

**The Bureau of Land Management  
Southeastern States Field Office**

**FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD**

Based on the analysis of potential environmental impacts contained in the attached Environmental Assessment (EA) No. ES-020-2012-63, prepared by the Bureau of Land Management (BLM), Southeastern States Field Office (SSFO), I have determined that the proposed action with the terms and conditions of approval, mitigation and conservation measures imposed for the protection of federally listed species and their habitat, as described in the attached EA is not expected to have an adverse effect on the federally listed species or a significant impact on the human environment. Therefore, an Environmental Impact Statement (EIS) is not required.

**DECISION**

It is my decision to authorize the Recreation and Public Purposes (R&PP) lease. Conservation measures identified for the proposed action in the EA have been formulated into stipulations. This decision incorporates by reference those measures. Stipulations are attached and will become part of the lease agreement.

**RATIONAL FOR DECISION**

The area analyzed in Environment Assessment No. ES-020-2012-63 is covered by the Florida Resource Management Plan. The decision to allow the lease will not result in any undue or unnecessary environmental degradation and is in conformance with BLM's resource management goals and objectives. Further impacts identified are not considered to be highly controversial.

Authorized Officer: Bruce Daws Date: 2-19-2015



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Southeastern States Field Office  
411 Briarwood Drive, Suite 404  
Jackson, Mississippi 39206

### **Environmental Assessment (EA-020-2012-63\_SSFO)**

**Case/Project No.: FLES-057504**

**Project Name: Smyrna Dunes Park, Volusia County R&PP Land Lease and/or Patent  
New Smyrna Beach, Florida**

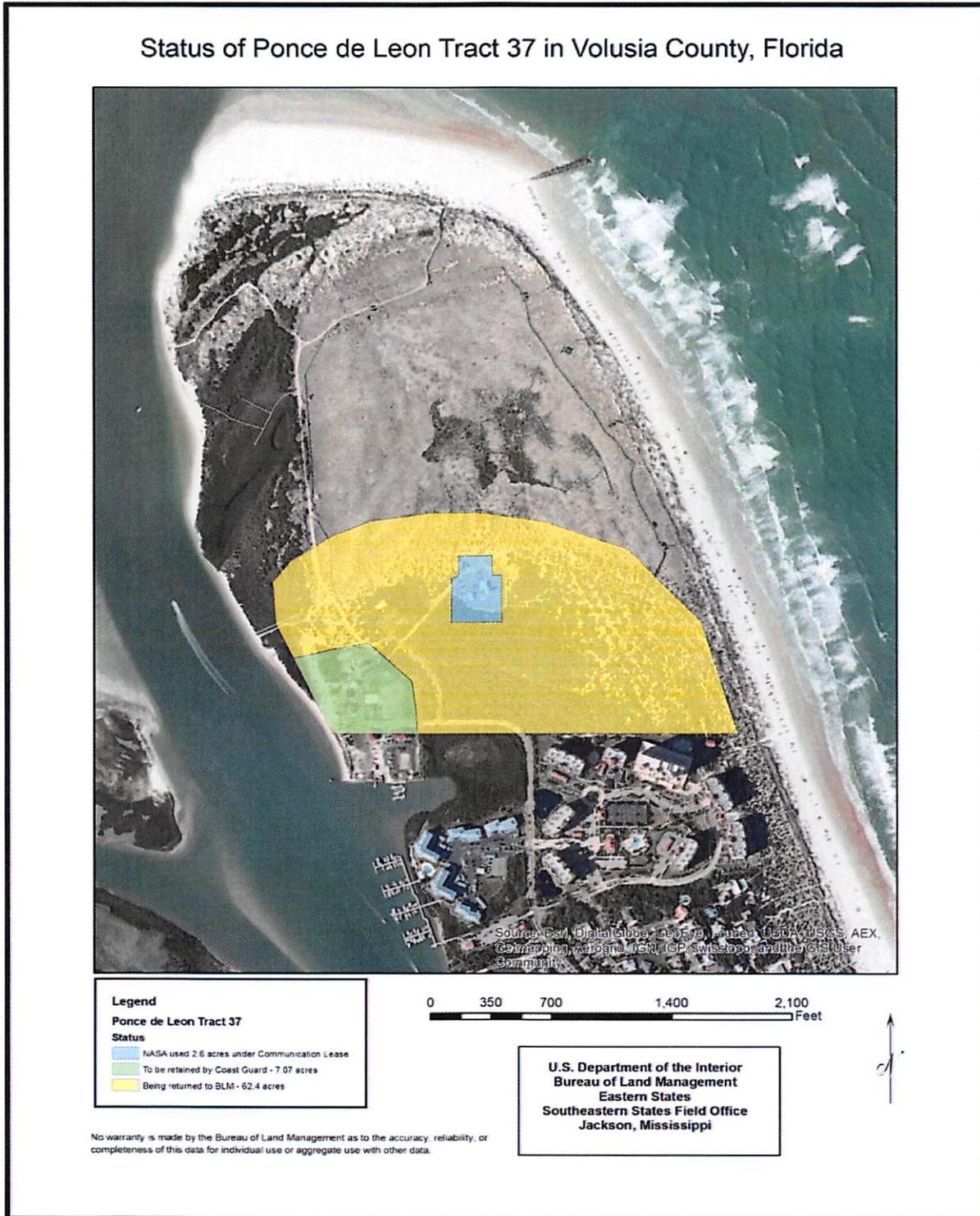
**Legal Description and Map Name:** Public Domain lands addressed in this Environmental Assessment (EA) are withdrawn to the United States Coast Guard (USCG). The legal land description defines the property as three parcels:

#### **Tallahassee Meridian**

Township 16 South, Range 34 East, Tract 37; Except that portion used for the USCG Station Ponce de Leon Inlet (lot 2), and that portion (lot 3) used by NASA pursuant to a BLM Communication Use Lease. Tract 37 comprises the remnants of fractional Lot 1, section 32, and fractional lot1, section 33, Township 16 South, Range 34 East.

Prepared by: Southeastern States Field Office  
Date: February 2015

The area described for the lease (Tract 37) contains approximately 62.40 acres (depicted in yellow), more or less in Volusia County, Florida.



## Chapter.1 – PURPOSE OF AND NEED FOR THE PROPOSED ACTION

### Background

In 2010, the United States Coast Guard (USCG) notified the U.S. Department of the Interior, Bureau of Land Management (BLM) of its intent to partially relinquish its withdrawal at its Ponce de Leon Station. Written consent obtained from the USCG Commander allows these lands to be available for lease and/or conveyance under the Recreation and Public Purposes Act (R&PP) (*Exhibit 1- USCG consent to lease*), and until such time a partial withdrawal relinquishment can be processed. The proposed site for lease and/or conveyance would provide the necessary land to maintain and expand operation of the existing Smyrna Dunes Park (SDP). The USCG also strongly recommended that the property continue to be operated, managed and maintained by Volusia County as a public park. BLM engaged the County relative to this interest via lease and/or patent under the authority of the R&PP Act. The County agreed to make lease application and funded a \$31,000.00 Cadastral Survey in support of the application. In 2012 the County submitted a formal application to the BLM for continued use/lease of the site for (25 years) and local management for public recreation. The park provides opportunities for passive forms of recreation for Volusia, and non-county residents for recreation compatible with the preservation of its resources. Such recreational use includes nature study, bird watching, hiking and fishing. The County has also submitted a plan of operation and maintenance as a part of their application. It provides for an inventory of all the improvements which includes parking areas, restrooms, outdoor showers, picnic pavilions, picnic tables, trash receptacles, elevated boardwalks and dune walkovers, nature trails, a dog-friendly inlet beach, a dog wash and rinse area and a marine environmental educational display.

The lease, when issued, would contain the standard reversionary clause contained in all R&PP patents and leases. The clause gives BLM the authority to revoke the lease/patent if the County, violate the terms and conditions set forth in the lease/patent. The R&PP Act authorizes the sale or lease of public lands for recreational or public purposes to state and local governments and to qualified non-profit organizations.

The location for the proposed lease/conveyance is described as tract 37, which (comprises the remnants of fractional Lot 1, Section 32, and fractional Lot 1, Section 33, Township 16 South, Range 34 East) and has been surveyed by the Cadastral Survey Division, in accordance with agency policy (*Exhibit 5 – Ponce de Leon Cadastral Survey Map*). The lands for lease would include a majority of the lands withdrawn to the USCG. Except that portion used for the USCG Station Ponce de Leon Inlet containing approximately 7.07 acres to be retained as part of their original withdrawal, and that portion used by NASA containing approximately 2.60 acres pursuant to a BLM Communication Use Lease under the 2800 rights-of-way regulations. The area described for the lease contains approximately 62.40 acres, more or less, in Volusia County.

According to the original plat of survey dated, December 8, 1925, the entire parcel originally contained 84.36 acres, withdrawn to the USCG (*Exhibit 3 – Vicinity Map*). However, due to an installation of a jetty structure by the Army Corps of Engineers to control the erosion the tract

has substantial accreted from its original acreage of 84.36 acres to approximately 187 acres. During the processing of the County's application the State of Florida claimed 102.64 acres of land that have accreted since the original survey as a result of the jetty structure installed by the Corp, as a part of the 1968 construction and reclamation project.

### **Proposed Action**

On April 2, 2012, Volusia County, Coastal Division, Florida, submitted an application to the Bureau of Land Management (BLM), Southeastern States Field Office (SSFO) under the Recreation and Public Purposes (R&PP) Act of 1926, as amended (43 U.S.C. 869 *et seq.*), to lease approximately 62.40 acres currently withdrawn to the USCG in support of the Coast Guard's Station Ponce de Leon.

Future park developments identified by the County, includes some parking area expansion to accommodate the ever-increasing use, construction of a fishing pier on the river shoreline (State lands) and reconstruction of the 28-year old main park elevated boardwalk, which is constructed on some portions of the withdrawn federal lands and the majority of the boardwalk occurring on the State's accreted lands and is projected some years out. The timetable for the parking area expansion has yet to be determined. Therefore, the impacts for future developments will not be addressed at this time (*Exhibit 7 – Existing and Proposed Improvements*).

Additional information the existing environment and the planned management of the proposed lease area is included in the Final Smyrna Dunes Park Management Plan, completed in December, 2014 (*Exhibit 10*). This plan is the result of considerable coordination between Volusia County, BLM, and the U.S. Fish and Wildlife Service. The plan is meant to be applied across the entire SDP and provides the basis for the Proposed Action and Existing Environment addressed in this EA.

### **Purpose of the Proposed Action**

The purpose of the Federal action is to respond to a request for a Recreation and Public Purposes Lease by Volusia County that would authorize the continued operation of the Smyrna Dunes Park (SDP), located on the north end of New Smyrna Beach and south of the inlet along the Atlantic Ocean shoreline (*Exhibit 2 – Location map*).

### **Need for Proposed Action**

The United States Coast Guard (USCG) is relinquishing its interest in a portion of the land at the Ponce de Leon Station. Volusia County has been managing SDP as a public park since 1982, under a license agreement with the U.S. Coast Guard, but the agreement expired on September 1, 2012. Also the need for action is established by the BLM's responsibility under the Federal Land Policy and Management Act of 1976 (FLPMA) (Section 212), as it relates to requests for lease and/or the patent of public domain land under the R&PP Act.

### **Condition of approval:**

The future development proposed, is strictly “proposed” at this time, because no conceptual plans have been submitted nor is any funding currently available. All future proposed development and construction plans for tract 37 must be reviewed and approved by the BLM and the USFWS.

- If approved, any significant changes, additions, or deletions must be reviewed and are subject to further NEPA evaluation. All proposed development must be designed to protect the integrity of the protected wildlife and sensitive plant habitat, in addition to all other Federal and State-Listed or candidate species and designated critical habitat. All boardwalks shall follow existing trails wherever possible. Picnic and restroom facilities shall be located to minimize destruction of existing vegetation. Extension of parking areas shall be restricted to the areas already disturbed.

In recognition of the potential impacts of beach driving, the County shall continue to regulate the allowed use, including but not limited to:

- Requiring licenses or passes
- Limiting the number of vehicles on the beach
- Limiting beach driving to certain types of vehicles (e.g. 4 WD)
- Enforcing speed limits
- Specifying beach access ramps and the allowed driving zone along the beach
- Prohibiting driving on dunes and in other ecologically sensitive areas
- Prohibiting driving during certain times of the year, such as during seabird or sea turtle nesting season, or when beach pedestrian traffic is so high that vehicles on the beach would represent a safety hazard.

This environmental assessment (EA) addresses the impacts of leasing the lands to the County of Volusia for a public park. The following provides the current physical and ecological characteristics of the site and potential impacts of the proposed action.

### **Management Objectives of the Actions**

Lease 62.40 acres of the public domain lands to the County of Volusia, Coastal Division through a Recreation and Public Purposes (R&PP) Act lease.

### **Scope of this Environmental Analysis**

This report characterizes the Proposed Action and evaluates the potential environmental consequences for the alternative, including the proposed action.

## **Land Use Plan Conformance**

The proposed actions are in conformance with the Florida Resource Management Plan (RMP) and Record of Decision (ROD) approved in June of 1995, and to the maximum extent possible, is consistent with federal, state and local laws, regulations, and plans.

## **Relationship to Other Statutes, Regulations, EISs, EAs, and Other Relevant Documents**

The BLM decision would authorize use of public lands that are currently withdrawn to the USCG, with the consent of the Commander. The Federal Land Policy and Management Act of 1976, (FLPMA) was passed to authorize BLM's management of public lands. Congress, in 1926, passed the Recreation and Public Purposes Act (R&PP) to provide land for the benefit of the public in connection with recreation, public health, safety and welfare. The R&PP Act as amended provides for lease and conveyance of certain public lands to State and local governmental units and agencies, Federal agencies, nonprofit associations, organizations, foundations and corporations for recreation and public uses. The Proposed Action would be conducted under the authority of FLPMA.

The FLPMA sections regulating or authorizing the disposal or conveyance of public lands relative to the Proposed Action are as follows:

- FLPMA 203(f)(1) describes the allowable methods of sale/conveyance. The public lands would be sold using the competitive method as described (or required) by Federal regulation at 43 CFR 2711.3-1.

(f) (2) However, where the Secretary determines it necessary and proper in order (1) to assure equitable distribution among purchasers of lands, or (2) to recognize equitable considerations or public policies, including but not limited to, a preference to users, he may sell those lands with modified competitive bidding or without competitive bidding. In recognizing public policies, the Secretary shall give consideration to the following potential purchasers:

- (1) The State in which the land is located;
- (2) The local government entities in such State which are in the vicinity of the land;
- (3) Adjoining landowners;
- (4) Individuals; and
- (5) Any other person.

When compatible with local government plans, Federal lands should be made available for state, local government, and private uses. The proposed action and no action alternative do not conflict with any State or local plan or zoning ordinance. The proposed action would be in the public interest.

The proposed action is consistent with the intents of Section 212, R&PP transfer of the Federal Land Policy and Management Act (FLPMA) of 1976. Specific guidance for transferring lands under the R&PP Act is found in 43 Code of Federal Regulations (CFR) 2741, et seq. The regulations allow transfers of the public domain if BLM makes a determination that it is in the national interest to do so and the lands are needed for a specific State or local government purpose.

Other laws and executive orders defining BLM's responsibilities in the analysis of the potential impacts are:

- Archaeological Resources Protection Act of 1979, 16 U.S.C. 470 aa, et seq.
- National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et. seq.
- National Environmental Policy Act of 1969, 42 U.S.C. 4321 et. seq.
- Clean Air Act of 1970, as amended, 42 U.S.C. 7401 et. seq.
- Clean Water Act of 1972, as amended, 33 U.S.C. 1251 et. seq.
- Council on Environmental Quality, Title 40 CFR, part 1500

### **Applicable Regulatory Requirements and Required Coordination**

In order to comply with Section 7(A)(4) of the Endangered Species Act, a biological assessment was prepared on December 17, 2014 (*Exhibit 8 – Biological Assessment New Smyrna Dunes Park Recreation and Public Purposes Act Lease*). USFWS responded on February 3, 2015, that they concurred with the finding that the action may affect, but is not likely to adversely affect the federally listed species in the proposed project area (*Exhibit 9 – USFWS Consultation Letter – FWS Log Nos. 41910-2015-I-0118*).

### **Decision(s) That Must Be Made**

This EA discloses the environmental consequences of implementing the proposed action and the No Action Alternative to that action. The Finding of No Significant Impact (FONSI) describes the findings of the analysis in this EA. The Southeastern States Field Office (SSFO), Field Manager is the Deciding Official. The decision and the rationale for that decision will be stated in the Decision Record (which would be attached after the EA is complete). Based on the information provided in this EA, the BLM Manager will decide whether to grant the R&PP lease with the option of subsequent patenting with appropriate mitigations and stipulations, or whether to reject it.

## **Chapter. 2 – ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **Introduction- Description of Project Area**

The proposed R&PP Lease/Conveyance is located in Volusia County, in New Smyrna Beach, Florida. The subject property consists of approximately 62.40 acres more or less, comprising the northernmost extent of the barrier island that contains the resort town of New Smyrna Beach. The size of the property changes with time due to natural coastal accretion and erosion and with

the addition of a jetty constructed by the Army Corps of Engineers (*Exhibit 4 – Enlarged Topographic Map*). The property is located on the south side of Ponce de Leon Inlet and can be reached via North Peninsula Avenue, approximately 3 miles south of State Road 44 in New Smyrna Beach, which is through the USCG Station Ponce de Leon Inlet.

The SDP occupies a majority of the subject tract, and existing structures are limited. North Peninsula Avenue, a two lane paved public roadway, enters through the southern portion of the property and subdivides the maritime hammock community. The road provides access to a paved parking lot. The Park’s only buildings, which provide a staff office, equipment storage space, restrooms with septic system, and a covered recreational pavilion, are adjacent to the parking lot. The pavilion contains an



extensive array of educational artwork and signage pertaining to local fauna, natural communities, and cultural/historical resources. Other existing amenities include approximately 1.5 miles of elevated pedestrian walkways, six elevated dune crossovers, restrooms facilities, outdoor showers, nature trails, a dog-friendly inlet beach, a dog wash and rinse area and an observation tower, which occurs on most of the accreted State lands. Sealed garbage receptacles are located throughout the property.

The 1.5 mile long, wooden pedestrian boardwalk forms a loop extending north from the park headquarters to the south shore of Ponce de Leon Inlet, then returns southward long the eastern margin of the property near the ocean beach, returning to the park headquarters parking lot. The majority of the acreage is not accessible by vehicle.

**Proposed Action Alternative:**

Under the proposed action, the BLM would grant Volusia County, Florida an R&PP lease with an option for subsequent patenting. The approval of a patent would give the County perpetual use of the lands approximately 62.40 acres (Tract 37) of public land for recreation that is compatible with the preservation of its resources, such as nature study, bird watching, hiking, and fishing. BLM would reserve the right to review all proposed developments that are projected 3 to 5 years out for future site and facility improvements.

The intent of future improvements is to provide additional public access to accommodate increased usage demand and enhanced passive recreational opportunities. Bolded items are expected to occur at least partially within the proposed R&PP lease. Improvements under consideration include the following:

- **Expanded Parking Area - A shellrock or paved parking lot connecting to North Peninsula Drive may be constructed within uplands in the southwest portion of the property. Once constructed, standardized signage with Park rules, regulations, and**

**hours of operation will be placed near the lot. The parking area may also include bicycle racks.**

- Fishing Pier - The construction of a fishing pier over the IRL is planned for the southwest portion of the property.
- **Boardwalk - The existing 28-year old elevated boardwalk may be renovated within the same footprint.**

### **No Action Alternative**

In the No-Action Alternative, Volusia County would not be granted the lease for the continuation of management of the Smyrna Dunes Park. The BLM would become the successor agency responsible for active management of the lands. BLM would “inherit” the current management plan and would be tasked with coordinating with the State of Florida in the management of this coastal park. Neither the State nor BLM are prepared to fund the current staffing provided by the County. Management could either continue with the County being contracted by the State and BLM, or would be suspended until agency funding was allocated for management. This would affect the thousands of annual visitors to the Park, suspend park maintenance, patrols and volunteer support efforts, and provide a liability to the County for continued compliance with the Federal Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP), issued to Volusia County on November 22, 1996 and set to expire on December 31, 2030.

### **Alternatives Considered But Eliminated from Detailed Analysis**

No other alternatives were considered other than the No Action Alternative and the R&PP lease/conveyance under the Proposed Action. The Proposed Action is the only alternative that meets the purpose and need; therefore, no other alternative was considered.

## **Chapter 3 – DESCRIPTION OF THE AFFECTED ENVIRONMENT**

### **Introduction**

This section describes the existing conditions of the environmental components that could be affected by the Proposed Action and alternatives, if implemented. It also serves as the baseline for the comparisons within Chapter 4. Additional information on the existing environment of SDP is available in the SDP management plan (*Exhibit 10 - Final Smyrna Dunes Park Management Plan*)

### **Critical Elements Dismissed for Further Analysis**

A review of the existing environment shows that the following list of critical elements of the human environment are not present or would not be effected by this proposed action(s); therefore they will not be addressed in this EA: Areas of Critical Environmental Concern, Farm Lands

(Prime or Unique), Hazardous or Solid Waste, Environmental Justice, and Wild and Scenic Rivers.

**General Setting- Description of Project Area/Current use**

SDP is a unique beach and inlet park located at the northern tip of a barrier peninsula on the South Atlantic Bight on the east central coast of Florida. The park is approximately 188.3 acres and generally bordered to the east by the Atlantic Ocean and to the north and west by the Ponce de Leon Inlet channel and Indian River respectively. In 2014, the State of Florida asserted ownership of 125.6 acres of accreted land within the Park. These lands are contiguous with the 62.40 acres of public domain lands administered by BLM. Condominiums and other residential development are located south of the site. The park was developed in 1982 and has been managed and maintained for public recreation by the County of Volusia under a Revocable License with the United States of America, Department of Transportation, United States Coast Guard (USCG), for approximately three decades.

A spaceflight tracking station operated by the NASA is located on an out parcel, once authorized by the USCG within the park. The area is approximately 2.60 acres, fenced, secured and accessed through a separate driveway in the park and currently under a Communications Use Lease with the BLM. The facility is not open to the public.

