

# Samsons Island Park Site Management Plan

## *Draft*



Satellite Beach, Florida  
August 2011

This Plan will state short-term or repetitive management needs and provide long-term management goals of the Island. It is the consensus of the committee that after approval and adoption of a final plan it be reviewed and revised as needed or every ten (10) years.

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# 1. Samsons Island - Site Description

## **Location**

Samson Island is located within the city limits of Satellite Beach, Florida. The island is situated in the north-west area of the city, in the Indian River Lagoon. (See aerial map) As seen from the aerial map the island is surrounded on three sides by urban development. The west boundary of the island faces the Banana River.

## **Legal Description**

North portion 26-37-34-00-00027.0-0000.00

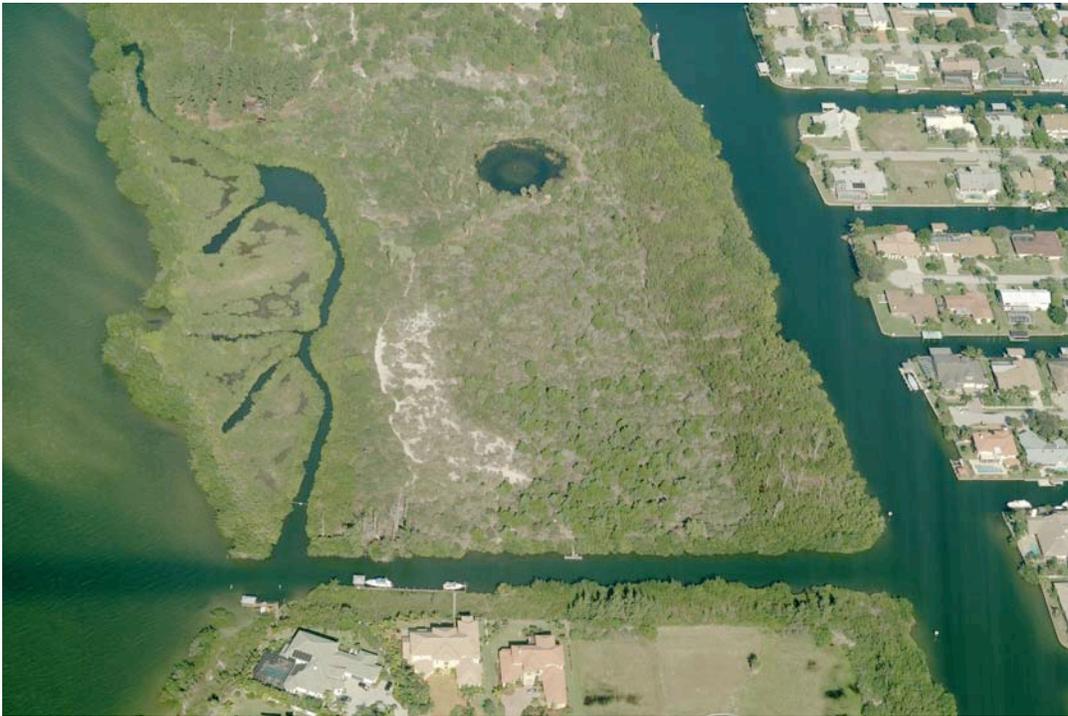
South portion 26-37-34-00-00029.0-0000.00

