## **ITEM 21:**

Consider an update to the Bahia Honda State Park Management Plan (Lease No. 3609).

LOCATION:

Monroe County

### **APPLICANT:**

Florida Park Service

### **STAFF REMARKS:**

### Background

Bahia Honda State Park (BHSP) is located in Monroe County in between Marathon and Big Pine Key. Access to the park is from U.S. Highway 1, also known as the Overseas Highway, at Mile Marker 36. Bahia Honda State Park was acquired on September 21, 1961 through a donation by Monroe County and later additions through the Save Our Coasts and Land Acquisition Trust Fund programs. Currently, the park comprises 491.25 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park, and on January 23, 1968, the Trustees leased (Lease No. 2324) the property to the Division of Recreation and Parks (DRP) under a 99-year lease. In 1988, the Trustees assigned a new lease number, Lease No. 3609, to BHSP without making any changes to the terms and conditions of Lease No. 2324. The current lease will expire on January 22, 2067.

The purpose of BHSP is to protect and preserve Bahia Honda Key which includes rare natural communities and one of the most recognizable segments of the Old Keys Bridges.

## Management Plan Overview

The Florida Natural Areas Inventory has identified seven distinct natural community types at BHSP. They also identified two altered landcover types. The predominant natural communities are maritime tidal swamp and marine substrate. Sixteen species of imperiled plants and twenty-eight species of imperiled animals have been identified at BHSP.

The Division of Historical Resources maintains a Master Site File that documents many of Florida's archaeological and historical features. A review of information obtained from the Florida Master Site File disclosed one archeological and one historic bridge within the park.

The primary recreational uses at the park include the use of the beaches on both the Gulf of Mexico and the Atlantic Ocean and camping. Fishing throughout the near-shore waters around the park is also a popular activity. Kayak rentals are available at the Ranger Station. Opportunities for recreation at the park include swimming, snorkeling, wildlife viewing, fishing, paddling, hiking, and picnicking. The nature trails at the park provide exceptional wildlife viewing opportunities and the park's status as part of the Great Florida Birding and Wildlife Trail attracts many visitors. The Florida Keys Overseas Heritage Trail passes through the park alongside U.S. Highway 1 and will continue to bring visitors to the park by bicycle as it is improved and connected to surrounding communities. The park concessionaire provides equipment rental and boat tours to Looe Key.

The Florida Legislature requires that all land management plans include long and short-term (ST) goals. These goals must be measurable objectives, and ST goals must be achievable within a two-year planning period. Pursuant to changes to Section 253.034, F.S., the Division of State

Lands tracks the status of ST goals in each land management plan approved since July 1, 2016. The ST goals from this management plan are included as part of this item.

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

### Public Involvement

DRP solicited public input by conducting a public workshop and advisory group meeting on June 9<sup>th</sup> and 10<sup>th</sup>, 2016. The purpose of the workshop was to present the management plan to the public. The purpose of the advisory group meeting was to provide the members the opportunity to review and discuss the management plan.

Suggestions received from the Advisory Group meeting resulted in the following modifications to the draft management plan:

- DRP staff will act to reduce the impacts of light pollution on park facilities.
- In order to appropriately manage the park's natural communities, efforts to remove exotic plants, including the coconut palm, will continue in the protected areas of the parks away from heavy visitor use. Coconut palm trees in heavy use areas such as beaches or picnic areas may be kept unless the tree poses a risk to visitor safety or is diseased.
- Language will be incorporated to highlight the issue of Island Biogeography and its role in natural resource management in state parks.

Additional revisions were made throughout the document to address editorial corrections, consistency of spelling and notations, and other minor corrections.

#### Surplus Lands

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

#### State Land Management Review Team

This property has not been subject to a recent review by an interagency land management review team.

#### **STAFF RECOMMENDATION:**

Approve the management plan.

