STUMP PASS BEACH STATE PARK

Park Chapter

CHARLOTTE HARBOR REGION

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Stump Pass Beach State Park

Park Chapter

Planning Region: Charlotte Harbor

County: Charlotte

Lease/Management Agreement Number: 2545

Overview: Stump Pass Beach State Park protects and preserves the remaining natural areas along the southernmost mile of Manasota Key, including adjacent Peterson Island and Whidden Key, providing habitat for coastal species and ample opportunity for resource-based recreation.

Total Acreage: 211.24

Natural Communities	Acres
Beach Dune	3.52
Coastal Strand	41.20
Estuarine Unconsolidated Substrate	10.50
Maritime Hammock	60.52
Mangrove Swamp	72.76
Marine Unconsolidated Substrate	14.04

Altered Land Cover	Acres
Developed	1.08
Invasive Exotic Monoculture	7.62

Acquisition: Stump Pass Beach State Park was initially acquired on May 10, 1971, with grants from Land Acquisition Trust Fund and federal grants from Land and Water Conservation Fund.

Resource Management Component

Hydrology

- Continue to partner with federal, state, and local agencies with active monitoring of erosion and accretion cycles and assessment of beach and shoreline conditions following natural disasters.

Natural Communities

- Revegetate beach dune communities throughout the park with native plant species.
- Continue to partner with Charlotte County on the ongoing Charlotte County Erosion Control Project, including maintenance dredging and beach renourishment in the park.
- Install temporary post and rope barriers as needed to protect newly planted dunes from disturbance.

Imperiled Species

- Update imperiled species inventory lists.
- Continue existing monitoring protocols for marine turtle species and piping plover, red knot, Wilson's plover, least tern, black skimmer, and American oystercatcher.
- Monitor impacts on shorebird and sea turtle nesting by terrestrial nuisance species in the park.

- Continue to improve protection and awareness of sensitive shorebird nesting areas.
- Continue to implement existing protocols for three imperiled plant species in the including shell mound prickly pear, Florida mayten, and inkberry.

Invasive and Nuisance Species

- Identify major vectors and pathways for invasive plants at the park and reduce incoming propagules.
- Regularly update surveys to reflect accurate infestation levels of each management zone.
- Develop an early detection rapid response protocol for new infestations.
- Develop a species-specific action plan for each management zone with a prioritization framework.
- Evaluate and update plan on an annual basis and adapt to changing conditions.
- Survey all maintenance areas yearly for new infestations.
- Treat areas where invasive plant spread is imminent (e.g., after prescribed fire, mechanical, or other disturbance).
- Treat medium infestations.
- Reduce high infestations with additional labor sources (e.g., contract funding, strike teams) and plan for passive or active restoration.
- Document treatments and update surveys in NRTS.
- Manage invasive or nuisance animals.

Cultural Resources

- Conduct biennial site condition assessments per OM Chapter 4.1, Section 3.5.1.
- Ensure all known sites are recorded or updated in the Florida Master Site File.
- Record and submit new or updated Florida Master Site File forms to Division of Historical Resources for all sites encountered across the island.
- Conduct post-hurricane assessments of all cultural sites on Peterson Island.
- Document any observed changes to the sites.
- Evaluate need for stabilization methods.

Land Use Component

Conceptual Land Use

Park Entrance

- Implement entry solutions to effectively manage high visitation.

Parking Area

- Reconstruct safe and organized parking

Paddlecraft Launch

- Reestablish bayside paddlecraft launch.

Restroom/Staff Support

- Renovate restroom and operational support facility.

Beach Access Pathways

- Reestablish sustainable and resilient beach access.
- Install plant species for habitat restoration.
- Remove ruined boardwalks.
- Reestablish access to Gulf beach via on-grade sand paths.
- Beach access paths extending south from the restroom building were previously aided by boardwalks to traverse dunes and sensitive habitat.

Southern End of Manasota Key

- Strategize wildlife habitat protection while maintaining current level recreational beach access.
- Coordinate with FWC and Charlotte County regarding the criteria and feasibility of establishing a Critical Wildlife Area at the southern tip of Stump Pass Beach.
- Aggregate wildlife occurrence/use data to aid in determination.

Optimum Boundary

- Lease amendment to include management authority of sovereign submerged lands at the southern ends of Peterson Island and Whidden Key (and) 50 ft seaward of mean high water, along the Gulf shore of Manasota Key.

INTRODUCTION

LOCATION AND ACQUISITION HISTORY

Stump Pass Beach State Park is located in Charlotte County. Access to the park is from U.S. Highway 41 to County Road 776 crossing Tom Adams Bridge to the terminus of Gulf Boulevard on Manasota Key or by watercraft. The Charlotte Harbor Region map reflects significant land and water resources existing near the park.

Stump Pass Beach State Park was initially acquired on May 10, 1971, with grants from Land Acquisition Trust Fund and federal grants from Land and Water Conservation Fund. Currently, the park comprises 211.24 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park. On May 4, 1971, the Trustees leased (Lease No. 2545) the property to the Department of Environmental Protection's (DEP) Division of Recreation and Parks (DRP) under a 99-year lease. The current lease will expire on May 4, 2070.

Stump Pass Beach State Park is designated single-use to provide public outdoor recreation and conservation. There are no legislative or executive directives that constrain the use of this property (see Southwest District appendix). A legal description of the park property can be made available upon request to DEP.

SECONDARY AND INCOMPATIBLE USES

In accordance with section 253.034(5), Florida Statutes (F.S.), the potential of the park to accommodate secondary management purposes was analyzed. These secondary purposes were considered within the context of DRP's statutory responsibilities and resource values. This analysis considered the park's natural and cultural resources, management needs, aesthetic values, visitation and visitor experiences. It was determined that no secondary purposes could be accommodated in a manner that would not interfere with the primary purpose of resource-based outdoor recreation and conservation.

DRP has determined that uses such as water resource development projects, water supply projects, stormwater management projects, linear facilities and sustainable agriculture and forestry (other than those management activities specifically identified in this plan) would not be consistent with the management purposes of the park.

In accordance with section 253.034(5), F.S., the potential for generating revenue to enhance management was also analyzed. Visitor fees and charges are the principal source of revenue generated by the park. It was determined that multiple-use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions and similar measures will be employed on a case-by-case basis as a means of supplementing park management funding. Generating revenue from consumptive uses or from activities that are not expressly related to resource management and conservation is not under consideration.

PURPOSE AND SIGNIFICANCE OF THE PARK

Park Purpose

The purpose of Stump Pass Beach State Park is to protect and preserve the remaining natural areas along the southernmost mile of Manasota Key, including adjacent Peterson Island and Whidden Key, providing habitat for coastal species and opportunity for resource-based recreation.

Park Significance

- The park provides access to pristine southwest Florida beaches and estuarine waters offering visitors exceptional boating, paddling, fishing, swimming, snorkeling and wildlife viewing opportunities.
- The park protects the last remaining natural communities at the southern end of populated Manasota Key, including nesting areas for imperiled sea turtles and shorebirds as well as habitat for gopher tortoises.
- The undeveloped southern tip of Manasota Key, including Peterson Island and Whidden Key, protects an exceptional area of productive intertidal and estuarine habitat along the Gulf.

Central Park Theme

Littered with seashells and shark teeth, the sandy shores of Stump Pass Beach State Park provide a haven for both coastal wildlife and humans seeking the outdoors.

Internal Classification

Stump Pass Beach State Park is classified as a State Park in the DRP unit classification system. 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.

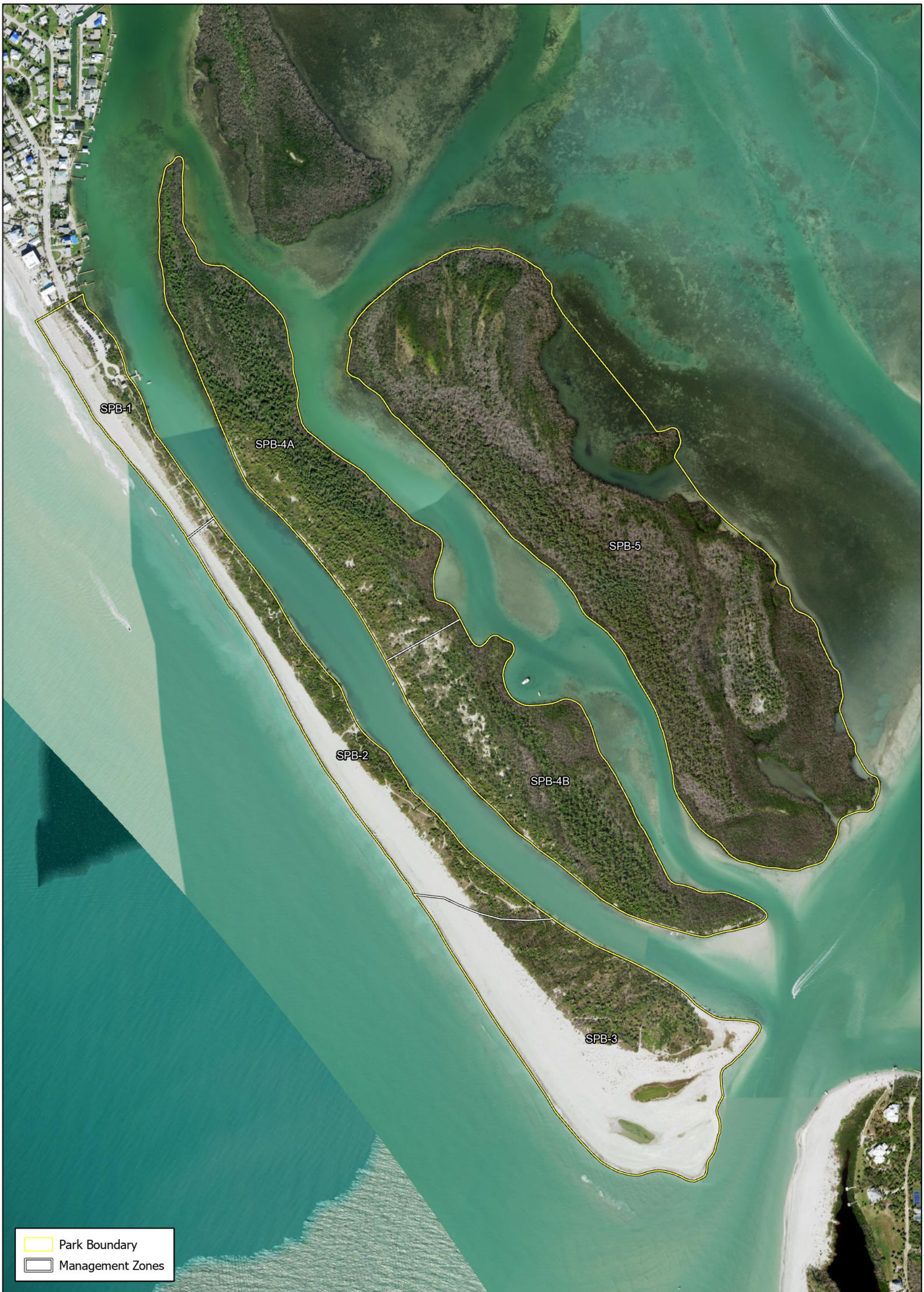
OTHER DESIGNATIONS

The unit is not within an Area of Critical State Concern as defined in section 380.05, F.S., and it is not under study for such designation. The park is a component of the Florida Greenways and Trails System, administered by the DRP's Office of Greenways and Trails.

All waters within the park have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302, Florida Administrative Code (F.A.C.). Surface waters in this park are also classified as Class III waters (suitable for fish consumption and recreation) by DEP. The park is adjacent to Lemon Bay Aquatic Preserve as designated under the Florida Aquatic Preserve Act of 1975 (section 258.35, F.S.).