U.S. Coast Guard Station Ponce de Leon Station borders the park to the south. The land is currently withdrawn on behalf of the USCG for Coast Guard purposes by Executive Order No. 4084, dated October 10, 1924, and previously reserved for lighthouse purposes by Executive Order on July 25, 1842.

The current management plan for SDP identifies the following management objectives:

- Conserve several rare and unique natural communities;
- Enhance natural communities through the removal of exotic vegetation and introduction of a formal prescribed burn program;
- Encourage cooperative research opportunities designed to monitor the status of the Park's threatened and endangered flora and fauna and other species;
- Conserve suitable habitat for threatened and endangered flora and fauna and other native wildlife;
- Provide for public beach access and outdoor recreation; and,
- Provide for public educational opportunities.

## **Critical Elements Retained for Further Analysis**

### **Land Use and Status**

The USCG is the agency with custody of and accountability for the subject tract. Of the entire 84.36 acres area, the vast majority of the acres (approximately 62.40 acres), were licensed to Volusia County, Coastal Division and are occupied by the SDP under a USCG 30-year license initiated on September 1, 1982, but has since expired in 2012. Additionally, 2.60 acres are under a BLM Communication Use Agreement, with NASA for a Missile Tracking Station. The project area is on lands withdrawn to the USCG, but actively managed by Volusia County for public recreation.

### **Air Quality**

The Florida Department of Environmental Protection (FDEP) and the Environmental Protection Agency (EPA) are responsible for regulating activities affecting air quality in the project area. The air quality in the general area is good. There are no known major sources of pollution in the area.

### **Hydrogeology**

The shallow aquifer beneath the site is composed of Pleistocene to Recent sediments, primarily fine- to medium-grained quartz sand with shells. Groundwater in the aquifer contains iron that may cause a disagreeable taste and staining when used for domestic purposes. The depth to shallow ground water beneath the site is not known, as there are no wells on the property. Groundwater flow direction is interpreted to be radially from the higher ground in the center of the property toward the lower ground at the property margins. This is based on an interpretation of the USGS New Smyrna Beach topographic map. Recharge to the shallow aquifer is from rainfall.

Clay beds beneath the shallow aquifer confine the water under pressure in the deeper artesian aquifer. The artesian aquifer in Volusia County consists mainly of limestone of Eocene age. Most of the recharge for artesian aquifer is from rainfall near Deland, Florida, approximately 30 miles west of the subject property (Wyrick, 1960).

### **Vegetation and Natural Resources**

The Smyrna Dunes Park property is comprised of a mosaic of several biologically diverse and rare natural communities, including open beach, beach dune, coastal strand, maritime hammock, salt marsh, and mangrove swamp. The area being considered for lease does not include open beach or beach dune (*Exhibit 7 – Vegetation Communities*). Additional information is available in the New Smyrna Dunes Management Plan.

According to the Florida Natural Areas Inventory (FNAI), all of the upland habitats at SDP are considered imperiled within the State of Florida because of rarity or vulnerability. Mangrove swamp and salt marsh habitats are apparently secure within Florida, however they are the subject of environmental concern because of their importance to the marine ecosystem. The natural communities found within SDP are described in more detail below and are depicted in Figure 4. A list of the dominant plant species found within each community is provided in Table 1. Overall, vegetative diversity at SDP appears to be relatively low, although no formal inventories have been compiled. Differences in natural communities are generally more related to structure and location than to drastic changes in floral composition.

### **Mangrove Swamp/Salt Marsh**

Smyrna Dunes Park contains approximately 5.5 acres of intermixed mangrove and salt marsh habitat, located along the Park's western shoreline. Collectively, these communities represent all of the wetland habitats at SDP. Mangrove swamps are characterized as dense, low forests occurring along relatively flat intertidal and supratidal, low energy shorelines along the coasts of southern Florida (FNAI 2010). The tidal mangrove swamp community at SDP is heavily vegetated and contains all three of the true mangrove species found within Florida: red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), and white mangrove (*Laguncularia racemosa*). Mangroves within the Park rarely exceed 20 feet in height, likely due to hard freezes that occurred in the early 1980s. When freezes occur, mangroves are killed and salt marsh grasses colonize the area. Over time, mangroves reestablish and eventually replace the salt marsh, such that there is a recurring transition between the two community types.

Salt marsh is defined as a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary (FNAI 2010). At SDP, vegetation within this community consists mainly of saltmarsh cordgrass (*Spartina alterniflora*), sand cordgrass (*Spartina bakeri*), marsh elder (*Iva frutescens*), and sea oxeye daisy (*Borrchia frutescens*).

Based upon community structure and overall appearance, the mangrove swamp/salt marsh community at SDP is in good condition. There are no noticeable exotic pest plants within these communities. Owing to their combination of high salinity, fluctuating water levels, and anaerobic sediments, tidal swamps within Florida are normally safe from exotic invasion (Odum and McIvor 1990). These communities within the Park are relatively undisturbed, excepting a narrow, elevated boardwalk which provides pedestrian access to the IRL beachfront. Focus of site management within this community will be to preserve its natural state. No site improvements are proposed within this community.

### **Coastal Strand**

Coastal strand habitats are defined as stabilized, wind-deposited coastal dunes that are vegetated with a dense thicket of salt-tolerant shrubs, especially saw palmetto (FNAI 2010). FNAI

indicates that this is probably the most rapidly disappearing community type within Florida due to coastal development. SDP contains approximately 6 acres of coastal strand, located within the southeast quadrant of the Park (Figure 4). This community is dominated by thickets of saw palmetto (*Serenoa repens*), interspersed with wood and non-woody shrubs, cabbage palms (*Sabal palmetto*), and open ground. Physical improvements within the coastal strand community are limited to an elevated pedestrian boardwalk. This community also has a moderate infestation of the invasive exotic pest plant, Brazilian pepper (*Schinus terebinthifolius*).

The coastal strand community at SDP will be preserved and managed in its natural state. Exotic species management, as described in following sections, will be an integral part of this effort. Volusia County considers the eradication of invasive plants to be a priority management objective at SDP. Brazilian pepper present within the coastal strand community will be removed using a combination of targeted herbicide applications, mechanical/physical removal, and/or prescribed burning. It is anticipated that removal of these plants will provide the space necessary for the recruitment and expansion of native vegetation.

### **Maritime Hammock**

Maritime hammock habitats typically consist of a narrow band of hardwood trees lying just inland from coastal strand communities (FNAI 2010). They occur on old coastal dunes that have stabilized enough to allow for the growth of a forest. At SDP, there is an approximately 7-acre maritime hammock community located along the southern site boundary (Figure 4). Dominant vegetation within this community includes red cedar (*Juniperus virginiana*), buttonwood (*Conocarpus erectus*), saw palmetto, cabbage palm, saw palmetto, and the exotic Brazilian pepper. Previous impacts to this community have included the construction of a small paved parking area, a recreational/educational pavilion, restrooms, and staff office and equipment storage space. Future impacts may include the expansion of the public vehicle parking area.

The maritime hammock community at SDP is in fair condition. Although there is significant coverage of native vegetation, there is also a major infestation of Brazilian pepper. Future management of this community will include the control of this species.

### **Beach Dune**

Smyrna Dunes Park contains about 5.7 acres of beach dune habitat, situated behind the open beach along the Atlantic and Ponce de Leon Inlet shorelines (Figure 4). Beach dunes are generally found along high energy shorelines and are formed by the deposition of sand from onshore winds. This community is dominated by salt tolerant, herbaceous native groundcover, most notably sea oats (*Uniola paniculata*). No exotic species are known to occur within this community. There are currently six elevated dune crossovers within this community which allow for pedestrian access. Otherwise, it is undisturbed, and no future site improvements are planned.

## **Coastal Grassland**

Disturbed coastal grassland occupies about 44 acres within the central portion of SDP (Figure 4). At least a portion of this transitional community was submerged prior to the construction of the jetty at Ponce Inlet, and it now occupies a large portion of a relict spoil deposition site used for past inlet maintenance dredging projects. It is likely that this community will eventually succession into a beach dune community, but at present is best characterized as a coastal grassland.

The FNAI (2010) reports that coastal grassland is a predominantly herbaceous community occupying the drier portions of the transition zone between beach dunes on the immediate coast and communities dominated by woody species, such as coastal strand or maritime hammock, further inland. This habitat type occurs primarily on the broader barrier islands and capes along the sandy coasts of Florida. At SDP, this community is dominated by grasses, low-growing herbs, and succulents, such as broom grass (*Andropogon* sp.), camphorweed (*Heterotheca subaxillaris*), and prickly-pear cactus (*Opuntia humifusa*). Vegetation within this community is generally sparse. Management concerns within this community include a very minor infestation of Brazilian pepper. Existing improvements within this community type include an approximately one-mile elevated pedestrian boardwalk. No other improvements are foreseen.

## **Coastal Berm**

According to FNAI (2010), coastal berm habitats consist of short forests (less than 10 feet in height) or shrub thickets found on long narrow storm-deposited ridges of loose, unconsolidated sediment. These ridges parallel the shore and may be found on the seaward edge or landward edge of the mangroves or further inland. About 6 acres of coastal berm communities at SDP can be found along the western shoreline (Figure 4). Vegetation consists mostly of red cedar, wax myrtle, and Brazilian pepper. There are no existing or proposed site improvements within this community. The prime management concern within this habitat shall be to control the invasive Brazilian pepper.

## **Priority Plant Species**

No formal surveys for listed plant species have been conducted at SDP, and there are no records of listed plant species within SDP. However, based on FNAI occurrence data and current habitat conditions there is potential for sand dune spurge (*Chamaesyce cumulicola*) and Atlantic coast Florida lantana (*Lantana depressa* var. *floridana*), both listed as endangered by the State of Florida, to occur in the coastal grassland, beach dune and coastal strand habitats within SDP.

## **Floodplains**

According to Cowardin et al. (1989), the property is located adjacent to a marine tidal and intertidal system. The shoreline is low relief, unconsolidated and subject to regular tidal flooding. The waterfront portion of the property is designated as a 100-year floodplain, while

the remaining non-waterfront portions of the property are not designated as floodplain. The property is not designated as an undeveloped floodplain nor is it in proximity to a wild and scenic river.

### **Wetlands**

By definition of wetlands, according to the U.S. Army Corps of Engineers Wetland Delineation Manual (1987), portions of the subject property are located within wetland area. These are low-lying areas where flooding occurs daily as a result of marine tides. The site wetlands are situated primarily on the western margin of the property at the edge of the Indian River North.

### **Soils**

Soils within the project area are recorded in the 1980 United States Department of Agriculture (USDA) et al., Soil Survey of Volusia County, Florida. The Palm Beach-Paola-Canaveral is the soil types that have been mapped in the project area. The designation is common to long, narrow coastal dune ridges, predominantly of excessively drained to somewhat poorly drained, grayish and brownish, shelly and sandy soils: includes coastal beaches. All are quartz sand with generous amounts of multicolored shell fragments.

These are excessively drained sandy soils on primary dunes that border and are parallel to the Atlantic coast. Slopes are 2 to 8 percent. Typically, the surface layer is about 6 inches thick. It is sand and about 15 to 30 percent very fine shell fragments. The upper 3 inches is gray and the lower 3 inches is grayish brown. Between depths of 6 and 34 inches, light brownish gray sand mixed with multicolored shell. Below this to 80 inches is white sand and multicolored shell.

### **Cultural Resources**

There are no known archeological, cultural, and/or historical resources located within the SDP property. The County would notify the State Division of Historical Resources immediately if future evidence is found to suggest historical or archeological resources at the site. Collection of artifacts or the disturbance of archeological and historic items, are prohibited unless prior authorization has been obtained from the State Division of Historical Resources. Also, a review of the Florida Master Site File (FMSF) database indicates that there are no previously recorded cultural resources within the project boundaries. The USCG Station Ponce de Leon Inlet is not listed on the FMSF, and is not listed on the National Register of Historic Places.

### **Native American Religious Concerns and Consultation**

There are no known concerns of this type relative to the project area.

## **Recreation**

Central Florida is a heavily populated metropolitan region with very high beach and water way access demand. SDP is a park of regional significance providing beach and waterway access to the populations of Volusia, Lake, Orange, Seminole and Osceola counties. It provides a unique opportunity for naturalists, ecologists, students and the general public to see a wide variety of animals, birds, reptiles, marine life and vegetation in their natural habitat. The surrounding waters provide excellent fishing, boating and swimming opportunities. Park uses include fishing, surfing, windsurfing, kite-surfing, swimming, boating, hiking, jogging, sunbathing, picnicking, bird-watching, dog walking, photography and shell collecting.

Special events held at the park include weddings, family reunions, surfing competitions, bird observation outings, and occasional non-profit fundraising events. The coastal division director reviews and authorized all park special events.

Dogs are allowed on inlet and river shorelines and boardwalks. Dogs must be leashed at all times and dog waste must be picked-up and properly disposed. Dog waste bad dispensers are located throughout the park.

Driving on the beach is a long-standing tradition in certain areas in Florida, including Volusia County. Volusia has remained one of the few places in Florida where vehicles have access to the beach. That's because the county has relatively little off-beach parking for visitors, and the County's charter mandates beach access.

## **Special Status Species**

The following federally listed species are known to occur within the area proposed for R&PP lease, or could be affected by activities planned within the SDP. It should be noted that the Atlantic beaches, majority of the dune habitats, and the Indian River shoreline in the SDP boundary are on land claimed by the State of Florida, having accreted since the original government survey. As such, that land is outside of the proposed R&PP lease area (*Exhibit 5 - Ponce de Leon Cadastral Survey Map*).

## **Sea Turtles**

Smyrna Dunes Park includes about 1.7 miles of linear shoreline that are suitable nesting habitat for sea turtles. Species that have nested within Volusia County, and therefore have the potential to nest within SDP, include the threatened loggerhead (*Caretta caretta*), and endangered green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles. Based upon available monitoring data from the three most recent nesting seasons (2010-2012), the section of shoreline associated with SDP receives an average of about 10 loggerhead nests per year (Volusia County, unpublished data). Nesting by green and leatherback sea turtles with SDP are rare events, and no Kemp's ridley sea turtles have nested within this area. Sea turtles within this stretch of beach are protected and managed by Volusia County, the State of Florida, and the U.S. Fish and Wildlife Service with respect to beach driving through a

Federal Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP), issued to Volusia County on November 22, 1996 and which expires on December 31, 2030. As a result of the preceding regulatory mechanisms, and their resulting protection and conservation benefits, the SDP Management Plan does not address additional provisions to protect these species. SDP staff would continue to report sea turtle nesting activity observed on inlet beaches.

**Atlantic salt marsh snake (*Nerodia clarkia taeniata*), listed as threatened**

There are historic records of Atlantic salt marsh snake in the estuarine wetland habitats in and around the vicinity of Ponce Inlet. Its current occurrence there is not known.

**Southeastern beach mouse (*Peromyscus polionotus niveiventris*)**

The southeastern beach mouse occurs in beach dune, coastal strand, and coastal grassland portions of SDP. Historically, this subspecies was distributed from Ponce de Leon Inlet in Volusia County, south to Miami-Dade County (Stout 1992), although it is currently believed to have been extirpated south of Indian River County (USFWS 2008). Preferred habitat is the sea oat zone of primary coastal dunes; however, they can also colonize secondary dunes and coastal strand habitat (USFWS 2008). Recent evidence indicates that the Park supports a viable beach mouse population. Trapping studies conducted in 2004 captured a considerable number of beach mice (Suazo 2004), and subsequent trapping studies conducted in 2006-2007 led to the conclusion that the SDP beach mouse population was stable and secure (> 500 individuals; USFWS 2008). This population may also extend onto private property up to one-half mile south of the Park where houses and condos are set well behind the primary dune and swale system, although no surveys have been conducted there. The beach mouse population at SDP is considered to be disjunct from the closest known population located approximately 10 miles south of the Park within the Canaveral National Seashore.

Conservation of southeastern beach mice is considered by SDP to be an important goal of their management plan. The following conservation measures are included in the proposed SDP management plan.

1. Establish a program to regularly monitor, in accordance with state and Federal protocols, the Southeastern beach mouse population within SDP, and use the additional and existing information to develop, in coordination with State, Federal and other species' authorities a long term species and habitat management plan.
2. Public access to the beach at SDP is currently restricted to an extensive system of elevated boardwalks. These boardwalks have been very effective in minimizing trampling of the dune system by pedestrian traffic. The County will continue to maintain these boardwalks in good working order during the term of their lease using existing funding mechanisms. It is anticipated that the boardwalk system will be replaced within the lease term. Prior to construction, the County will conduct a survey to locate and mark beach mouse burrows potentially affected by construction and work with the USFWS to develop appropriate protective measures.

3. Strategically-placed signage within the SDP notifies the public that it is illegal to disturb the dunes or dune vegetation, further discouraging people from traversing the dune system. Park staff will continue to be vigilant of visitors, vehicles, and/or pets that encroach on the dune system. Minor violations will be addressed politely with the Park visitor. Repeated and/or egregious violations will be referred to law enforcement.
4. Domestic cats are a known predator of beach mice. SDP lies adjacent to a residential portion of New Smyrna Beach where feral and/or domesticated cats may be present. The extent to which domestic cats utilize the parcel is unknown, but sightings have been reported. Park staff will discourage visitors from feeding free-ranging animals on the property and will maintain its existing network of animal-proof garbage cans. Unregulated domestic animals that are found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.
5. Dogs would be allowed at SDP, but only at certain times and locations, and they must be kept on a leash at all times. Current regulations separate dogs both spatially (i.e., limiting them to boardwalks and inlet beaches) and temporally (i.e., prohibiting dogs at night when mice are active) from beach mice. Signage placed throughout SDP informs visitors of the regulations, and free dog waste collection bags are provided at strategic locations. Park staff will enforce leash regulations. During times of peak visitation (Memorial Day to Labor Day), a dedicated Park staff member will monitor inlet beaches to enforce these regulations.

**Piping plover (*Charadrius melodus*), listed as threatened**, also includes acres within designated critical habitat

SDP is known to provide loafing habitat for piping plover, and the contiguous intertidal beach provides foraging habitat. Birds present during the spring and summer represent part of an overwintering, non-nesting population. During 2010 to 2012, an average of about 30 incidental sightings of wintering piping plovers were documented on SDP shorelines by staff of Volusia County Environmental Management, Beach Safety, and Ecological Associates, Inc. (EAI). During that period, piping plovers were observed in Volusia County from August through May.

In July 2001, the USFWS published its Final Determination of Critical Habitat for wintering piping plovers. Two areas were designated in Volusia County, one on the north side and one on the south side of Ponce de Leon Inlet, collectively referred to as FL-Unit 34. The southern portion of that unit lies entirely within SDP and includes beaches on both the Atlantic and inlet sides of SDP. The proposed lease area is generally south of the designated critical habitat, except for approximately 6 acres on the Atlantic side. These 6 acres are coastal grassland and coastal strand and do not include preferred beach/shoreline habitats.

### **Red knot (*Calidris canutus rufa*), listed as threatened**

Migrating and overwintering rufa red knot utilize the beaches of SDP, although there is potential for non-breeding individuals year around. Adult red knots, presumably female, have been recorded at SDP as early as August. Red knots forage on intertidal flats for mollusks, crustaceans, and other marine invertebrates. According to the Rufa Red Knot Background Information and Threats Assessment, population declines of 70 to 75 percent have been documented since 2000 based on survey data from Tierra Del Fuego (wintering grounds) and Delaware Bay (key spring stop-over location). Because of shifting migration patterns, the same conclusion cannot be made of the southeastern wintering populations, despite some years with lower survey counts in Florida. Primary threats in the nonbreeding portion of the range identified by the U. S. Fish and Wildlife Service are reduced food availability at Delaware Bay stopover sites, timing of optimal food sources during migration, sea level rise, shoreline stabilization, and coastal development. In many wintering and stopover areas, quality high-tide roosting habitat (i.e., close to feeding areas, protected from predators, with sufficient space during the highest tides, free from excessive human disturbance) is limited.

### **Wildlife**

The mangrove swamp, salt marsh, and open beach portion of the property provide habitat for numerous listed wading and shorebird species. Wading species utilizing these areas include the little blue heron, wood stork, snowy egret, roseate spoonbill, white ibis, and tricolored heron. All typically nest within mangrove trees or other wood shrubs, but prefer to place their nests over open water within mangrove islands (Hipes et al, 2000). Mangrove areas are also frequently used for nesting and roosting by the brown pelican, a State Species of Special Concern. No bird rookeries have been identified on the site to date; the nearest known wading bird rookery is located approximately 1.5 miles south of SDP (FWC, unpublished data).

The shorelines of SDP provide ample foraging habitat for listed shorebirds and also support nesting Wilson's plover (*Charadrius wilsonia*). As part of its HCP, Volusia County Environmental Management conducts surveys for nesting shorebirds each year. Monitors have recorded an average of two Wilson's plover nests per year over the previous three years (2010-2012). In 1979, a portion of the interior of the site was designated by the State of Florida as a Critical Wildlife Area (CWA) for least tern and black skimmer nesting. This 13.7-acre CWA was licensed to the State by the U.S. Coast Guard. By order of the FWC (formerly the Florida Game and Freshwater Fish Commission), entry into or molestation of birds within the CWA was prohibited from April 1 to August 15 each year. Least tern and black skimmers reportedly nested in this area until 1983, when the colony was abandoned (Hovis 2000). The CWA license expired in the 1980's. No shorebird nesting is presently known to occur within interior portions of SDP.

Upland portions of the SDP property provide suitable habitat for the gopher tortoise (*Gopherus polyphemus*), a State-listed threatened species, and candidate for listing by USFWS. Based upon informal burrow counts, there is a sizable gopher tortoise population occupying the coastal

strand, beach dune, and coastal grassland portions of the site. However, the exact size and demographic of this population is currently unknown.

## **Chapter 4 – ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES**

This chapter assesses potential environmental consequences associated with direct, indirect and cumulative effects of the Proposed Action and alternatives.