## **Description**

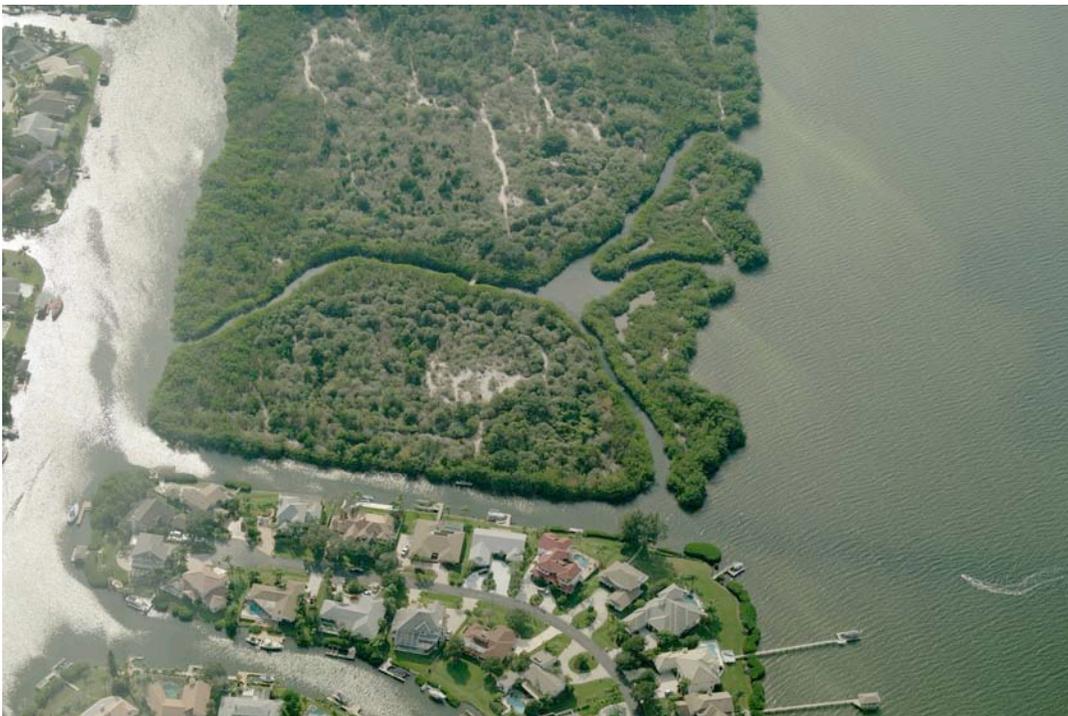
Samson Island is a 52-acre passive recreation park owned and managed by Satellite Beach. It is one of many spoil islands located within the Indian River Lagoon Estuary System. This estuary is listed federally as an estuary of national significance due to the tremendous biodiversity of the system. The island exists in an area that originally was salt-marsh and mangrove wetlands. The island was built up by dredge material being deposited on the wetlands as channels and canals were constructed. The island is rectangular in shape and has several canals and trails that criss-cross the entire length of the land mass. There is a small foot bridge that connects the northern portion of the island to the main land body. The majority of the island is considered to be at sea level and has some wetland areas contained within its boundaries primarily at the southern end. There is also a small pond that was dug as part of a mitigation project. Currently there are three docks on the island. The main dock is located on the east side of the island. The other docks are on the north and south ends of the island. There are approximately 1.5 miles of trails on the island. There is also a hill with the approximate elevation of 30 feet affording a great vista of the surrounding area. The island is environmentally significant for several reasons but primarily because there is a rarity of undeveloped/green space land in this area.

2. Google Earth - Aerial view of Samsons Island



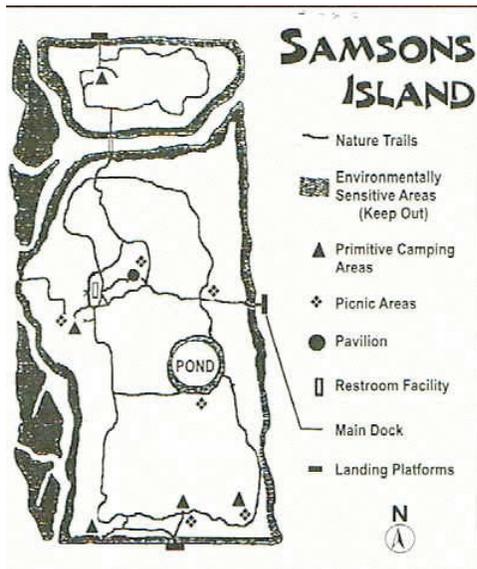


**Samsons Island - South**  
facing north



**Samsons Island - North**  
facing south

### 3. History of Samsons Island



Prior to the 1950's Samsons Island consisted primarily of salt-marsh and mangroves. During the 1950's dredging of the canals in the area greatly increased because of population growth. The dredge material, also referred to as spoil, was deposited in the mangrove wetlands. The combination of dredge material being dumped and the accumulation of silt around the mangroves eventually increased the land mass and uplands were created.