PARK ACCOMPLISHMENTS

- The park delineates, monitors and protects nearly four acres of shorebird nesting areas annually.
- The 2018 sea turtle nesting season recorded 249 loggerhead nests, two green turtle nests and one Kemp's ridley nest. The 2019 sea turtle nesting season recorded 162 loggerhead turtle nests, two green turtle nests and one Kemp's ridley nest.
- Visitor management strategies provide for the restoration and protection of beach dune, maritime hammock, coastal strand, mangrove swamp and submerged estuarine habitats.



STUMP PASS BEACH STATE PARK
Management Zones

N

0 500 Feet 1,000

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RESOURCE MANAGEMENT COMPONENT

Stump Pass Beach State Park Management Zones		
Management Zone	**Acreage**	**Managed with Prescribed Fire**
SPB-01	21.50	No
SPB-02	10.87	No
SPB-03	26.72	No
SPB-04A	34.71	No
SPB-04B	31.97	No
SPB-05	100.82	No

TOPOGRAPHY

Stump Pass Beach State Park is located in the Peace River District, specifically the Peninsular Coastal Lowlands Province. Stump Pass Beach is located at the southernmost portion of Manasota Key, and the park boundary includes the neighboring barrier islands, Peterson Island and Whidden Key to the east. These islands are characterized by low relief barrier island topography typical along the west coast of Florida. The low-energy coastline, with a relatively shallow, sloping bottom prevents the buildup of large waves. Consequently, the dune system at Stump Pass Beach is not well developed. The islands of Stump Pass Beach rest on a foundation of Pleistocene aged limestone. The upper strata of this limestone belongs to a series of sedimentary deposits called the Anastasia Formation, made up of coquinoid limestone, sand and clay.

The topography of the southern Gulf shoreline of Manasota Key has changed dramatically due to erosion. The Stump Pass inlet located at the south end of Manasota Key connects the Gulf and Lemon Bay, separating Manasota Key from Knight Island to the south. The southerly transport of sand along the Gulf shoreline continuously forms a spit that extends southward from the tip of Manasota Key into the inlet. Prior to 2003, the sand spit connected briefly to Knight Island and was subsequently severed from park lands during a maintenance dredge of the inlet that year. Sand dredged from the Stump Pass channel and adjacent ebb shoal areas is placed along the Manasota Key beach and locations south of Stump Pass on Knight Island to partially offset erosion impacts.

Anthropological effects resulting from geo-tubes and maintenance dredge and beach renourishment projects have also dramatically changed the shoreline features of this island. The morphology of the barrier islands results from the interplay between these natural and manmade coastal forces (Randazzo and Jones 1997). The island is highly susceptible to being breached and flooded during hurricanes (Charlotte Harbor National Estuary Program 1998). Breaches of the island following tropical storm events have been documented through the years with subsequent changes to the pass location. During Hurricane Milton in 2024, the island breached approximately 500 feet south of the park restroom. The location of the breach coincided with an area of the former inland trail where vegetation was absent and recreational boaters frequently landed on the bay side and crossed over to the beach.

The original location of the pass prior to the hurricane of 1910 was 1.3 miles north of the current position of Stump Pass. Factors such as low topography and narrow island width combine to make the barrier island most susceptible to overwash and possible breakthrough in a major storm or hurricane (Reynolds 1976). Waves are driven ashore by winds that come predominantly from the west and northwest (University of Florida 1972).

Stump Pass was a natural inlet until a navigation channel was first dredged in 1980 (DEP Strategic Beach Management Plan 2008). Storms of record have relocated the pass at this locale, and to the north as well as the south, for a considerable distance (Reynolds 1976).

SOILS

The soils of the barrier islands of Southwest Florida are relatively young, lacking well-developed horizons. The beach soil types are composed predominately of fine quartz sand and calcareous shell material deposited by wind and wave action. The proportion of sand to shell in coastal soils varies. Most are mixtures of shells, shell fragments and fine sand; however, pure sediments of both shell material and sand are common. Little organic matter occurs in these young, sandy soils (Reynolds, 1976).

In a 1984 soil survey of Charlotte County, three types are identified (see Soils Map) within the park boundaries: Canaveral Fine Sand, Kesson Fine Sand, and a type known simply as "Beaches." Complete soil descriptions are contained in the Southwest District Soils Descriptions appendix. Several soil samples were taken during a study of the park in 1976. All the samples were of the Canaveral Series, a sandy soil mixed with shell fragments and little organic material. The texture ranged from fine sand to coarse sand; the shell particles were stratified or homogeneously mixed through the soil. The Canaveral Series is mildly alkaline and moderately well drained, although drainage is limited by the shallow water table.

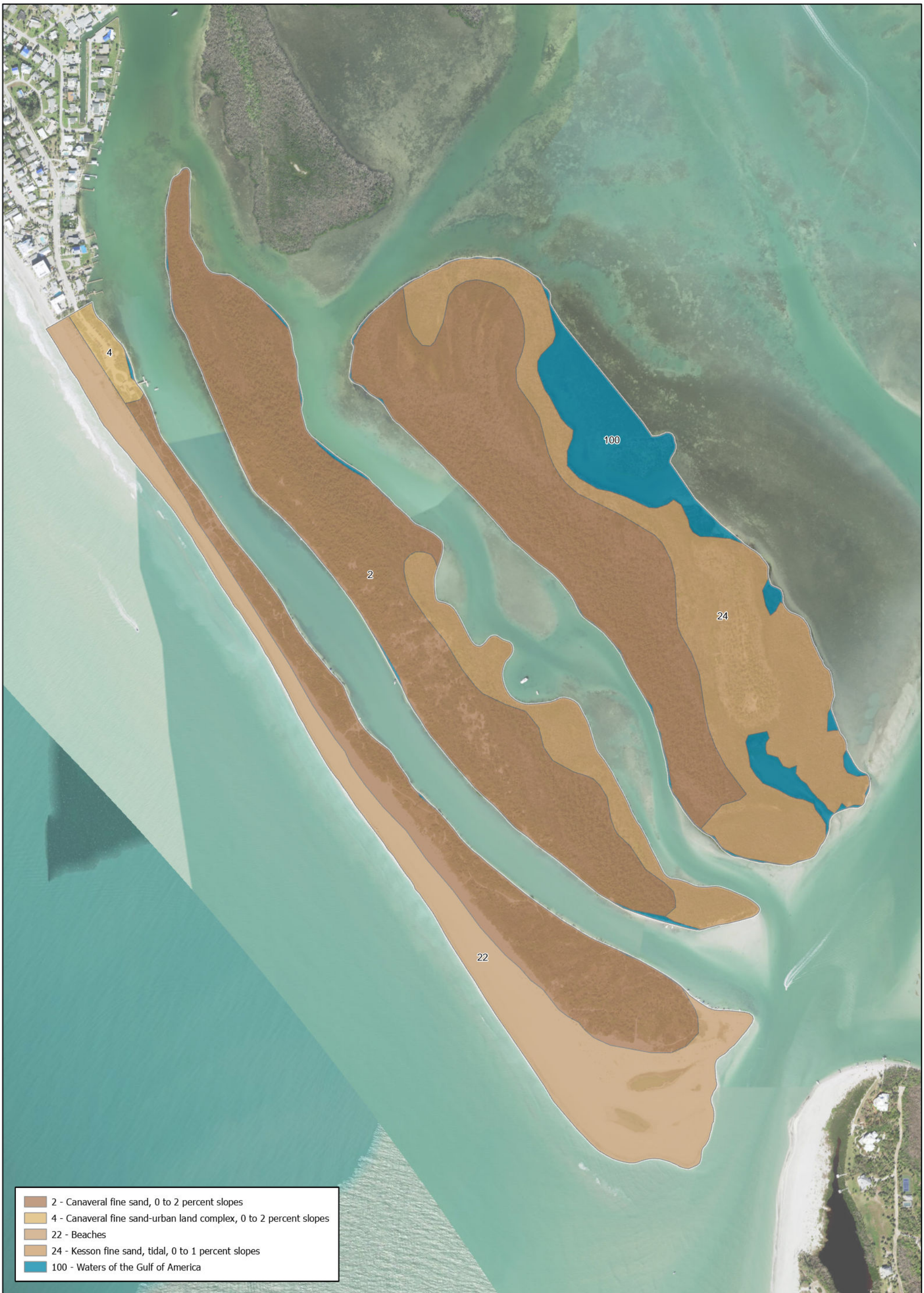
Two types of the Canaveral Series were found. The Canaveral Series (Low) has a seasonally high water table within 10 inches of the surface, while the Canaveral Series (High) has a seasonally high water table from 10 to 40 inches deep. The boundaries of the Canaveral Series (Low) were found to be the same as the boundaries of those plant communities that are tolerant of excessively wet or flooded conditions.

The boundaries of the Canaveral Series (High) were the same as the vegetation communities that cannot withstand the flooding or saline conditions of the Canaveral Series (Low) in this area. The communities found in association with the Canaveral Series (High) were the unconsolidated substrate, maritime hammock, beach dune, coastal strand and altered landscape type areas. Definite ecotones marked the boundaries between the Canaveral Series (Low) and Canaveral Series (High) soils. This was particularly evident in those areas where old shorelines had formed alternating lines of ridges and swales. The Canaveral Series (Low) occurred in those areas low in elevation that were subject to tidal flooding or accumulation of rainwater runoff during the rainy season. The Canaveral Series (High) occurred in those areas of higher elevation, above the reach of the tides and where water could not accumulate during heavy rains (Reynolds 1976).

HYDROLOGY

Stump Pass Beach State Park lies within the Southern Coastal Watershed of the Southwest Florida Water Management District. The park is bordered by the Gulf of America to the west, Lemon Bay to the east and a navigable mechanically maintained tidal inlet that is known as Stump Pass to the south. All waters within the park boundary are designated as an Outstanding Florida Waterway and Class II surface waters by DEP and are managed by DEP’s Lemon Bay Aquatic Preserve.

The only natural source of freshwater in the park is rainfall. The rain rapidly percolates through the sandy soil into the Gulf of America and there is no surface drainage of freshwater. Presently, all water for park use is piped from the mainland. It is not anticipated that there will ever be any withdrawals of ground water in the state park.