### **Land Use Status**

#### **Impacts of the Proposed Action:**

The management of the site is not expected to change. The current land use of the project area is recreational and would continue to be utilized by the County of Volusia and surrounding counties of Lake, Orange, Seminole and Osceola for its recreational opportunities and its amenities. The proposed leasing or transfer of the subject tract would impact current land use in a positive manner for the outdoor enthusiast by ensuring the continuation of passive forms of recreation. Current restricted use by elevated boardwalks and dune walkovers have resulted in no degradation of the dune structures or plant life. All beach goers will continue to be restricted to the boardwalks and dune walkovers.

#### **Mitigation measures:**

- Construction of future facilities will entail some impact to onsite natural communities. Attention will be given during the planning phase to ensure that the proposed parking area and fishing pier are designed and sited in a manner that minimizes impacts to natural resources. Although some impacts to the maritime hammock will be unavoidable, the footprint of the parking lot will be minimized to the extent possible and must be confined to the upland area.
- Prior to any site improvements, pre-construction surveys would be conducted to determine the location of any protected plant or animal species. The County would coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) and USFWS and implement appropriate protective measures should any of these species be found in areas potentially affected by construction activities. All proposed facilities would be sited and constructed in accordance with local, State, and Federal regulations. All construction and development plans are subject to review and approval by appropriate local (New Smyrna Beach), State (Florida Department of Environmental Protection - FDEP, St. Johns River Water Management District – SJRWMD), and/or Federal permitting agencies ((U.S. Army Corps of Engineers - USACOE) and shall be in compliance with the Americans with Disabilities Act.

**Impacts of the No Action Alternative:**

The No Action Alternative would have no effect on current land status. However, Volusia County would lose the right to manage SDP as a public park, and BLM-Eastern States would retain ownership and management of the property after the partial revocation of the USCG's withdrawal is processed.

**Air Quality**

**Impacts of the Proposed Action:**

No impacts are anticipated on the air quality from the proposed action.

**Impacts of the No Action alternative:**

The No Action Alternative would have no effect on the air quality.

**Hydrogeology/Water Quality**

**Impacts of the Proposed Action:**

It is not anticipated that there would not be any adverse impact to the water quality from the proposed action.

**Impacts of the No Action alternative:**

There would be no impact to water quality from the No Action alternative.

**Vegetation and Natural Resources**

**Impacts of the Proposed Action:**

Volusia County plans to implement a maintenance program to address Brazilian pepper infestations at SDP. These plants will be eradicated within natural communities, where necessary, with the goal of maintaining less than 10% canopy coverage within five years of plan implementation. This will be accomplished through a combination of low impact mechanical removal (i.e., chainsaw, pruning saw) and/or foliar or basal bark applications of an approved herbicide. All activities will be performed by qualified Volusia County personnel, contractors, and/or volunteers managed by the County. It is anticipated that removal of these plants will allow for the successful natural recruitment of desirable native species.

Informal monitoring for Brazilian pepper at SDP will be performed by Park staff during routine operations. Maintenance treatments will occur for the duration of the County's lease to the extent allowed by funding and qualified staff.

Informal monitoring for Brazilian pepper at SDP will be performed by Park staff during routine operations. Maintenance treatments will occur for the duration of the County's lease to the extent allowed by funding and qualified staff.

SDP plans to implement a prescribed fire program to improve wildlife habitat, promote forest regeneration, cycle nutrients, and reduce the risk of catastrophic wildfires. Most of the upland communities at SDP could benefit from a prescribed burning regime, although logistical realities (e.g., presence of park infrastructure, adjoining residential properties and inconvenience to park visitors) may limit the scope of the burn program. The County would initially consider establishing a prescribed burn program within the coastal strand community (Figure 4). Other areas may be added if deemed feasible. The County would use reasonable and professional judgment when establishing the burn cycle. The designated burn area may initially be divided into smaller segments, and each segment burned on a rotating cycle. Smaller segments may be then combined with other segments after initial burns. The interval between successive burns will be predicated on prevailing site conditions.

Prescribed burns would be conducted in accordance with State statutes (F.S. 590.125) and associated administrative rules (Chapter 5I-2, F.A.C.) under the direction of a Certified Prescribed Burn Manager (CPBM). Several staff members of Environmental Management are Certified Prescribed Burn Managers. Burns must be authorized by the local Division of Forestry office. CPBM's must present their certification number at the time of their permit request from the Division of Forestry, and they must have a copy of the prescription on site for inspection.

Specific burn plans would be prepared by the County's CPBM or designee. Minimum requirements for the burn prescription include: stand, site, and fuel description; map of the area to be burned; personnel and equipment to be used; desired weather factors; desired fire behavior; ignition technique; time and date the prescription was prepared; authorization date and time period; an evaluation and approval of the anticipated impact of the proposed burn on smoke-sensitive areas; and signature and number of the certified burn manager. Each burn will be performed in accordance with the burn prescription. *(See Exhibit 6 - Vegetation Communities Map)*

### **Priority Plant Species**

Priority plant species are expected to benefit from removal of invasive species. Neither of the State-listed plants with potential to occur in SDP are fire adapted, but their preferred habitat is not expected to be treated with prescribed fire.

### **Impacts of the No Action alternative:**

The no action alternative, would not allow for the leasing of the lands to Volusia County and the tract would return to BLM for active management. Until dedicated funding and staff were in place, BLM and probably the State of Florida would suspend most active management. Maintenance of facilities, enforcement of protective measures, monitoring and habitat restoration

activities would likely be curtailed. Invasive species management would be postponed and would have a detrimental effect on native plant communities. The percentage of Brazilian pepper and the extent of the infestation are both likely to increase until control measures are taken.

### **Floodplains/Wild and Scenic Rivers**

#### **Impacts of the Proposed Action:**

The Proposed Action would not result in any elimination of floodplains on the property. No ground disturbing activities are proposed in the R&PP lease project area.

#### **Impacts of the No Action alternative:**

Under the No Action Alternative, no new impacts to floodplains would occur.

### **Wetlands**

#### **Impacts of the Proposed Action:**

The Proposed Action would not result in any elimination of wetlands on the property.

#### **Impacts of the No Action alternative:**

Under the No Action Alternative, no new impacts to wetlands would occur.

### **Soils**

#### **Impacts of the Proposed Action:**

The Proposed Action would not have an impact on the soils. Any future proposed developments and improvements would be fully analyzed for their impacts.

Shore erosion can be accelerated by careless beach driving and vehicles on the beach can be a safety hazard to beach goers.

#### **Impacts of the No Action alternative:**

The No Action Alternative would have no impact on the soils.

## **Cultural and Historical Resources**

### **Impacts of the Proposed Action:**

The Proposed Action would have no direct impacts on cultural resources. The likelihood of any cultural and/or historical resources occurring on the project site is deemed low. If any cultural resources are encountered during future projects during ground-disturbing activities, work would cease in the area of the discovery and the BLM would be notified immediately. Work would not resume until written authorization to proceed was issued by BLM

### **Impacts of the No Action Alternative:**

The No Action Alternative would have no new impacts on any known prehistoric or historic cultural resources.

## **Native American Religious Concerns and Consultation**

### **Impacts of the Proposed Action:**

No concerns of this type are present. The proposed action doesn't require any consultation because there's no ground disturbing activities associated with the proposed action.

### **Impacts of the No Action Alternative:**

Direct and indirect impacts to Native American Religious practices would not occur. Under the No Actions Alternative, it would have no impacts.

## **Recreation**

### **Impacts of the Proposed Action:**

The property is currently accessible to the general public for many forms of recreational activities. The proposed action is expected to result in the continuation and utilizing of the property for outdoor recreational activities which is a very popular stopping point for the users of the property.

### **Impacts of the No Action Alternative:**

Transferring management of SDP to BLM and the State of Florida is expected to result in a lapse in public services and could inconvenience the visiting public.

## **Special Status Species**

### **Loggerhead sea turtle (*Caretta caretta*), impacts of the Proposed Action:**

The issuance of the R&PP lease would allow the current levels of public uses to continue, including use of boardwalks that provide for public access to suitable sea turtle nesting habitat on the beaches. The SDP monitors the beachfront daily for crawls and nests during the sea turtle nesting season (May through September). With daily monitoring and sea turtle nest protection measures required under the HCP, this action is not expected to result in adverse effects or add to additional take.

The public domain lands included in this proposal are all outside of suitable nesting habitat for sea turtles. The proposed R&PP lease would have no direct effect on nesting sea turtles, but by supporting the continued public use of the SDP the lease may affect loggerhead sea turtles, but is not likely to adversely affect because of the protections measures in place under the HCP.

SDP is not within the recently designated critical habitat for the Northwest Atlantic population of loggerhead sea turtles, and the proposed lease would not affect designated critical habitat.

### **Green sea turtle (*Chelonia mydas*), impacts of the Proposed Action:**

The proposed lease does not include suitable nesting habitat for green sea turtle, but by supporting the continued public use of the SDP the lease may affect green sea turtles, although it is not likely to adversely affect because of the protections measures in place under the HCP.

### **Leatherback sea turtle (*Dermochelys coriacea*), impacts of the Proposed Action:**

The proposed lease does not include suitable nesting habitat for leatherback sea turtle, but by supporting the continued public use of the SDP the lease may affect leatherback sea turtles, although it is not likely to adversely affect because of the protections measures in place under the HCP.

### **Atlantic salt marsh snake (*Nerodia clarkia taeniata*), impacts of the Proposed Action:**

The proposed project occurs primarily outside of the preferred habitat, and may affect but is not likely to adversely affect this species.

### **Southeastern beach mouse (*Peromyscus polionotus niveiventris*), impacts of the Proposed Action:**

The vast majority of the suitable habitat at the SDP is located on land claimed by the state. There are some records of southeastern beach mouse on the land included in the R&PP application. However, given the protective measures being employed throughout SDP the proposed lease is expected to affect, but not adversely affect southeastern beach mouse. Future

projects, such as replacement of the dune boardwalks may require additional site specific analysis, and if it is determined that there is potential for an adverse effect, a separate Section 7 consultation with FWS would be required.

**Piping plover (*Charadrius melodus*), impacts of the Proposed Action:**

While there is potential for pedestrian recreational use to flush piping plovers, in general this recreational beach use is considered negligible. Visitor use is highest during the summer months (Memorial Day to Labor Day) when plovers are not typically present. There is potential for harassment of foraging and loafing plovers from off-leash dogs, but SDP policy requires dogs be leashed at all times in SDP. Dogs are allowed on the natural trails along the western side of the Park and on inlet beaches any time of day, but can only be taken on the elevated boardwalks between sunrise and 10:00 AM and within one hour of sunset.

None of the land in the proposed lease area is considered preferred shoreline habitat for piping plover. In addition, the protection measures in place across the SDP are expected to reduce the potential to affect piping plover. Additional loafing and foraging habitat is available within Lighthouse Point Park across Ponce Inlet, as well as on the Rockhouse Creek shoals and emergent lands complex associated with the inlet feature located west of SDP and the confluence of the North Indian and Halifax Rivers. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect piping plover.

The proposed lease supports the continuing use of SDP by the public and there is potential for that use to affect non-breeding piping plover as a result of conflicts with pedestrian and vehicle use of beach and intertidal areas. It is generally considered that typical beach use by the public in piping plover wintering habitat does not have serious consequences at the population level. (Unsworth et al. An Economic Analysis of Piping Plover Recovery Activities on the Atlantic Coast. Prepared for the U.S. Fish and Wildlife Service, Division of Economics, Arlington, VA, 1998). With adequate enforcement of the leash rule in SDP, the proposed lease is not expected to result in adverse effects to designated critical habitat within SDP.

**Red knot (*Calidris canutus rufa*), impacts of the Proposed Action**

Like wintering piping plovers, red knots are apt to be flushed by pedestrian and vehicle beach use. This may limit access to some feeding area where public use is highest in SDP. Frequent disturbance by both humans and roaming dogs within close vicinity to flocks of red knots can cause the birds to flush and increase energy expenditures. This can be detrimental to individuals of the rufa subspecies, as they migrate long distances and must retain as much energy and body fat as possible to both fly the long distance to and from wintering grounds and successfully breed when they reach the Arctic (COSWIC 2007).

As with the piping plover, none of the land in the proposed lease area is considered preferred shoreline habitat for rufa red knot. Protection measures in place across the SDP are expected to reduce the potential to affect both species. Additional loafing and foraging habitat is available

within lighthouse Point Pork across Ponce Inlet, as well as on the Rockhouse Cree shoals and emergent lands complex associated with the inlet feature located west of SDP, and the confluence of the Nort Indian and Halifax River. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect, rufa red knot.

In summary, BLM has determined that the proposed R&PP lease to Volusia County for the continued use of SDP may affect but is not likely to adversely affect loggerhead sea turtle, green sea turtle, leatherback sea turtle, Atlantic salt marsh snake, southeastern beach mouse, piping plover, and red knot. The proposed lease is not expected to affect Kemp's ridley sea turtle, or to result in adverse effects to piping plover designated critical habitat. These determinations are based on a biological assessment (*Exhibit 8 – BLM's Biological Assessment*) submitted to the Jacksonville Ecological Services Office of the U.S. Fish and Wildlife Service on February 2, 2015. BLM received concurrence with these determinations in a letter from the U.S. Fish and Wildlife Service dated February 3, 2015 (*Exhibit 9 - USFWS Consultation Letter – FWS Log. Nos. 41910-2015-I-0118*).

**Impacts of the No Action alternative:**

Special Status Species would be adversely affected by a lapse in management if BLM and the State of Florida are required to assume management of SDP. Neither agency has current funding or staffing levels sufficient to implement the approved SDP management plan, which would delay implementation of the species protection, monitoring and habitat enhancement actions.

**Wildlife**

**Impacts of the Proposed Action:**

The proposed action is not expected to alter current management of the park and is not expected to alter wildlife use of the site. The park also provides a unique opportunity for naturalists, ecologists, students and the general public to see a wide variety of animals, birds, reptiles, marine life and vegetation in their natural habitat. To protect the natural habitat, more than two miles of elevated boardwalks, picnic areas, pavilions and an observation tower have been erected.

Driving on the beach is a long-standing tradition in certain areas in Florida. It is also widely recognized that beach driving can cause serious ecological impacts by potentially destroying nesting areas for sea turtles and birds, such as the Piping Plover and damaging or destroying vegetation and dunes and an activity that occurs on the adjacent State lands.

**Impacts of the No Action alternative:**

Wildlife and key habitats are likely to be degraded by a lapse in management if BLM and the State of Florida are required to assume management of SDP. Neither agency has current funding

or staffing levels sufficient to implement the approved SDP management plan, which would delay implementation of the habitat protection and enhancement actions.

**Cumulative Impact of the Proposed Action:**

Approval of the proposed action would result in the long term lease of Federal land to Volusia County for recreational purposes. Cumulative impacts are impacts on the environment which result from the incremental impact of the proposed action, when added to other past, present and reasonable foreseeable future actions, regardless of what agency or person undertakes such other actions. They can result from individually minor but collective actions taking place over a period of time. The SDP is one of many tourist attractions in Volusia County. While some people may come to the County specifically to visit SDP, the majority do so because of their general visit to the area. This is, most people will plan their visit to Volusia County based around the many recreational amenities and activities such as hiking, swimming, fishing, sea shell collecting etc.

**Cumulative Impacts of the No Action Alternative:**

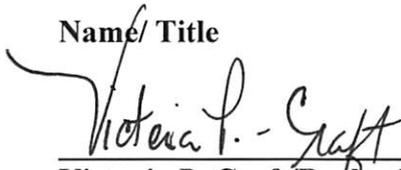
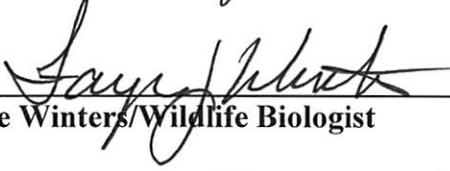
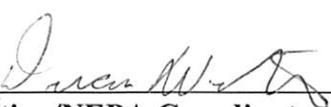
Under the No Action Alternative, Volusia County would no longer manage the tract for various forms of passive public recreation. Neither BLM nor the State of Florida has staffs or budgets to replace the services offered by Volusia County. There would likely be a lag in services, drop in attendance, lack of enforcement of environmental protective measures and habitat degradation as a result.

**V. - LIST OF AGENCIES AND PERSONS CONSULTED**

Persons and Agencies Consulted:

United States Fish and Wildlife Service, USFWS  
Native American Tribes  
Historical Preservation Offices  
State of Florida

**Preparers/Reviewers:**

Name/ Title	Initials/Date
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 Faye Winters/Wildlife Biologist	FW 2-13-2015
 John M. Sullivan/Archeologist	JMS 2/19/2015
 Duane A. Winters/Acting/NEPA Coordinator	2-17-2015
<b>Duane A. Winters/AFM, Natural Resources</b>	
Reviewed by: 	Initials/Date: DW 2-17-2015

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Jackson, Mississippi 39206  
<http://www.es.blm.gov>

IN REPLY REFER TO:  
2912 (020) VC

Commander Benjamin L. Davis, CDR  
Commanding Officer  
U.S. Department of Homeland Security  
United States Coast Guard  
Civil Engineering Unit Miami  
15608 S. W. 117<sup>th</sup> Street  
Miami, Florida 33177-1639

July 20, 2011

Dear Commander Davis:

We are in receipt of the U. S. Coast Guard's revised "Notice of Intent to Relinquish" dated September 16, 2010, to relinquish custody, accountability and control of approximately 73.36 acres on the USCG Station Ponce de Leon. In the interim or until such time we are able to process your request for relinquishment of your withdrawal. The Ponce de Leon Port Authority, Daytona Beach, Volusia County, who currently occupies most of the withdrawal has requested that the Bureau of Land Management (BLM) classify those public lands to be leased and/or patented to the county under the authority of the Recreation and Public Purposes (R&PP) Act, as amended (43 U. S. C. 869 et seq.) for their continued operations of the Smyrna Dunes Park.

The subject property is located in Section 32, Township 16 South, Range 34 East. The legal description defines the property as two parcels:

**Tallahassee Meridian**

Lot 1, Section 32, Township 16 South, Range 34 East and Lot 1, Section 33, Township 17 South, Range 34 East, Volusia County, Florida.



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Lands that are subject to disposition under the R&PP Act and which are under the jurisdiction of another federal agency, requires that we obtain written approval from the holding agency of the withdrawal before the issuance of an R&PP lease or patent. The Act specifically provides that lands withdrawn in aid of another Federal agency may be conveyed (or leased) with the consent of the holding agency and lease or patent may be issued without first terminating the withdrawal. Pursuant to 43 CFR 2741.1, we are seeking the Coast Guard's consent/approval to move forward with the classification of the above lands for recreation in Volusia County.

If you have any questions, or need additional information, please contact Vicky Craft of our office at 601.977.5400, extension 435. Thanks in advance for your assistance regarding this matter.

Sincerely,

*Grace Hues (acting for)*

Bruce E. Dawson  
Field Manager

*B. E. Dawson* 7/22/2011  
Consent

\_\_\_\_\_ Non-Consent

cc: Joe Nolin, Volusia County  
Pat Dixon



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Exhibit 2 (Location Map)

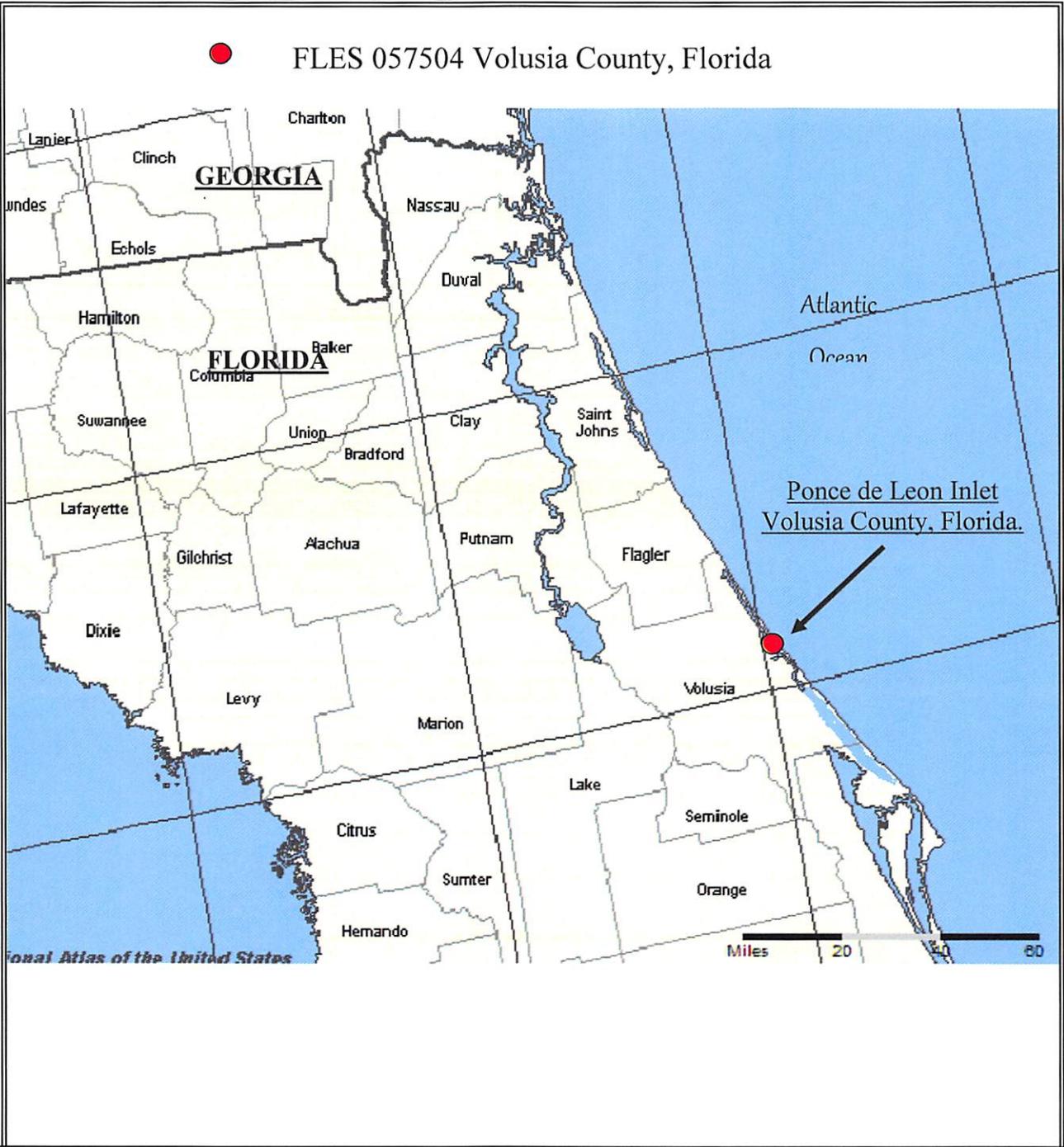


Exhibit 3 (Vicinity Map)