#### **Samsons Island is a man-made island.**

There is a detailed record of the history of the island from the 1950's into present day. **A very brief synopsis is as follows:**

- 1954-1958 Grand Canal was dredged and the spoil placed in the swamp areas that eventually created and comprised

*Lansing, Samsons, and Tortoise Islands.*

- Half of Samsons Island came to be owned by Samuel Fuchs. In 1968 a 34-acre tract west of the Grand Canal was given to the City by Sam Fuchs. *His gift carried with it three stipulations: 1) that it be named for his sons and 2) that it be used for a city park 3) the park be established in three years.*
- In 1969 the City bought 32 acres of adjacent land for \$115,000 from Mr. Blate and Mr. Weinstein of Miami.
- 1972, the city dredged two channels between the Grand Canal and the Banana River to establish a 52-acre island slated for recreational development as Samsons ("Sam's sons", to fulfill Mr. Fuch's first condition) Island Park. Around this time the city had plans to build a bridge to the island and worked toward acquiring permits for bridge construction. Permitting for the bridge failed. The land was basically unused for approximately 20 years.
- 1989 the city hired consultants to make recommendations as to the future use of the site.
- February 1990 the consultant recommended the City sell the parcel for residential development because: 1) it was a "liability", 2) to raise funds from the sale to finance City operations, and 3) to increase the City's tax base. The citizens of Satellite didn't agree with the consultants recommendations.
- 8 April 1990 Council appointed 11 residents to the Samsons Island Citizens Ad Hoc Committee. This committee decided to leave Samsons Island as a park.
- 1991 Volunteer effort began to improve native landscaping on the Island.
- On 21 February 1996, Council formally established the Samsons Island Development Committee as one of the City's permanent committees.

\* Attached to this document are more detailed excerpts from a compilation of historical notes and memories from Satellite Beach residents. (See Addendum 5)

\* \* Also included as an Addendum to this document is the CD containing the video history of the island.

**Addendum 5 - See Samsons Park Fact Sheet**

#### 4. Management Authority and Responsibility

Samsons Island is owned exclusively by the city of Satellite Beach. All management authority and responsibility are within the purview of the city. Satellite Beach city council has final decision-making authority, taking into consideration recommendations offered by the Samsons Island committee. This is currently and historically a very active committee with dedicated members. All environmental management, education, and passive recreation activities concerning the island are carefully considered by this committee and recommendations only go to the city council for their approval after a motion has passed with a majority vote by the committee.

Financial decisions are also under the authority of the city council. The committee presents a requested budget for activities on and for the island annually. The committee does seek to accomplish as much as possible through the use of citizen volunteers and organized groups.



## 5. Natural Resources and Natural Communities Descriptions

Samsons Island contains a range of natural communities, from low marsh and mangrove fringe to xeric areas characterized primarily by scattered Florida privet shrubs. About half of the island is vegetated with a moderate-to-dense mixture of shrubs and small trees including Florida privet, southern white cedar, and groundsel tree. The shoreline of the island contains almost completely a mixture of red, white, and black mangroves and buttonwood.

**Natural communities found on the island are as follows:**

### **Descriptions by Florida Natural Areas Inventory**

See [http://www.fnai.org/pdf/nc/FNAI\\_NatComGuide\\_2010.pdf](http://www.fnai.org/pdf/nc/FNAI_NatComGuide_2010.pdf)

**Mangrove Swamp** (G5/S4) – estuarine wetland on muck/sand/or limestone substrate; inundated with saltwater by daily tides; central peninsula and Keys; no fire; dominated by mangrove and mangrove associate species; red mangrove, black mangrove, white mangrove, buttonwood.

**Salt Marsh** (G5/S4) – estuarine wetland on muck/sand/or limestone substrate; inundated with saltwater by daily tides; statewide; occasional or rare fire; treeless, dense herb layer with few shrubs; saltmarsh cordgrass, needle rush, saltgrass, saltwort, perennial glasswort, seaside oxeye.

**Maritime Hammock** (G3/S2) – stabilized coastal dune with sand substrate; xeric-mesic; statewide but rare in Panhandle and Keys; rare or no fire; marine influence; evergreen closed canopy; live oak, cabbage palm, red bay, red cedar in temperate maritime hammock; gumbo limbo, seagrape, and white or Spanish stopper in tropical maritime hammock. Xeric Oak

**Mesic Flatwoods** (G4/S4) – flatland with sand substrate; mesic; statewide except extreme southern peninsula and Keys; frequent fire (2-4 years); open pine canopy with a layer of low shrubs and herbs; longleaf pine and/or slash pine, saw palmetto, gallberry, dwarf live oak, wiregrass.