STUMP PASS BEACH STATE PARK
Soils

N

0 500 1,000 Feet

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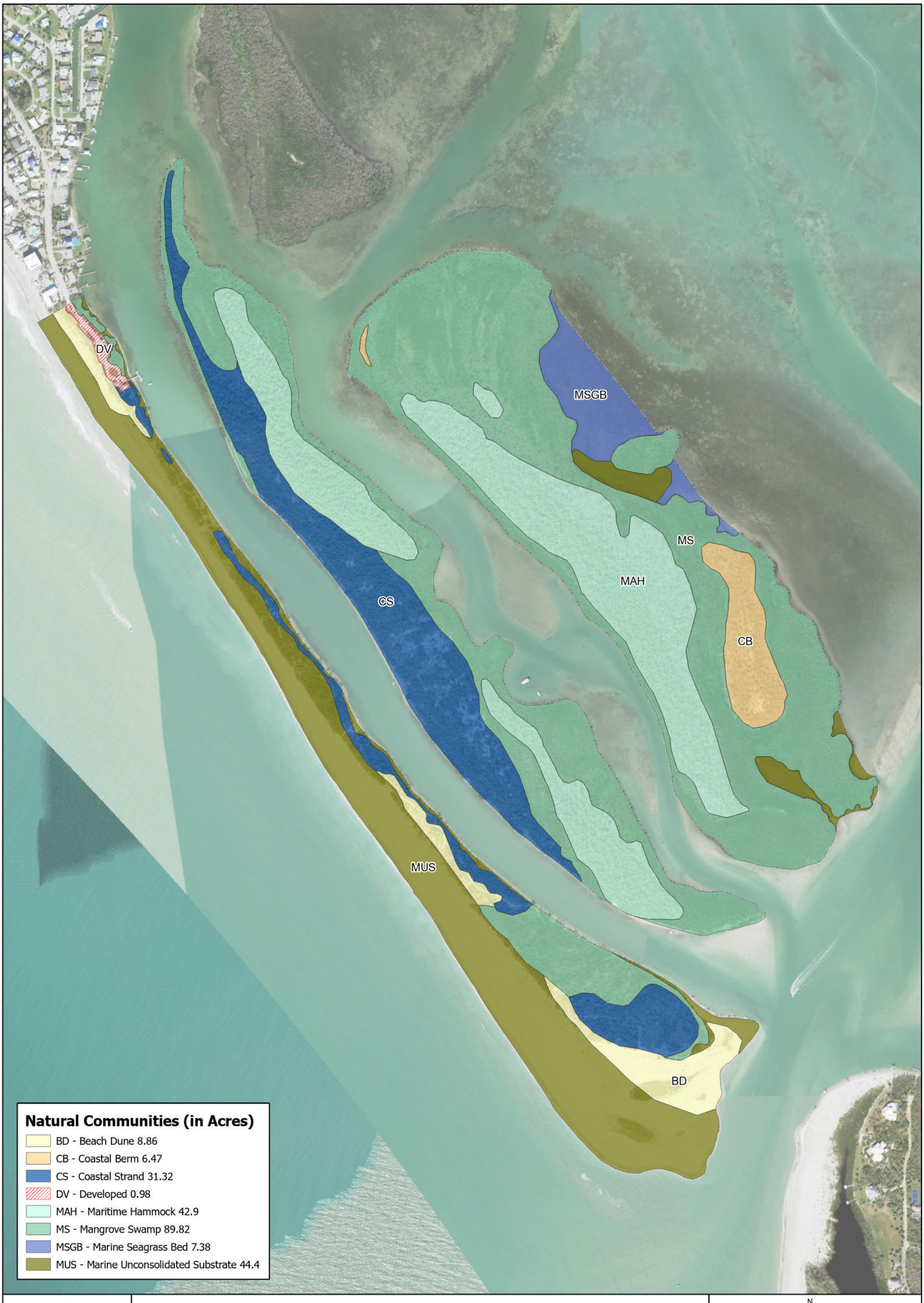

STUMP PASS BEACH STATE PARK
Natural Communities - Existing Conditions

N

0 500 Feet 1,000

Sources: ESRI; Florida Department of Environmental Protection
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At the southern end of the park, coastal interdunal swales that have formed on the beach due to sand accretion tend to hold saltwater perennially providing resting and foraging habitat for a variety of shorebirds, seabirds and wading birds. These swales are breached by tidal events allowing for the occasional flushing of water within. The swales have changed in both shape and location following storm events or maintenance dredging activities along the pass.

Coastal Erosion/Sedimentation

The shoreline along Stump Pass Beach State Park is considered critically eroded (DEP 2024). The southerly transport of sand along the Gulf shoreline continuously forms a spit that extends southward from the tip of Manasota Key into the inlet. In 1910, a hurricane relocated the inlet's historical location, near the park's northern boundary, 6,500 feet south near its current location. In 1944 and 1947, consecutive hurricanes breached the south end of the key causing an island formed by the breaching to drift southward and connect to Knight Island while Manasota Key continued to expand southward.

Stump Pass has a history of dredging activity to maintain navigable channel depths providing access between Lemon Bay and the Gulf, and to also provide a source of sand for adjacent eroding beach areas. In 1980, the first Stump Pass dredge severed an elongated peninsular spit from southern Manasota Key to improve navigation, while groins placed along the beach north of the park's northern boundary caused significant beach erosion to the north end of the park. Approximately 109,000 cubic yards of beach quality sand dredged from this 1980 event was spread along the park's northern beach to compensate for the groin-induced erosion. As a result, an immediate accretion of the peninsular spit reformed in the dredge cut. By the late 1980s, the severed peninsular spit had migrated southward and connected to Knight Island with the peninsular spit reforming in the same shoreline configuration prior to the initial 1980 dredging.

In 1995, dredging west of the inlet's pass continued to restore beaches on Knight Island. In 1998, Stump Pass was dredged along its existing southward channel meander to help maintain navigation and provide interim beach nourishment to Knight Island.

A Stump Pass Inlet Management Study (IMS) was completed in 2000. This study compared the dredging of the 1998 meander channel versus the 1980 permitted channel. The IMS recommended to dredge and maintain the 1980 template for navigation, again through the peninsular spit, to "backpass" about 100,000 cubic yards of sand to Manasota Key beach for offsetting expected inlet effects and to "bypass" approximately 400,000 cubic yards of sand to nourish Knight Island beach segments. The IMS also explored options for stabilizing Stump Pass and Manasota Key beach by using coastal structures such as a terminal groin at the south end of the park or cluster pile groins near the center of the park beach.

In 2003, Permit No. 0194790-001-JC was issued for the recommended dredging. Backpassing of sand to the north end of the park beach and creation of a four-acre shorebird mitigation site was required by this permit. Additional compensation to the park was required through the terms of an easement (No. 40072) which allowed the implementation of the project. The first dredging under this permit and easement was completed in 2003. Despite the placement of about 100,000 cubic yards of sand on the park beach, the southern Gulf beach of the park eroded dramatically, losing several hundred feet of width within months. This erosion and resulting deposition of sand into the navigation channel of Stump Pass was exacerbated by hurricanes in 2004 and 2005.

In 2005 and 2006, the permitted project was expanded to install six low-profile geotextile groins along the central beach area of the park. This was an "experimental" project intended to provide some beach stabilization consistent with the cluster pile groin concept that was considered in the IMS. Unfortunately, though the experimental groins impounded sand to their north, they reportedly further

increased the erosion with significant loss of coastal strand and the shorebird mitigation site at the south end of the park. The permitted template was dredged again in 2006 with back passing of 148,000 cubic yards to Manasota Key, and the south beach retreated further. The groins were removed in early 2009 due to these documented adverse impacts. In a project completed in 2011, the permitted template was dredged once again as the Post-Storm Recovery and Maintenance Project (Tropical Storm Faye), and a total of 156,000 cubic yards was placed on Manasota Key beach. This was expected to be the last project to be implemented under the 2003 permit.

Since 1980, dredging activity associated with the maintenance of Stump Pass has generally resulted in increased erosion of the adjacent shoreline. In 2017, a permeable or "leaky" rock groin structure was installed at the southern end of the park to address this erosion. The intent of the groin was to attenuate the natural southerly movement of sand. As of 2026, this structure, along with beach nourishment, appeared to be working as park beaches to the north experienced several hundred feet of accretion.

Storm surge from Hurricanes Helene and Milton in 2024 resulted in significant displacement of sand from the beach into the park's main day use area on the Manasota Key parcel. Sand depth in the parking areas and roadways was up to 5 feet. Substantial vegetation loss occurred along the entire length of the island with increased sedimentation occurring along the east side of the island. Hurricane Milton's storm surge opened a new pass approximately 500 feet wide due south of the main day use area. This new pass, known as Milton Pass, is relatively shallow with a narrow channel on the south side that is deep enough for recreational boats to navigate. Accretion from north side of the pass is evident with more than 400 feet of sandy shoreline building south in a year, narrowing the pass to approximately 100 feet in width. Eventually, the pass will naturally fill in due to accretion from the north to south longshore sediment transport process along the west coast of Florida.

Interagency Partnerships

Objective: Continue to partner with federal, state and local agencies with active monitoring of erosion and accretion cycles and assessment of beach and shoreline conditions following natural disasters.

Action:

- Continue stakeholder engagement with federal, state and local agencies and researchers in monitoring erosion and planning and implementation of coastal projects that impact the park.

DRP will continue to coordinate with U.S. Army Corps of Engineers (USACE), Charlotte County, DEP and others regarding the design and planning phases of any proposed maintenance dredge activities adjacent to the park and beach renourishment permits within the park to maintain a high-quality beach system. Charlotte County currently holds multi-year permits from DEP and USACE for maintenance dredging of Stump Pass and sand placement within the park under the Charlotte County Erosion Control Project. Imperiled species monitoring and other permit conditions for sand placement activities in the park are completed by Charlotte County staff and contractors.

NATURAL COMMUNITIES

Stump Pass Beach State Park contains five distinct natural communities and one altered landcover type, developed areas (see Natural Communities Map). A list of known plants and animals occurring in the park is included in the Southwest District Species Matrix appendix.

Beach Dune

Beach dunes are typically wind-deposited ridges of sand that are sparsely to densely vegetated with salt-tolerant pioneer species. Though adapted to a harsh environment, dune plants are very vulnerable to human disturbance. The beach dune is usually a very dynamic community due to the unstable nature of active dune fields. Once pioneer vegetation stabilizes a beach dune community, succession to more enduring communities may occur, particularly in areas with long-term shoreline accretion.

This community at Stump Pass Beach is highly variable with the north end of the park (management zone SPB-01) having wide, low elevation dunes, the middle portion of the park (management zone SPB-02) containing a disconnected narrow band of dunes, and the south end of the park (management zone SPB-03) returning to wide, low elevation dunes stretched across the accreted sand.

The dominant dune vegetation in all areas of the park consists of species such as sea oats (*Uniola paniculata*) and railroad vine (*Ipomea pes-caprae* spp. *brasiliensis*). Other species commonly found in this community at Stump Pass include coastal sea rocket (*Cakile lanceolata*), seacoast marshelder (*Iva imbricata*), shoreline seapurslane (*Sesuvium portulacastrum*) and west coast dune sunflower (*Helianthus debilis* subsp. *vestitus*). Shrubs such as the state threatened inkberry (*Scaevola plumieri*) are common, especially in management zone SPB-03.

Imperiled animal species commonly found in the beach dune community include gopher tortoises (*Gopherus polyphemus*) and nesting sea turtles including the federally threatened loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) sea turtles and federally endangered Kemp's ridley (*Lepidochelys kempii*) sea turtles. State-listed least terns (*Sternula antillarum*) and black skimmers (*Rhynchops niger*) have previously been documented nesting in this community, as well as Wilson's plovers (*Charadrius wilsonia*). A large portion of the beach dune community along the south end of the island is pre-posted annually to provide undisturbed habitat for nesting shorebirds and seabirds.

The beach dune community at Stump Pass Beach State Park is currently in poor condition. Hurricanes Helene and Milton in 2024 played a significant role in the destructive erosion and sedimentation of the beach dune community throughout the park, and restorative efforts will be necessary moving forward. All beach dune locations in the park were covered by 2–3 feet of sand and will take time to naturally recover. Natural coastal erosion processes will continue to alter the beach dune community at the park, resulting in iterative acreage fluctuations. New beach dunes will continue to form as the communities shift with changing sea levels and increased erosion patterns.

Management of beach dune at Stump Pass Beach State Park focuses on imperiled species protection and monitoring, predator control, invasive plant survey and treatment efforts, protection from human disturbances and restoration following storm events. Areas of beach dune where birds have nested historically are pre-posted ahead of nesting season with boundary markers adjusted as needed to account for changes in historic usage and shoreline configuration. Sea turtle nests are posted for protection and monitored using the Florida Fish and Wildlife Conservation Commission (FWC) protocol throughout the breeding season. Park and DRP district staff monitor predation levels at the park and coordinate predator control efforts with the U.S. Department of Agriculture (USDA) for the protection of sea turtles and shorebirds.