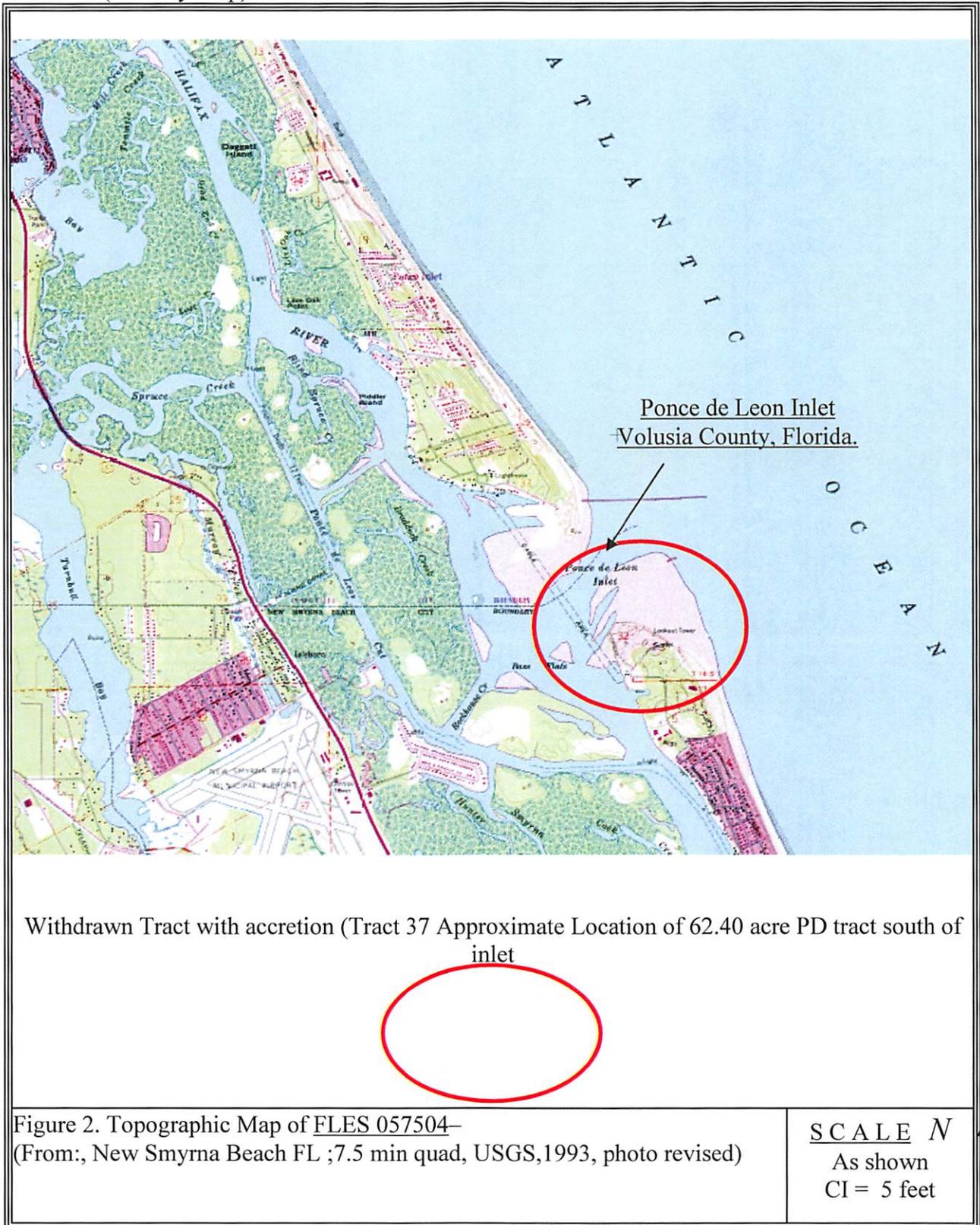
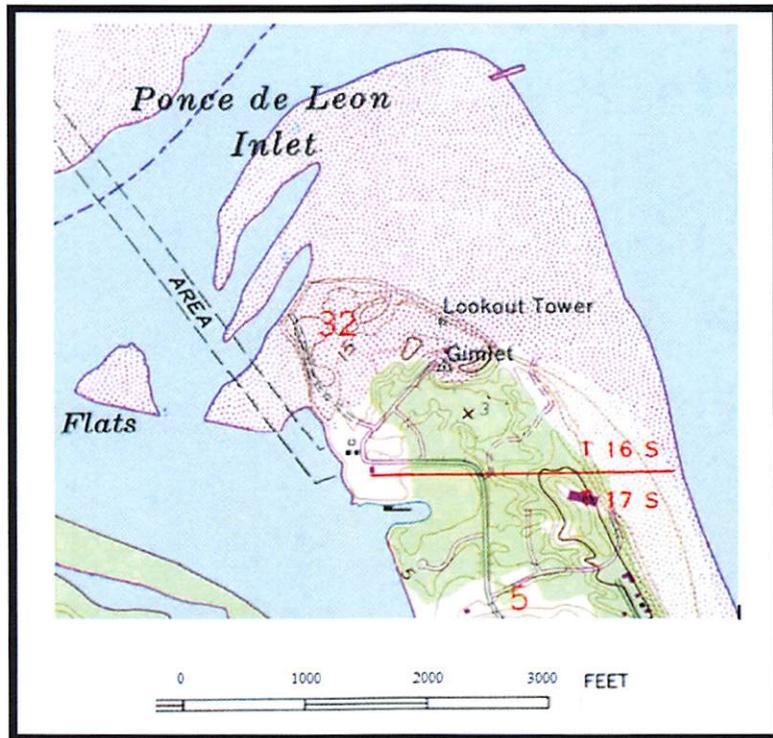
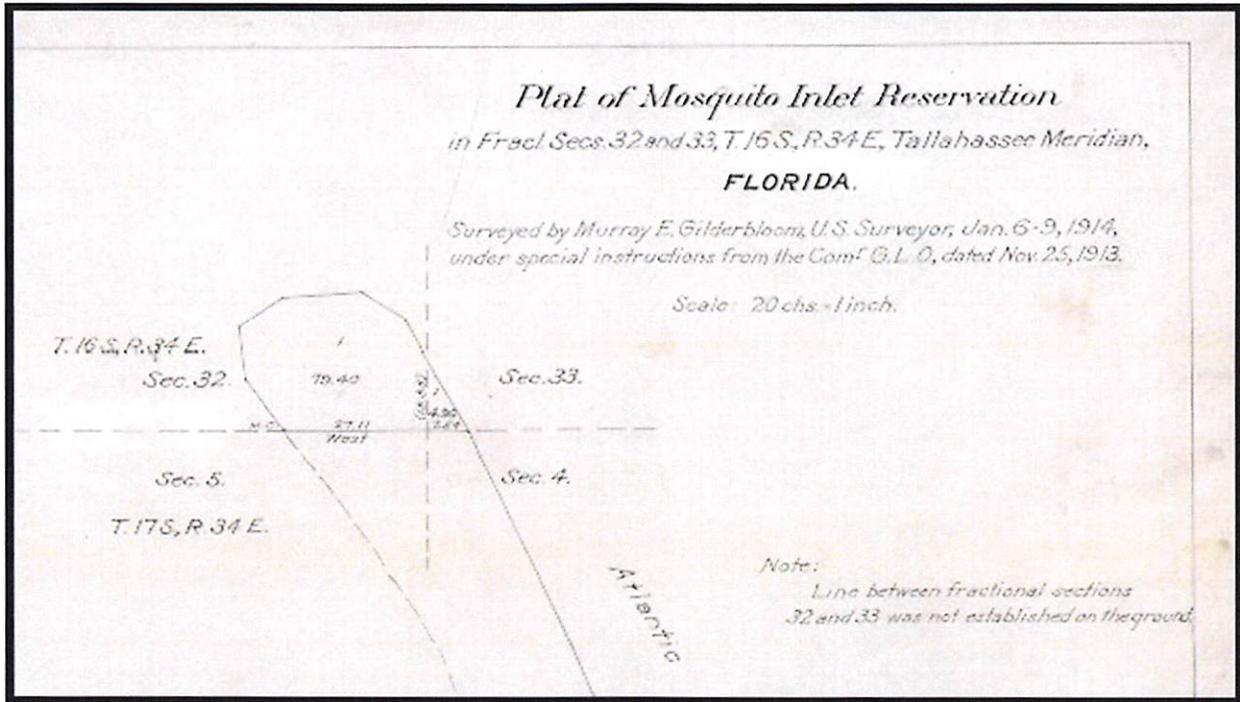


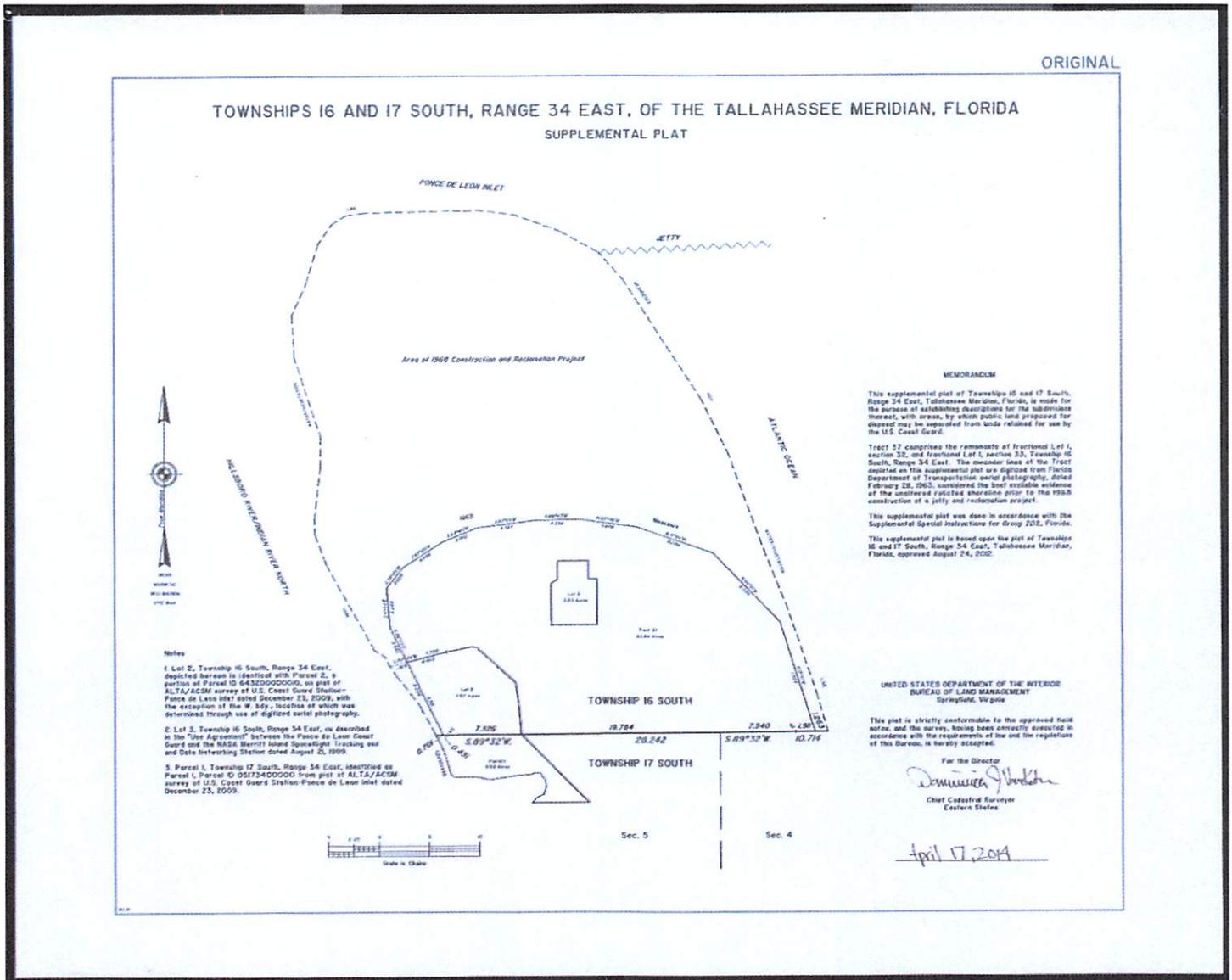
Exhibit 4. FLES 057504 – Enlarged Topographic Map (From: New Smyrna Beach FL; 7.5 min quad, USGS, 1993, photo revised) & Survey Plat – Fract. Secs 32 and 33, T.16 S., R.34 E. (Now Tract 37)



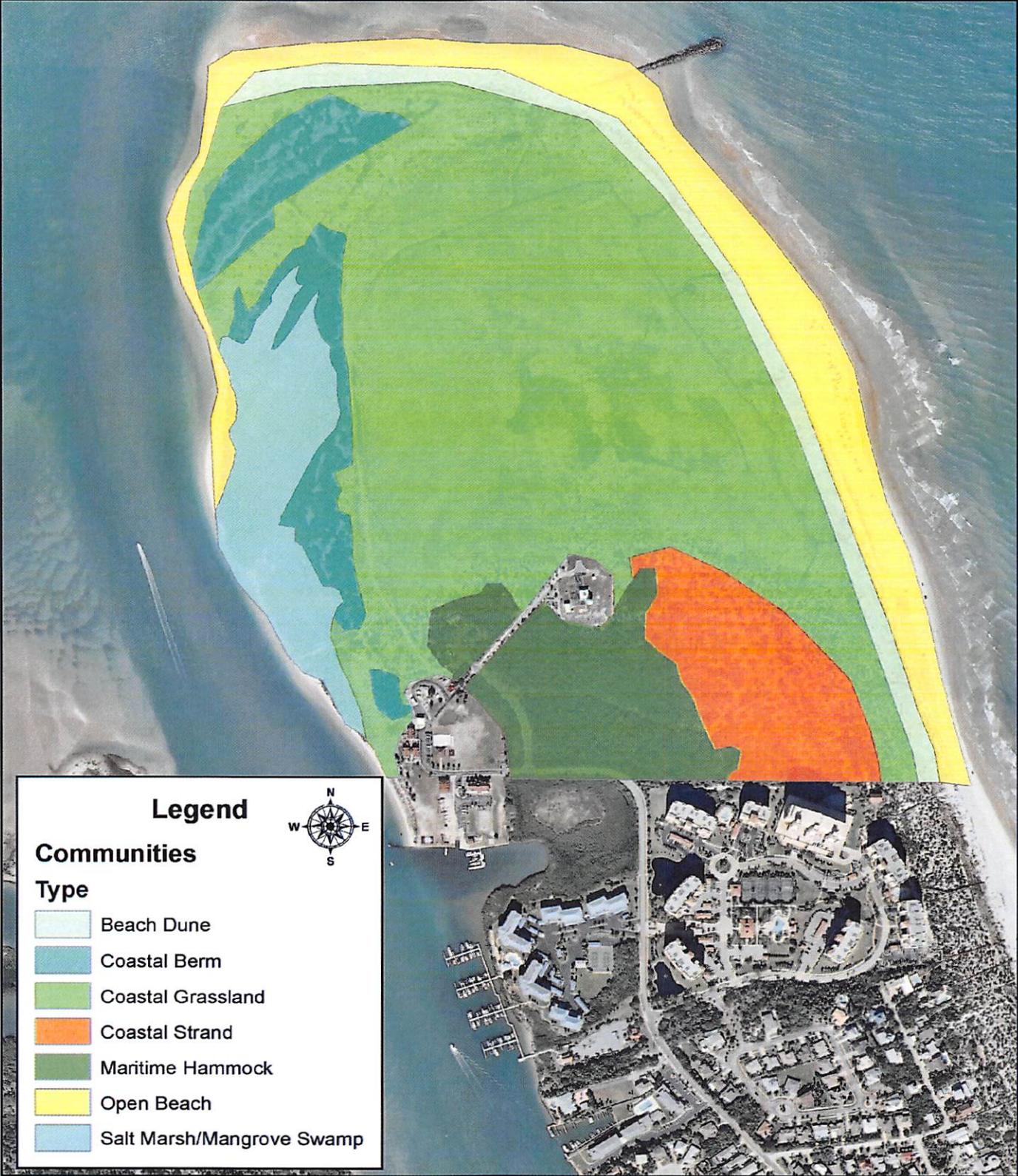
1914 Original Survey Plat



(Exhibit 5) Ponce de Leon Cadastral Survey Map (Tract 37) of April 17, 2014



(Exhibit 6) Vegetation Communities



**(Exhibit 7) Existing and Proposed Improvements**



**Exhibit 8 (BLM's Biological Assessment)**

**Biological Assessment**

**New Smyrna Dunes Park Recreation and Public Purposes Act Lease**

Prepared by

**Bureau of Land Management - Southeastern States Field Office**

**December 17, 2014**

### Proposed Action

The U.S. Coast Guard is in the process of relinquishing public domain land in coastal Volusia County associated with Smyrna Dunes Park (SDP). The land was originally reserved for lighthouse purposes in 1842 and withdrawn (84.36 acres) to the Coast Guard in 1924. SDP currently leases this acreage from the U.S. Coast Guard. Contingent on the revocation, the Bureau of Land Management (BLM) is proposing to grant Volusia County a Recreation and Public Purposes Act (R&PP) lease for the continued use as part of SDP. The R&PP lease would be issued with an option for the future patenting of the land, which would give the County the right for perpetual use of the property for recreational purposes, within the constraints of the patent document. During the lease period, which is typically 3 – 5 years, BLM would reserve the right to review proposed developments to ensure compliance with federal laws, regulations, and policies. This would include additional consultation and coordination with the U.S. Fish and Wildlife Service, as appropriate, under the Endangered Species Act for actions with the potential to affect federally listed or proposed species. Stipulations in support of these laws, regulations and policies may also be included as provisions in the patent.

During the processing of this application the State of Florida claimed 102.64 acres of land that have accreted since the original survey. We understand that the State is in the process of leasing this land to the County for the continued use by SDP. The SDP management plan developed by Volusia County would apply across the BLM and State land; however BLM's responsibilities would be limited to the 62.40 acres of public domain included in Tract 37, which comprises the remnants of fractional Lot 1, Section 32, and fraction Lot 1, Section 33, T. 16 S., R. 34 E.. Within the original withdrawal two areas are being excluded from the proposed R&PP lease: the USCG Station Ponce de Leon Inlet containing approximately 7.07, and that portion used by NASA containing approximately 2.60 acres pursuant to a BLM Communication Use Lease under the 2800 rights-of-way regulations. These areas are not addressed in the biological assessment. See Attachments for maps.

SDP management plan includes the following planned actions (see Map 4 below for locations). Bolded items are expected to occur at least partially within the proposed R&PP lease:

1. Expanded Parking Area. A shellrock or paved parking lot connecting to North Peninsula Drive may be constructed within uplands in the southwest portion of the property. Once constructed, standardized signage with Park rules, regulations, and hours of operation will be placed near the lot. The parking area may also include bicycle racks.
2. Fishing Pier. The construction of a fishing pier over the IRL is planned for the southwest portion of the property.
3. Boardwalk. The existing 1.5 miles 28-year old elevated boardwalk may be renovated within the same footprint.
4. Control of invasive plants within natural communities, where necessary, and then maintain to less than 10% aerial coverage in the next 5 years. Efforts to eradicate

Brazilian pepper within the coastal strand community may employ a variety of techniques, including but not limited to basal bark treatments, cut stump treatments, foliar applications, mechanical or physical removal, and prescribed burning.

5. Use prescribed fire in accordance with established procedures, and/or other methods to limit the succession of maritime hammock into the coastal strand community, with a prescribed fire frequency target of 5 to 10 years. If mechanical and/or chemical treatments within the coastal strand are used, they will be limited to those areas that are not immediately adjacent to the sensitive coastal dune community.
6. Develop an annual monitoring program to compile a comprehensive wildlife and botanical inventory of the Park, particularly with State and federally protected species. County staff will amend this inventory, as needed, over the term of the lease agreement to reflect additional species found during incidental observations.
7. Establish a program to regularly monitor, in accordance with state and Federal protocols, the Southeastern beach mouse population within SDP, and use the additional and existing information to develop, in coordination with state, Federal and other species' authorities.
8. Unregulated domestic animals found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.
9. Conduct as time and resources permit, Spring shorebird nesting surveys in coordination with other Volusia County staff, to document and mark shorebird nesting sites on and adjacent to County beaches in support of the County's HCP. Additionally, County staff and sea turtle monitoring personnel report any beach nesting activity they observe during the course of their routine activities. Nesting sites are cordoned off with stakes and ribbon and the sites are periodically monitored until the chicks have fledged.
10. Assist as time and resources permit, other Volusia County staff conduct wintering piping plover monthly surveys each year within Critical Habitat Unit FL-34. Opportunistic sightings of piping plovers and red knots are also recorded at any time of year.
11. Collect weak, ill, and injured birds from SDP and contiguous County Beaches and coordinate their transport to State and/or federally licensed wildlife rehabilitation facilities, including the shorebird and seabird rehabilitation facility within the Volusia County Marine Science Center.
12. Coordinate visitor marine environmental education opportunities with the Volusia County Marine Science Center in Ponce Inlet.
13. Maintain, update, and expand public awareness programs and educational materials (e.g., Birds of the Beach brochure and Environet Newsletter) relevant to the natural resources within and adjacent to SDP.
14. Maintain and expand as appropriate the county-wide A monofilament fishing line recycling program within SDP).

