#### **ITEM 13:**

Consider a 10-year update to the Caladesi Island State Park Management Plan (Lease No. 3203).

#### LOCATION:

Pinellas County

### **APPLICANT:**

Division of Recreation and Parks (DRP)

### **STAFF REMARKS:**

Background

Caladesi Island State Park (CISP) in Pinellas County consists of approximately 2,420 acres and is only accessible by boat or ferry that launches from Honeymoon Island State Park. Caladesi Island State Park was initially acquired on April 18, 1966, in fee simple by the Board of Trustees of the Internal Improvement Trust Fund (BOT). The BOT leased the property to DRP under Lease Number.

The purpose of CISP is to ensure the protection of an undeveloped barrier island and provide opportunities for public access along almost 2.5 miles of pristine sandy beach. The park is located on a pristine barrier island off the coast of a densely populated region of the state and protects a remarkable community of mesic flatwoods and maritime hammock unique in Southwestern Florida, among many other natural communities. The park protects a globally significant nesting shorebird site and a critical winter residence site for many birds.

# Management Plan Overview

The Florida Natural Areas Inventory has identified ten distinct natural community types and one altered landcover types at CISP. The predominant natural community is marine seagrass beds, followed by marine unconsolidated substrate. Seven species of imperiled plants and 39 species of imperiled animals have been identified at CISP.

The Division of Historical Resources maintains a Master Site File that documents many of Florida's archaeological and historical features. Four archaeological sites have been identified at CISP.

Access to the park is only available by water. In addition to a ferry service from Honeymoon Island State Park, visitors may access CISP by motorboat or paddle craft. Boat camping, beach use, and paddling through the mangrove trail are the most popular recreational uses at the park. A concession operation at the boat marina offers food service and souvenir sales. Visitation typically begins to increase in February and is highest during the months of March and July before tailing off in August. Overnight docking is allowed in the park marina. Electric and water hook-ups are provided. During the busy season, a standard camping fee is charged to allow for dock space for day-use visitors.

The Florida Legislature requires that all land management plans include long and short-term goals. These goals must be measurable objectives, and short-term goals must be achievable within a two-year planning period. Pursuant to section 253.034, Florida Statutes, the Division of State Lands began compiling the short-term goals from each land management plan approved

since July 1, 2016. The Division has included short-term goals from this management plan as part of this item.

While the 10-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 October 4 and 18, 2021. 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 Advisory Group members the opportunity to review and discuss the management plan. No additional changes were recommended to the draft plan. The DRP staff recommended approval of the proposed management plan as presented.

# Surplus Lands

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

State Land Management Review Team

A Land Management Review (LMR) was conducted in February 2019. The review team found that the property is managed in accordance with the purposes for which it was acquired and the management practices, including public access, are in compliance with the management plan. Two consensus recommendations were offered:

- The team recommended DRP contact DHR for a Phase I archaeological survey of Caladesi Island.
- The recommended DRP pay staff competitive wages to keep and expand institutional knowledge and experience on-site.

The 2019 LMR notes were reviewed as part of developing this plan and the agreed upon changes and recommendations were made to this management plan.

#### STAFF RECOMMENDATION:

Approve the management plan.

ARC RECOMMENDATION:	
( ) APPROVE	
( ) APPROVE WITH MODIFICATIONS:	
( ) DEFER	
( ) WITHDRAW	
( ) NOT APPROVE	
( ) OTHER:	

# **Caladesi Island State Park**

# **Land Management Plan Short-term Goals**

Goal	Details of Goal	Objective	Details of Objective	Performance Measure
VII	Provide public access and recreational opportunities at	D	Develop 2 new interpretive programs.	Number of new interpretive programs.
	the park.			

Source: Florida DEP, Office of Environmental Services, Revised 2020-MWE.

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# Park Significance

The extensive 2.5 miles of pristine sandy beach at the park is consistently named as one of the best beaches in America by widely distributed publications.

Cultural resource sites protected by the park include remnants of the islands' first inhabitants from the Safety Harbor culture. The island was also the site of the late 1800's homestead of Myrtle Scharrer Betz, who wrote the book Yesteryear I Lived in Paradise.

The park is located on a pristine barrier island off the coast of a densely populated region of the state and protects a remarkable community of mesic flatwoods and maritime hammock.

The park protects a globally significant nesting shorebird site and a critical winter residence site for many birds.

#### Central Park Theme

Sheltered from development, the shallow sand bars and award-winning beaches at the park exemplify the beauty of untouched barrier islands.

Primary Interpretive Themes

### **Barrier Islands**

Rising sand bars give visitors a glimpse into the natural processes that continually shape Florida's beautiful barrier islands.

#### <u>Development</u>

Although kept pristine at this park, barrier islands that are essential to Florida's coastal health have often been altered by development.

### Water Quality

Natural offshore ecosystems such as seagrass beds and oyster reefs provide invaluable services by naturally filtering coastal waters.

#### Homestead

The Scharrer homestead and the written accounts of Myrtle Scharrer Betz remind us of all those who forged a livelihood on Caladesi Island and left their unique marks on this isolated place.