**Scrub** (G2/S2) – upland with deep sand substrate; xeric; statewide except extreme southern peninsula and Keys, mainly coastal in Panhandle; occasional or rare fire (usually 5-20 years); open or dense shrubs with or without pine canopy; sand pine and/or scrub oaks and/or Florida rosemary.

## 6. Current Condition of the Site

Ecologically considered, the site is currently in fair to good condition. The single, largest concern facing the ecological health of the island is invasive, exotic plants. There is approximately one half acre of mature Australian pine trees (*Casuarina equisetifolia* L.) that were cut and treated with herbicide in April 2011 through state grant monies. As referenced on the Florida Exotic Pest Plant Council website ( <http://www.fleppc.org/list/09list.htm> ) this species is a Category 1 invasive exotic plant. Brazilian Pepper trees (*Schinus terebinthifolius*), another Category 1 invasive exotic, are also found throughout. This species has been treated on a large scale in the recent past. Ongoing treatment of Carrotwood trees, (*Cupaniopsis anacardioides*) Cassia, (*Senna pendula*), and other exotics will be required in perpetuity. Currently there are no known invasive exotic animals on site.

At one time erosion on the southwest shore of the island was considered a threat. Visitors were pulling boats on the banks and loss of vegetation along the shorelines in these areas caused erosion. A barrier was put in place and motor boats no longer pose an erosion problem. The island is widely accessible by canoe and kayak. Erosion is also a concern on the hill located on the northern area of the island. Maintaining vegetation should minimize erosion to some extent. Vandalism throughout the island is an ongoing concern that will be addressed at the “Security of the Island” section of this document.

The site is relatively free of litter due to diligence of the city’s Public Works Department and Samsons Island volunteers.



## 7. Existing and Potential Uses

### **Passive Recreation & Education**

The island is currently used for passive recreation, environmental educational, and to maintain “green space” within the city. Passive recreational opportunities include hiking, picnicking, primitive camping, bird watching, catch & release fishing, and nature observation. There are some environmental education programs offered on the island through the City of Satellite Beach Recreation Department. In the surrounding waters visitors can paddle, fish, and wade in the lagoon.

One of the areas that offers the greatest place for expansion is in environmental education. There are currently some education programs offered through the city on the island. With four schools comprising all grades in the city proper and several colleges nearby, the need for an environmental education platform is significant. Samson Island has the potential to act as a living, biologically diverse, outdoor classroom both on the island and in the surrounding waters of the lagoon. The island has potential to support in-depth and long-term biological research. Committee discussions in the past have included the possibility of a multi-use, two story building. Past committee discussions have suggested the construction of a building at or near the site of the current garage. Such a building could serve as an education facility (laboratory and classroom), storage for scientific, recreation, and land management equipment, provide shelter in inclement weather, and possibly act as a base for a security person.

Other potential activities that have been discussed include:

- Construction of a covered observation tower or covered pavilion at the top of the hill.
- Creation of a Discovery Area, encouraging visitors to interact with the features of the island using all human senses i.e. hearing, sight, smell, touch, taste.
- Promotion of educational topics that include the waters of the lagoon as well as the terrestrial components.



## 8. ADA Plan Implementation

In 2005, a five year, multi-stage ADA Plan was presented by the committee and approved by the city council. The plan was suggested and developed as a pro-active measure to allow access to the island to as many visitors as possible. Considering the island is accessible only by boat and is very primitive in nature and by design, planning for access to those of all abilities was the desire of the committee however challenging creating that level of access might be. Taking into consideration, the then current, national ADA guidelines and recommendations, the committee developed a plan that would allow for a representative hiking/nature trail, a wheelchair accessible campsite with fire ring and picnic tables, ramps for the pavilion, an accessible toilet, and a new ramp that could be lowered to an individuals' boat. The ADA plan is now complete with the opening of a hiking/nature loop trail thanks to a local Boy Scout working to achieve his Eagle Scout award.



## 9. Optimum Carrying Capacity

There has been vigorous and ongoing discussion by the Samsons Island Committee concerning human carrying capacity. There are some parks in the state park system that become so crowded in the course of a day that staff are forced to close the gate and allow no more visitors in the parks until some visitors have left. Although there is no imminent danger of Samsons Island being overrun with visitors, it is a topic to be considered. As Florida becomes more populated in the future, there will be more impact on all natural areas in the state. Establishing parameters will provide guidance to land management in the future. The island currently has 3 boat docks, 4 primitive campsites, 1 large pavilion, 2 small pavilions, and 1 functional toilet.