All wrack and seaweed deposited naturally on the beach dune community should be left in place to allow for the addition of nutrients to the sandy soil of this community.

Invasive plants in the beach dune community are currently minimal and small enough to be hand-pulled without chemical application. This includes beach naupaka (*Scaevola taccada*), Brazilian pepper (*Schinus terebinthfolia*) and Australian pine saplings, all of which are present throughout the developing dune system in part due to the extensive seed bank present pre-Hurricane Milton or seeds that washed in with the storm surge. DRP staff will continue periodic surveys for rare plants and invasive plant infestations to catch new infestations early.

Additional dune restoration and/or revegetation will be necessary following erosion and sedimentation from Hurricanes Helene and Milton and potential future events. Plant materials for future dune restoration efforts should be sourced by ecoregion to preserve local genetic integrity, except where sufficient research suggests other strategies are appropriate for a given species. All new and existing dune walkovers should be designed in winding or zig-zagged patterns to prevent sand blowouts and avoid changing salt exposure for vegetative communities. Interpretive signs are generally effective in advising park visitors of the need to stay off the beach dunes; however, additional temporary post and roper barriers should be considered in areas where dune vegetation is recovering from significant disturbances or where new plantings have been installed.

Coastal Strand

Coastal strand at Stump Pass Beach State Park typically forms as a transition zone between beach dune and older maritime hammock communities. Coastal strand dunes contain deep, well drained sands that are generally quite stable but become susceptible to severe damage if the vegetation is significantly disturbed. This natural community is found on the Manasota Key parcel, the western portion of Peterson Island and much of Whidden Key. In addition to cabbage palms (*Sabal palmetto*), the coastal strand at Stump Pass contains tropical, salt tolerant species such as seagrape (*Cocoloba uvifera*), coco plum (*Chrysobalanus icaco*), myrsine (*Myrsine cubana*), beach creeper (*Eronodea littoralis*), buttonsage (*Lantana involucrata*), white indigoberry (*Randia aculeata*), snowberry (*Chiococca alba*), nickerbean (*Guilandina bonduc*), necklace pod (*Sophora tomentosa*), wax myrtle (*Myrica cerifera*) and numerous others. Imperiled species found within the coastal strand include state threatened species such as Florida mayten (*Tricerma phyllanthoides*), shellmound pricklypear (*Opuntia stricta*) and gopher tortoises.

Coastal strand is not considered a fire dependent community although it does receive prescribed fire for a variety of reasons including proximity to fire dependent communities. According to the Florida Natural Areas Inventory (FNAI), the natural fire frequency of coastal strand is unresolved (FNAI 2010). The coastal strand community varies in dominant species from temperate areas in north to central Florida, which contain dense saw palmetto (*Seronoa repens*) patches, to tropical areas such as Stump Pass Beach State Park dominated by seagrape. A range of four to 15 years has been estimated by DRP; however, variability outside this range may occur based on site specific conditions and management goals. Stump Pass Beach State Park does not contain any pyric communities and will not be managing the coastal strand at the park with prescribed fire.

The coastal strand at Stump Pass Beach State Park is in good condition except for the strand along the Manasota Key parcel, which was heavily impacted by sedimentation and vegetation loss during Hurricanes Helene and Milton in 2024 and is in poor condition. Vegetation along the Manasota Key parcel was buried with 3–4 feet of sand with the storm surge toppling large trees, and several hundred feet of vegetation was lost during the island breach from Hurricane Milton. The coastal strand on Peterson Island received storm surge, sedimentation along the western edge and anthropogenic debris impacts from the hurricanes, while Whidden Key received storm surge with some debris. Revegetation along the Manasota Key parcel with beach dune and coastal strand species may be necessary to restore areas of coastal strand that were heavily impacted by the sedimentation.

Management of coastal strand at Stump Pass Beach State Park largely focuses on invasive plant survey and treatment efforts and invasive animal removal. Invasive plants in the coastal strand are currently minimal and small enough to be uprooted by hand without chemical application. Australian pine and Brazilian pepper plants persist on the Manasota Key portion of Stump Pass Beach State Park but are readily tackled by staff as they are observed. DRP staff will continue periodic surveys for rare plants and invasive plant infestations to catch new infestations early.

Maritime Hammock

The maritime hammock at Stump Pass Beach State Park is the dominant plant community on Peterson Island and Whidden Key. While Stump Pass Beach State Park lacks the live oak (*Quercus virginica*) commonly found in maritime hammocks throughout the state, other tropical hardwood species such as seagrapes, Jamaican capertree (*Quadrella jamaicensis*) and catclaw blackbead (*Pithecellobium unguis-cati*) and strangler fig (*Ficus aurea*) merge with cabbage palms (*Sabal palmetto*) to form a closed canopy. Maritime hammock can be found on both Peterson Island and on the western portion of Whidden Key directly behind the narrow mangrove fringe. The most abundant native canopy species on both islands are cabbage palms and seagrapes. Where the maritime hammock has matured, white stopper is an abundant understory tree, with other species being much reduced and with little foliage springing from the mat of leaves covering the ground. However, much of the hammock along the western side of Peterson Island is in a transitional stage from an earlier sere of coastal strand vegetation; it is dense with large shrubs like myrsine and wax myrtle. The well-developed hammocks on these islands mark the uplands that have been continuously in existence since at least 1884. The blackened trunks of cabbage palm trees in the hammock on Peterson Island are evidence of a past fire. A fire was reported in 1974 (Reynolds 1976).

The community is in good condition despite the presence of Brazilian pepper. Multiple invasive plant treatments funded by DRP and FWC have taken place in the uplands on Peterson Island and have successfully reduced the coverage of Brazilian pepper. Whidden Key has also undergone a full island invasive plant treatment project tackling dense patches of Brazilian pepper and Australian pine, which was considered a monoculture on a disjointed segment of uplands on the southwest side of Whidden Key.

Management of maritime hammock at Stump Pass Beach State Park largely focuses on rare plant surveys and invasive plant survey and treatment efforts. DRP staff will continue periodic surveys for rare plants and invasive plant infestations to catch new infestations early.

Mangrove Swamp

The mangrove swamp community at Stump Pass Beach State Park includes narrow fringes of mangroves along the east side of the Manasota Key parcel and the west sides of Perterson Island and Whidden Key, with dense patches on the eastern sides of Whidden Key and Peterson Island. Dominant overstory includes red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*) and buttonwood in differentiated, monospecific zones based on degrees of tidal influence, salinity levels and type of substrate. Soils found in mangrove swamps are typically anaerobic and saturated with brackish water at all times, becoming inundated at high tide.

Red mangroves dominate the deepest water, followed by black mangroves in the intermediate zone and white mangroves and buttonwood trees in the highest, least tidally influenced zone. Mangroves at Stump Pass Beach State Park usually occur with little to no understory in the lower tidal zones;

however, in upper tidal reaches, may have a shrub groundcover including seaside oxeye, gray nicker, coinvine and herbaceous species such as saltwort, perennial glasswort (*Sarcocornia perennis*) and giant leather fern (*Acrostichum danaeifolium*). Imperiled plant species present in the mangrove swamp at Stump Pass Beach State Park include state threatened golden leather fern (*Acrostichum aureum*). Mangrove swamps provide important habitat for birds, juvenile fish and crustaceans, and play an important role in the cycling of nutrients and breakdown of detritus.

The mangrove swamp community at Stump Pass Beach State Park is in fair to poor condition. The mangrove swamp community on the Manasota Key parcel is in poor condition. The community experienced some dieback from sedimentation during Hurricane Ian in 2022, and has now been severely impacted by sedimentation, toppling and washouts from Hurricanes Helene and Milton in 2024. The mangrove swamp communities on Peterson Island and Whidden Key are both in fair condition. Both islands received some dieback from Hurricane Ian, and additional damage sustained during Hurricanes Helene and Milton includes anthropogenic debris, defoliation from wind and sedimentation along the western side of Peterson Island, which may lead to future dieback.

Management of the mangrove swamp community at Stump Pass Beach State Park largely focuses on invasive plant survey and treatment efforts. Additional revegetation efforts may be necessary along the Manasota Key parcel to replace vegetation lost during hurricanes. DRP staff will continue periodic surveys for rare plants and invasive plant infestations to catch new infestations early.

Marine Unconsolidated Substrate

Marine unconsolidated substrate at Stump Pass Beach State Park consists of expansive unvegetated areas of sand beach along the western and southern shorelines of the Manasota Key parcel fronting Stump Pass. The park has approximately 6,900 linear feet of beachfront. Shark teeth and skeletal fragments from an ancient geological time, unearthed by waves eroding the mainland, are commonly found along the beach. At the southern end of the park, the shoreline curves around to the east where it is subject to the significant flow and hydrodynamics of Stump Pass.

The sandy beaches at Stump Pass Beach State Park provide important nesting habitat for imperiled sea turtles, primarily the loggerhead, green and Kemp's ridley sea turtles. In 2014, the marine unconsolidated substrate community along the west side of the island and along the south pass received a designation as critical habitat for the northwest Atlantic Ocean distinct population segment of the loggerhead sea turtle (Federal Register 2014). The marine unconsolidated substrate community also provides important habitat for various avian species, several of which nest on the higher portions of the beach. Most of these species use the beaches as resting and feeding areas, and many do not tolerate disturbance. Federally protected red knots (*Calidris canutus rufa*) and piping plovers (*Charadrius melodus*) are frequent visitors in the winter months.

All-terrain vehicles and utility vehicles are used on the beaches by park staff to access the southern end of the park, with driving limited to those lower beach areas near or below the high-tide line not utilized by shorebirds and sea turtles in accordance with FWC best management practices. In this community, wrack and seaweed is typically left in place to provide foraging opportunities for shorebirds and additional nutrients to the sandy soil. Situations where hand removal or hand raking of wrack might be necessary include large fish kill events typically associated with harmful algal blooms.

The marine unconsolidated substrate at the park is currently in good condition. Maintenance dredge events in Stump Pass conducted under permits for the Charlotte County Erosion Control Project allow for the renourishment of sand along the beach with sand dredged from the Pass. In 2003, sand was placed near the bathhouse and parking area to create a dune feature to offer additional protection from

storms to the infrastructure of the park property. In 2006, 2011, 2017 and 2021, sand from dredging the pass was placed along the beach to ameliorate erosion. In 2017, a permeable T-groin was also installed in the marine unconsolidated substrate at the south end of the park to reduce the quantity of sand naturally transported towards the pass and increase the sand available to the north of the structure. Shifts in this community naturally occur with sand accreting and eroding along the beach; however, major storm events have disrupted this community in the past with island wash-overs from storm surge creating new pass openings along the island. The most recent event occurred in 2024 during Hurricane Milton.

Management of marine unconsolidated substrate at Stump Pass Beach State Park largely focuses on imperiled species monitoring efforts, predator control, minimizing habitat disturbances, and coordinating with external agency partners regarding shoreline erosion sand placement activities. Natural resource protection should be balanced with recreational use by posting marine turtle nests in accordance with FWC permits and guidelines, increasing signage prohibiting pets on the beach and pre-posting temporary shorebird nesting and protection areas at the south end of the island and any other location where shorebird nests are identified. The park will continue to work with Charlotte County staff and contractors for the protection of imperiled species at the park. DRP district staff will continue to coordinate with park staff and Charlotte County staff regarding ongoing predator control needs at Stump Pass Beach. Driving on this natural community should be limited to necessary management activities and in accordance with FWC best management practices to avoid conflicts with beach nesting species.

Natural coastal erosion processes typical of barrier islands will constantly alter the marine unconsolidated substrate community, resulting in iterative acreage fluctuations. Future beach renourishment activities should continue in conjunction with Charlotte County dredge projects in Stump Pass to combat erosion and increase beach width and acreage for the benefit of imperiled species and recreational usage.