15. SDP will cooperate with Volusia County Environmental Management staff in soliciting for qualified volunteer personnel from academia, government agencies, scientific research organizations, and/or private consulting firms to develop and implement a gopher tortoise management plan. The plan is intended to monitor and assess the size, demographics, and trends of the population present at SDP, and describe the appropriate management actions. Environmental Management staff is authorized to conduct gopher tortoise surveys as FWC Authorized Gopher Tortoise Agents and may assist in park surveys. Environmental Management also established a Gopher Tracker Volunteer Program. Volunteers from this program may be used to assist with surveys of the park.

#### Federally Listed and Proposed Species

The following federally listed species are known to occur within the area proposed for R&PP lease, or could be affected by activities planned within the SDP. It should be noted that the Atlantic beaches, majority of the dune habitats, and the Indian River shoreline in the SDP boundary are on land claimed by the State of Florida, having accreted since the original government survey. As such, that land is outside of the proposed R&PP lease area (see attached Map 2).

#### Sea turtles

Smyrna Dunes Park includes about 1.7 miles of linear shoreline that are suitable nesting habitat for sea turtles. Species that have nested within Volusia County, and therefore have the potential to nest within SDP, include the threatened loggerhead (*Caretta caretta*), and endangered green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles. Based upon available monitoring data from the three most recent nesting seasons (2010-2012), the section of shoreline associated with SDP receives an average of about 10 loggerhead nests per year (Volusia County, unpublished data). Nesting by green and leatherback sea turtles with SDP are rare events, and no Kemp's ridley sea turtles have nested within this area. Sea turtles within this stretch of beach are protected and managed by Volusia County, the State of Florida, and the U.S. Fish and Wildlife Service with respect to beach driving through a Federal Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP), issued to Volusia County on November 22, 1996 and which expires on December 31, 2030. As a result of the preceding regulatory mechanisms, and their resulting protection and conservation benefits, the SDP Management Plan does not address additional provisions to protect these species. SDP staff would continue to report sea turtle nesting activity observed on inlet beaches.

The issuance of the R&PP lease would allow the current levels of public uses to continue, including use of boardwalks that provide for public access to suitable sea turtle nesting habitat on the beaches. The SDP monitors the beachfront daily for crawls and nests during the sea turtle nesting season (May through October). With daily monitoring and sea turtle nest protection

measures required under the HCP, this action is not expected to result in adverse effects or add to additional take.

The public domain lands included in this proposal are all outside of suitable nesting habitat for sea turtles. The proposed R&PP lease would have no direct effect on nesting sea turtles, but by supporting the continued public use of the SDP the lease may affect loggerhead sea turtles, but is not likely to adversely affect because of the protections measures in place under the HCP.

SDP is not within the recently designated critical habitat for the Northwest Atlantic population of loggerhead sea turtles, and the proposed lease would not affect designated critical habitat.

Atlantic salt marsh snake (*Nerodia clarkia taeniata*), listed as threatened

There are historic records of Atlantic salt marsh snake in the estuarine wetland habitats in and around the vicinity of Ponce Inlet. Its current occurrence there is not known.

The proposed project occurs primarily outside of the preferred habitat, and may affect but is not likely to adversely affect this species.

Southeastern beach mouse (*Peromyscus polionotus niveiventris*), listed as threatened

The southeastern beach mouse occurs in beach dune, coastal strand, and coastal grassland portions of SDP. Historically, this subspecies was distributed from Ponce de Leon Inlet in Volusia County, south to Miami-Dade County (Stout 1992), although it is currently believed to have been extirpated south of Indian River County (USFWS 2008). Preferred habitat is the sea oat zone of primary coastal dunes; however, they can also colonize secondary dunes and coastal strand habitat (USFWS 2008). Recent evidence indicates that the Park supports a viable beach mouse population. Trapping studies conducted in 2004 captured a considerable number of beach mice (Suazo 2004), and subsequent trapping studies conducted in 2006-2007 led to the conclusion that the SDP beach mouse population was stable and secure (> 500 individuals; USFWS 2008). This population may also extend onto private property up to one-half mile south of the Park where houses and condos are set well behind the primary dune and swale system, although no surveys have been conducted there. The beach mouse population at SDP is considered to be disjunct from the closest known population located approximately 10 miles south of the Park within the Canaveral National Seashore.

Conservation of southeastern beach mice is considered by SDP to be an important goal of their management plan. The following conservation measures are included in the proposed SDP management plan.

1. Establish a program to regularly monitor, in accordance with state and Federal protocols, the Southeastern beach mouse population within SDP, and use the additional and existing information to develop, in coordination with state, Federal and other species' authorities a long term species and habitat management plan.

2. Public access to the beach at SDP is currently restricted to an extensive system of elevated boardwalks. These boardwalks have been very effective in minimizing trampling of the dune system by pedestrian traffic. The County will continue to maintain these boardwalks in good working order during the term of their lease using existing funding mechanisms. It is anticipated that the boardwalk system will be replaced within the lease term. Prior to construction, the County will conduct a survey to locate and mark beach mouse burrows potentially affected by construction and work with the USFWS to develop appropriate protective measures.
3. Strategically-placed signage within the SDP notifies the public that it is illegal to disturb the dunes or dune vegetation, further discouraging people from traversing the dune system. Park staff will continue to be vigilant of visitors, vehicles, and/or pets that encroach on the dune system. Minor violations will be addressed politely with the Park visitor. Repeated and/or egregious violations will be referred to law enforcement.
4. Domestic cats are a known predator of beach mice. SDP lies adjacent to a residential portion of New Smyrna Beach where feral and/or domesticated cats may be present. The extent to which domestic cats utilize the parcel is unknown, but sightings have been reported. Park staff will discourage visitors from feeding free-ranging animals on the property and will maintain its existing network of animal-proof garbage cans. Unregulated domestic animals that are found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.
5. Dogs would be allowed at SDP, but only at certain times and locations, and they must be kept on a leash at all times. Current regulations separate dogs both spatially (i.e., limiting them to boardwalks and inlet beaches) and temporally (i.e., prohibiting dogs at night when mice are active) from beach mice. Signage placed throughout SDP informs visitors of the regulations, and free dog waste collection bags are provided at strategic locations. Park staff will enforce leash regulations. During times of peak visitation (Memorial Day to Labor Day), a dedicated Park staff member will monitor inlet beaches to enforce these regulations.

The vast majority of the suitable habitat at the SDP is located on land claimed by the state. There are some records of southeastern beach mouse on the land included in the R&PP application. However, given the protective measures being employed throughout SDP the proposed lease is expected to affect, but not adversely affect southeastern beach mouse. Future projects, such as replacement of the dune boardwalks may require additional site specific analysis, and if it is determined that there is potential for an adverse effect, a separate Section 7 consultation with FWS would be required.

Piping plover (*Charadrius melodus*), listed as threatened, also includes acres within designated critical habitat.

SDP is known to provide loafing habitat for piping plover, and the contiguous intertidal beach provides foraging habitat. Birds present during the spring and summer represent part of an overwintering, non-nesting population. During 2010 to 2012, an average of about 30 incidental sightings of wintering piping plovers were documented on SDP shorelines by staff of Volusia County Environmental Management, Beach Safety, and Ecological Associates, Inc. (EAI). During that period, piping plovers have been observed in Volusia County from August through May.

While there is potential for pedestrian recreational use to flush piping plovers, in general this recreational beach use is considered negligible. Visitor use is highest during the summer months (Memorial Day to Labor Day) when plovers are not typically present. There is potential for harassment of foraging and loafing plovers from off-leash dogs, but SDP policy requires dogs be leashed at all times in SDP. Dogs are allowed on the natural trails along the western side of the Park and on inlet beaches any time of day, but can only be taken on the elevated boardwalks between sunrise and 10:00 AM and within one hour of sunset.

None of the land in the proposed lease area is considered preferred shoreline habitat for piping plover. In addition, the protection measures in place across the SDP are expected to reduce the potential to affect piping plover. Additional loafing and foraging habitat is available within Lighthouse Point Park across Ponce Inlet, as well as on the Rockhouse Creek shoals and emergent lands complex associated with that inlet feature located west of SDP and the confluence of the North Indian and Halifax Rivers. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect, piping plover.

In July 2001, the USFWS published its Final Determination of Critical Habitat for wintering piping plovers. Two areas were designated in Volusia County, one on the north side and one on the south side of Ponce de Leon Inlet, collectively referred to as FL-Unit 34. The southern portion of that unit lies entirely within SDP and includes beaches on both the Atlantic and inlet sides of SDP. The proposed lease area is generally south of the designated critical habitat, except for approximately 6 acres on the Atlantic side. These 6 acres are coastal grassland and coastal strand and do not include preferred beach/shoreline habitats.

The proposed lease supports the continuing use of SDP by the public and there is potential for that use to affect non-breeding piping plover as a result of conflicts with pedestrian and vehicle use of beach and intertidal areas. It is generally considered that typical beach use by the public in piping plover wintering habitat does not have serious consequences at the population level (Unsworth et al. An Economic Analysis of Piping Plover Recovery Activities on the Atlantic Coast. Prepared for the U.S. Fish and Wildlife Service, Division of Economics, Arlington, VA, 1998). With adequate enforcement of the leash rule in SDP, the proposed lease is not expected to result in adverse effects to wintering piping plovers or designated critical habitat within SDP.

Red knot (*Calidris canutus rufa*), listed as threatened

Migrating and overwintering rufa red knot utilize the beaches of SDP, although there is potential for non-breeding individuals year round. Adult red knots, presumably females, have been recorded at SDP as early as August. Red knots forage on intertidal flats for mollusks, crustaceans, and other marine invertebrates. According to the Rufa Red Knot Background Information and Threats Assessment, population declines of 70 to 75 percent have been documented since 2000 based on survey data from Tierra Del Fuego (wintering grounds) and Delaware Bay (key spring stop-over location). Because of shifting migration patterns, the same conclusion cannot be made of the southeastern wintering population, despite some years with lower survey counts in Florida. Primary threats in the nonbreeding portion of the range identified by the U.S. Fish and Wildlife Service are reduced food availability at Delaware Bay stopover sites, timing of optimal food sources during migration, sea level rise, shoreline stabilization, and coastal development. In many wintering and stopover areas, quality high-tide roosting habitat (i.e., close to feeding areas, protected from predators, with sufficient space during the highest tides, free from excessive human disturbance) is limited.

Like wintering piping plovers, red knots are apt to be flushed by pedestrian and vehicle beach use. This may limit access to some feeding area where public use is highest in SDP. Frequent disturbance by both humans and roaming dogs within close vicinity to flocks of red knots can cause the birds to flush and increase energy expenditures. This can be detrimental to individuals of the rufa subspecies, as they migrate long distances and must retain as much energy and body fat as possible to both fly the long distance to and from wintering grounds and successfully breed when they reach the Arctic (COSEWIC 2007).

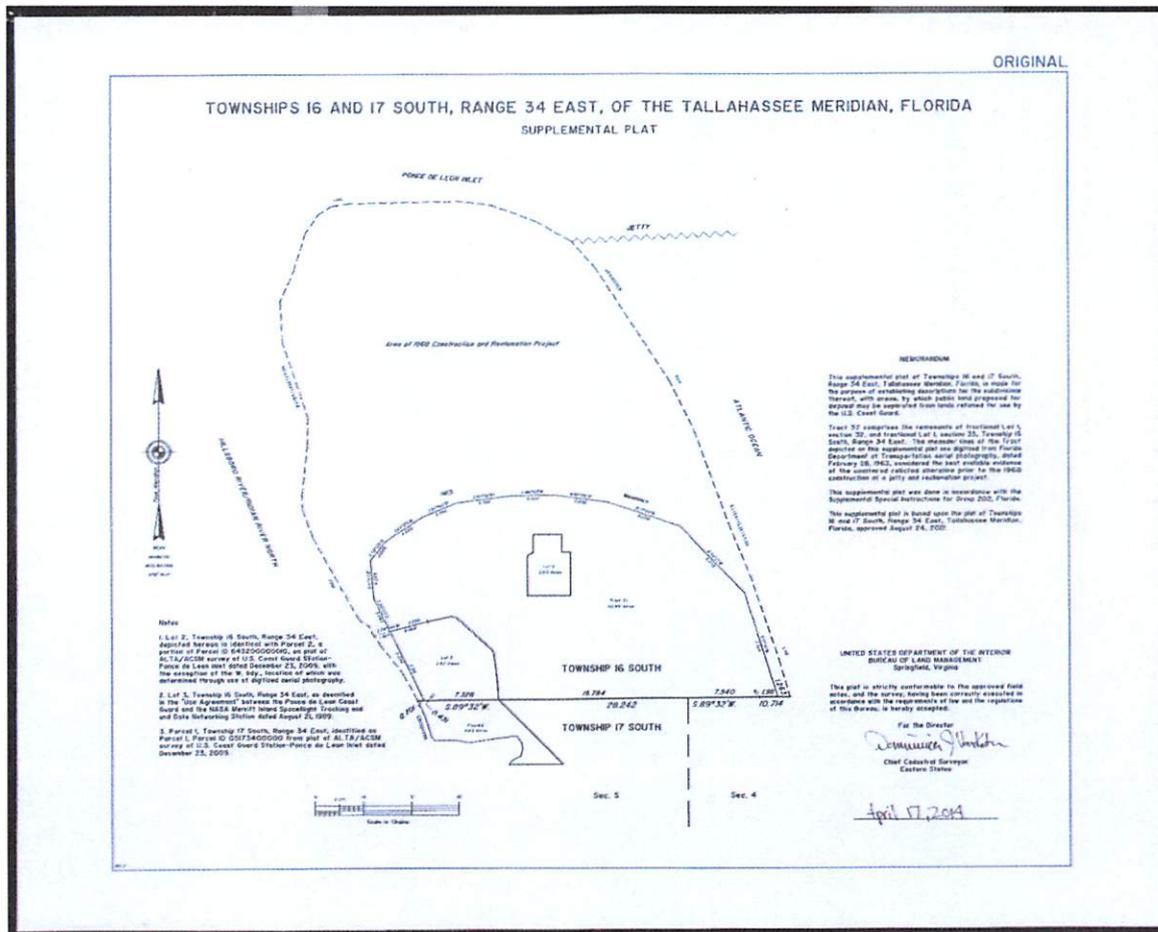
As with the piping plover, none of the land in the proposed lease area is considered preferred shoreline habitat for rufa red knot. Protection measures in place across the SDP are expected to reduce the potential to affect both species. Additional loafing and foraging habitat is available within Lighthouse Point Park across Ponce Inlet, as well as on the Rockhouse Creek shoals and emergent lands complex associated with that inlet feature located west of SDP, and the confluence of the North Indian and Halifax Rivers. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect, rufa red knot.

#### Summary

In summary, the proposed R&PP lease to Volusia County for the continued use of SDP may affect but not adversely affect loggerhead sea turtles, green sea turtles, leatherback sea turtles, Atlantic salt marsh snake, southeastern beach mouse, piping plover, and rufa red knot. The proposed lease is not expected to affect Kemp's ridley sea turtle, or to result in adverse effects to piping plover critical habitat.

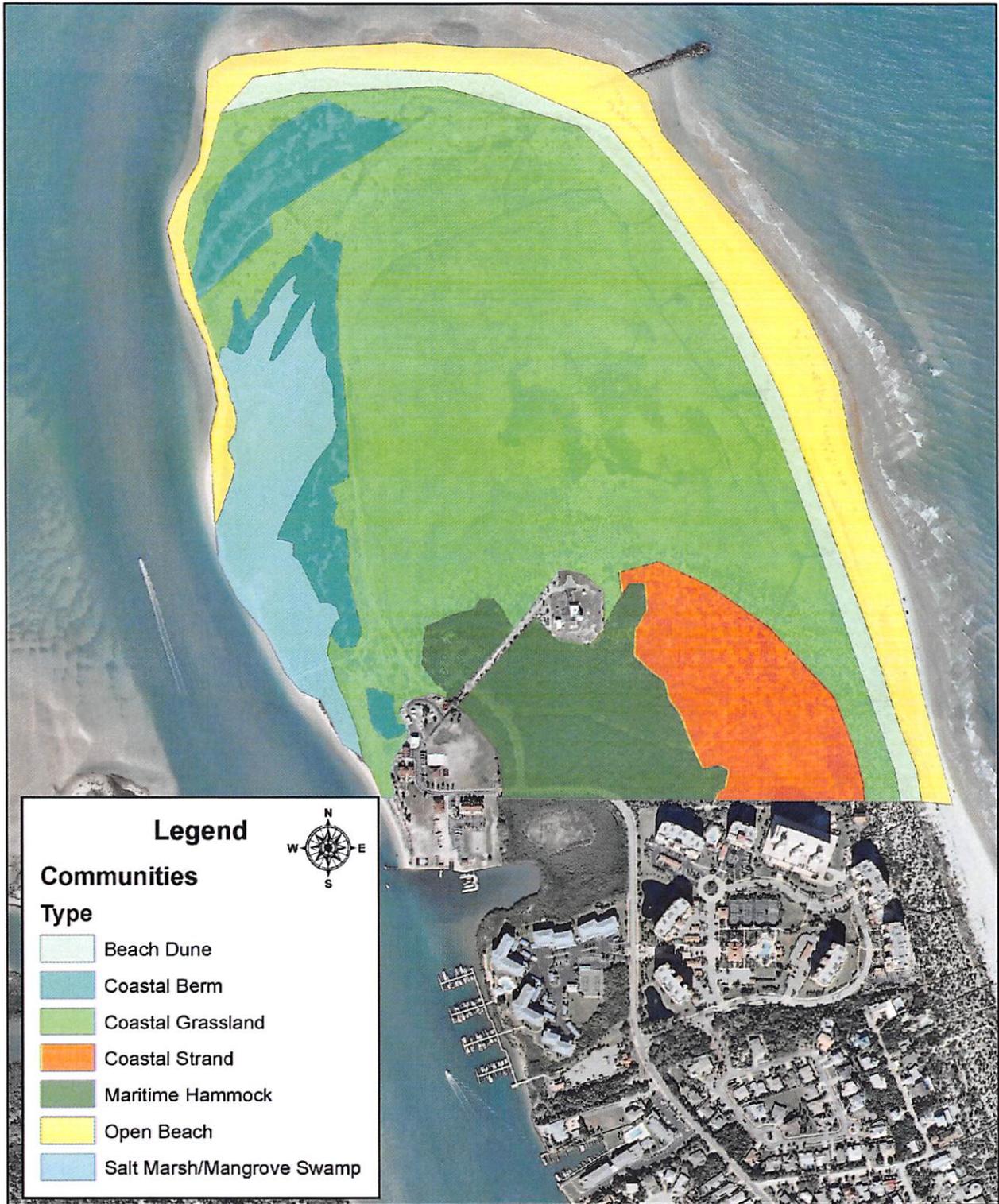
**Attachments**

Map 1. Ponce de Leon Cadastral Survey Map





Map 3. Vegetation Communities



Map 4. Existing and Proposed Improvements



**Exhibit 9 (USFWS Consultation Letter - FWS Log Nos. 41910-2015-I-0118)**



**United States Department of the Interior**

**U. S. FISH AND WILDLIFE SERVICE**

7915 BAYMEADOWS WAY, SUITE 200  
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:

**FWS Log Nos. 41910-2015-I-0118**

February 3, 2015

Mr. Bruce Dawson, Field Manager  
Southeastern States Field Office  
Department of Interior, Bureau of Land Management  
411 Briarwood Drive, Suite 404  
Jackson, MS 39206  
(Attn: Faye Winters)

Re: Section 7 Consultation Response: Recreation and Public Purposes Act Lease Agreement with Volusia County, Florida on Smyrna Dunes Park, New Smyrna Beach, Florida

Dear Mr. Dawson:

Our office has reviewed your letter, dated February 2, 2015, and the accompanying Biological Assessment (BA) and December 2014 Land Management Plan (LMP), for the proposed Recreation and Public Purposes Act (R&PP) Lease Agreement between the Bureau of Land Management (BLM) and Volusia County, Florida on Smyrna Dunes Park (SDP). The U.S. Coast Guard (USCG) was the original lessor of that property to the county, and intends to partially relinquish its withdrawal to the BLM. BLM intends to continue to allow the previous use through a R&PP lease. Since the original withdrawal, as a result of land accretion, the State of Florida has asserted claim over 102.64 acres of this property. BLM responsibilities are limited to a total of 62.40 acres. An additional 7.07 acres comprising USCG Station Ponce de Leon Inlet, and 2.60 acres leased by BLM to the National Aeronautics and Space Administration for a tracking station, are not covered under the BA and LMP. The State of Florida currently is in the process of leasing its acreage to Volusia County for the continued use of SDP, and the reviewed SDP LMP would apply across the BLM and State lands. The BLM property is included in Tract 37, which comprises the remnants of fractional Lot 1, Section 32 and fractional lot 1, Section 33, Township 16 South, Range 34 E, New Smyrna Beach, Volusia County. We provide the following comments in accordance with Section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*).

Federally listed species occurring or having the potential to occur within and contiguous to the BLM land include the threatened loggerhead (*Caretta caretta*), and endangered green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles, the threatened Atlantic salt marsh snake (*Nerodia clarkii taeniata*), the southeastern beach mouse (*Peromyscus polionotus niveiventris*), piping plover (*Charadrius meoldus*) and a

significant portion of a unit of its designated critical wintering habit (FL Unit-34), and the threatened red knot (*Calidris canutus rufa*).

The proposed SDP LMP does not propose any changes in the park's daytime operating hours, its lighting, or to existing pedestrian access via dune crossovers and trails to ocean, inlet, and river beaches except for construction of a fishing pier within the North Indian River at the southwest portion of the property. The SDP LMP will continue to support sea turtle nest monitoring and education, removal of unregulated domestic and nuisance feral wildlife within park boundaries, and maintain and expand its monofilament fishing line recycling program. Due to existing Federal, state, and county regulations addressing the protection of nesting sea turtles, their nests, and sea turtle hatchlings on the adjacent beaches, the SDP LMP does not include any duplication of those regulatory mechanisms. As a result, BLM determined in its BA that the proposed lease agreement and its implementing LMP will not adversely affect the loggerhead, green, and leatherback sea turtles, and have no effect (due to lack of historic nesting data) on the Kemp's ridley sea turtle. We concur with that determination.