The total number of campers per night should not exceed 36. When all campsites are complete that will allow approximately 6 people per site at 6 campsites. Permits will be issued based on number of campsites needed per group.

The total number of day visitors that the island can host is approximately 36 at any given time with the exception of City sponsored events. City sponsored events will require staff and volunteer oversight to prevent degradation of resources on the island.

The carry capacity of visitors is based on several factors not the least of which is the fact that there is only one functional toilet on the island.

The visitors' experience is changed based on the number of other visitors that each person encounters. These limitations should maintain the primitive nature of each visitors' experience as well as afford a high level of protection for the island. To monitor the effectiveness of these capacity limits, each camper that is issued a permit will also be offered an email survey to rate their experience on the island. Capacity numbers can be adjusted in the future based on the results of surveys received.

Activity/Facility	Existing Capacity	Proposed Additional Capacity	Estimated Optimum Capacity
Camp Sites - 4	6 per site/24 total	1 campsites proposed	36 total campers per night on island w/ADA site
ADA Camp Site -1	6	0	36 total campers per night on island
Day Use Picnic Tables - 7	Approx. 6 people per table	0	36 total day use at any given time*
Trails	1.5 miles	0	Same as day use
Docks for motorized boats	3	0	Approximately 6 boats depending on size
Landings for canoe/kayaks	4 including the lower side of the main dock	0	Same as day use

## 10. Special Management Needs

There will always be special management needs for this site. There are several factors contributing to this. The main factor is that it is an island. The city will always have need of a “work” boat similar to the pontoon boat that is currently used for transport of visitors, staff, and equipment to and from the island. Another contributing factor is that the site is almost completely surrounded by development. That situation will call for creativity when attempting to plan activities such as prescribed fire or spraying of herbicides. Another factor that will contribute to the need for special management considerations is the fact that it is a man-made site. Restoration in the truest sense is not an option. The dubious nature of dredged spoil as the foundation soils, seed and plant matter content in the dredged material, and run-off from surrounding homes and businesses make establishing and maintaining a “native” plant community challenging.

As the population grows, the possibility is quite strong that the visitation to the island will increase. That will require increased monitoring of any listed species, more frequent replacement of equipment such as picnic tables, and more frequent regular “house-keeping” type activities, i.e. litter removal and toilet maintenance. With an increase in the urban population there may be increased pressure to implement activities other than passive recreation opportunities. Activities other than passive recreation will affect the plant and animal communities and change the nature of the island.

***The in-depth proposed management activities are listed in the Management Goals & Strategies - Addendum 4***



# 11. Continued Public Participation

Satellite Beach’s citizenry has always been very active participants in city government. There is no reason to expect that will change to any significant extent. This **draft** plan will be presented to the public for review and comment. The intent is to have at least two public meetings to gather suggestions, input, and record any concerns regarding this plan. When public comment has been taken and incorporated, the plan will then be presented to the Samsons Island Committee for a vote of ratification. The plan will then go to the city council for final approval. After adoption by city council, the plan will be implemented. The desire of the committee is that the plan be reviewed, rewritten and/or revised as needed or minimally every 10 years, and then adopted again by the Samsons Island committee and the council. After this plan had been put in place, it is expected and hoped that public participation will continue as it has for the last 20+ years. The island’s continued beauty and value will depend heavily on those active, caring individuals that are dedicated staff, volunteers, residents, and visitors to Satellite Beach. The need for work days, Adopt-a-Park partners, private donations, and cooperate sponsors will be needed in perpetuity.



## 12. Funding Sources /Potential Partnerships

The citizens of Satellite Beach have historically demonstrated their willingness and desire to maintain a high standard of living. That desire is evident in a willingness to financially support amenities that benefit the community. The support for current and future activities on Samsons Island will depend on continued involvement from individuals and civic groups and from budget allocations approved by the city council. The following are potential funding/partnership sources. A sub-committee with expertise in raising or sustaining support could be created to investigate possible funding streams.