# **Natural Communities**

The marine seagrass bed natural community is the largest in the park. Dominant species are turtle grass, shoal grass, and manatee grass. Ecologically, these grass beds are important components of the estuary as they stabilize sediments and provide nurseries, food, and shelter to many estuarine organisms. An exclusion zone for motorized watercraft has been established along the east side of the island.

The dunes of Caladesi Island remain as an excellent example of this Gulf Coast barrier island habitat type. The mesic flatwoods community is one of the few remaining on Gulf Coast barrier islands of southwestern Florida. It is best developed along a single ridge that occurs on the southwestern part of the main island, between the coastal strand and the maritime hammock.

### Natural Communities Management

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

There are 204 acres of fire dependent communities to maintain on Caladesi Island, which are comprised of 76 acres of mesic flatwoods and 128 acres of coastal strand. The pyric acreage is divided into 12 management zones ranging in size from 5 to 33 acres.

Objective: Maintain 204 acres within the optimum fire return interval.

Action 1 Update annual burn plan

Annually burn between 53-132 acres. Action 2

Natural Communities and	Altered Landcover	rs Table
Natural Community	Acreage	Percentage
Marine Seagrass Bed	1,104.62	45.7%
Marine Unconsolidated Substrate	606.13	25.1%
Mangrove Swamp	372.67	15.4%
Coastal Strand	146.25	6.0%
Mesic Flatwoods	75.53	3.1%
Beach Dune	57.09	2.4%
Marine Mollusk Reef	19.11	0.8%
Coastal Interdunal Swale	16.67	0.7%
Maritime Hammock	8.66	0.4%
Shell Mound	0.96	0.0%
Altered Landcover	Acreage	Percentage
Developed	12.35	0.5%
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### **Imperiled Species**

The park has long been an important location for nesting shorebirds and seabirds, ranking among the top sites in the state and giving it global significance as a result. Listed species that have nested on Caladesi include black skimmer, least tern, and American oystercatcher. Snowy and Wilson's plover nests have been recorded on the island. A moderate number of piping plovers and red knot, which are both state and federally listed threatened species, forage and rest at the park.

The mudflats and shorelines of the island's north tip are important wintering sites and are annually used by piping plover and red knot. Federal recovery plans for threatened piping plovers and red knots designate unaltered sandy beaches adjacent to inlets as critical habitats along the wintering range. Almost 90 percent of observations of roosting piping plovers at ten coastal sites in southwest Florida were on inlet shorelines. At inlets, foraging plovers are associated with moist substrate features such as intertidal flats, algal flats, and ephemeral pools.

Imperiled loggerhead sea turtles nest at Caladesi Island between May and September each year. Kemp's ridley sea turtles have also been observed within park boundaries nesting during the daytime. In accordance with FWC protocol, park staff and volunteers survey the beach daily between April 15th and September 30th identifying new nests and erecting boundary markers with signage.

Florida manatees are commonly seen off the Gulf beaches in the warm summer months. Mating groups have wandered into swim areas on several occasions, giving visitors a closer look than expected. The seagrass beds on the bay side of the park are a prime source of food for foraging manatees.

In addition to the seven listed shorebird and seabird species mentioned above, more than 24 other designated bird species have been documented in the park. Seven designated reptile species, seven designated plants, and one designated mammal species have also been documented at the park.

In addition to the Florida-listed inkberry and shell-mound pricklypear, three Florida endemic plants are found in the park, all of which have limited populations in the State. The most threatened is the West Coast dune sunflower, found only on the west coast and only in six counties. Management includes verifying that any landscaping will exclude the use of the East Coast dune sunflower. The other two endemics, although not listed, are the Florida amaranth and vente conmigo.



# **Imperiled Species Management**

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

Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet the DRP's mission. Long-term monitoring is essential to ensure the effectiveness of resource management programs. Monitoring efforts must be prioritized so that the data collected provides information that can be used to improve or confirm the effectiveness of management actions on conservation priorities.

Objective: Monitor and document 13 selected imperiled species.

Action 1	Implement monitoring protocols for loggerhead sea turtles, green sea turtles, Kemp's ridley sea turtles, piping plovers, red knots, American oystercatchers, least terns, snowy plovers, Wilson's plovers, black skimmers, and Eastern indigo snake.
Action 2	Complete all required FWC survey protocols for imperiled sea turtles and nesting shorebirds/seabirds.
Action 3 Action 4	Monitor and document gopher tortoise population. Implement monitoring protocol for giant airplants.

Objective: Provide protection, where appropriate, to imperiled species.

Action 1	Demarcate shorebird habitat by enclosing the perimeter of
	the habitat and buffer area with fencing and signage.
Action 2	Monitor habitat during the nesting season to identify and
	protect new breeding sites.
Action 3	Provide interpretive and educational outreach to the public
	prior to and during the nesting season to encourage visitor use
	that protects shorebirds and their habitat.
Action 4	Coordinate with FWC and local law enforcement agencies to
	ensure compliance with park rules and shorebird protection.
Action 5	When implementing any landscaping or planting projects,
	verify that all source plants are correctly identified and are
	species found naturally occurring at the park.
Action 6	Remain aware of distribution and protections of American
	crocodile.