#### **ARC RECOMMENDATION:**

- () APPROVE
- ( ) APPROVE WITH MODIFICATIONS:
- ( ) DEFER
- () WITHDRAW
- () NOT APPROVE
- () OTHER:

## Bahia Honda State Park

## Land Management Plan Short Term Goals

| Goal<br>(ST) | Details of Goal   | Objective | Details of Objective   | Action | Details of Action   | Measures                               |
|--------------|---|-----------|--|--------|---|--|
| II           | Protect water quality and<br>quantity in the park,<br>restore hydrology to the<br>extent feasible, and<br>maintain the restored<br>condition. | В         | Restore natural hydrological<br>conditions and function to<br>approximately eight acres of<br>seagrass, mangrove swamp,<br>and salt marsh natural<br>communities | 2      | Install four culverts to<br>restore<br>salt marsh and mangrove<br>swamp | Number of acres restored.              |
| VII          | Provide public access and recreational opportunities in the park.   | В         | Expand the park's<br>recreational carrying<br>capacity by 40 users per day.  | n/a    | n/a   | Number of visitors<br>per day.         |
| VII          | Provide public access and recreational opportunities in the park.   | D         | Develop two new interpretive programs  | n/a    | n/a   | Number of<br>interpretive<br>programs. |

*Source:* Florida DEP, Office of Environmental Services, Revised Sept\_2019\_MWE.

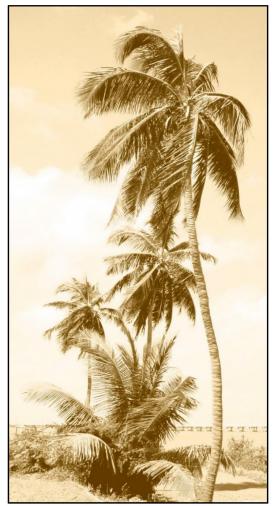


## **Executive Summary**

Bahia Honda State Park is located in Monroe County at mile marker 36, east of Big Pine Key. The park was initially acquired on September 21, 1961 through a donation by Monroe County. Subsequent additions to the park were obtained through the Save Our Coasts and Land Acquisition Trust Fund (LATF) programs. Currently, the park's total acreage is approximately 491 acres.

The purpose of Bahia Honda State Park is to protect and preserve Bahia Honda Key, which includes rare natural communities and one of the most recognizable segments of the Old Keys Bridges. Segments of Henry Flagler's railroad bridges built in the early 1900s are still important parts of the local landscape providing remarkable panoramic views of the key and surrounding waters.

The natural break in the offshore coral reef allows for the establishment of some of the largest segments of sandy and accessible beaches in the Florida Keys at the park. Beaches are a rare occurrence in the Florida Keys due to the majority of the natural shoreline consisting of low energy mangrove habitat. The beach dune natural community includes the largest silver palm hammock in the Florida Keys. In total, there are 43 listed plant and animal species that rely on the park for crucial habitat.



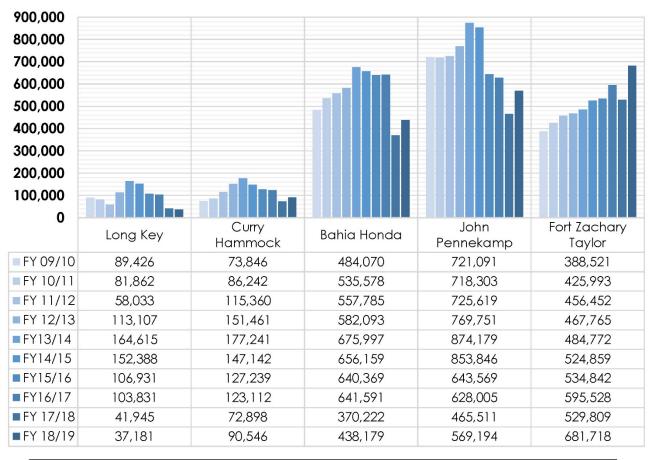


## i | Executive Summary



| Bahia Honda State Park<br>Natural Communities and Altered Landcover Types |         |            |  |  |  |  |  |
|---|---------|------------|--|--|--|--|--|
| Landcovers  | Acreage | Percentage |  |  |  |  |  |
| Marine Tidal Swamp  | 146.38  | 30%        |  |  |  |  |  |
| Marine Substrate  | 135.15  | 27%        |  |  |  |  |  |
| Developed   | 72.38   | 15%        |  |  |  |  |  |
| Marine Tidal Marsh  | 52.64   | 11%        |  |  |  |  |  |
| Beach Dune  | 36.73   | 7%         |  |  |  |  |  |
| Coastal Berm  | 27.61   | 6%         |  |  |  |  |  |
| Marine Seagrass Bed   | 18.20   | 4%         |  |  |  |  |  |
| Spoil Area  | 0.96    | 0.1%       |  |  |  |  |  |
| Key Tidal Rock Barren   | 0.54    | 0.1%       |  |  |  |  |  |
| Total   | 490.59  | 100%       |  |  |  |  |  |