Altered Land Cover Types

Developed

The developed areas at Stump Pass Beach State Park consist of natural communities such as coastal strand that have been replaced by structures or permanently cleared areas. Developed areas at Stump Pass Beach State Park include an entrance drive loop, parking area and restroom facility with maintenance storage below. All developed areas are located at the northern end of the park on the Manasota Key portion.

Management of developed areas at Stump Pass Beach State Park largely focuses on invasive plant survey and treatment efforts. DRP staff will continue periodic surveys for rare plants and invasive plant infestations to catch new infestations early. The developed areas within the park will be managed to minimize the effect of the developed areas on adjacent natural areas.

Proposed landscaping within developed areas of the park should include only native plant materials sourced by ecoregion to preserve local genetic integrity, except where sufficient research suggests other strategies are appropriate for a given species. Native plants that have been documented within the county but have not been historically documented in the park should be avoided. Additionally, special care should be taken with native plant species that are known to hybridize between ecoregions. For example, the east coast dune sunflower (*Helianthus debilis subsp. debilis*) readily hybridizes with the west coast variety, with the latter variety being the only subspecies appropriate to plant in parks along

the west coast of Florida. Proposed planting or landscaping efforts must be approved by District staff prior to installation on site.

Restoration

Objective: Conduct habitat/natural community restoration activities on up to three acres of beach dune.

Actions:

- Revegetate beach dune communities throughout the park with native plant species.
- Continue to partner with Charlotte County on the ongoing Charlotte County Erosion Control Project including maintenance dredging and beach renourishment in the park.
- Install temporary post and rope barriers as needed to protect newly planted dunes from disturbance.

The beach dune and marine unconsolidated substrate communities at Stump Pass Beach State Park were severely affected by Hurricane Ian in 2022 and Hurricanes Helene and Milton in 2024. During Hurricane Milton, the dune system at the park was flattened by storm surge with sand shifted landward into developed areas and dune vegetation buried beneath several feet of sand. Dune vegetative plantings are needed in all coastal locations of the park to help rebuild the dune habitat for imperiled species such as gopher tortoises and sea turtles. Additional dune plantings at the park may become necessary following an increase in shoreline erosion or future storm events. Native plant species that should be considered for dune restorative plantings include sea oats, bitter panicgrass, railroad vine, seacoast marshelder, shoreline seapurslane and west coast dune sunflower. Imperiled plant species such as inkberry should also be considered for in-house propagation and planting to restore the large populations that previously existed at the park. Additional species that could be considered for more landward dune restoration planting locations include beach creeper and seagrapes.

Natural coastal erosion processes typical of barrier islands will constantly alter the beach dune and marine unconsolidated substrate communities, resulting in iterative acreage fluctuations. New beach dunes will continue to form as the communities shift with changing sea levels and increased erosion patterns. Additional dune restoration and/or revegetation events may be necessary following erosional events. Plant materials for future dune restoration efforts should be sourced by ecoregion, except where sufficient research suggests other strategies are appropriate. All new dune walkovers should be designed in winding or zig-zagged patterns to prevent sand blowouts and avoid changing salt exposure for vegetative communities. Interpretation is generally effective in advising visitors of the need to keep off the beach dunes and should be added as needed throughout the park to protect dune vegetation. In some situations, obtaining a Coastal Construction Control Line permit from DEP for the installation of post and rope fences will be necessary to protect emerging or planted dune vegetation from foot traffic.

IMPERILED SPECIES

Stump Pass Beach State Park has a rich diversity of plant and animal life, including a variety of imperiled species that utilize the park for breeding, nesting, resting and feeding grounds. Although the impetus of natural systems management as practiced by DRP is management of natural communities and not

individual species, certain species are of particular concern and importance and merit special management attention. At the park, this includes marine turtles and several shorebird species.

Imperiled marine turtles frequently nest on Stump Pass Beach, including the federally endangered Kemp's ridley sea turtle, which have deposited nine confirmed nests at the park since 2009. Federally threatened loggerhead sea turtles are the most common with 189 nests in 2022, 287 nests in 2023 and 273 in 2024 at the park. Nesting declined in 2025 with only 70 loggerhead nests laid in the park. The decline is most likely attributed to the changes in the beach topography from Hurricane Milton along with sand placement activities along the south island, which completed after the start of nesting season. Federally threatened green sea turtles lay between one and five nests at Stump Pass Beach each year.

Stump Pass Beach State Park participates in the Statewide Nesting Beach Survey program involving daily sea turtle nesting surveys from April 15 to October 31 with a yearly nesting summary provided to FWC's Fish and Wildlife Research Institute. Charlotte County contractors currently conduct sea turtle nest surveys at Stump Pass Beach in conjunction with DEP permit conditions related to maintenance dredge and erosion mitigation projects at the park. All marine turtle activities conducted at the state park are regulated under a Marine Turtle Permit issued by FWC. The permit allows staff, volunteers or contractors to conduct nesting surveys, conduct stranding and salvage activities, relocate nests for conservation purposes, outfit nests with self-releasing screens/cages, conduct hatch success evaluations and maintain and display preserved specimens. Nests are posted and monitored daily until hatch with information about tidal inundation, erosion or depredation recorded. Depredation by nuisance animals, such as raccoons (*Procyon lotor*), armadillos (*Dasypus novemcinctus*) and coyotes (*Canis latrans*), has previously been a significant issue for nesting sea turtles on these islands. Protective screening of nests involves placing a 4x4-foot self-releasing screens over the nests deter depredation in accordance with the Marine Turtle Conservation Handbook (2016). Screens are secured in place with four tent stakes and buried 2–3 inches below sand surface. Additional nuisance animal removal activities have previously been contracted for the protection of incubating sea turtle nests when depredation levels are high. Nests are excavated three days after hatching occurs or 70 days from the date when eggs are first deposited.

No structural lighting exists in the parking areas or restroom area at Stump Pass Beach. Plans for new construction or updates to existing structures should not include structural lighting since the park is closed to the public at night. If lighting is necessary, lights will need to conform to FWC's Marine Turtle Lighting Guidelines designed to prevent adult and hatchling disorientations. Disorientation events attributed to artificial light sources and area sky-glow near the park are reported to FWC and Charlotte County.

Nesting seabirds and shorebirds are also monitored by Charlotte County contractors at Stump Pass Beach in accordance with DEP permit conditions related to the maintenance dredge and renourishment projects at the park. These surveys are completed in accordance with FWC guidelines and DRP Shorebird and Seabird Management standards. This includes completing monthly shorebird focal species nesting surveys during the FWC Florida Shorebird Database windows (March through August). Bird species known to nest at Stump Pass include least terns (*Sternula antillarum*), Wilson's plovers (*Charadrius wilsonia*) and black skimmers (*Rynchops niger*).

Exclusion of humans and their pets from least tern and black skimmer colonies during the pre-nesting and nesting season is essential for successful nesting. Historical nesting sites at the south end of the park are posted by Charlotte County and park staff pre-season to provide this disturbance free zone. The area posted generally encompasses two to four acres on the south end of the island and includes areas where

shorebirds and seabirds are frequently observed resting or foraging, such as the interdunal swales that continuously hold water. Solitary nesters like Wilson's plovers are vulnerable to disturbance pre-nesting.

Staff continue to follow the guidelines and recommendations provided in the DRP Resource Management Standard, "Shorebird and Seabird Management," for the protection and management of least terns and other imperiled shorebird, seabird and wading bird species throughout the park, but the park is heavily used by visitors in areas such as the sandy southern end. Management actions by park staff, volunteers and FWC work to minimize visitor impacts and preserve areas that are significant to nesting shorebirds. The posted and roped areas provide sufficient buffering for nesting and resting birds. These areas are monitored for changes in nesting and resting activity and ropes and signage are adjusted accordingly. Timing, size and enforcement of the closed areas for beach nesting shorebirds and sea turtles are critical to their effectiveness. Posting of significant wildlife habitat in advance of seasonal occupation (pre-posting) can make the difference between occupied and unused nesting sites. Providing sufficient buffer to ensure that disturbance does not result in abandonment is critical. In areas of intense recreational pressure outreach and enforcement need to accompany any posting effort. DRP will continue to coordinate with FWC on enforcement and protection measures for critical shorebird and sea turtle nesting areas.

Stump Pass Beach State Park is an important resting and feeding area for migrating and wintering shorebirds. Species currently experiencing population declines such as the red knot and piping plover will be monitored within the state park. Stump Pass Beach State Park participates in FWC's winter shorebird survey to accurately capture how many birds are using Florida beaches for wintering and resting. The park also participates in the International Piping Plover census coordinated by United States Geological Survey every five years. The last census was conducted in 2016. When important resting and feeding areas are identified at these parks, proper signage and protection will be erected. DRP will continue to coordinate with Charlotte County staff for these two surveys.

Dogs brought by visitors to the park introduce significant and challenging impacts on shorebird nesting success. The south end of the park is heavily used by recreational boaters who occasionally bring their dogs with them to the island despite multiple signs posted that indicate pets are not allowed. Park staff regularly patrols the south end of the island, educating park visitors on state park policies regarding pets. The current approach to reducing this impact to shorebird nesting depends on multiple partners including law enforcement personnel. Rule 62D-2.014(13), F.A.C., includes enforceable language on the presence of pets in restricted areas. This code is enforced by FWC law enforcement at state parks.

Predation critically threatens many rare species (Hecht and Nickerson 1999), with the deleterious impacts of predation losses compounded by habitat loss (Reynolds and Tapper 1996). In Florida, nesting beaches have been substantially altered by urbanization and development, leaving few beaches isolated from development, thereby severely reducing the amount of habitat suitable for successful nesting by sea turtles and shorebirds (e.g., Rogers et al., 1995). At the same time, predators are found along many beaches where nesting could otherwise succeed. Nest predation can have severe impacts on reproductive success for sea turtles and shorebirds (Engeman et al. 2010).

Nuisance sea turtle and shorebird predators at Stump Pass Beach State Park includes coyotes, armadillos and racoons. Coyotes, armadillos and racoons can destroy multiple turtle nests in one night and have previously impacted the overall hatching success at Stump Pass Beach State Park. To combat depredation of sea turtle eggs, nesting surveyors place an FWC-approved self-releasing metal screen over the clutch of eggs to prevent the predators from reaching the egg clutch. Unfortunately, many of the nests are depredated overnight, before the surveyors arrive in the morning and have a chance to

place the screen on it. Charlotte County currently coordinates with USDA for trapping efforts ahead of sea turtle and shorebird nesting season in accordance with an agreement in place due to the maintenance dredge and sand placement activities that occur at the park.

The gopher tortoise population at Stump Pass Beach State Park is mainly located on the Manasota Key portion of the park. In 2002, gopher tortoises had been observed by district biologists in a small upland area on Whidden Key; however, there have been no recent sightings on that island. The gopher tortoise population on Manasota Key was significantly impacted by two hurricanes in 2024. The exact number of gopher tortoises at Stump Pass Beach State Park prior to the storms is unknown, but multiple active burrows had been observed throughout the beach dune adjacent to the entrance, parking area and restroom facility ahead of the storms. A gopher tortoise was observed in this area of the park post-Hurricane Helene, but no tortoises or tortoise tracks were observed following Hurricane Milton's landfall several weeks later.

Though no longer listed as imperiled, southern bald eagles are noted here because of the FWC guidelines for activities near eagle nests during the October 1 through May 15 nesting season (FWC 2008). Special precautions are taken near active bald eagle nests, including buffers, to prevent disturbance.