Due to the proposed continued protections for estuarine wetland habitats within the state-portion of SDP, and its absence within the BLM property, the BA stated that the SDP proposed lease agreement and LMP is not expected to adversely affect the Atlantic salt marsh snake. We concur with that determination.

Piping plovers and red knots occur or potentially occur within the intertidal and mid and upper beaches associated with the Atlantic Ocean, Ponce de Leon Inlet, and North Indian River contiguous to SDP. Those habitats also include the bulk of FL Unit-34 of critically designated, wintering habitat for the piping plover. SDP provides pedestrian access to those habitats, and leashed dogs to river and inlet beaches, but not on the ocean beach. Such activity has the potential to temporarily flush foraging and loafing birds. Due to the close proximity of additional intertidal and upper beach habitats along the north shore of the inlet and its oceanfront as part of Lighthouse Point Park, and islands and emergent shoals associated with Rockhouse Creek located at the confluence of the inlet with the North Indian and Halifax Rivers, the temporary flushing is not expected to adversely affect these species. Continued education on the effects of dogs on shorebird flushing, and regular enforcement of the SDP leash law is expected to further reduce the frequency of flushing, and potential impacts to these species. As a result, and taking into account the seasonal differences between peak pedestrian and bird use of the preceding areas, BLM determined that the proposed lease agreement and its implementing LMP is not likely to adversely affect the piping plover, red knot, and designated winter habitat (FL Unit-34) for the piping plover. We concur with those determinations.

The southeastern beach mouse occurs in beach dune, coastal strand, and coastal grassland portions of SDP. Due to the mosaic of limited habitat, seawalls and other hardened shoreline structures, and beach access roads south of SDP, the beach mouse population at SDP is considered disjunct from the closest known population within the undeveloped shoreline of Canaveral National Seashore approximately 10 miles south of SDP. Due to its disjunct status, conservation of the beach mouse population at SDP is considered to be an important goal of the LMP. Coordinated population monitoring, habitat management and protection, removal of feral cats and other potential predators as nuisance wildlife, education, enforcement of leash laws, and

use of animal-proof garbage cans are just some of the proposed actions that will benefit this beach mouse subspecies. Separate section 7 consultations on specific actions related to SDP LMP implementation, such as boardwalk replacement, may be required if it's determined that such actions have the potential to adversely affect the beach mouse. Based on the preceding, BLM determined that the proposed lease agreement and implementing LMP are not likely to adversely affect the southeastern beach mouse. We concur with that determination.

Additional Federal Trust Resources of special interest associated with the proposed lease agreement include the eastern population of the gopher tortoise (*Gopherus polyphemus*), a candidate for Federal listing, and migratory shorebirds. The SDP LMP includes an action item that calls for the coordination of park and other county staff, volunteers, and Federal, state, and local wildlife authorities in gopher tortoise monitoring, as well as in the development and implementation of a gopher tortoise site management plan. A second action item includes the participation of Park staff in shorebird nesting surveys within SDP boundaries, and when available, outside of park boundaries as part of a coordinated effort to monitor shorebirds in the vicinity of SDP. We support such efforts to protect, conserve, and enhance the current gopher tortoise population at SDP, and be a part of overall shorebird conservation and enhancement within east-central Florida.

Although this does not represent a biological opinion as described in section 7 of the Act, it does fulfill the requirements of the Act and no further action is required. We appreciate the efforts made by the BLM, Volusia County management, staff, and consultants, and the State of Florida to resolve the land ownership issue, and coordinate as needed to develop the documents essential to ensuring that the lease agreement will adequately address the protection and conservation of Federally listed species and other federal trust resources within and adjacent to Smyrna Dunes Park

If you have any questions regarding this response, please contact Mr. John F. Milio of my staff at [john\\_milio@fws.gov](mailto:john_milio@fws.gov), or by calling 904-731-3098.

Sincerely,



*for* Jay B. Herrington  
Field Supervisor

cc: FWC, Tallahassee (Dr. Thomas Eason)  
FWS, Migratory Bird (Cindy Fury)

**Exhibit 10 (Final Smyrna Dunes Park Management Plan) attached**



# Smyrna Dunes Park Management Plan



December 2014

# **SMYRNA DUNES PARK MANAGEMENT PLAN**

**Prepared in Support of Land Lease Agreement With the  
U.S. Bureau of Land Management**

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**December 2014**



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## **INTRODUCTION**

The Smyrna Dunes Park (SDP) property is located along the southern shoreline of the Ponce de Leon Inlet, within the City of New Smyrna Beach, Volusia County, Florida (Sections 32 and 33, Township 16S, Range 34E; Figure 1). The site comprises the northern tip of a barrier island, and is bordered to the north and east by the Atlantic Ocean, to the west by the Atlantic Intracoastal Waterway (northern Indian River Lagoon; IRL), and to the south by residential and multifamily development. Vehicular access to the property is via North Peninsula Avenue, or along the Atlantic shoreline where beach driving is permitted.

SDP has been managed as a public park by Volusia County since 1982 under a license agreement with the U.S. Coast Guard (USCG; Appendix A). County management of the Park continues to focus on protecting the property's environmentally sensitive resources while accommodating public access for passive recreation. In 2010, the USCG notified the U.S. Department of the Interior, Bureau of Land Management (BLM) of its intent to relinquish ownership of the property (Appendix B). The USCG also strongly recommended the property continue to be operated, managed, and maintained by Volusia County as a public park. BLM engaged the county relative to this interest via lease and/or patent under the authority of the Recreation and Public Purposes Act. The County agreed to make a lease application and committed to funding a \$31,000.00 Cadastral Survey of property boundaries (Figures 2 and 3) in support of the application. In 2012 the County made formal application to the BLM for a 25-year lease to continue local management of the site for public recreation.

Prior to and during the County's management of SDP, there has been considerable accretion of sand on previously submerged lands owned by the State of Florida. This has resulted in a northward expansion of Park boundaries. In 2014, the State asserted ownership of 125.6 acres of accreted land within the Park. These lands are contiguous with those 62.40 acres owned by the BLM. Thus, in addition to its application for a BLM lease, the County submitted formal application to the Florida Division of State Lands (DSL) for lease of State owned property within the Park, also for public recreation; the DSL lease application is incorporated herein by reference (Appendix C). This Management Plan was developed in support of both the BLM and DSL lease applications and is intended to unify management of both properties. As discussed below, the unified Management Plan provides a blueprint for future Park management to enhance public use and conserve natural resources throughout both Federal and State properties.

Smyrna Dunes Park is approximately 188.3 acres in size and contains frontage along both the Atlantic Ocean and the IRL. SDP supports several biological communities, including beach and dune, coastal strand, maritime hammock, mangrove swamp, and tidal marsh. Continued County management of SDP provides an opportunity to preserve these native habitats, as well as several rare animal species that depend on them for food, shelter, and/or reproduction. Two developed, federally-owned and operated outparcels are located within and immediately adjacent to the boundaries of SDP, a USCG Station (Ponce de Leon Inlet) and a NASA spaceflight tracking station (Figure 2).

Smyrna Dunes Park is a highly popular destination for local and non-County residents alike. Park uses include, but are not limited to, nature watching, photography, walking/jogging, fishing, sunbathing, picnicking, surfing, shell collection, and dog walking. Under County management, the property will be open to the public year-round and operated as a passive recreational area, with the exception of those days needed for maintenance and land management activities. Management of the site will focus primarily on conservation of the site's natural resources for the ongoing use and enjoyment of the general public.

This Management Plan has been prepared to provide a framework for the adaptive management of the SDP's natural resources during the term of the County's leases with the BLM and DSL. The following sections describe the overall purpose for management of the site, provide information on the property's resources, set forth management goals and objectives, and outline procedures, funding mechanisms, staffing levels, and management practices necessary to achieve the overall project goal of managed use and natural resource conservation. It is anticipated that natural resources will be managed at SDP through a combination of existing programs and practices that have already proven successful, and the implementation of several new programs.

## **GOAL**

The SDP property was originally leased by the County for use as a public park. The goal of this Management Plan is to ensure the site is developed and managed in a manner that offers passive recreational opportunities for the general public, and that is consistent with the protection and conservation of the site's environmentally sensitive resources. Current management of the site is the responsibility of the Volusia County Coastal Division. However, the Coastal Division may be assisted by other County Divisions and/or consultants, and management responsibility may be transferred to other Divisions at the direction of the County Manager.

It is the intention of the County to utilize and manage SDP for 1) passive outdoor recreation; and 2) the protection, enhancement, and restoration (collectively, the conservation) of the natural communities that occur there. Thus,

*The primary management goal is to conserve the ecological integrity of the site's various natural communities while providing visitors with a safe, informative, enjoyable, and resource-compatible recreational experience.*

Natural communities may be enhanced through various initiatives, including but not limited to, the implementation of a program to eradicate invasive plant species, the introduction of a formal prescribed burn program, and/or promotion of cooperative research and monitoring opportunities. Recreational and educational opportunities will be enhanced through various site improvements and the development of cooperative educational programs. Specific management objectives for the property include:

- Conserve several rare and unique natural communities;
- Enhance natural communities through the removal of exotic vegetation and introduction of a formal prescribed burn program;
- Encourage cooperative research opportunities designed to monitor the status of the Park's threatened and endangered flora and fauna and other species;
- Conserve suitable habitat for threatened and endangered flora and fauna and other native wildlife;
- Provide for public beach access and outdoor recreation; and
- Provide for public educational opportunities.

Implementation of these management objectives, as described below in the Plan, is contingent upon available and adequate funding and staffing.

## **PLAN MANAGEMENT**

The director of the Volusia County Coastal Division shall have ultimate responsibility for the implementation and coordination of this Management Plan. It is anticipated that staff from the Coastal Division, Volusia County Environmental Management, and other County divisions, as well as private contractors, researchers, and volunteers will contribute to Plan implementation.

### ***Relationship to Existing HCP***

In February 1996, Volusia County applied to the U.S. Fish and Wildlife Service (USFWS) for an Incidental Take Permit (ITP) to authorize unintentional impacts to

federally protected species caused by beach driving and related activities on County-managed beaches. The ITP was issued on November 22, 1996 and expires December 31, 2030. A Habitat Conservation Plan (HCP), prepared in support of the ITP application describes the various programs, policies, plans, and measures the County will implement to minimize and mitigate the take (harm and harassment) of sea turtles and piping plovers causally related to ITP authorized activities. The HCP is managed by the Volusia County Environmental Management Department, with support from various other facets of County government, including the County Manager's office, Division of Beach Safety, Legal Department, Coastal Division, and other stakeholders.

Those portions of SDP that lie within the Plan Area of the HCP (i.e. between the mean high water line and line of permanent dune vegetation along the Atlantic Ocean and Ponce de Leon Inlet) will continue to be managed under the County's HCP. As such, this Management Plan will primarily focus on those areas of the Park not included within the HCP Plan Area and/or species not covered under the HCP. Park staff will coordinate any activities that occur within the Plan Area with the County's HCP Program Coordinator to ensure that Park operations are consistent with HCP policies. All Park staff are HCP trained with respect to operating vehicles on the beach and often assist HCP staff by reporting sea turtle crawls and shorebird nesting along inlet beaches, incidental sightings of piping plovers, and observations of post-hatchling sea turtles washed up on Atlantic beaches.

## **PARK OPERATIONS AND ADMINISTRATION**

The Coastal Division develops, manages, and maintains coastal public infrastructure and parks in Volusia County. Park operations are funded by the Ponce de Leon Inlet and Port District via ad-valorem taxing authority, and through park entrance fees. The current entrance fee is \$5.00 per vehicle. Entrance fees typically generate between \$120,000 and \$140,000 annually.

Volusia County employs a staff of three full-time and one part-time maintenance personnel at SDP. They are primarily responsible for park maintenance activities, including landscaping, boardwalk repair, pavilion and utility storage shed repair, trail grading, trash and litter pick-up, restroom cleaning, minor plumbing and electrical repair, fence repair, and educational display setup. The Volusia County Public Works Road and Bridge Division is responsible for roadway and parking area improvements. Waste receptacles are located throughout the Park and are emptied twice daily. Portable toilet maintenance and garbage collection along the Atlantic Ocean beaches is performed by a private contractor under the oversight of Volusia County.

Smyrna Dunes Park is open to the public year-round, daily from sunrise to sunset. Data from traffic counts at the Park's sole vehicular entry point indicate that in a typical year roughly 30,000 visitor vehicles access the park, with peak utilization between March and September.

Dogs are allowed on the natural trails along the western side of the Park and on inlet shoreline beaches any time of day, but can only be taken on the elevated boardwalks between sunrise and 10:00 AM and within one hour of sunset. Dogs must be leashed at all times while within the park, and dog waste must be picked up and disposed of in trash receptacles. Dog waste removal bags are available at no charge to the public at receptacles located throughout the park

## **FACILITIES AND POTENTIAL SITE IMPROVEMENTS**

### ***Existing Facilities***

Existing structures at SDP are limited (Figure 2). North Peninsula Avenue, a two lane paved public roadway, enters through the southern portion of the property and subdivides the maritime hammock community. The road provides access to a paved parking lot. The Park's only buildings, which provide a staff office, equipment storage space, restrooms with septic system, and a covered recreational pavilion, are adjacent to the parking lot. The pavilion contains an extensive array of educational artwork and signage pertaining to local fauna, natural communities, and cultural/historical resources. Other existing amenities include approximately 1.5 miles of elevated pedestrian walkways, six elevated dune crossovers, and an observation tower. Sealed garbage receptacles are located throughout the property.

### ***Potential Site Improvements***

Potential site improvements are shown in Figure 2. The intent of future improvements is to provide additional public access to accommodate increased usage demand and enhanced passive recreational opportunities. Improvements under consideration include, but are not limited to, the following:

- **Expanded Parking Area.** A shellrock or paved parking lot connecting to North Peninsula Drive may be constructed within uplands in the southwest portion of the property. Once constructed, standardized signage with Park rules, regulations, and hours of operation will be placed near the lot. The parking area may also include bicycle racks.

- **Fishing Pier.** The construction of a fishing pier over the IRL is planned for the southwest portion of the property.
- **Boardwalk.** The existing 28-year old elevated boardwalk may be slightly widened and renovated within the same footprint.
- **Restrooms.** The existing restrooms on the property may be renovated and the septic system abandoned and removed in favor of a lift station and sanitary sewer connection.
- **Entrance Feature.** The entrance area may be enhanced with new signage and the existing admission booth may be renovated or replaced.

Construction of these facilities will entail some impact to onsite natural communities. Attention will be given during the planning phase to ensure that the proposed parking area and fishing pier are designed and sited in a manner that minimizes impacts to natural resources. Although some impacts to the maritime hammock will be unavoidable, the footprint of the parking lot will be minimized to the extent possible and will be confined to the upland area.

Prior to any site improvements, pre-construction surveys will be conducted to determine the location of any protected plant or animal species. The County will coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) and USFWS and implement appropriate protective measures should any of these species be found in areas potentially affected by construction activities. All proposed facilities will be sited and constructed in accordance with local, State, and Federal regulations. All construction and development plans are subject to review and approval by appropriate local (New Smyrna Beach), State (Florida Department of Environmental Protection - FDEP, St. Johns River Water Management District – SJRWMD), and/or Federal permitting agencies ((U.S. Army Corps of Engineers - USACOE) and shall be in compliance with the Americans with Disabilities Act.

The County acknowledges that the undertaking of any site alterations or physical improvements that are not addressed in this Management Plan shall require prior approval of the BLM and may require additional coordination and/or consultation with the USFWS.

### ***Easements and Outparcels***

The USACE has a maintenance easement along the length of the Ponce de Leon Inlet south jetty (Figure 3). The U.S. Coast Guard Ponce de Leon Station borders SDP to the south and previously held a dredged spoil easement within the northern portion of the site. It is Volusia County's understanding that the USCG intends to abandon the rights to this easement. A spaceflight tracking facility operated by NASA is located on an

approximately two-acre outparcel within the central portion of SDP. This area is fenced, secured, and off limits to the public.

## NATURAL AND CULTURAL RESOURCES

### *Natural Communities*

The Smyrna Dunes Park property is comprised of a mosaic of several biologically diverse and rare natural communities, including beach, beach dune, coastal strand, maritime hammock, salt marsh, and mangrove swamp. According to the Florida Natural Areas Inventory (FNAI), all of the upland habitats at SDP are considered imperiled within the State of Florida because of rarity or vulnerability. Mangrove swamp and salt marsh habitats are apparently secure within Florida; however they are the subject of environmental concern because of their importance to the marine ecosystem. The natural communities found within SDP are described in more detail below and are depicted in Figure 4. A list of the dominant plant species found within each community is provided in Table 1. Overall, vegetative diversity at SDP appears to be relatively low, although no formal inventories have been compiled. Differences in natural communities are generally more related to structure and location than to drastic changes in floral composition.

### Mangrove Swamp/Salt Marsh

Smyrna Dunes Park contains approximately 5.5 acres of intermixed mangrove and salt marsh habitat, located along the Park's western shoreline (Figure 4). Collectively, these communities represent all of the wetland habitats at SDP. Mangrove swamps are characterized as dense, low forests occurring along relatively flat intertidal and supratidal, low energy shorelines along the coasts of southern Florida (FNAI 2010). The mangrove swamp community at SDP is heavily vegetated and contains all three of the true mangrove species found within Florida: red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), and white mangrove (*Laguncularia racemosa*). Mangroves within the Park rarely exceed 20 feet in height; likely due to hard freezes that occurred in the early 1980s. When freezes occur, mangroves are killed and salt marsh grasses colonize the area. Over time, mangroves reestablish and eventually replace the salt marsh, such that there is a recurring transition between the two community types.

TABLE 1. DOMINANT PLANT SPECIES WITHIN EACH NATURAL COMMUNITY AT SMYRNA DUNES PARK			
Scientific Name	Common Name	FLEPPC Status <sup>1</sup>	Native (Y/N)
<b>Mangrove Swamp/Salt Marsh</b>			
<i>Avicennia germinans</i>	Red Mangrove		Y
<i>Laguncularia racemosa</i>	White Mangrove		Y
<i>Rhizophora mangle</i>	Black Mangrove		Y
<i>Sesuvium portulacastrum</i>	Sea Purslane		Y
<i>Spartina alterniflora</i>	Saltmarsh Cordgrass		Y
<i>Spartina bakeri</i>	Sand Cordgrass		Y
<i>Iva frutescens</i>	Saltmarsh Elder		Y
<i>Borrchia frutescens</i>	Sea Oxeye Daisy		Y
<b>Coastal Strand</b>			
<i>Chamaecrista fasciculata</i>	Partridge Pea		Y
<i>Forestiera segregata</i>	Florida Privet		Y
<i>Sabal palmetto</i>	Cabbage Palm		Y
<i>Schinus terebinthifolius</i>	Brazilian Pepper	I	N
<i>Smilax auriculata</i>	Dune Greenbriar		Y
<i>Opuntia humifusa</i>	Prickly-Pear Cactus		Y
<i>Serenoa repens</i>	Saw Palmetto		Y
<b>Maritime Hammock</b>			
<i>Baccharus halimifolia</i>	Saltbush		Y
<i>Conocarpus erectus</i>	Buttonwood		Y
<i>Juniperus virginiana</i>	Red Cedar		Y
<i>Myrica cerifera</i>	Wax Myrtle		Y
<i>Sabal palmetto</i>	Cabbage Palm		Y
<i>Schinus terebinthifolius</i>	Brazilian Pepper	I	N
<i>Serenoa repens</i>	Saw Palmetto		Y
<i>Zanthoxylum clava-herculis</i>	Hercules' Club		Y
<b>Beach Dune</b>			
<i>Uniola paniculata</i>	Sea Oats		Y
<i>Croton punctatus</i>	Silver-Leaf Croton		Y
<i>Gaillardia pulchella</i>	Indian Blanket Flower		Y
<i>Helianthis debilis</i>	Dune Sunflower		Y
<i>Hydrocotyle bonariensis</i>	Beach Pennywort		Y
<i>Iva imbricata</i>	Beach Elder		Y
<i>Panicum amarum</i>	Beach Panicum		Y

TABLE 1. (CONTINUED)			
Scientific Name	Common Name	FLEPPC Status <sup>1</sup>	Native (Y/N)
<b>Coastal Berm</b>			
<i>Forestiera segregata</i>	Florida Privet		Y
<i>Juniperus virginiana</i>	Red Cedar		Y
<i>Myrica cerifera</i>	Wax Myrtle		Y
<i>Schinus terebinthifolius</i>	Brazilian Pepper	I	N
<i>Smilax auriculata</i>	Dune Greenbriar		Y
<b>Coastal Grassland</b>			
<i>Andropogon sp.</i>	Broom Grass		Y
<i>Heterotheca subaxillaris</i>	Camphorweed		Y
<i>Hydrocotyle bonariensis</i>	Beach Pennywort		Y
<i>Opuntia humifusa</i>	Prickly-Pear Cactus		Y
<i>Smilax auriculata</i>	Dune Greenbriar		Y
<sup>1</sup> I=Category I invasive exotic pest plant, as determined by the Florida Exotic Pest Plant Council (FLEPPC).			

Salt marsh is defined as a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary (FNAI 2010). At SDP, vegetation within this community consists mainly of saltmarsh cordgrass (*Spartina alterniflora*), sand cordgrass (*Spartina bakeri*), marsh elder (*Iva frutescens*), and sea oxeye daisy (*Borrichia frutescens*).

Based upon community structure and overall appearance, the mangrove swamp/salt marsh community at SDP is in good condition. There are no noticeable exotic pest plants within these communities. Owing to their combination of high salinity, fluctuating water levels, and anaerobic sediments, tidal swamps within Florida are normally safe from exotic invasion (Odum and McIvor 1990). These communities within the Park are relatively undisturbed, excepting a narrow, elevated boardwalk which provides pedestrian access to the IRL beachfront. Focus of site management within this community will be to preserve its natural state. No site improvements are proposed within this community.