### **Present and Potential Partnership Sources**

- Florida Fish & Wildlife Conservation Commission/Bureau of Invasive Plant Management
- Florida Inland Navigation District (FIND) Grants
- United States Fish & Wildlife Service (USFWS)
- Florida Department of Environmental Protection (FLDEP)
- St Johns River Water Management District (SJRWMD)
- The Nature Conservancy (TNC)
- Educational grants
- Civic group grants such as VFW, Women's' Club, Scout Groups
- Partnerships/ High school clubs, youth groups
- Mitigation prospects
- Call for and developing a Trust fund

### **Current Adopt-a-Park Partners**

- Space Coast Paddlers - ADA Campsite
- East Coast Sailing Association - Central Campsite
- Space Coast Geocachers - North Campsite
- Boy Scout 309 South Central Campsite
- Banana River Power Squadron

### 13. Security of the Island

Currently the City's police department provides security for the island. There is vandalism on the island especially during holidays. Although vandalism is an ongoing concern it is not yet at a level yet where it is considered a high risk to the currently established resources on the island. There are residences close the island and the neighboring homeowners are vigilant in observing and reporting any suspicious activity on the island. The level of security at present seems to be adequate. However, if there is any increase in visitation or increase in the value of the facilities on the site, some measure of increased oversight will be required. Increased security should be a component of the Management Activity Timeline to be considered. There is no way to fence or otherwise confine the boundaries of the site.

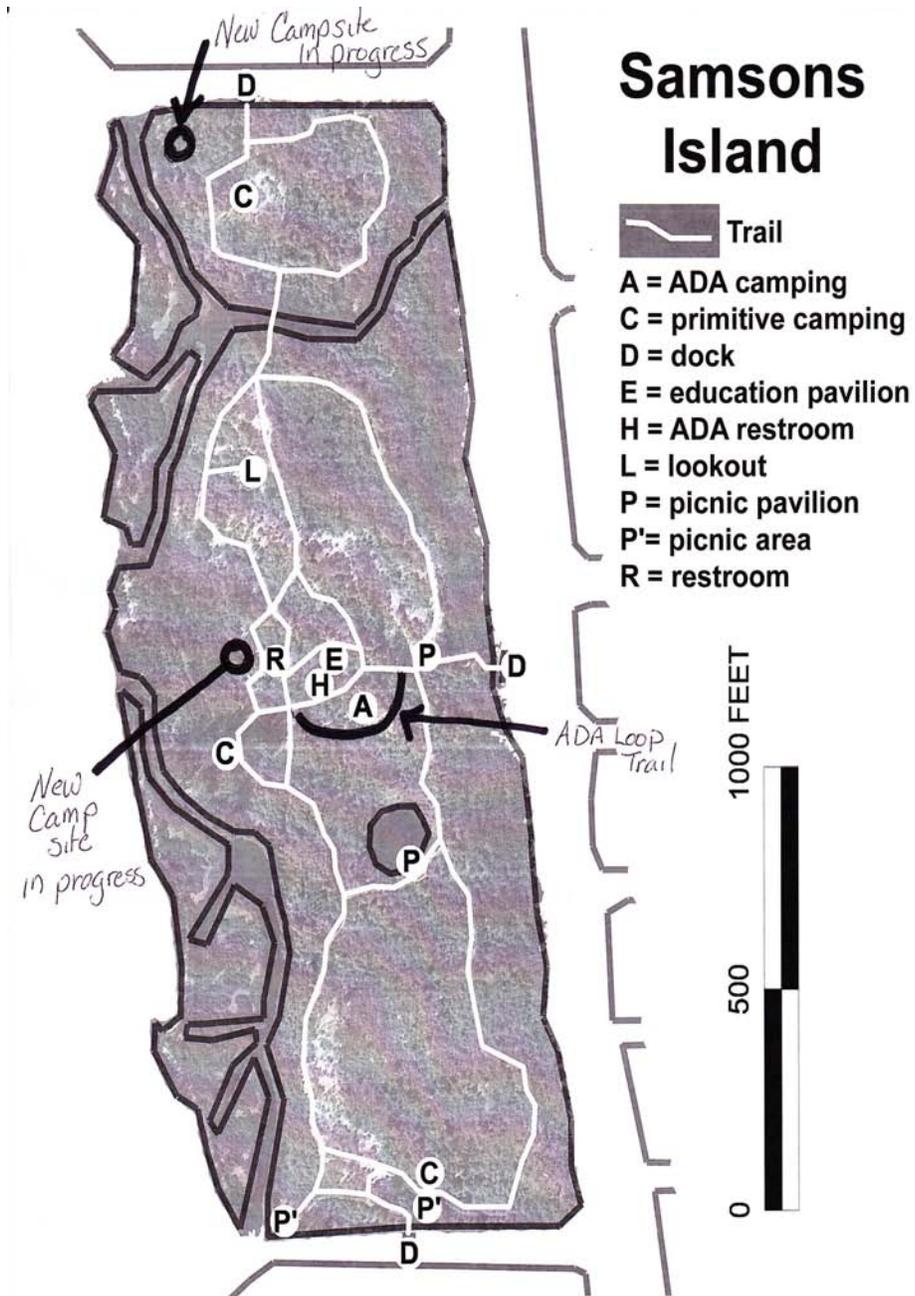


## Addendum 1

Animal & Plant List (See Attached Spreadsheet)