The waters surrounding Stump Pass Beach State Park provide important habitat for federally threatened Florida manatees (*Trichechus manatus latirostris*) and federally endangered smalltooth sawfish (*Pristis pectinata*). The Florida Manatee was placed on the federal Endangered Species list in 1973 and is also covered by the federal Marine Mammal Protection Act. Manatees have been observed within "Ski Alley" between the Manasota Key and Peterson Island portions of the park. However, FWC has not established a manatee protection zone within this area to reduce speeds and operation of boating vessels. Manatee boat collisions have not occurred in this area for some time.

A subspecies of beach mouse, *Peromyscus gossypinus restrictus* or Chadwick Beach cotton mouse, formerly existed on the southern end of Manasota Key, but after several comprehensive surveys it has been declared extinct by the U.S. Fish and Wildlife Service (USFWS) (Millsap and Holder 1989). It is believed to have been extirpated in the 1950s (Humphrey).

Imperiled plant species are managed through the upkeep of the park's natural communities. Four imperiled plant species are currently found at Stump Pass Beach State Park including state threatened Florida mayten (*Tricerma phyllanthoides*), state threatened inkberry, state threatened shellmound prickly pear and west coast dune sunflower. Shellmound pricklypear cacti statewide are under attack by an invasive non-native moth species known as the cactus moth (*Cactoblastis cactorum*), which is threatening the abundance of this pricklypear cacti species at state parks. The female moth lays her eggs at the base or tip of a spine in the form of a long chain known as an egg-stick. The larvae crawl down the egg stick onto the cladode where they burrow into the pad and destructively feed on the tissue, moving to other cladodes until the food source is exhausted or the larvae exit the plant to pupate (Habeck et al., 2016). Cactus moth feeding may be detected by the pile of frass on or beneath an infested pad. The Florida Department of Agriculture and Consumer Services (FDACS) Division of Plant Industry has submitted a petition to USDA for permission to release a biological control agent of the moth. The park will continue to monitor the shellmound pricklypear plants for regrowth post-cactus moth destruction.

In 2016, a final rule was issued by USFWS designating critical habitat for the federally protected prickly-apple cactus (USFWS 2016). This rule identifies potential habitat for the endangered cactus, along with areas to be surveyed and potential sites for relocation. All upland natural communities on the Manasota Key portion of the park and Peterson Island are designated as potential critical habitat to protect the prickly apple-cactus.

The table below contains a list of all known imperiled species within the park and identifies their status as defined by various entities. It also identifies the types of management actions that are currently being taken by DRP staff or others and identifies the current level of monitoring effort. The codes used under the column headings for management actions and monitoring level are defined following the table. Explanations for federal and state status as well as FNAI global and state rank are provided in the Southwest District FNAI Element Tracking Codes appendix.

Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
PLANTS						
West coast dune sunflower *Helianthus debilis subsp vestitus*				G5T2, S2	2	Tier 1
Shell-mound pricklypear *Opuntia stricta*			T	G4?, S3S4	2	Tier 1
Inkberry *Scaevola plumieri*			T		2	Tier 1
Florida mayten *Tricerma phyllanthoides*			T	G3G5, S3	2	Tier 1
FISH						
Smalltooth sawfish *Pristis pectinata*	FE	E		G1G3, S1S2	13	Tier 1
REPTILES						
Loggerhead sea turtle *Caretta caretta*	FT	T		G3, S3	8, 9, 10, 13	Tier 3
Green sea turtle *Chelonia mydas*	FT	T		G3, S2S3	8, 9, 10, 13	Tier 3
Kemp's ridley sea turtle *Lepidochelys kempii*	FE	E		G1, S1	8, 9, 10, 13	Tier 3
Gopher tortoise *Gopherus polyphemus*	ST			G3, S3	13	Tier 3
BIRDS						
Red knot *Calidris canutus rufa*	FT	T		G4T2, S2N	10, 13	Tier 3

Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
Piping plover *Charadrius melodus*	FT	T		G3, S2	10, 13	Tier 3
Snowy plover *Charadrius nivosus*	ST			G3, S1	8, 9, 10, 13	Tier 3
Wilson's plover *Charadrius wilsonia*				G5, S2	8, 9, 10, 13	Tier3
Little blue heron *Egretta caerulea*	ST			G5, S4	13	Tier 1
Tricolored heron *Egretta tricolor*	ST			G5, S4	13	Tier 1
Reddish egret *Egretta rufescens*	ST			G4, S2	13	Tier 1
Merlin *Falco columbarius*				G5, S2	13	Tier 1
Peregrine falcon *Falco peregrinus*				G4, S2	13	Tier 1
Southeastern American kestrel *Falco sparverius paulus*	ST			G5T4, S3	13	Tier 1
Magnificent frigatebird *Fregata magnificens*				G5, S1	13	Tier 1
American oystercatcher *Haematopus palliatus*	ST			G5, S2	13	Tier 4
Caspian tern *Hydroprogne caspia*				G5, S2	13	Tier 1
Wood stork *Mycteria americana*	FT, PDL	T		G4, S2	13	Tier 1
Sooty tern *Onychoprion fuscatus*				G5, S1	13	Tier 1
Painted bunting *Passerina ciris*				G5T3Q, S1S2	13	Tier 1
Roseate spoonbill *Platalea ajaja*	ST			G5, S2	13	Tier 1
American avocet *Recurvirostra americana*				G5, S2	13	Tier 1
Black skimmer *Rynchops niger*	ST			G5, G3	8, 9, 10, 13	Tier 3

Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
American redstart *Setophaga ruticilla*				G5, S2	13	Tier 1
Roseate tern *Sterna dougallii*	FT	T		G4, S1	13	Tier 2
Least tern *Sternula antillarum*	ST			G4, S3	8, 9, 10, 11,13	Tier 4
Sandwich tern *Thalasseus sandvicensis*				G5, S2	10, 13	Tier 2
MAMMALS						
Florida manatee *Trichechus manatus latirostris*	ST			G2G3T2T3, S2S3	10, 13	Tier 1

Management Actions:

1. Prescribed Fire
2. Invasive Plant Removal
3. Translocation/Augmentation
4. Hydrological Maintenance/Restoration
5. Nest Boxes/Artificial Cavities
6. Hardwood Control
7. Mechanical Treatment
8. Predator Control
9. Erosion Control
10. Protection from Visitor Impacts
11. Decoys (Shorebirds)
12. Vegetation Planting
13. Outreach/Education
14. Other

Monitoring Level:

Tier 1. Non-Targeted Observation/Documentation: includes documentation of species presence through casual/passive observation during routine park activities (i.e., not conducting species-specific searches). Documentation may be in the form of Wildlife Observation Forms or other district specific methods used to communicate observations.

Tier 2. Targeted Presence/Absence: includes monitoring methods/activities that are specifically intended to document presence/absence of a particular species or suite of species.

Tier 3. Population Estimate/Index: an approximation of the true population size or population index based on a widely accepted method of sampling.

Tier 4. Population Census: A complete count of an entire population with demographic analysis, including mortality, reproduction, emigration and immigration.

Tier 5. Other: may include habitat assessments for a particular species or suite of species or any other specific methods used as indicators to gather information about a particular species. [If referenced in table, provide discussion in narrative]

Inventory

Objective: Update baseline imperiled species occurrence inventory lists for plants and animals.

Action:

- Continue to inventory the park to update imperiled species inventory lists.

Update imperiled species list as necessary to add or remove species in compliance with current FWC or USFWS listing status and update any accepted nomenclature changes.

Fauna

Objective: Continue existing monitoring protocols for nine selected imperiled animal species.

Actions:

- Continue existing monitoring protocols for marine turtle species and piping plover, red knot, Wilson's plover, least tern, black skimmer and American oystercatcher.
- Review and revise protocols as necessary to remain consistent with FWC and USFWS standards.
- Monitor impacts on shorebird and sea turtle nesting by terrestrial nuisance species in the park.
- Continue to improve protection and awareness of sensitive shorebird nesting areas.

Imperiled species management at Stump Pass Beach State Park focuses primarily on shorebirds and other coastal bird species, as well as marine turtle species that nest within the parks. The park coordinates all monitoring of imperiled species at the park with FWC and Charlotte County and ensures monitoring data is submitted to FWC as required.

Daily marine turtle nesting surveys are completed by park staff, volunteers and contractors under a FWC Marine Turtle Permit issued to the park and in strict accordance with the FWC Marine Turtle Conservation Handbook (FWC 2016). Ongoing maintenance dredge and sand placement projects within the state park are overseen by Charlotte County along with subsequent monitoring requirements including completing annual sea turtle and shorebird nesting surveys and reporting data. DRP district biologists are involved in ensuring the results of annual monitoring are reported to FWC in accordance with Marine Turtle Permit conditions.

In addition to shorebird surveys, Charlotte County and park staff annually pre-post shorebird nesting areas at the south end of the park in advance of seasonal occupation in accordance with FWC and DRP guidelines. This includes greater than two acres of historic least tern and Wilson's plover nesting areas. Posted areas are expanded as needed to provide sufficient buffering to limit nest abandonment. The park will work to enhance community outreach efforts during shorebird nesting season through improved interpretive programming and regular monitoring of posted areas by park staff and volunteers.

Staff, volunteers and contractors are trained to observe and document predator tracks near shorebird and sea turtle nesting habitat. In accordance with FWC guidelines and permit conditions, self-releasing cages and screens are installed over sea turtle nests by contractors at Stump Pass Beach State Park to discourage depredation by nuisance mammal species. DRP district biologists coordinate with Charlotte County and park staff for timely implementation of predator removal efforts.

Dogs brought by visitors to the park introduce significant and challenging impacts on shorebird nesting success. The south end of the park provides the best habitat for colonial nesting shorebird species and is heavily used by recreational boaters for beach landings on the bay side of Stump Pass. Evidence of dogs is typically observed during every sea turtle and shorebird nesting survey conducted on the islands. Park staff maintains signage and educates visitors on policies when dogs are encountered in areas of the park where prohibited. Despite routine checks by parks staff and signage installed that clearly describes DRP's policy on pets, evidence of non-compliance persists.

The current approach to reducing this impact to shorebird nesting depends on multiple partners including law enforcement personnel. Rule 62D-2.014(13), F.A.C., includes enforceable language on the presence of pets in restricted areas, a rule which is enforced by FWC law enforcement at state

parks. District and County staff have previously partnered with the Charlotte County Sheriff's Office and FWC law enforcement to monitor the south end of the park for the presence of dogs. In addition, FWC law enforcement officers have previously accessed and issued warnings and citations to boaters at the south end for various violations including dogs in the park.

Despite these efforts, recreational boaters continue to bring off-leash dogs to the park, which threatens the nesting success of several imperiled species found on the islands, including the least terns, black skimmers and Wilson's plover. Measures to increase FWC law enforcement presence are needed. These measures should include pairing of DRP and FWC law enforcement staff, vessels and equipment to meet partnering agency safety requirements that may otherwise limit the number of days that law enforcement personnel are present during the nesting season. Continued monitoring will gauge the effectiveness of such enhanced partnerships.

Flora

Objective: Monitor and document three selected imperiled plant species in the park.

Action:

- Continue to implement existing protocols for three imperiled plant species in the park including shell mound pricklypear, Florida mayten and inkberry.

Cactus populations at the park have been severely impacted by storm surge and parasitic moths and require additional monitoring to ensure survival. Park staff should develop a protocol to monitor shellmound pricklypear cacti at the park as needed.