#### Coastal Strand

Coastal strand habitats are defined as stabilized, wind-deposited coastal dunes that are vegetated with a dense thicket of salt-tolerant shrubs, especially saw palmetto (FNAI 2010). FNAI indicates that this is probably the most rapidly disappearing community type within Florida due to coastal development. SDP contains approximately 6 acres of

coastal strand, located within the southeast quadrant of the Park (Figure 4). This community is dominated by thickets of saw palmetto (*Serenoa repens*), interspersed with wood and non-woody shrubs, cabbage palms (*Sabal palmetto*), and open ground. Physical improvements within the coastal strand community are limited to an elevated pedestrian boardwalk. This community also has a moderate infestation of the invasive exotic pest plant, Brazilian pepper (*Schinus terebinthifolius*).

The coastal strand community at SDP will be preserved and managed in its natural state. Exotic species management, as described in following sections, will be an integral part of this effort. Volusia County considers the eradication of invasive plants to be a priority management objective at SDP. Brazilian pepper present within the coastal strand community will be removed by a combination of targeted, foliar or basal bark application of an approved herbicide, mechanical/physical removal, and/or prescribed burning. It is anticipated that removal of these plants will provide the space necessary for the recruitment and expansion of native vegetation.

#### Maritime Hammock

Maritime hammock habitats typically consist of a narrow band of hardwood trees lying just inland from coastal strand communities (FNAI 2010). They occur on old coastal dunes that have stabilized enough to allow for the growth of a forest. At SDP, there is an approximately 7-acre maritime hammock community located along the southern site boundary (Figure 4). Dominant vegetation within this community includes red cedar (*Juniperus virginiana*), buttonwood (*Conocarpus erectus*), saw palmetto, cabbage palm, saw palmetto, and the exotic Brazilian pepper. Previous impacts to this community have included the construction of a small paved parking area, a recreational/educational pavilion, restrooms, and staff office and equipment storage space. Future impacts may include the expansion of the public vehicle parking area.

The maritime hammock community at SDP is in fair condition. Although there is significant coverage of native vegetation, there is also a major infestation of Brazilian pepper. Future management of this community will include the control of this species.

#### Beach Dune

Smyrna Dunes Park contains about 5.7 acres of beach dune habitat, situated behind the open beach along the Atlantic and Ponce de Leon Inlet shorelines (Figure 4). Beach dunes are generally found along high energy shorelines and are formed by the deposition of sand from onshore winds. This community is dominated by salt tolerant, herbaceous native groundcover, most notably sea oats (*Uniola paniculata*). No exotic species are known to occur within this community. There are currently six elevated dune crossovers

within this community which allow for pedestrian access. Otherwise, it is undisturbed, and no future site improvements are planned.

### Coastal Grassland

Disturbed coastal grassland occupies about 44 acres within the central portion of SDP (Figure 4). At least a portion of this transitional community was submerged prior to the construction of the jetty at Ponce Inlet, and it now occupies a large portion of a relict

spoil deposition site used for past inlet maintenance dredging projects. It is likely that this community will eventually succession into a beach dune community, but at present is best characterized as a coastal grassland.

The FNAI (2010) reports that coastal grassland is a predominantly herbaceous community occupying the drier portions of the transition zone between beach dunes on the immediate coast and communities dominated by woody species, such as coastal strand or maritime hammock, further inland. This habitat type occurs primarily on the broader barrier islands and capes along the sandy coasts of Florida. At SDP, this community is dominated by grasses, low-growing herbs, and succulents, such as broom grass (*Andropogon* sp.), camphorweed (*Heterotheca subaxillaris*), and prickly-pear cactus (*Opuntia humifusa*). Vegetation within this community is generally sparse. Management concerns within this community include a very minor infestation of Brazilian pepper. Existing improvements within this community type include an approximately one-mile elevated pedestrian boardwalk. No other improvements are foreseen.

### Coastal Berm

According to FNAI (2010), coastal berm habitats consist of short forests (less than 10 feet in height) or shrub thickets found on long narrow storm-deposited ridges of loose, unconsolidated sediment. These ridges parallel the shore and may be found on the seaward edge or landward edge of the mangroves or further inland. About 6 acres of coastal berm communities at SDP can be found along the western shoreline (Figure 4). Vegetation consists mostly of red cedar, wax myrtle, and Brazilian pepper. There are no existing or proposed site improvements within this community. The prime management concern within this habitat shall be to control the invasive Brazilian pepper.

### ***Listed Plant Species***

No formal surveys for listed plant species have been conducted at Smyrna Dunes Park, and there are no protected plant species known to occur there. However, based upon

occurrence data from FNAI and current habitat conditions, several State-listed plant species are likely to occur at this site (Table 2). No federally-listed plant species are either known to, or are likely to, occur at SDP.

Listed plant species that may be present within the Park will be protected through Volusia County's management. The primary management tool for their protection will be the removal of exotic vegetation, which competes with native species for space, water, and nutrients.

<b>Scientific Name</b>	<b>Common Name</b>	<b>Habitat Association<sup>1</sup></b>	<b>State Status<sup>2</sup></b>	<b>Federal Status<sup>2</sup></b>
<i>Chamaesyce cumulicola</i>	Sand Dune Spurge	CS, BD, CG	E	N
<i>Lantana depressa</i> var. <i>floridana</i>	Atlantic Coast Florida Lantana	BD, CG, CS	E	N
<sup>1</sup> CS = Coastal Strand; BD = Beach Dune; CG = Coastal Grassland <sup>2</sup> E = Endangered; N =None				

### ***Listed Animal Species***

Volusia County has not conducted formal surveys for State or federally-listed animal species specific to the Smyrna Dunes Park property. However, based on current habitat conditions, informal observations, and other surveys, the site is known or likely to be utilized by several listed species (Table 3).

Volusia County monitors the beachfront along the SDP property daily during the sea turtle nesting season (May through September) for signs of nesting activity. Four species of sea turtles, including the loggerhead (*Caretta caretta*), green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's ridley (*Lepidochelys kempii*), have been documented nesting on County beaches and may utilize beaches within the Park. The loggerhead sea turtle is considered threatened, while the green, leatherback, and Kemp's ridley sea turtles are listed as endangered at both the Federal and State levels. All of these species deposit their eggs between May and September within excavated nest cavities on the beach or within the dune system.

TABLE 3. LISTED ANIMAL SPECIES KNOWN OR LIKELY TO OCCUR ON THE SMYRNA DUNES PARK PROPERTY				
<b>Reptiles</b>				
Scientific Name	Common Name	Habitat Association <sup>1</sup>	State Status <sup>2</sup>	Federal Status <sup>2</sup>
<i>Caretta caretta</i>	Loggerhead Turtle	BCH, BD	T	T
<i>Chelonia mydas</i>	Green Sea Turtle	BCH, BD	E	E
<i>Dermochelys coriacea</i>	Leatherback Turtle	BCH, BD	E	E
<i>Gopherus polyphemus</i>	Gopher Tortoise	BD, CS, CG	T	C
<i>Nerodia clarkia taeniata</i>	Atlantic Salt March Snake	SM, MS	T	T
<b>Birds</b>				
<i>Charadrius melodus</i>	Piping Plover	BCH	T	T
<i>Rynchops niger</i>	Black Skimmer	BCH, CG	SSC	N
<i>Sterna antillarum</i>	Lease Tern	BCH, CG	T	N
<i>Egretta caerulea</i>	Little Blue Heron	BCH, SM, MS	SSC	N
<i>Egretta thula</i>	Snowy Egret	BCH, SM, MS	SSC	N
<i>Eudocimus albus</i>	White Ibis	BCH, SM, MS	SSC	N
<i>Mycteria americana</i>	Wood Stork	BCH, SM, MS	E	E
<i>Ajaja ajaja</i>	Roseate Spoonbill	BCH, SM, MS	SSC	N
<i>Egretta tricolor</i>	Tricolored Heron	BCH, SM, MS	SSC	N
<i>Pelecanus occidentalis</i>	Brown Pelican	BCH	SSC	N/F
<b>Mammals</b>				
<i>Peromyscus polionotus niveiventris</i>	SE Beach Mouse	BD, CG	T	T
<sup>1</sup> CS = Coastal Strand, BD = Beach Dune, BCH = Open Beach, CG = Coastal Grassland, SM = Salt Marsh, MS = Mangrove Swamp. <sup>2</sup> E=Endangered; T=Threatened; C=Candidate; SSC=Species of Special Concern; N=None; N/F=Not Listed in Florida, Endangered Elsewhere.				

Smyrna Dunes Park includes about 1.7 miles of linear shoreline which is available as nesting habitat. Based upon available monitoring data for the three most recent nesting seasons (2010-2012), the section of shoreline associated with SDP receives an average of about 10 loggerhead nests per year (Volusia County, unpublished data). Green and leatherback sea turtles nest at SDP only rarely. Kemp's ridley sea turtles have never been documented nesting within the Park but do occasionally nest along Atlantic beaches south of the Park. As mentioned previously, these species and their nesting habitat are managed separately under Volusia County's Habitat Conservation Plan and Federal Incidental Take Permit. Accordingly, specific provisions to protect these species are not addressed by this Management Plan, although Park staff will continue to report sea turtle nesting activity observed on inlet beaches.

Upland portions of the SDP property provide suitable habitat for the gopher tortoise (*Gopherus polyphemus*), a State-listed threatened species and candidate for Federal listing. Based upon informal burrow counts, there is a sizable gopher tortoise population occupying the coastal strand, beach dune, and coastal grassland portions of the site. However, the exact size and demographic of this population is currently unknown.

The federally-threatened southeastern beach mouse (*Peromyscus polionotus niveiventris*) is a potential inhabitant of the beach dune, coastal strand, and coastal grassland portions of SDP. Historically, this subspecies of old field mouse was distributed from Ponce de Leon Inlet in Volusia County, south to Miami-Dade County (Stout 1992), although it is currently believed to have been extirpated south of Indian River County (USFWS 2008).

Beach mice are mainly inhabitants of the sea oat zone of primary coastal dunes, however they can also colonize secondary dunes and coastal strand habitat (USFWS 2008). Recent evidence indicates that the Park supports a viable beach mouse population. Trapping studies conducted in 2004 captured a considerable number of beach mice (Suazo 2004), and subsequent trapping studies conducted in 2006-2007 led to the conclusion that the SDP beach mouse population was stable and secure (> 500 individuals; USFWS 2008). This population may also extend onto private property up to one-half mile south of the Park where houses and condos are set well behind the primary dune and swale system, although no surveys have been conducted there. The beach mouse population at SDP is considered to be disjunct from the closest known population located approximately 10 miles south of the Park within the Canaveral National Seashore.

The mangrove swamp, salt marsh, and open beach portion of the property likely provides habitat for numerous listed wading and shorebird species. Wading species utilizing these areas include the little blue heron, wood stork, snowy egret, roseate spoonbill, white ibis, and tricolored heron. All typically nest within mangrove trees or other wood shrubs, but prefer to place their nests over open water within mangrove islands (Hipes *et al*, 2000). Mangrove areas are also frequently used for nesting and roosting by the brown pelican, a State species of special concern. No bird rookeries have been identified on the site to date; the nearest known wading bird rookery is located approximately 1.5 miles south of SDP (FWC, unpublished data). The federally-threatened Atlantic salt marsh snake (*Nerodia clarkii taeniata*) historically occurred within estuarine wetland habitats in and around the vicinity of Ponce Inlet. Its current occurrence there is not known.

The shorelines of SDP provide ample foraging habitat for listed shorebirds and also support nesting by at least one non-listed species, the Wilson's plover (*Charadrius wilsonia*). As part of its HCP, Volusia County Environmental Management conducts

surveys for nesting shorebirds each year. Monitors have recorded an average of two Wilson's plover nests per year over the previous three years (2010-2012). In 1979, an interior portion of the site was designated by the State of Florida as a Critical Wildlife Area (CWA) for least tern and black skimmer nesting. This 13.7-acre CWA created by the deposition of spoil from inlet maintenance dredging projects was licensed to the State by the U.S. Coast Guard. By order of the FWC (formerly the Florida Game and Freshwater Fish Commission), entry into the CWA was prohibited from April 1 to August 15 each year to prevent molestation of nesting birds. Least tern and black skimmers reportedly nested in this area until 1983, when the colony was abandoned (Hovis 2000). The CWA license expired in the 1980's, and the site eventually transitioned into a coastal grassland community. No shorebird nesting is presently known to occur within interior portions of SDP.

SDP is known to provide foraging habitat to the federally-threatened piping plover. Birds present during the spring and summer represent part of an overwintering, non-nesting population. During 2010 to 2012, an average of about 30 incidental sightings of wintering piping plovers were documented on SDP shorelines by staff of Volusia County Environmental Management, Beach Safety, and Ecological Associates, Inc. (EAI). Piping plovers have been observed within Volusia County throughout the overwintering period, which extends from mid-July to mid-May.

In July 2001, the USFWS published its Final Determination of Critical Habitat for wintering piping plovers. Two areas were designated in Volusia County, one on the north side and one on the south side of Ponce de Leon Inlet, collectively referred to as FL-Unit 34. That portion on the south side of the inlet lies entirely within SDP. Insofar as this species is managed separately under the County's HCP and ITP, this Management Plan does not specifically address conservation measures for the piping plover. However as noted earlier, all SDP operations are fully consistent with HCP and ITP requirements.

It is anticipated that the listed fauna species found on site will benefit from the continued preservation of the site in its natural condition, application of Volusia County's existing management practices, and through additional active management of the site under the provisions of this Management Plan. Collectively, these management activities will increase the value of the habitat for these and other wildlife species.

### ***Archaeological, Cultural, and Historical Resources***

There are no known archeological, cultural, and/or historical resources located within the SDP property. The County will notify the State Division of Historical Resources immediately if future evidence is found to suggest that a historical or archeological

resource exists at the site. Collection of artifacts or the disturbance of archeological and historic items will be prohibited unless prior authorization has been obtained from the State Division of Historical Resources. Management of these resources will comply with the provisions of Chapter 267, Florida Statutes, Sections 267.061 2(a) and (b).

## **NATURAL RESOURCE MANAGEMENT**

During the term of the leases with the BLM and DSL, Volusia County will continue to conserve and manage the natural resources at SDP. It is anticipated that existing management activities will continue to provide a substantial benefit to listed flora and fauna that occur on the property. Additional management practices, such as exotic vegetation control and a prescribed burn program will be implemented, should funding and qualified staff become available and/or willing outside partners become involved.

### ***Exotic Vegetation Removal***

Invasive exotic pest plants are disrupting many of Florida's ecosystems by displacing native plant species through competition for space, light, nutrients, and water. The Florida Exotic Pest Plant Council functionally defines an invasive exotic pest plant as a plant that has been introduced to an area outside its native range, either purposefully or accidentally; can sustain itself outside of cultivation and outside its native range; and disrupts naturally occurring native plant communities. The principal exotic pest plant on the SDP property is the Brazilian pepper. This woody weed poses a serious threat to biodiversity and is eliminating many indigenous sources of food for wildlife in Florida (Morton 1979). For that reason it has been placed on the State's prohibited plant list (16C-52, F.A.C.). At SDP, Brazilian pepper has colonized extensive portions of the maritime hammock and coastal berm communities and has established itself within the other upland communities. It is the only known exotic pest plant to occur at the Park.

Volusia County plans to implement a maintenance program to address Brazilian pepper infestations at SDP. These plants will be eradicated within natural communities, where necessary, with the goal of maintaining less than 10% canopy coverage within five years of plan implementation. This will be accomplished through a combination of low-impact mechanical removal (i.e., chainsaw, pruning saw) and/or foliar or basal bark applications of an approved herbicide. All activities will be performed by qualified Volusia County personnel, contractors, and/or volunteers managed by the County. It is anticipated that removal of these plants will allow for the successful natural recruitment of desirable native species.

Informal monitoring for Brazilian pepper at SDP will be performed by Park staff during routine operations. Maintenance treatments will occur for the duration of the County's lease to the extent allowed by funding and qualified staff.

### ***Prescribed Burn Program***

Prescribed fire, when properly managed, can improve wildlife habitat, promote forest regeneration, cycle nutrients, and reduce the risk of catastrophic wildfires (Long 1999). Most of the upland communities at SDP could benefit from a prescribed burning regime, although logistical realities (e.g., presence of park infrastructure, adjoining residential properties and inconvenience to park visitors) may limit the scope of the burn program. The County shall initially consider establishing a prescribed burn program within the coastal strand community (Figure 4). Other areas may be added if deemed feasible. .

According to FNAI (2010), there is little information regarding the natural fire frequency in coastal strand habitats. Accordingly, the County shall use reasonable and professional judgment when establishing the burn cycle. The designated burn area may initially be divided into smaller segments, and each segment burned on a rotating cycle. Smaller segments may be then combined with other segments after initial burns. The interval between successive burns will be predicated on prevailing site conditions.

Prescribed burns will be conducted in accordance with State statutes (F.S. 590.125) and associated administrative rules (Chapter 5I-2, F.A.C.) under the direction of a Certified Prescribed Burn Manager (CPBM). Several staff members of Environmental Management are Certified Prescribed Burn Managers. Burns must be authorized by the local Division of Forestry office. CPBM's must present their certification number at the time of their permit request from the Division of Forestry, and they must have a copy of the prescription on site for inspection.

Specific burn plans shall be prepared by the County's CPBM or designee. Minimum requirements for the burn prescription include: stand, site, and fuel description; map of the area to be burned; personnel and equipment to be used; desired weather factors; desired fire behavior; ignition technique; time and date the prescription was prepared; authorization date and time period; an evaluation and approval of the anticipated impact of the proposed burn on smoke-sensitive areas; and signature and number of the certified burn manager. Each burn will be performed in accordance with the burn prescription.

### ***Plant and Animal Inventories***

The Volusia County Coastal Division will compile a comprehensive wildlife and botanical inventory of the Park, particularly with respect to State and federally protected

species, through multiple means, including, grants, volunteer efforts, and/or involvement of other County Divisions. County staff will amend this inventory, as needed, over the term of the lease agreement to reflect additional species occurrences based on incidental observations. Any independent research conducted on the property will be documented.

### ***Protected Species Management***

#### **Southeastern Beach Mice**

Conservation of southeastern beach mice is considered an important goal of this Plan. Management of beach mice will be performed via existing management practices, as described below. Additionally, County staff will solicit for qualified volunteer personnel from academia, government agencies, scientific research organizations, and/or private consulting firms to establish a program to monitor beach mouse population levels within the Park. In particular, the County will promote the utilization of graduate students to advance scientific understanding of the local beach mouse population. County staff shall also attempt to identify potential funding sources to support/enhance the monitoring effort.

Beach access at SDP is currently restricted to an extensive system of elevated boardwalks. These boardwalks have been very effective in minimizing trampling of the dune system by pedestrian traffic. The County will continue to maintain these boardwalks in good working order during the term of their lease using existing funding mechanisms. It is anticipated that the boardwalk system will be replaced within the lease term. Prior to construction, the County will conduct a survey to locate and mark beach mouse burrows potentially affected by construction and work with the USFWS and/or FWC to develop appropriate protective measures.

Strategically-placed signage within the Park indicates that is illegal to disturb the dunes or dune vegetation (F.S. 161.053), further discouraging people from traversing the dune system. Park staff will continue to be vigilant of visitors, vehicles, and/or pets that encroach on the dune system. Minor violations will be addressed politely with the Park visitor. Repeated and/or egregious violations will be referred to law enforcement.

Domestic cats are a known predator of beach mice. SDP lies adjacent to a residential portion of New Smyrna Beach where feral and/or domesticated cats may be present. The extent to which domestic cats utilize the parcel is unknown, but sightings have been reported. Park staff will discourage visitors from feeding free-ranging animals on the property and will maintain its existing network of animal-proof garbage cans. Unregulated domestic animals that are found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County

ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.

As mentioned previously, dogs will be allowed at SDP, but only at certain times and locations, and they must be kept on a leash at all times. Current regulations separate dogs both spatially (i.e., limiting them to boardwalks and inlet beaches) and temporally (i.e., prohibiting dogs at night when mice are active) from beach mice. Signage placed throughout SDP informs visitors of the regulations, and free dog waste collection bags are provided at strategic locations. Park staff will enforce leash regulations. During times of peak visitation (Memorial Day to Labor Day), a dedicated Park staff member will monitor inlet beaches to enforce these regulations.

### Migratory Shorebirds

Many of the existing management practices described above for the southeastern beach mouse also benefit migratory shorebirds which utilize SDP. The placement of sealed garbage receptacles around the Park's shorelines and regular trash collection will limit the abundance of potential predators. Migratory birds will also benefit from the existing leash regulations. Although Park rules allow dogs on inlet beaches, as previously mentioned, they must be leashed at all times. The County has also established a dedicated shorebird nesting area along approximately 1,300 feet of upper beach on the southern shore of the Ponce de Leon Inlet (Figure 5). This area encompasses the locations of historical Wilson's plovers nesting sites. Signage placed on 4x4 posts spaced every 50 feet within this area indicates that it is a shorebird protection area, that all access is prohibited, and dogs must be leashed at all times. Signage will be maintained and Park staff will enforce these regulations for the term of the County's lease. The County will seek other opportunities, as presented and financially supportable, to create and enhance additional migratory shorebird nesting habitat.

Volusia County has also implemented voluntary measures for the benefit of migratory birds as well as other protected species inhabiting County Beaches. These measures, which aid in conservation efforts at SDP, include the following:

- Each spring, dedicated shorebird nesting surveys are conducted to document and mark shorebird nesting sites on County beaches as part of the County's HCP. Additionally, County staff and sea turtle monitoring personnel report any beach nesting activity they observe during the course of their routine activities. Nesting sites are cordoned off with stakes and ribbon and the sites are periodically monitored until the chicks have fledged.
- Monthly surveys for piping plovers are conducted within Unit FL-34 between

December and February each year. Opportunistic sightings of piping plovers are also recorded at any time of year.

- A program has been implemented to recover weak, ill, and injured birds from County Beaches and coordinate their transport to State and/or federally licensed wildlife rehabilitation facilities.
- A seabird rehabilitation and education facility has been established by Volusia County at the Marine Science Center in Ponce Inlet to care for injured seabirds and shorebirds recovered from County Beaches.
- Public awareness materials (e.g., Birds of the Beach brochure and Environet Newsletter) have been developed to address factors impacting shorebirds. They are distributed throughout the County, including SDP.
- A monofilament fishing line recycling program has been implemented, and collection bins are strategically placed throughout the County at boat ramps, prominent fishing spots, and parks (including one at SDP).