# Addendum 2

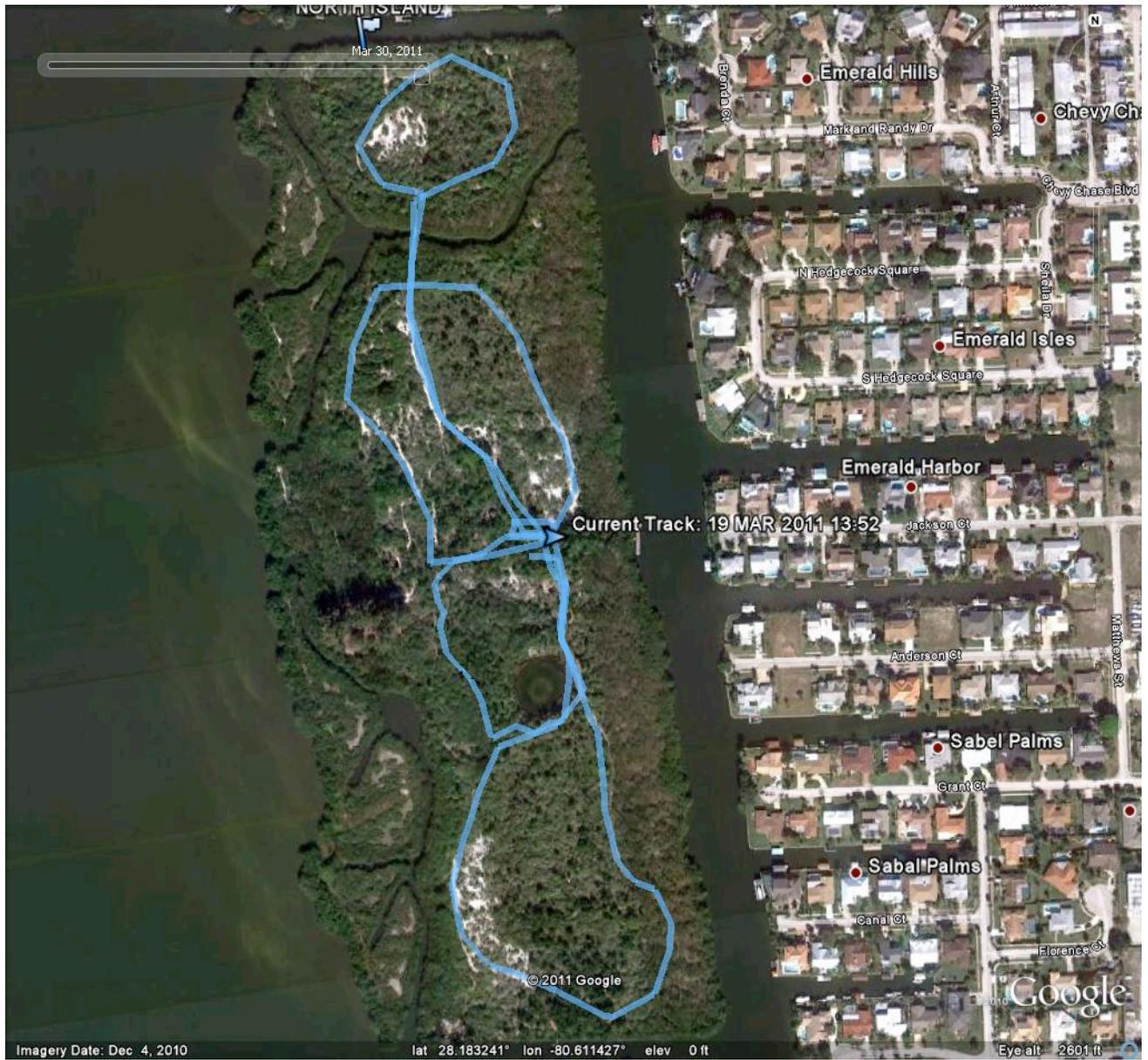
## Facility & Trail Map (Graphic)



# Addendum 3

## Hiking Trails Map

Courtesy of Space Coast Geocachers



## Addendum 4

### Management Goals

Note - Goals of the island were last reviewed in 2002. Establishing goals is an ongoing committee effort.