Objective: Monitor impacts on shorebird and sea turtle nesting by terrestrial nuisance species in the park.

Action 1	Monitor sea turtle nesting and gopher tortoise mortality for	
	impacts from coyote, raccoon, and nine banded armadillos.	
Action 2	Develop and implement a predator control strategy.	



### **Exotic Species**

Early park planners, visiting Caladesi Island for the first time, described trails winding through dark tunnels of Brazilian pepper to reach a dune line shaded by 50-foot Australian pine stands. These historic infestations have been erased by decades of effort by park staff, contractors, and volunteers. Current infestation levels are low, but require constant retreatment to maintain the natural areas in this state. The seed bed, contaminated by these past invaders, will remain a source of active regrowth of exotics for many years to come. Constant attention to controlling infestations is now the focus of park staff and volunteers. Staff also monitor the islands for new invaders. Several invasive plants such as cogongrass and rosary pea are established on Caladesi Island and will also require constant effort.

The other exotics found on Caladesi Island are thinly dispersed. Plants such as carrotwood, lantana, and balsampear are occasionally located and treated. Of greater concern to park and district staff is the arrival of new exotic plant species to the islands. While birds, mammals, and the wind can bring seeds of exotics to the islands, humans can also act as vessels for plant dispersal. To avoid the dispersal of exotics, park personnel does not allow for firewood, or any potted plants to be brought to the island. Also, trash collected from visiting boats is not allowed in park trash cans, as raccoons frequently raid these cans, and could potentially spread exotic plant seeds all over the island. This also limits potential pests and pathogens that could be introduced to the islands from the mainland and other outside areas.

### **Exotic Species Management**

Goal: Remove invasive species and conduct needed maintenance control.

The DRP actively removes invasive exotic species with priority being given to those causing the ecological damage. Removal techniques may include mechanical treatment, herbicides or biocontrol agents.

Objective: Annually treat 8 acres of exotic plant species in the park.

Action 1 Annually update exotic plant management work plan.

Action 2 Implement work plan by treating eight acres in park annually.

Objective: Implement control measures on 1 exotic animal species.

Action 1 Continue to trap exotic animals and report quarterly.

Action 3 Continue to contract outside trappers to remove exotic/

nuisance animals, including nine-banded armadillos.



### <u>Cultural Resources</u>

There are four archaeological sites on Caladesi Island recorded in the FMSF. Three of these sites represent prehistoric use of the island by local people. The island's first inhabitants are believed to have been the local Safety Harbor culture, the Tocobago, a society sustained in large part by the abundant fish and shellfish of the estuarine environment. A burial mound is situated in the tidal swamp and was excavated in 1903 by C.B. Moore. It has been identified by the DHR Florida Master Site File as Hog Island Mound.

In 1897, Henry Scharrer received a homestead certificate for land on the island, and by 1899 built a cottage to began his life there. After his wife died, he lived on the homestead with his daughter Myrtle. This was the only permanent homestead on the island. After his death in 1934, the dwelling and outbuildings declined. Today only foundations and the cottage fireplace, made of tabby, remain. The site is identified by the FMSF as Scharrer Homestead Foundation.

# Cultural Resource Management

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

Cultural resources are individually unique and collectively challenging for the public land managers. The management of cultural resources is often complicated because these resources are irreplaceable and vulnerable to disturbances. The advice of cultural resource experts is required in this effort.

Objective: Annually evaluate three recorded cultural resources.

Action 1 Complete 3 assessments/evaluations of archaeological sites.

Objective: Compile reliable documentation for all recorded resources.

Action 1 Ensure all known sites are recorded or updated in the FMSF.

Action 2 Complete a predictive model for high, medium, and low probability of locating archaeological sites within the park.

Action 3 Develop and adopt a Scope of Collections Statement.

Objective: Maintain three recorded cultural resources in good condition.

Action 1 Design and implement regular monitoring programs for three cultural sites.

Action 2 Create and implement a cyclical maintenance program for

each cultural resource.



# Coastal Management

Caladesi Island State Park has 2.5 miles of stunning, sandy Gulf beach and was named America's Best Beach in 2008 by Dr. Stephen Leatherman. Qualities considered for the distinction include sand and water quality, abundance of wildlife, and attractive vistas. Images of the island beach are commonly used on local tourism publications. Increased positive publicity resulted in several years of significantly increased visitation to this once quiet location. 420,000 people visited the island in 2008, a 24 percent increase over the year prior. One of the primary challenges for management here is balancing the availability of prime shorebird habitat with recreational use.