INVASIVE SPECIES

Invasive plants are persistent at the park including Brazilian pepper, Australian pine, carrotwood (*Cupaniopsis anacardiodes*) and beach naupaka. Widespread invasive plant removal efforts funded by the FWC Invasive Plant Management Uplands Program have taken place on Peterson Island in the larger sections of coastal strand and maritime hammock within the island's interior in 2016. Additional invasive plant removal efforts funded by DRP have taken place on Peterson Island in 2020 and Whidden Key in 2021. The Whidden Key treatment successfully tackled what was a monoculture of Australian pine in a disconnected section of uplands surrounded by mangroves. Future funding should continue to be pursued to assist with maintaining low invasive plant coverage level in all areas of the park.

The Manasota portion of the park is virtually free of invasives currently due to burial from storm surge associated with Hurricane Milton. The invasive seed banks at all islands are extensive and park staff try to hand-pull saplings when first found, treating species as necessary with chemical application. Peterson Island and Whidden Key are more logistically difficult to treat and are typically targeted for contractor projects.

Nuisance imperiled species predators commonly found at Stump Pass Beach State Park includes coyotes, racoons and armadillos, which account for most of the depredation activity for sea turtle nests on the island. Consistent predator control efforts are necessary to reduce depredation levels and have been effective at achieving this at other state parks in southwest Florida. DRP district biologists coordinate with park and Charlotte County staff to monitor depredation levels at the park during nesting seasons and assess when further predator control is warranted.

Invasive Plant Species			
Species Name ***Scientific Name* - Common Name**	**FISC Category**	**Distribution**	**Zone ID**
Sisal hemp *Agave sisalana*	II	Single Plant or Clump	SPB-01
Australian pine *Casuarina equisetifolia*	I	Single Plant or Clump	SPB-02, SPB-05
		Scattered Plants or Clumps	SPB-03, SPB-04A, SPB-04B
Carrotwood *Cupaniopsis anacardioides*	I	Single Plant or Clump	SPB-01
		Scattered Plants or Clumps	SPB-02, SPB-04A, SPB-04B
Durban crowfootgrass *Dactyloctenium aegyptium*	II	Scattered Plants or Clumps	SPB-01, SPB-02, SPB-03, SPB-04A, SPB-04B, SPB-05
Bowstring hemp *Dracaena hyacinthoides*	II	Single Plant or Clump	SPB-01
		Scattered Dense Patches	SPB-03
Indian laurel *Ficus microcarpa*	I	Single Plant or Clump	SPB-01, SPB-02, SPB-03, SPB-04A, SPB-04B, SPB-05
Australian umbrella tree *Heptapleurum actinophyllum*	I	Single Plant or Clump	SPB-04A, SPB-04B
Beach naupaka *Scaevola taccada*	I	Single Plant or Clump	SPB-02
		Scattered Plants or Clumps	SPB-01, SPB-03, SPB-04A, SPB-04B
Brazilian pepper *Schinus terebinthifolia*	I	Single Plant or Clump	SPB-01, SPB-05
		Scattered Plants or Clumps	SPB-04A, SPB-04B
		Scattered Dense Patches	SPB-02, SPB-03, SPB-04A, SPB-04B
Creeping oxeye *Sphagneticola trilobata*	II	Scattered Plants or Clumps	SPB-01
Seaside mahoe *Thespesia populnea*	I	Single Plant or Clump	SPB-02

Invasive Plant Treatment

Objective: Update the long-term invasive plant management plan for the park.

Actions:

- Identify the major vectors and pathways for invasive plants at the park and reduce incoming propagules where possible.
- Regularly update surveys to reflect accurate infestation levels of each management zone.
- Develop an early detection rapid response protocol for new infestations.
- Develop a species-specific action plan for each management zone with a prioritization framework.

- Evaluate and update plan on an annual basis and adapt to changing conditions.

Objective: Monitor and maintain 79 gross acres of habitat already in maintenance condition as needed.

Actions:
- Survey all maintenance areas yearly for new infestations.
- Treat areas where invasive plant spread is imminent (e.g., after prescribed fire, mechanical or other disturbance).
- Document treatments and update surveys in the Natural Resource Tracking System (NRTS).

Objective: Reduce or maintain cover class on 133 acres not in maintenance.

Actions:
- Treat medium infestations with staff and volunteers where available.
- Reduce high infestations with additional labor sources (e.g., contract funding, strike teams) and plan for passive or active restoration.
- Document treatments and update surveys in NRTS.

In addition to treating, staff also conduct surveys where they are overdue to find new infestations before they increase. Staff should focus on treatment of small populations of invasives whenever they arise in addition to large-scale woody invasives. DRP staff, volunteers and AmeriCorps should be utilized in tackling persistent, non-woody invasives that require both a team and time, such as bowstring hemp (*Dracaena hyacinthoides*). Priority should be on maintaining infestation at or below current infestation and singling out priority invasive species that should be eradicated, such as beach naupaka. Successful removal of certain species, such as Australian pines, will save time and effort down the line and allow all parties to maintain focus on an ever-decreasing pool of invasive species. New invasive species should immediately be vouchered and eradicated. Education and outreach with private parcel owners should be pursued to prevent future infestations from private parcels and to garner additional volunteer support in removal efforts. Staff should take great care in transferring equipment from other parks to prevent further spread of invasive species.

Invasive and Nuisance Animal Control

Objective: Implement control measures on three non-indigenous/nuisance animals to protect native species and habitats.

Actions:
- Manage invasive or nuisance animals as needed.
- Coordinate with USDA, FWC and park staff capable of management to develop control method plans of known non-indigenous/nuisance animals.

USDA and DRP staff have directly assisted with sea turtle and shorebird predator management of coyotes and racoons at Stump Pass Beach State Park. Predator management completed by USDA has been shown to effectively reduce sea turtle nest depredation rates in subsequent seasons. Park staff will continue to coordinate with DRP district biologists and Charlotte County to monitor depredation levels at the park during nesting seasons and assess when further predator control is warranted.

CULTURAL RESOURCES

Prehistoric and Historic Archaeological Sites

Stump Pass Beach State Park contains two archaeological sites recorded in the Florida Master Site File (FMSF). The sites are both located on Peterson Island and include small areas of shell scatter. The sites are both somewhat protected by inaccessibility and can be considered in fair condition.

Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	**Culture/Period**	**Description**	**Significance**	**Condition**	**Treatment**
CH00367	Prehistoric (unspecified)	Shell Scatter Site	NE	F	P
CH02717	Prehistoric (unspecified)	Shell Scatter Site	NE	F	P

Significance:
NRL - National Register Listed
NRE - National Register Eligible
LS - Locally Significant
NE - Not Evaluated
NS - Not Significant

Conditions:
G - Good
F - Fair
P – Poor

Recommended Treatment:
RS - Restoration
RH - Rehabilitation
ST - Stabilization
P - Preservation
R – Removal

Condition Assessment

Objective: Monitor and assess all recorded cultural resources.

Action:

- Conduct biennial site condition assessments per DRP Operations Manual Chapter 4.1, Section 3.5.1.

Park staff will monitor two cultural sites annually, recording site visits and updating site files with the FMSF short form.

Documentation of Recorded Sites

Objective: Compile reliable documentation for all recorded historic and archaeological resources.

Actions:

- Ensure all known sites are recorded or updated in the FMSF.
- Record and submit new or updated FMSF forms to the Division of Historical Resources for all sites encountered across the island.

Preservation Measures

Objective: Bring all cultural sites into good condition.

Actions:

- Conduct post-hurricane assessments of all cultural sites on Peterson Island.
- Document any observed changes to the sites.
- Evaluate need for stabilization methods.

The cultural sites on Peterson Island may have been impacted by recent storms and tides. Upon assessment, the park will document any notable changes to the artifacts, and any impacts that may have occurred. Stabilization of these sites and potential mitigation or erosion control must be evaluated.

SPECIAL MANAGEMENT CONSIDERATIONS

Arthropod Control Plan

Mosquito control plans (i.e., Arthropod Control Plans) are typically proposed by county mosquito control districts when they desire to treat on public lands that are protected by section 388.4111, F.S. (Charlotte County Mosquito Control District 2012; FDACS 2012). The current plan for Stump Pass Beach State Park was finalized in 1987 and is available in the Southwest District Arthropod Control Plan Appendix. Mosquito control plans temporarily may be set aside under declared threats to public or animal health, or during a declared state of emergency.

See the Florida State Park System – Statewide Philosophy and Framework for additional information.

Entrance
Canoe/Kayak Launch
Fixed Dock
Picnic Pavilion
Restroom
Lemon Bay
Whidden Key
Peterson Island
Manasota Key
GULF OF AMERICA
Stump Pass
Hiking
Walkways
County Road
Park Road Stabilized
Park Road Unstabilized
Structures
Parking Lots
Park Boundary

STUMP PASS BEACH STATE PARK
Existing Facilities

N
0 500 Feet 1,000

This graphical representation is provided for informational purposes and should not be considered authoritative for navigational, engineering, legal, and other uses.

LAND USE COMPONENT

VISITATION

This secluded beach is enjoyed year-round by visitors looking to swim in the Gulf or wander the beach in search of shells and shark teeth. Anglers fish the clear waters of the Gulf and Lemon Bay for species such as pompano, snapper, flounder and tarpon. Paddling through mangroves corridors of the park islands within Lemon Bay is a popular activity and affords opportunities to view wildlife, including dolphins, manatees and wading birds.

Trends

Visitation to Stump Pass Beach State Park is concentrated on beach access. Annually, the park attendance is approximately 251,000 with visitation trending highest between November and April, as many seasonal residents overwinter in southwest Florida. The park is typically at capacity throughout the winter season and increasingly reaches capacity throughout the summer months as well.

Economic Impact

Stump Pass Beach State Park recorded 409,507 visitors in FY 2023/24. By DRP estimates, the FY 2023/24 visitors contributed $48,935,785 in direct economic impact, the equivalent of adding 685 jobs to the local economy (FDEP 2024).

EXISTING FACILITIES AND INFRASTRUCTURE

Upon arrival at Stump Pass Beach State Park, visitors directly enter a small and high-turnover unpaved parking area. A small roundabout north of an electronic gate allows vehicles to exit the park without driving to the south-end roundabout. On the east side is an unimproved natural-surface paddlecraft launch and on the right is Gulf beach access. Within this day use area is a restroom situated above a small storage and operational support facility. This area contains the entirety of park infrastructure including a service dock, picnic pavilions, interpretive panels, trailhead and boardwalks to the beach. From the boardwalks, visitors access an on-grade (sand surface) trail that extends through the interior of Manasota Key to the southern tip of the island with spurs providing bay and gulf side access. The Manasota Key portion of the park extends approximately 1.3 miles along the Gulf, with nearly 1 mile of this distance being south of the restroom building.

Facilities Inventory

North Beach Use Area	
Paddlecraft Launch (destroyed by hurricane storm surge)	1
Honor Box	1
Nature Trail (mileage)	2.8
Restroom (damaged by hurricane storm surge)	1
Dune Crossover Boardwalk (destroyed by hurricane storm surge)	2
Interpretive Signs (destroyed by hurricane storm surge)	2
Picnic Pavilion	6
Maintenance Facility (destroyed by hurricane storm surge)	1
Service Dock (damaged by hurricane storm surge)	1
Stabilized Parking Spaces (buried in sand from hurricane storm surge)	60

CONCEPTUAL LAND USE PLAN

Park Entrance

Objective: Implement entry solutions to effectively manage high visitation.

Actions:
- Option (a) – Install a small ranger station.
- Option (b) – Install a kiosk payment system.

Option (a)
Formalizing a front (north area) staff presence to interface with incoming visitors and oversee parking, which would offer advantages over staff standing unsheltered alongside traffic at the gate. A compact ranger station could be located adjacent to or within the newly constructed roundabout so attending staff can inform visitors of available parking (or manually control gate closure when capacity is reached), direct traffic and collect entrance fees. Given highly constrained space, the format of the structure should be very compact and not exceed the size of a single-person tollbooth. Portable options should be considered. In the absence of such a compact booth, staff will continue to utilize the sheltered operational support space on the ground level of the restroom building. For any new infrastructural solutions at the entrance, sensitivity to vegetation is necessary.