#### **Definitions for the proposes of this Management Plan:**

*Goal - the end toward which effort is directed*

*Objective - something toward which effort is directed : an aim, goal, or end of action*

*Strategy - the art of devising or employing plans or stratagems towards achievement a goal*

**All goals, objectives, and strategies will only be accomplished if the city has and maintains a suitable, operational boat. The need for a replacement boat is imminent.**

#### **Environmental Goals**

**Goal** - Eradicate exotic invasive plants

**Objective** - to increase the native vegetation thereby producing more food and shelter for wildlife and enhancing biological diversity

**Strategy** - Major efforts funded by grants and focus volunteer efforts on the removal of exotic plants

**Goal** - Keep invasive exotic plants from re-occurring on site

**Objective** - Compliance with FFWCC grant /maintain exotic free habitat long term

**Strategy** - Develop grid of site to aid in monitoring ensuring that exotics are controlled

**Strategy** - Optimize use of state funded chemical bank

**Strategy** - Enlist volunteers to assist monitoring and removal of new growth

**Strategy** - Acquire and house a wood chipper on site, allowing exotic plants and normal trail trimming to be accomplished onsite and debris managed

**Strategy** - Develop plan for eradicating continual regrowth of exotics/Long term plan

**Goal** - Restore and maintain healthy habitats short & long term

**Objective** - To plan for vegetative restoration and maintenance

**Strategy** - Develop short term plan for enhancement of viable native plant communities, identifying planting needs on Island (use of sub-committee)

**Strategy** - enlist volunteers, arrange workdays to accomplish planting, solicit donations for native plants

**Goal** - To preserve and protect threatened and endangered species on the Island

**Objective** - Acquire and maintain a comprehensive species list for Samsons Island

**Strategy** - Continue to enlist volunteers to conduct surveys of both plants and animals on the Island to build the current base species list

**Strategy** - Monitor current threatened and endangered species

**Goal** - Reduce or maintain level of human impact on the site

**Objective** - To reduce refuse on the island, to limit off-trail site degradation, limit impacts to wildlife

**Strategy** - Increase public awareness through signage asking visitors to “pack in-pack out” trash, to stay on trails, and to observe but not disturb wildlife

### **Environmental Education Goals**

**Goal** - Increase environmental education activities on the island

**Objectives** - To increase understanding, awareness, and community value for conservation lands in general, Samsons Island specifically

**Strategy** - Develop education programs for citizens of all ages promoting Samsons Island (Use of sub-committee)

**Strategy** - Develop education programs with the intent of increasing awareness of the value of conservation lands worldwide

**Strategy** - Seek partnerships with educational institutions, encourage their participation in park programs

**Strategy** - Promote opportunities for research projects conducted by area schools, universities, and environmental agencies

### **Recreational Goals**

**Goal** - Continue to enhance passive recreation activities for citizens and visitors

**Objective** - Provide passive recreation and exposure to native areas with limited impact on habitat

**Strategy** - Develop partnerships with local groups promoting acceptable passive activities on Samsons Island

**Strategy** - Provide opportunities for citizens to engage in passive recreational activities such as organized bird watching events, small group hikes, or plant identification seminars on Island

**Strategy** - Continual evaluation of ADA facilities and access

**Strategy** - Blaze existing trails to encourage hiking “on-trail.” Develop trail standards to make trails uniform throughout the Island

**Strategy** - Conduct annual review of existing amenities to determine success or inadequacies of recreational activities

### **Maintenance Goals**

**Goal** - Perpetual maintenance of physical assets on the Island

**Objective** - Plan for long & short term care of city assets

**Strategy** - Generate a comprehensive inventory of all physical assets on Samsons Island

**Strategy** - Develop an annual maintenance plan for scheduling repair and/or replacement of equipment and physical assets

**Strategy** - Develop a five year maintenance schedule for ongoing replacement and repairs of equipment to aid in budget estimations