Seven of the nine federally listed species known to occur on the island are specialists that depend exclusively on the sandy beach for forage or reproductive success. Three additional state listed species (snowy plover, least tern, and black skimmer) also require sandy beach habitat for survival. For beach nesting and resting birds, the most generally applicable protection method is establishment of setback distances that have been determined from studies of effects of human disturbance on breeding bird colonies in Florida. The recommended setback distance is 590 feet. This is often more space than is available above the mean high tide line.

Within this competitive system, there are currently two zones of high recreational use. Beach access boardwalks provide low impact corridors between the marina complex and the sandy beach. This concentration of human activity on the shoreline has resulted in a zone of reduced habitat value for wildlife. A second location, at the northern tip of the island, is popular with boaters, kayakers, kite surfers, and jet skiers. This location offers access from the nearby Dunedin causeway. Volume of visitation here is variable throughout the year, reaching peaks during pleasant weekends and holidays. Nesting or resting species may get weeks of low disturbance, only to be sporadically inundated on various busy weekends.

Objective: Continue to assist federal, state, and local agencies with monitoring and assessment of natural community responses following coastal projects.

Action 1 Continue to monitor spatial distribution of sea turtle nesting.

Action 2 Continue to monitor occurrence of imperiled shorebird nesting.

Action 3 Report data to state and federal partners as appropriate.

Natural community response and shoreline species use can be strong indicators of habitat recovery following coastal projects. Monitoring to document the use of habitat by threatened species should continue.



# Capital Facilities and Infrastructure

Goal: Develop and maintain use areas and support infrastructure.

Potential development will mainly consist of improving or replacing existing structures. Improvements at the marina use area are geared toward enhancing the visitor experience, while new development at the support areas will allow for increased park management capabilities.

The existing facilities are appropriate to the natural and cultural resources contained in the park and should be maintained. New construction is recommended to improve the quality and safety of the recreational opportunities, to improve the protection of park resources, and to streamline the efficiency of park operations.

Objective: Improve 3 use areas.

Major repair projects for park facilities may be accomplished within the tenyear term of this management plan, if funding is available.

### Marina Use Area

The northern bathhouse of the two on the island should be replaced, and an additional bathhouse should be constructed near the western corner of the marina use area. Electric hookups and the boat docks should be repaired and upgraded. The existing kayak dock should be expanded to include an ADA accessible launch. An observation tower will be built.

### Maintenance Area

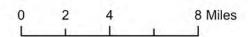
For resource management capabilities, a 3-bay shop and 3-bay pole barn should be constructed in the existing maintenance support area.

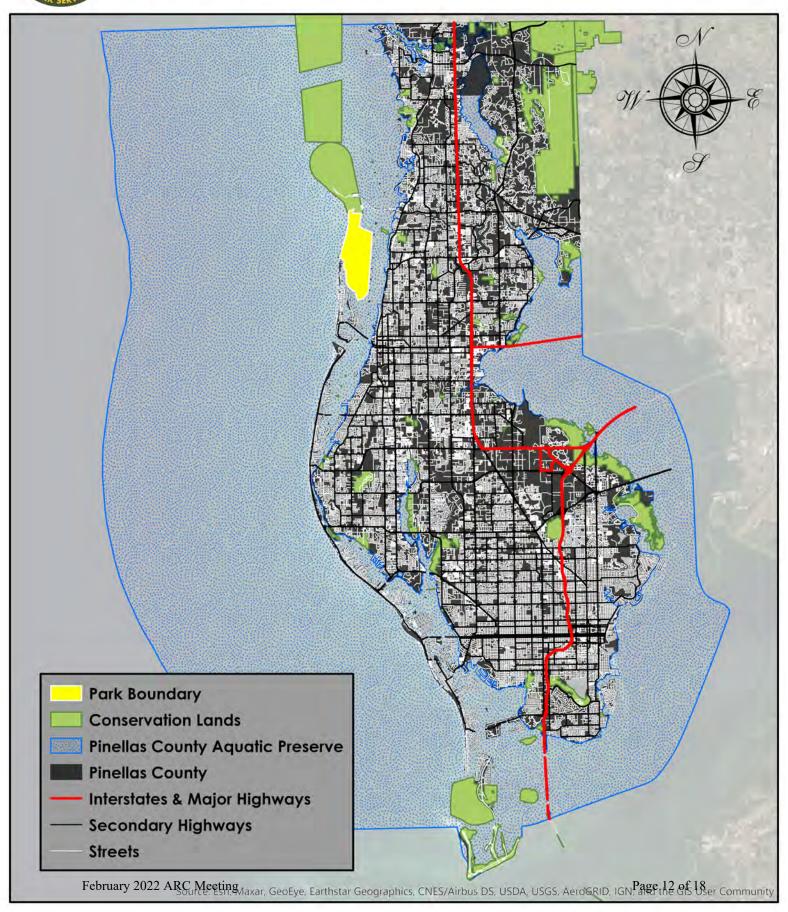
### Residence Area

One new residence is recommended for the staff residence area. An additional residence should be constructed to host park volunteers.