Option (b)
As an alternative to a ranger station, a kiosk for self-service payment could be installed. Criteria for placement of such a kiosk should include visibility and ease of access along the most commonly used path toward the main use area. A potential location should be considered near the southern end of the parking lot, prior to the shoreline access points.

Parking Area

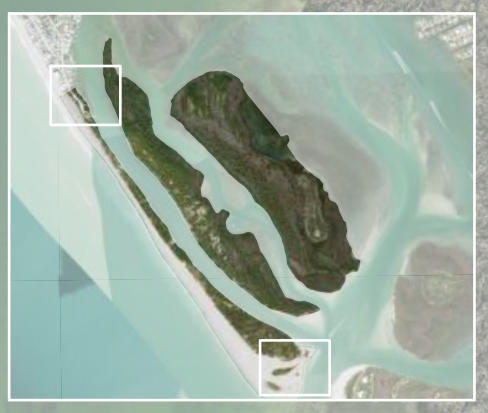
Objective: Reconstruct safe and organized parking.

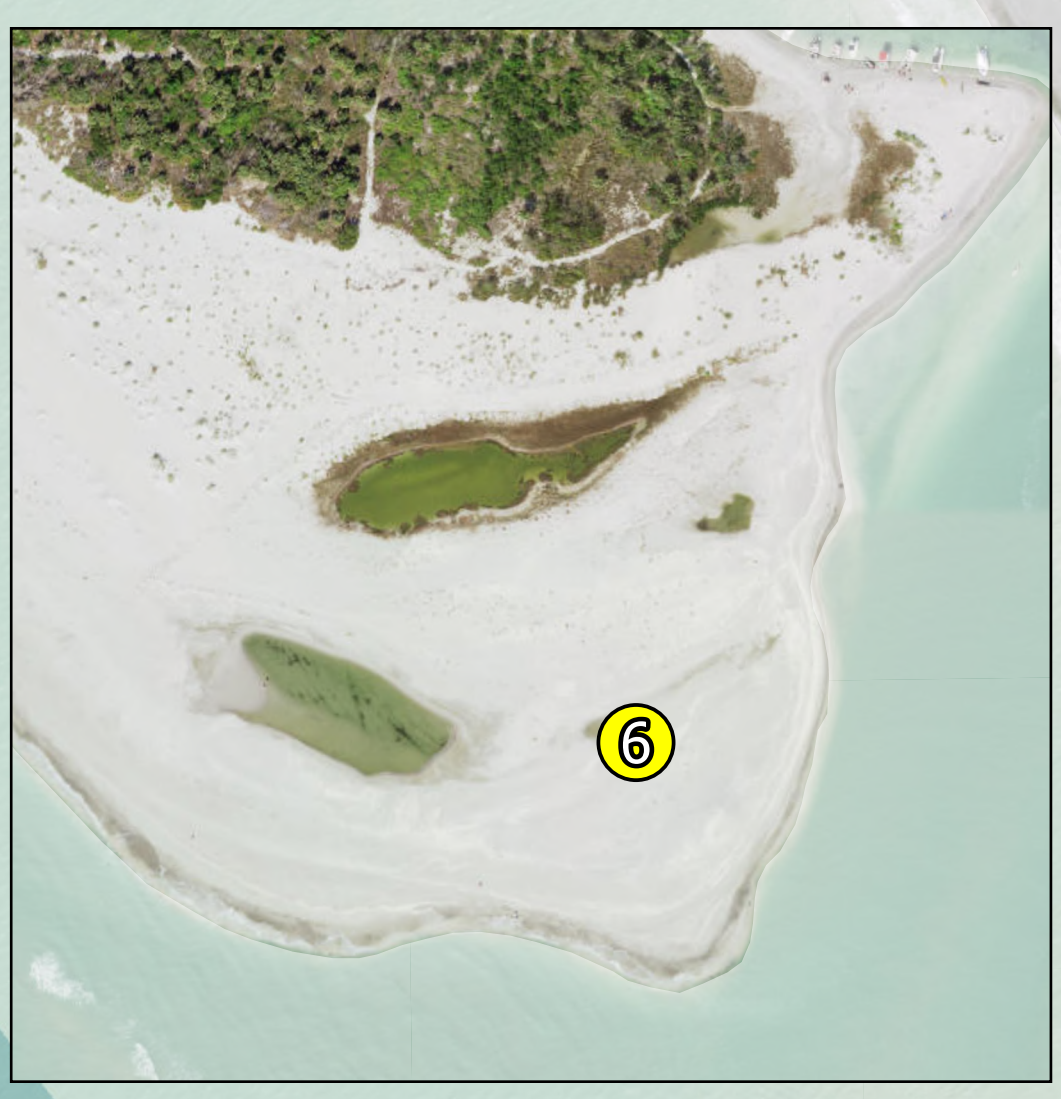
Actions:
- Delineate parking spaces.
- Evaluate potential pedestrian pathways from parking area.

Although the park has consistently high visitation, with the majority of visitors accessing by vehicle, the parking area has lacked delineation of individual parking spaces. As a result, visitors tended to park very close to one another, maximizing capacity during occasional periods of congestion but resulting in recurring impacts to the perimeter of the adjacent coastal strand natural community. Initial reclamation of the parking area as necessary following the 2024 hurricane season, but further redesign of the entrance area should include demarcation of individual parking spaces. Delineating or otherwise demarcating spaces and placement of a staffed entrance booth would alleviate patterns of congested parking.

High traffic volume and congestion result, at times, in potentially unsafe conditions for pedestrians. While installation of a gate and north-end roundabout will mitigate traffic congestion, visitors traversing the busy parking area without a designated pedestrian path may continue to present safety concerns. Spatial constraints along the perimeter of the parking area (between vehicles and the vegetation line)

1. Park Entrance - Implement entry solutions to effectively manage high visitation.
2. Parking - Reconstruct safe and organized parking.
3. Paddlecraft Launch - Reconstruct bayside paddlecraft launch.
4. Beach Access Pathways - Remove existing boardwalks. Reestablish access to Gulf beach.
5. Restroom - Reconstruct restroom facility/operational support space.
6. Southern Tip - Visitor use management strategy for protection of sensitive wildlife habitat.





STUMP PASS BEACH STATE PARK
Conceptual Land Use Plan

N

0 200 400 Feet

may preclude reserving a corridor for such a pathway. If spatially feasible, the designated pathway should be established with consideration of linking visitors with a potential self-service payment kiosk. In the absence of such a pathway, cautionary signage and guidance from staff will continue to be employed to manage this parking area for safety.

Parameters of any parking or pathway improvements will be the interior limit of the dune and coastal strand and maritime hammock restoration. Restoration of the natural communities of this site will be essential to park aesthetics as well as buffering the infrastructure interior from wind, surge and erosion during future storm events.

Paddlecraft Launch

Objective: Reconstruct a paddlecraft launch.

Action:

- Reestablish bayside paddlecraft launch.

Prior to the 2022 hurricane season, an unimproved paddlecraft launch was located on the bayside of the parking area. This feature, along with the entire use area, was overwashed and buried under an estimated 5 feet of sand. As this use area is excavated, the on-grade path to the paddle launch will be re-established. The gradient of the path should be designed to minimize slope and provide easy access to the shallow-water launch/landing site. Sensitivity to mangroves is a limiting factor for any potential expansion. The size and level of accessibility is considered proportionate to the current and predicted rates of use.

Restroom/Staff Support

Objective: Reconstruct necessary restroom facility/operational support space.

Action:

- Renovate restroom and operational support facility.

The current restroom facility is well-constructed and is located in the interior of the narrow uplands south of the parking area. Although this elevated structure remained intact through the 2024 storm events, renovation is necessary. Utilizing the existing footprint, administrative and equipment storage space should be maximized to support park operations. Location within the coastal construction control line requires minimal enclosure and installations. Given the small upland acreage at this park, additional buildings apart from this existing footprint are not recommended.

Beach Access Pathways

Objective: Reestablish sustainable and resilient beach access.

Actions:

- Install plant species for habitat restoration.
- Remove ruined boardwalks.
- Reestablish access to Gulf beach via on-grade paths.

Beach access paths extending south from the restroom building were previously aided by boardwalks to traverse dunes and sensitive habitat. One beach access path, stemming west directly from the parking area, is to be reestablished to conveniently reach the northern portion of the park's beach. Where the south bearing beach access paths previously featured boardwalks, access will be reestablished as on-grade paths consisting of sand. While reconstruction of boardwalks was evaluated, frequency of damaging storm events does not support the presence of such infrastructure at this location. Where multiple paths previously traversed the hammock and dunes, only one on-grade path will be aligned through the area south of the restroom to provide a point of alternative access south of the popular northern access. To minimize bisection of habitat and reduce dune erosion, a trail through the interior of the island will not be reestablished. Replanting of sea grapes and various foundational species of the hammock, strand and dune communities will be prioritized in the portion of the park, which will stabilize the uplands against future storm events and will restore the scenic backdrop of the park's southern beach. Beach wheelchairs that are capable of traversing the soft sand of this environment will be offered to assist visitors as needed.

VISITOR USE MANAGEMENT

Southern End of Manasota Key

Objective: Strategize wildlife habitat protection while maintaining current level recreational beach access.

Actions:

- Coordinate with FWC and Charlotte County regarding the criteria and feasibility of establishing a Critical Wildlife Area at the southern tip of Stump Pass Beach.
- Aggregate wildlife occurrence/use data to aid in determination.

The southern tip of the island has experienced erosion for many years due to the dredging of Stump Pass conducted by Charlotte County. In 2017, a permeable T-groin was installed on the southern gulf side of the island. In conjunction with beach nourishment, the groin has resulted in considerable accretion, re-establishing desirable habitat for shorebirds to use for resting and nesting. The park will continue to coordinate with FWC to monitor shorebird activity, particularly at the southern tip. If shorebird nesting trends supports the need and the area is deemed relatively stable (in terms of dry and tidally exposed sand substrate), this area will be considered for a Critical Wildlife Area designation.

Critical Wildlife Area designation would require a spatial plan to demarcate and protect the nesting area while also preserving space for recreational use as this area of the park is a popular destination for boaters and anglers. Delineation of colonial shorebird nesting sites via posting and roping along with

Existing Park Boundary
Other Existing Conservation Lands
Optimum Boundary (ARC-Approved)

STUMP PASS BEACH STATE PARK
Optimum Boundary

N

0 500 1,000 Feet

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interpretation and routine patrolling has proven effective in raising awareness and achieving compliance in maintaining separation of humans and shorebirds at analogous coastal parks. Another factor that must be addressed for successful colonial nesting is the perpetual challenge of dogs on the beach, which is a conflict that can only be effectively resolved when interpretive elements and law enforcement presence are coupled with strong local support through conservation partnerships.

OPTIMUM BOUNDARY

As a dynamic barrier island, the park boundary is subject to change due to erosion and accretion. Accordingly, the need to change the projection of the park boundary may be warranted to manage natural resources. Two areas to be considered include the southern ends of both Peterson Island and Whidden Key where tidally accreted sand has formed partially inundated extensions of marine unconsolidated substrate. Boundary amendment to add the areas of accreted tidal sand would improve the ability of DRP and FWC to manage and protect important shorebird and sea turtle nesting habitat.

The park also proposes management authority of the submerged land located up to 50 feet seaward of the mean high waterline along the Gulf shore of Manasota Key, for resource protection. This management authority will require a lease amendment by DEP's Division of State Lands, which should be coordinated through DEP's Office of Park Planning.