	1	\$75,000
	Completed Sidewalk Improvements	1	\$300,000
	Completed Landscaping Improvements	1	\$100,000
	Phase Two Estimated Total Cost		\$2,975,000
	Historic Attraction		
PHASE INKEE			#000
PHASE THREE	Pedestrian Bridge	1	\$200,000
PHASE THREE	Pedestrian Bridge Phase Three Estimated Total Cost	1	\$200,000 \$200,000

References

City of Brooksville website. http://www.ci.brooksville.fl.us/index.php?option=com_content&view=article&id =25&Itemid=28

City of Weeki Wachee. 1990. Zoning Code and Map. Adopted by ordinance 90-2 on October 31, 1990.

City of Weeki Wachee. 1991. Comprehensive Plan. Adopted by ordinance 91-5 on December 20, 1991.

- Florida Department of Community Affairs. 2008. Protecting Florida's Springs: An Implementation Guidebook.
- Florida Department of Environmental Protection. 2008. Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries.
- Florida Department of Environmental Protection, Division of Environmental Assessment and Restoration, Bureau of Watershed Restoration. 2013. DRAFT Nutrient TMDL for Weeki Wachee Spring and Weeki Wachee River (WBIDs 1328B and 1382F). Tallahassee, Florida. 80 pp.
- Florida Department of Environmental Protection, Division of Recreation and Parks. Approved June 28, 2011. Weeki Wachee Springs State Park Unit Management Plan. Tallahassee, Florida. 92 pp. + appendices.
- Florida Department of Environmental Protection. 2009. Statement for Interpretation: Weeki Wachee Springs State Park, March 2009.
- Florida Department of Environmental Protection. 2013. Florida Springs Initiative. www.floridasprings.org.
- Florida Department of Environmental Protection and University of Florida. 2009. Florida Yards and Neighborhoods Handbook.
- Florida Department of Environmental Protection and University of Florida. 2009. Florida-Friendly Landscape Guidance Models for Ordinances, Covenants, and Restrictions.
- Hernando County Metropolitan Planning Organization (MPO). 2009. 2035 Cost Affordable Long Range Transportation Plan. http://www.hernandocounty.us/mpo/pdf/FINAL%20AMENDED%202035%20 LRTP.pdf
- Hernando County Metropolitan Planning Organization (MPO). 2012. Hernando County MPO Transit Development Plan: 2012 Progress Report. http://www.hernandocounty.us/mpo/pdf/2012%20 TDP%20Progress%20Report%20-%20FINAL.pdf
- Hernando County Tourism. http://www.naturallyhernando.org/
- Karst Underwater Research, Inc. 2008. Weeki Wachee Spring, Hernando County Preliminary Exploration of the Underwater Conduit System, May-July, 2007. Karst Underwater Research, Inc.
- Jones, G. W..., S. B. Upchurch, K. M. Champion and D. Dewitt. 1997. Water Quality and Hydrology of the Homosassa, Chassahowitzka, Weeki Wachee, and Aripeka Spring Complexes, Citrus and Hernando, Counties, Florida: Origin of Increasing Nitrate Concentrations. Southwest Florida Water Management District. Brooksville, Florida.

The American Irrigation Company. http://theamericanirrigationcompany.com/images/irrigation2_qh1m.jpg

The Nature Coast Coalition. http://www.naturecoastcoalition.com/nchistory.htm

- Pesticide Research. http://www.pesticideresearch.com/site/wp-content/uploads/2012/05/DSC_8320-300x200.jpg
- Scott, T.M, G.H. Means, R.P. Meegan, R.C. Means, S.B. Upchurch, R.E. Copeland, J. Jones, T. Roberts, and A. Willet. 2004. Springs of Florida. Bulletin No. 66. Florida Geological Survey. Tallahassee, FL. 677 pp.

University of Florida. 2010. The Florida-Friendly Landscaping Guide to Plant Selection & Landscape Design.

Vist Florida. http://www.visitflorida.com/en-us.html

Weeki Wachee Springs. http://www.weekiwachee.com/index.php/about-us/history-of-weeki-wachee-springs

West Central Florida MPO Chairs Coordinating Committee. 2010. Regional 2035 Long Range Transportation Plan. http://www.regionaltransportation.org/LRTP/2035_RLRTP/Default.pdf

Withlacoochee Regional Planning Council. 2012. Comprehensive Economic Development Strategy for the Withlacoochee Region. http://www.wrpc.cc/documents/2012_CEDS_adopted%20Final.pdf





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