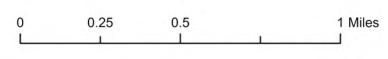
# Optimum Boundary

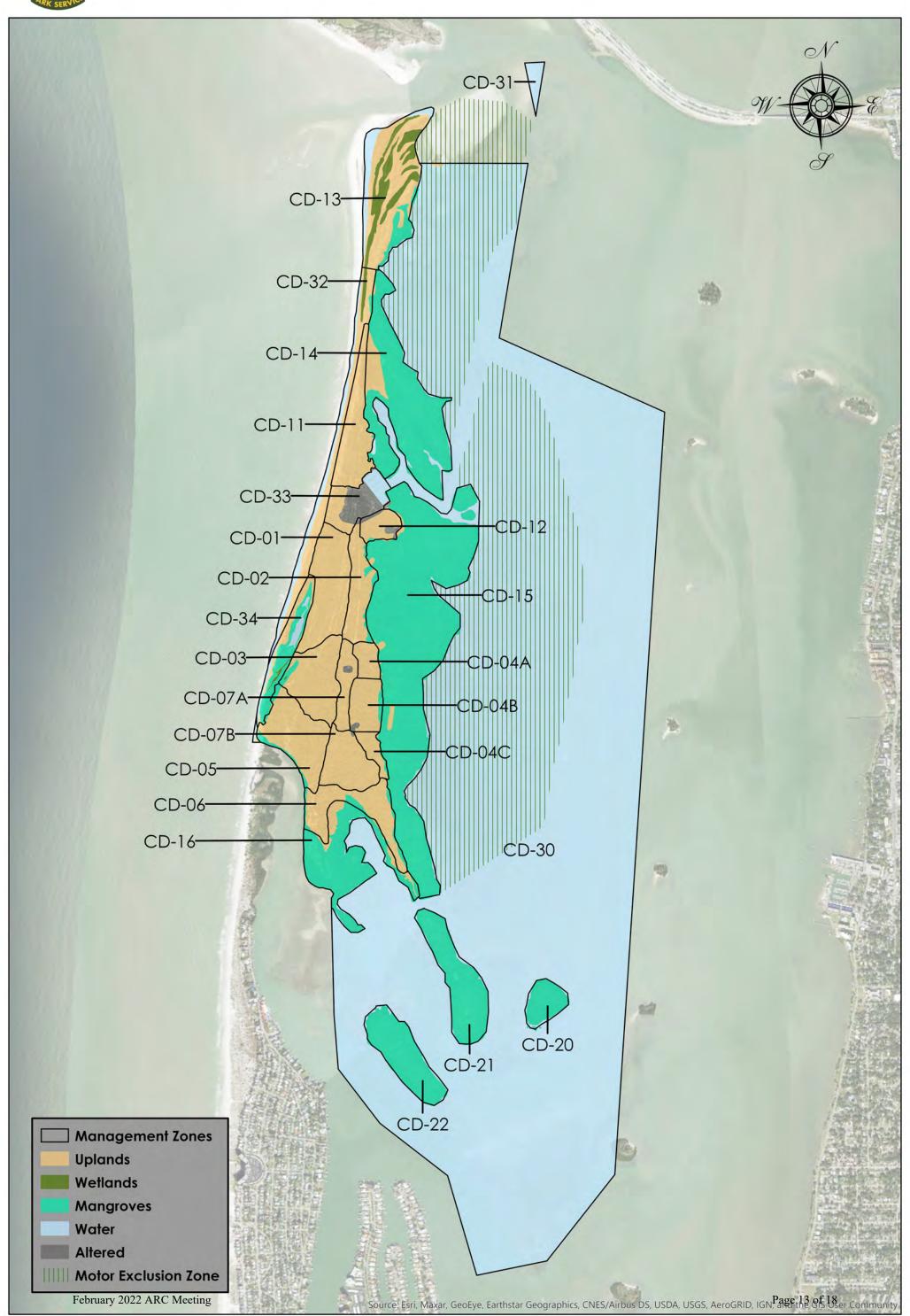
Additional lands adjacent to the southern boundary of the park have been identified as optimum boundary. The identified land became connected to Caladesi Island when the Dunedin Pass was closed by accreting sand. Acquisition of this property would help buffer the park from development along Clearwater Beach.