Annual Attendance: Fiscal Year 2009/10 - 2018/19



## ii | Executive Summary



## Hurricane Irma

On September 17, 2017, Hurricane Irma made landfall in the Florida Keys as a Category 4 hurricane. The storm's eye traversed across Cudjoe Key, just 15 miles west on US Highway 1 from Bahia Honda State Park. Maximum sustained winds reached speeds of 132 mph and storm surge was up as much as 8 feet. Given the size and strength of the storm, much of the park was devasted (as shown in the before and after images below). The park's main day use areas, support facilities, and main road were largely destroyed. Since 2017, park management and district staff have been hard at work rebuilding one of the most significant and treasured units of the Florida Park Service.



iii | Executive Summary



# Post-Hurricane Irma Recovery

When Hurricane Irma made landfall on Cudjoe Key in 2017, the impact at Bahia Honda State Park was substantial. The oceanside shoreline was severely impacted, resulting in vegetative and infrastructure damage. The storm surge flowed into the secondary dune, and a deep wrack line was deposited approximately 180 feet from the shoreline. Sandspur campground and day use area were destroyed, the park road was heavily damaged, and Loggerhead Beach was severely damaged. Bahia Honda State Park was closed for two months to enable clean-up and debris removal. When the park reopened in November of 2017, only the area west of the ranger station was open to the public. Over time, native vegetation including sea lavender, bay cedar, railroad vine, sea oats, southern sea rocket, and inkberry slowly recruited along the shoreline, and the population of sea lavender is once again abundant. Overall, the beach has recovered from the impacts from Hurricane Irma. Loggerhead Beach required restoration and stabilization, and large boulders were installed to prevent erosion and protect the park road. Over 500 native plants, donated by the Dagny Johnson Key Largo Hammock Nursery, have been planted to aid in natural resource recovery.

## Infrastructure Repairs

#### Loggerhead Beach

Parking area fully rebuilt Accessible beach ramp added Restroom constructed to withstand Cat-5 storm Three beach access stairs constructed Accessible ramp added to concession building

#### Marina

#### Dredged to re-accommodate vessels All fenders, posts, utilities repaired

Buttonwood Campground Campground reopened Utilities repaired at all sites Bathhouse constructed to withstand Cat-5 storm

<u>Cabins</u> New roofs, siding, interior furnishings

Sandspur Beach and Campground Beach parking area ~50% complete Restroom ~40% complete Campground ~50% complete

# Total Rebuild Cost to Date: \$8.8 million

iv | Executive Summary







# **Resource Management Goals and Objectives**

## Hydrological Management

# Goal: Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.

<u>Objective</u>: Conduct/obtain an assessment of the park's hydrological restoration needs. <u>Objective</u>: Restore natural hydrological conditions and functions to approximately 8 acres of seagrass and mangrove salt marsh natural communities.

## Natural Communities Management

#### Goal: Restore and maintain the natural communities/habitats of the park.

<u>Objective</u>: Conduct habitat improvement activities on 10 acres of coastal berm, beach/dune, and mangrove natural communities.

## **Imperiled Species Management**

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

<u>Objective</u>: Monitor and document 6 selected imperiled animal species. <u>Objective</u>: Monitor and document 15 selected imperiled plant species.

## **Exotic Species Management**

Goal: Remove exotic and invasive plants and animals from the park and conduct needed maintenance control.

<u>Objective</u>: Annually treat 0.2 acres of exotic plant species in the park. <u>Objective</u>: Implement control measures on 5 exotic animal species in the park.

## **Cultural Resource Management**

Goal: Protect, preserve and maintain the cultural resources of the park.

Objective: Bring 1 of 2 recorded cultural resources into good condition.

#### v | Executive Summary



# Capital Facilities Goals and Objectives

## Facilities and Infrastructure Management

#### Goal: Develop and maintain the capital facilities and infrastructure.

<u>Objective</u>: Improve/repair six existing use areas and 1.6 miles of road.

<u>Cabin Area</u> Develop new cabins (2) Add floating dock

Concession Area Construct ADA paddling launch

<u>Calusa Beach Day Use Area</u> Add small picnic pavilions (2) Replace restroom Improve landscaping Redesign parking area Improve fishing platform

Loggerhead Beach Day Use Area Renovate storage facility Create special events pavilion

Buttonwood Campground Redesign site configuration

> Parkwide Improve park road

## **Optimum Boundary and Land Acquisition**

Southwest of the park, several parcels totaling approximately 40 acres have been added to the park's optimum boundary and are identified for potential acquisition as funding becomes available. The parcels on located on West Summerland Key, which is also known as Spanish Harbor Key. These parcels include the Spanish Harbor borrow pit and adjacent land to the north of US Highway 1 between mile marker 34 and mile marker 35.3.