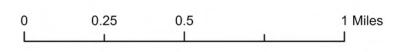


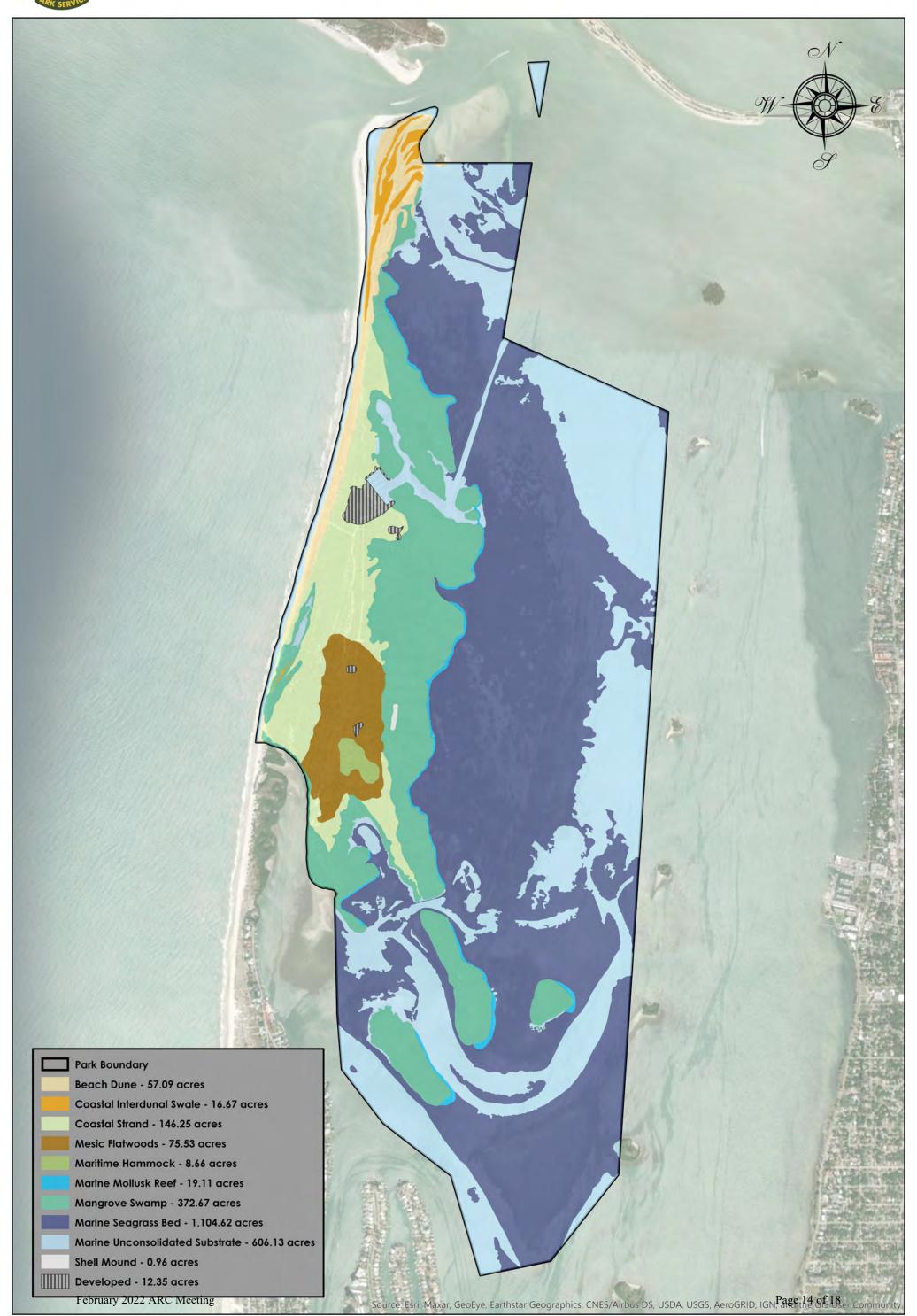


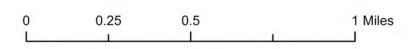


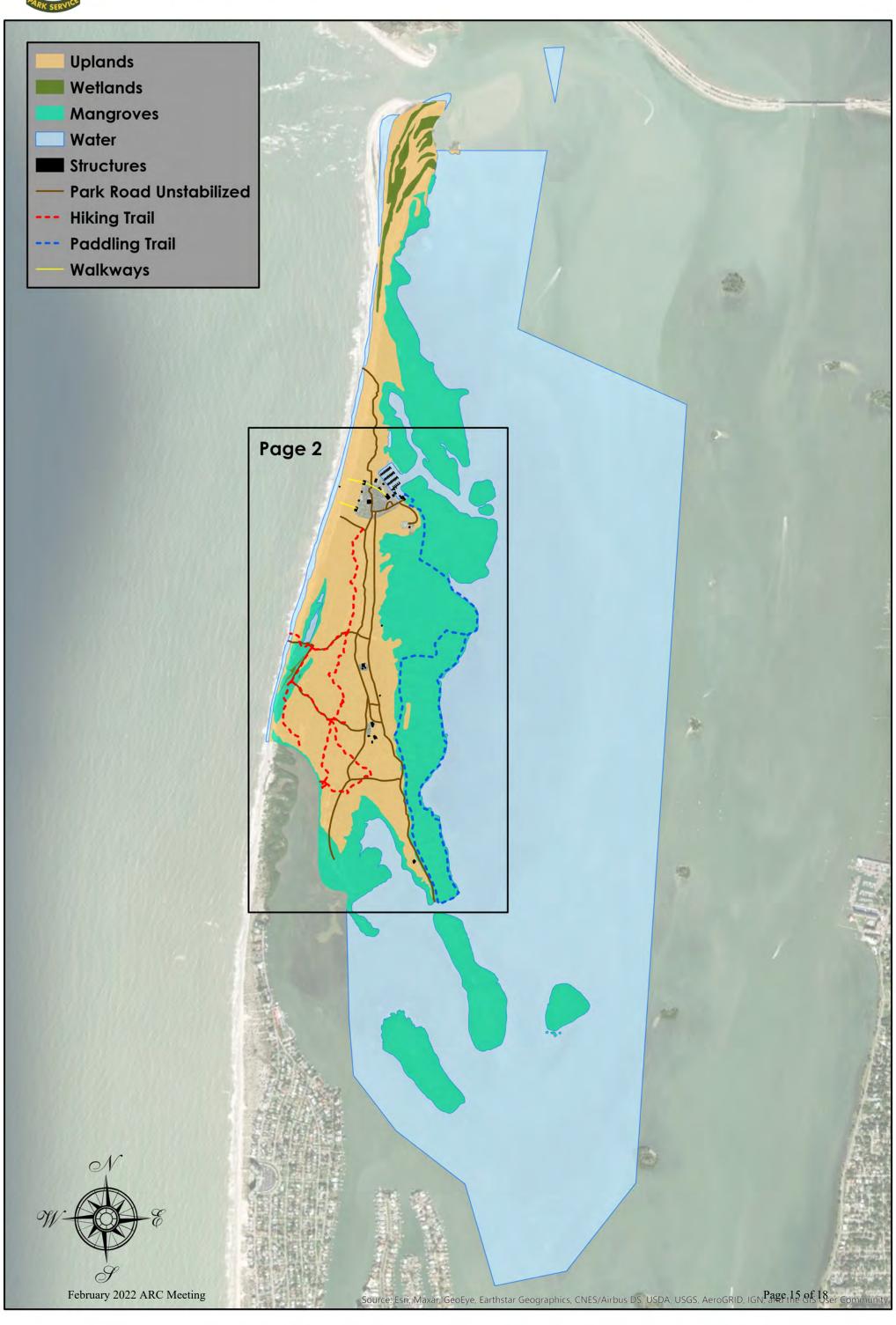


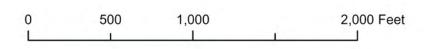


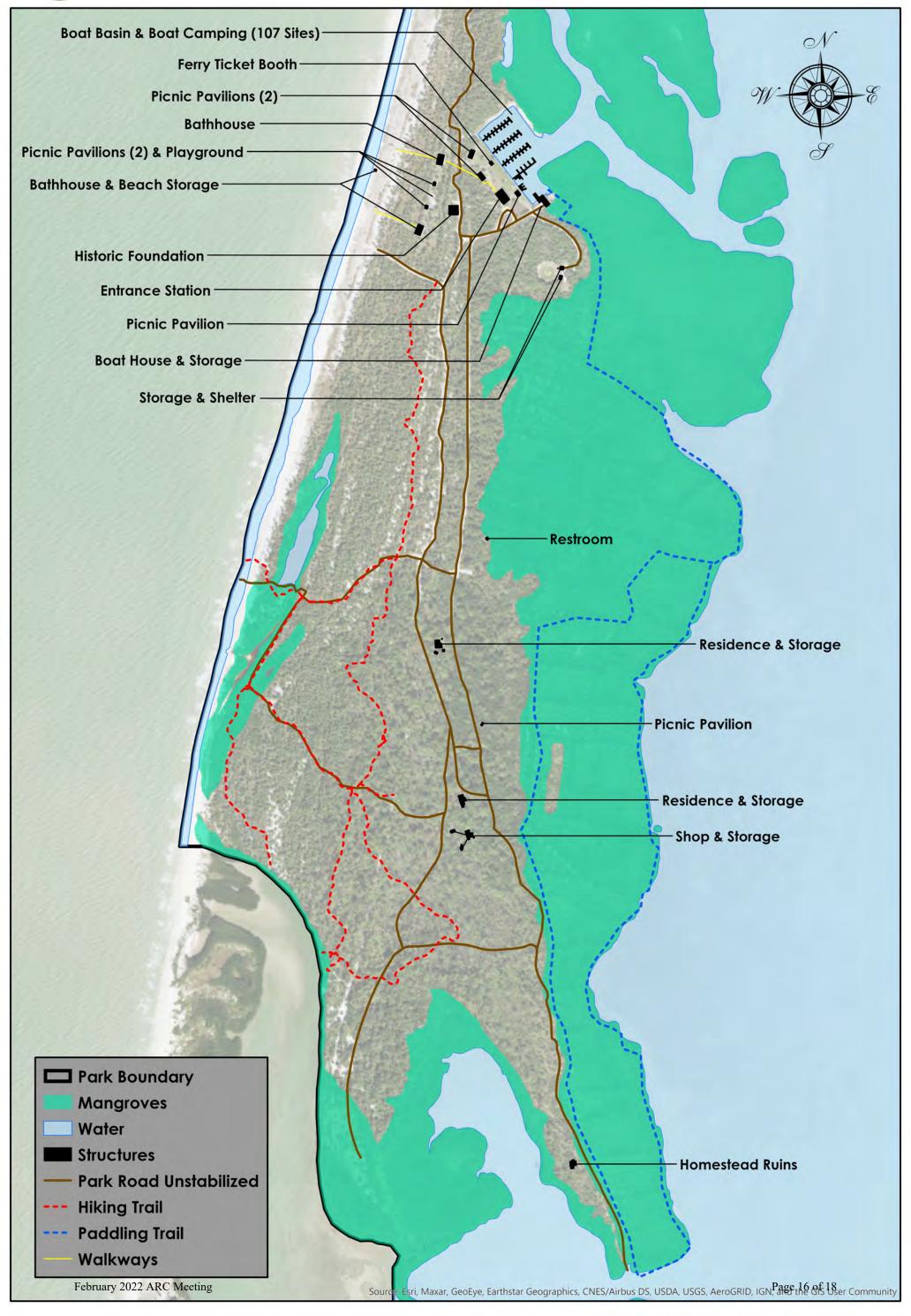