#### vi | Executive Summary



# Introduction

Bahia Honda State Park is located in Monroe County in between Marathon and Big Pine Key (see Vicinity Map). Access to the park is from U.S. Highway 1, also known as the Overseas Highway, at Mile Marker 36 (see Reference Map).

Bahia Honda State Park was acquired on September 21, 1961 through a donation by Monroe County and later additions through the Save Our Coasts and Land Acquisition Trust Fund (LATF) programs. Currently, the park comprises 491.25 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park, and on January 23, 1968, the Trustees leased (Lease No. 2324) the property to the Division of Recreation and Parks (DRP) under a 99-year lease. The current lease will expire on January 22, 2067. In 1988, the Trustees assigned a new lease number, Lease No. 3609, to Bahia Honda State Park without making any changes to the terms and conditions of Lease No. 2324.

Bahia Honda State Park is designated single-use to provide public outdoor recreation and other parkrelated uses. There are no legislative or executive directives that constrain the use of this property (see Addendum 1).

## Purpose and Significance of the Park

The purpose of Bahia Honda State Park is to protect and preserve Bahia Honda Key which includes rare natural communities and one of the most recognizable segments of the Old Keys Bridges.

## **Park Significance**

- The natural break in the offshore coral reef allows for the establishment of some of the largest segments of sandy and accessible beaches in the Florida Keys at the park.
- The park is home to the largest stand of silver palm (Coccothrinax argentata) in the continental United States and 43 other listed plant and animal species including the dune lilly thorn (Catesbaea parviflora), least tern (Sternulla antillarum), Atlantic green turtle (Chelonia mydas), and hawksbill turtle (Eretmochelys imbricata).
- The unique environment on Bahia Honda Key allows for a wider variety of recreational activities than on most other keys in the area. Park visitors can enjoy overnight accommodations in cabins or in one of the several campgrounds, fishing, swimming, paddling, snorkeling, wildlife viewing, hiking, and picnicking among many other activities. Boat tours are also provided to visitors to the Looe Key National Marine Sanctuary.
- Segments of Henry Flagler's railroad bridges built in the early 1900s are still important parts of the local landscape providing remarkable panoramic views of the key and surrounding waters.

#### 1 | Introduction



## **Unit Classification**

Bahia Honda State Park is classified as a State Park in the DRP's unit classification system. In the management of a State Park, a balance is sought between the goals of maintaining and enhancing natural conditions and providing various recreational opportunities. Natural resource management activities are aimed at management of natural systems. Development in the park is directed toward providing public access to and within the park, and to providing recreational facilities, in a reasonable balance, that are both convenient and safe. Program emphasis is on interpretation on the park's natural, aesthetic, and educational attributes.

## Purpose and Scope of the Plan

This plan serves as the basic statement of policy and direction for the management of Bahia Honda State Park as a unit of Florida's state park system. It identifies the goals, objectives, actions and criteria or standards that guide each aspect of park administration and sets forth the specific measures that will be implemented to meet management objectives and provide balanced public utilization. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and is intended to be consistent with the State Lands Management Plan. With approval, this management plan will replace the 2003 approved plan.

The plan consists of three interrelated components: the Resource Management Component, the Land Use Component and the Implementation Component. The Resource Management Component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management needs and issues are identified, and measurable management objectives are established for each of the park's management goals and resource types. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, imperiled species management, cultural resource management and restoration of natural conditions.

The Land Use Component is the recreational resource allocation plan for the park. Based on considerations such as access, population, adjacent land uses, the natural and cultural resources of the park, current public uses and existing development. Measurable objectives are set to achieve the desired allocation of the physical space of the park. These objectives identify use areas and propose the types of facilities and programs as well as the volume of public use to be provided.

The Implementation Component consolidates the measurable objectives and actions for each of the park's management goals. An implementation schedule and cost estimates are included for each objective and action. Included in this table are (1) measures that will be used to evaluate the DRP's implementation progress, (2) timeframes for completing actions and objectives and (3) estimated costs to complete each action and objective.

#### 2 | Introduction