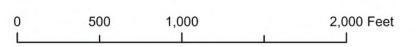


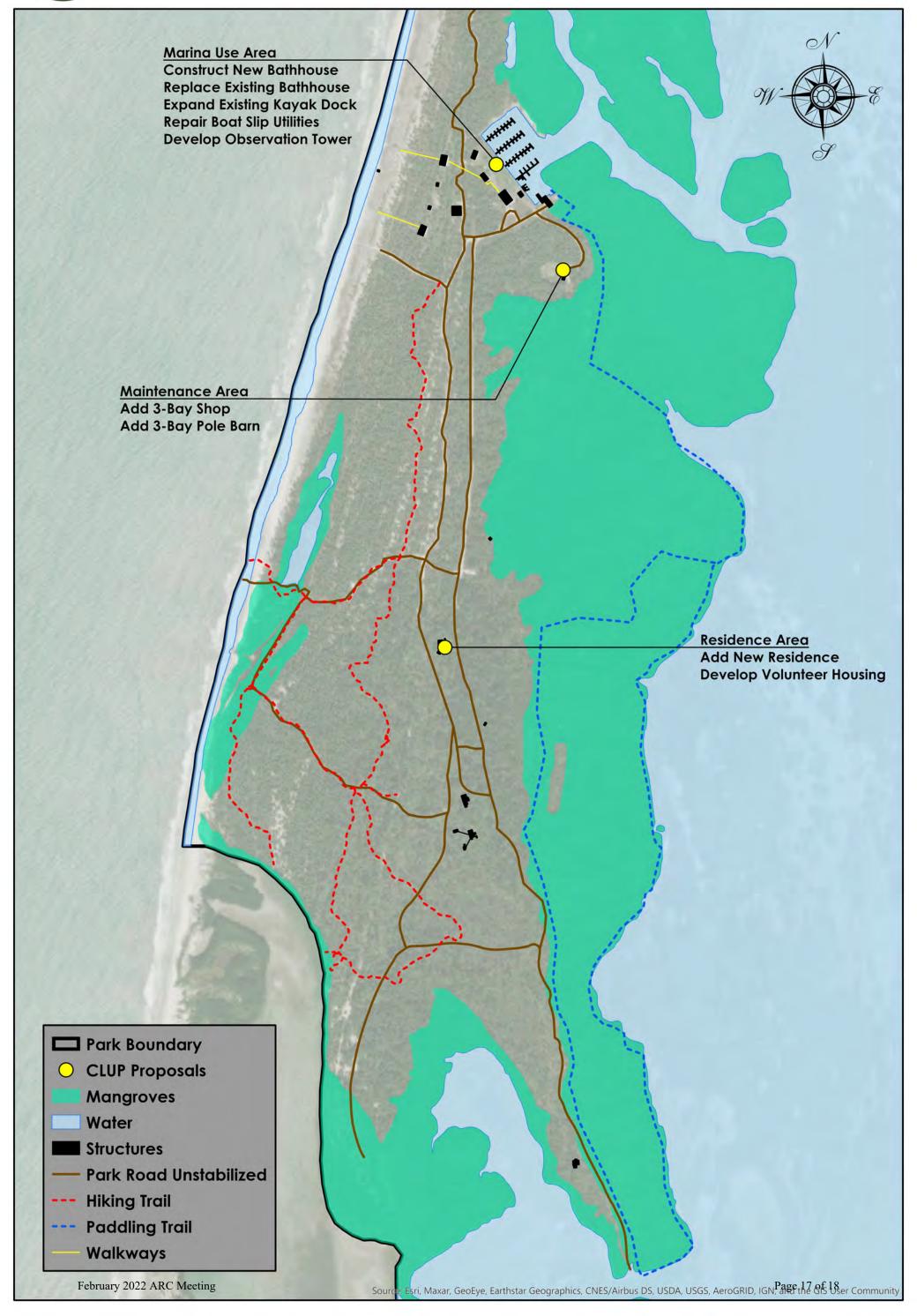












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