### Gopher Tortoises

Based on previous informal surveys, and other incidental observations, the gopher tortoise population at SDP appears to be thriving. It is anticipated that habitat management programs established by this Plan (e.g., exotic vegetation control) will assist in maintaining SDP as suitable gopher tortoise habitat. Existing management practices, including the use of elevated boardwalks and leash restrictions for dogs, will continue to benefit the conservation of this species.

The County will solicit for qualified volunteer personnel from academia, government agencies, scientific research organizations, and/or private consulting firms to implement a monitoring program to assess the size, demographics, and trends of this population. Environmental Management staff is authorized to conduct gopher tortoise surveys as FWC Authorized Gopher Tortoise Agents and may assist in park surveys. Environmental Management also established a Gopher Tracker Volunteer Program. Volunteers from this program may be used to assist with surveys of the park. The County will promote the utilization of graduate students to advance scientific understanding of the local gopher tortoise population.

## **FUNDING MECHANISMS**

Park management operations will continue to be funded by traditional means including ad-valorem taxes and park entrance fees. To the extent permitted by available staff, the County will identify and pursue the funding necessary to support the natural resource management activities identified in this Plan. These sources may include, but are not

limited to, grants from the National Fish and Wildlife Foundation or other State and Federal agencies, as well as *in lieu* fee mitigation from approved development sites within coastal areas of Volusia County. In addition, volunteer labor will be utilized wherever possible and appropriate to minimize costs.

## REFERENCES

- Ashton and Ashton. 2008. The Natural History and Management of the Gopher Tortoise (*Gopherus polyphemus*). Krieger Publishing Company, Malabar, Florida. 275 pp.
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- Suazo, A.A. 2004. A new record of southeastern beach mouse (*Peromyscus polionotus niveiventris*) from New Smyrna Beach, Florida, U.S.A. Unpublished data on file at U.S. Fish and Wildlife Service, Jacksonville Field Office, Jacksonville, Florida.
- United States Fish and Wildlife Service (USFWS). 2008. Southeastern beach mouse (*Peromyscus polionotus niveiventris*). Five-year Review: Summary and Evaluation. Jacksonville Ecological Field Office, Jacksonville, Florida. 38 pp.

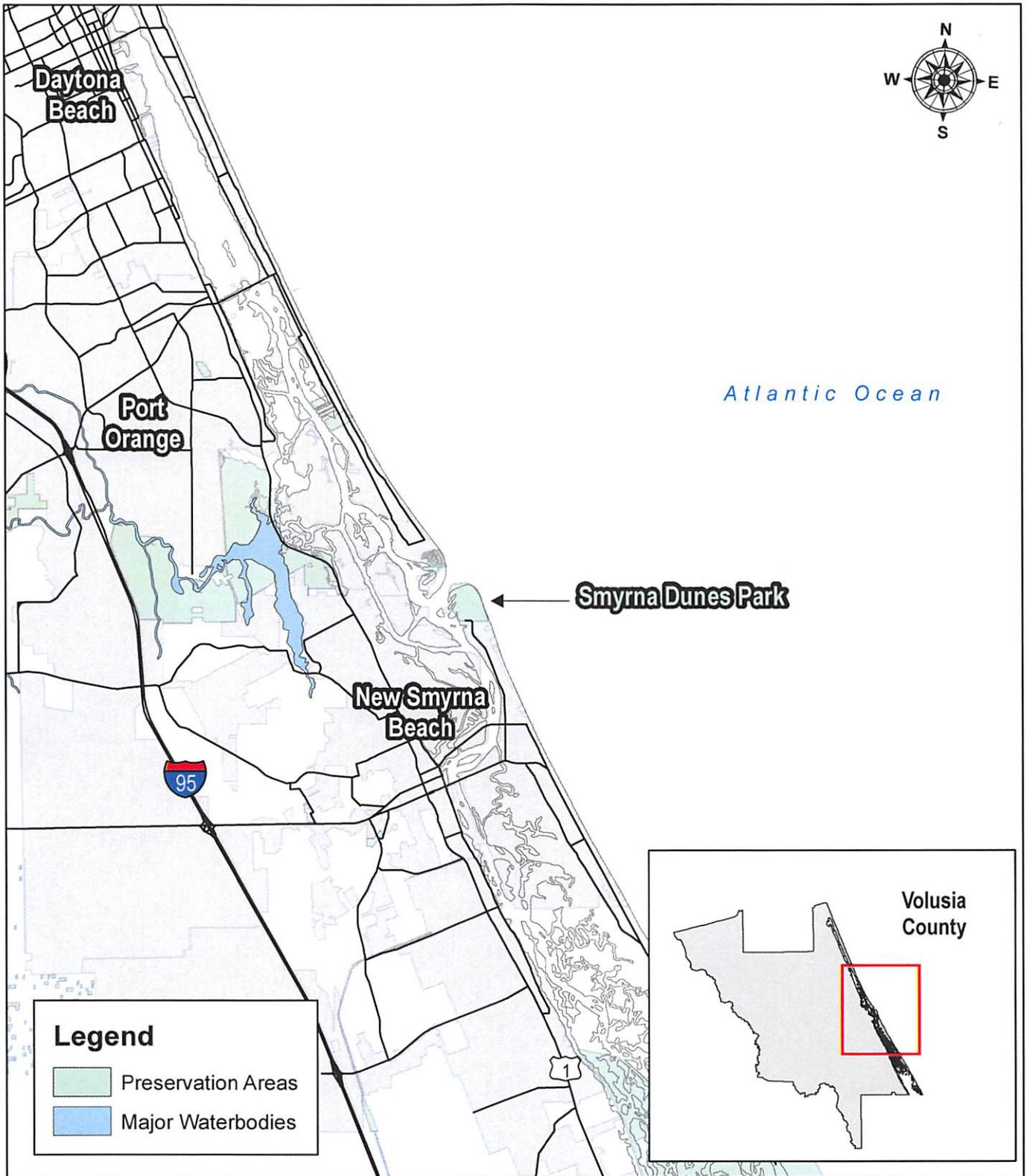


Figure 1. Location of Smyrna Dunes Park, Volusia County, Florida.



## NEW SMYRNA BEACH DUNES PARK

PHOTO DATE: 2012

Figure 2. Federal and State property boundaries map.





Figure 4. Existing and Proposed Physical Improvements at Smyrna Dunes Park.



Figure 5. Easements and Outparcels at Smyrna Dunes Park.



Figure 6. Natural Communities Map, Smyrna Dunes Park.

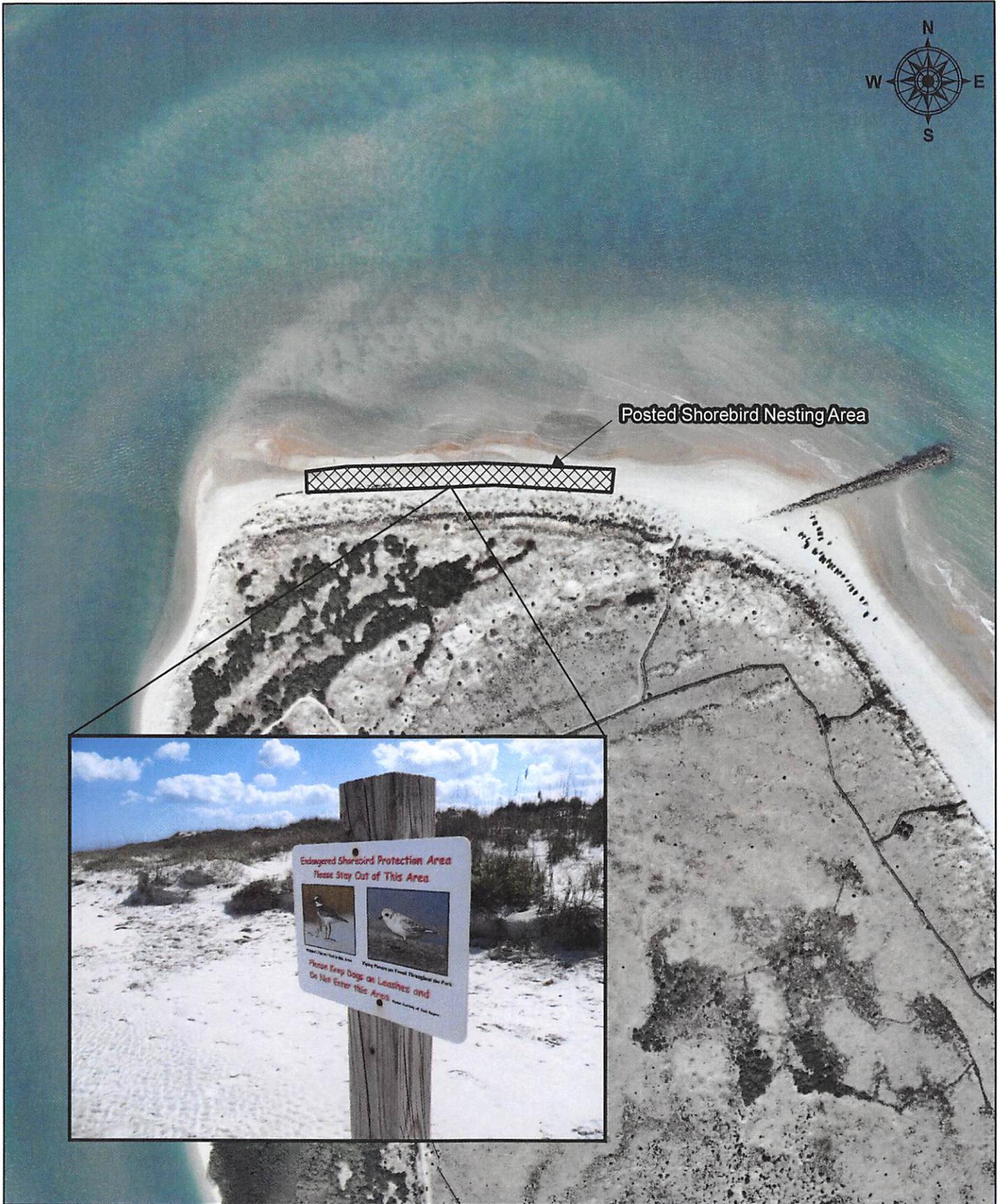


Figure 7. Dedicated Shorebird Nesting Area, Smyrna Dunes Park.

**APPENDIX A  
COUNTY LICENSE AGREEMENT WITH USCG FOR OPERATION  
OF SMYRND A DUNES PARK**

REVOCABLE LICENSE

DTCG-271107-82RP017L

The United States of America, Department of Transportation, United States Coast Guard, hereinafter called Licensor, hereby grants unto the Ponce de Leon Port Authority, Daytona Beach, Volusia County, Florida; hereinafter called Licensee; a license for a period of thirty (30) years commencing 01 September 1982. This License is revocable at will by the Licensor upon thrity (30) days prior notice to the Licensee. This License is for the use of land at the U. S. Coast Guard Station, Ponce de Leon Inlet, New Smyrna Beach, Volusia County, Florida, for the purpose of providing a passive public park and to preserve and protect environmentally sensitive areas. A description of this land is as follows:

All that land in Sections 32 and 33, T16S, R34E bounded on the South by township line 16 South, on the east, north and west by the mean high water lines of the Atlantic Ocean, the Inlet, and the Hillsboro River Respectively.

- and -

Beginning at a point where the township line between Section 32, Township 16 South, Range 34 East, and Section 5, Township 1-7 South, Range 34 East, intersects the East shoreline of Hillsboro River or Indian River North; thence due East on said township line 700 Ft. to a stake; thence South 45° East 625 feet to a stake; thence due West parallel with said township line 700 ft. to the shoreline of said Hillsboro River or Indian River North; thence Northwesterly along shoreline of Hillsborough River or Indian River North to Point of Beginning.

The area to be used by the licensee excludes the area depicted in Exhibits "A" and "B" pertaining to the Coast Guard Station itself and the area licensed to the Department of the Air Force (listed as NASA in Exhibit "A"). Additionally, as indicated on Exhibit "A" an area approximately 600 feet by 1000 feet on the Northwesterly side of the property is licensed to the State of Florida, Game and Fresh Water Fish Commission, Bureau of Wildlife Resources.

That permission hereby granted shall be subject to the following provisions and conditions:

ALL: JCD:KUN 386-248-3072

1. The use and occupancy of said portion of the Coast Guard premises shall be without expense to the United States and shall be subject to such rules and regulations as the Licensor, or his duly authorized representative may prescribe.

2. That the Licensee shall take all reasonable and necessary steps to preserve and protect the bird sanctuary, sand dunes, and other environmentally sensitive areas, and shall maintain the area in a neat and presentable condition.

3. That the Licensee shall not assign or transfer this License without prior written consent of the Licensor, or his duly authorized representative.

4. That the Licensee shall not interfere or permit interference with the operations and access rights of the Department of the Air Force installation; that the boardwalks and parking lot be placed no closer than 500 feet of the site; that the proposed beach house be limited to one story, and any new sand dunes created east and south of the site be limited to 30 feet in height. The Licensee shall provide a gate to the Air Force Road as specified by the U. S. Air Force.

5. That the Licensee shall not interfere, or permit interference with the operations or access rights of the U. S. Coast Guard. That the Licensee shall install at its expense a fence around the Coast Guard Station as indicated in Exhibit "B." The height and other specifications of said fence shall be as established by the Licensor.

6. That the Licensee is not to be considered as acquiring hereunder any permanent interest in the said Coast Guard property.

7. That the Licensee shall provide for trash and garbage collection law enforcement, and sewage disposal for the two rest room areas. Sewage disposal plants are not allowed.

8. That plans for construction be approved by the Licensor; that Licensee shall make no significant improvement alteration or additions to the area without prior approval by the Licensor.

9. That the Licensee shall not make any use of the premises which is contrary to the Laws of the United States or the State of Florida.

10. The Licensee shall pay for all water, gas, and electricity used on said premises during the term of this License. All electrical, sewage, and water hook-ups shall be at the expense of the Licensee.

11. That in consideration of the permission herein granted, the Licensee does hereby for itself and its successors remise, release, and forever discharge and agree to indemnify, protect, and save harmless the United States of America, the Department of Transportation, the U. S. Coast Guard, and all their officers, agents, and employees, acting officially or otherwise, from any and all claims, demands, actions, or cause of action on account of any damage to, or destruction of or loss of, Licensee's property which may occur from any cause in connection with Licensee's use and enjoyment.

12. That in further consideration of the permission hereby granted, the Licensee agrees to indemnify, protect, and save harmless The United States of America, the Department of Transportation, the U. S. Coast Guard, and all their officers, agents, or employees, acting officially or otherwise, from any and all liability, costs, settlements, judgments, demands, or claims of every kind and character, due to or by reason of, injury to or death of any person whatsoever, which may result in any manner arising out of or directly related to the activities of the Ponce de Leon Port Authority in connection with this License or the use of the licensed premises.

13. That it is a condition of this License that no person shall, on the grounds of race, color, creed, or national origin, be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of the premises. The Licensor reserves the right to revoke and cancel this License in the event of breach of such non-discrimination condition during the period of the License.

14. Upon abandonment or termination of this License, all permanent improvements shall become the property of the U. S. Coast Guard.

15. That the Licensee shall not conduct, or permit, the sale of any alcoholic beverages on the premises.

16. That upon expiration or revocation of this License, the Licensee shall relinquish the use of said property, in as good a condition and state of repair as when possession was received, ordinary wear and tear excepted, and shall remove all personal property within such reasonable time as the Licensor may designate, and upon failure to do so, it may be removed at the expense of the Licensee, and no claim for damages against the United States shall arise by or on account of such removal.

17. No member or delegate to Congress or Resident Commissioner shall be admitted to any share or part of this License, or to benefit to arise therefrom.

DATED this 17th day of August, 1982

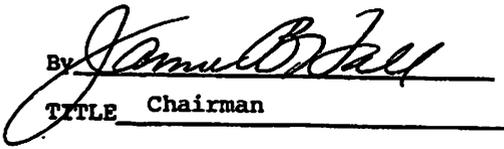
UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

By   
D. C. THOMPSON  
Rear Admiral, U. S. Coast Guard  
Commander  
Seventh Coast Guard District

This License is executed by the Licensee in acknowledgement and acceptance of the terms herein set forth:

PONCE DE LEON PORT AUTHORITY  
VOLUSIA COUNTY, FLORIDA

Date 3/23/83

By   
TITLE Chairman

**APPENDIX B**  
**TRANSFER OF PUBLIC LANDS OWNERSHIP FROM U.S. COAST**  
**GUARD TO BUREAU OF LAND MANAGEMENT**



United States Department of the Interior



Bureau of Land Management

Southeastern States Field Office  
411 Briarwood Drive, Suite 404  
Jackson, Mississippi 39206  
<http://www.es.blm.gov>

IN REPLY REFER TO:  
2912 (020) VC

Commander Benjamin L. Davis, CDR  
Commanding Officer  
U.S. Department of Homeland Security  
United States Coast Guard  
Civil Engineering Unit Miami  
15608 S. W. 117<sup>th</sup> Street  
Miami, Florida 33177-1639

July 20, 2011

Dear Commander Davis:

We are in receipt of the U. S. Coast Guard's revised "Notice of Intent to Relinquish" dated September 16, 2010, to relinquish custody, accountability and control of approximately 73.36 acres on the USCG Station Ponce de Leon. In the interim or until such time we are able to process your request for relinquishment of your withdrawal. The Ponce de Leon Port Authority, Daytona Beach, Volusia County, who currently occupies most of the withdrawal has requested that the Bureau of Land Management (BLM) classify those public lands to be leased and/or patented to the county under the authority of the Recreation and Public Purposes (R&PP) Act, as amended (43 U. S. C. 869 *et seq.*) for their continued operations of the Smyrna Dunes Park.

The subject property is located in Section 32, Township 16 South, Range 34 East. The legal description defines the property as two parcels:

**Tallahassee Meridian**

Lot 1, Section 32, Township 16 South, Range 34 East and Lot 1, Section 33, Township 17 South, Range 34 East, Volusia County, Florida.



WILD HORSES & BURROS • CADASTRAL SURVEY • GENERAL LAND OFFICE RECORDS • MINERALS • RENEWABLE RESOURCES



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Lands that are subject to disposition under the R&PP Act and which are under the jurisdiction of another federal agency, requires that we obtain written approval from the holding agency of the withdrawal before the issuance of an R&PP lease or patent. The Act specifically provides that lands withdrawn in aid of another Federal agency may be conveyed (or leased) with the consent of the holding agency and lease or patent may be issued without first terminating the withdrawal. Pursuant to 43 CFR 2741.1, we are seeking the Coast Guard's consent/approval to move forward with the classification of the above lands for recreation in Volusia County.

If you have any questions, or need additional information, please contact Vicky Craft of our office at 601.977.5400, extension 435. Thanks in advance for your assistance regarding this matter.

Sincerely,

*Bruce Dawson (acting for)*

Bruce E. Dawson  
Field Manager

*B. Dawson* 7/22/2011  
Consent

\_\_\_\_\_ Non-Consent

cc: Joe Nolin, Volusia County  
Pat Dixon



**APPENDIX C**  
**FLORIDA DIVISION OF STATE LANDS LEASE APPLICATION**

# Conservation Management Plan

This management plan form is intended for Board of Trustees leases and subleases of conservation properties that are less than 160 acres. It is intended to address the requirements of Chapter 253.034, 259.032 and rule 18-2.021. Attachments to, or expansion of this form are welcome, if the space provided below is not sufficient. Please answer all of the items below and number all attachments and reference them in the appropriate location below. You are under no obligation to use this form. Any plan format is acceptable, provided it includes all of the appropriate items from the above mentioned statutes and rule. This form is available in electronic format upon request. For additional information pertaining to management plans, please visit the Division of State Lands stewardship page on the web at <http://www.dep.state.fl.us/lands/stewardship.htm>

## **A. General Information**

1. Common name of the property Smyrna Dunes Park
2. Lease number \_\_\_\_\_
3. Acres 141
4. Managing Agency: Volusia County
5. Provide an executive summary/description of this property that includes a brief description of the resources, uses and proposed uses, outstanding features etc.

The Smyrna Dunes Park (SDP) property is located along the southern shoreline of Ponce de Leon Inlet, within the City of New Smyrna Beach, Volusia County, Florida. SDP encompasses contiguous property owned separately by the State of Florida and the U.S. Bureau of Land Management; both are under the unified management of Volusia County and are used for public passive recreation. SDP supports several biological communities including beach, dune, coastal strand, maritime hammock, mangrove swamp, and tidal marsh. Continued County management of SDP will ensure preservation of these native habitats, as well as several rare animal species that depend on them for food, shelter, and/or reproduction. Park uses include, but are not limited to, nature watching, photography, walking/jogging, fishing, sunbathing, picnicking, surfing, shell collection, and dog walking.

6. Attach a map showing the location and boundaries of the property including:
- a) The location and type of structures or improvements currently on the property
  - b) The location and type of proposed improvements.

See attached site map (Figure 1) showing existing structures and proposed improvements.

7. A map showing the proximity of this managed area to other conservation areas within 10 miles.

See Figure 1 in the attached Federal Smyrna Dunes Park Management Plan.

8. Please attach a legal description of the property.

The legal description of the property is provided in Attachment 1.

9. Provide a physical description of the land including a quantitative data description of the land which includes an inventory of forest and other natural resource, exotic and invasive plants, hydrologic features, infrastructure including recreational facilities, and other significant land, cultural or historical features.

The State-owned portion of the SDP property is comprised of a mosaic of several biologically diverse and rare natural communities (see Figure 2), including 6.6 acres of beach, 8 acres of beach dune, 14 acres of coastal berm, 82 acres of coastal grassland, 15 acres of salt marsh/mangrove swamp. The principle exotic plant species on the SDP property is Brazilian pepper. The main hydrological features at SDP are the adjacent Ponce de Leon Inlet to the north, Indian River Lagoon/Intracoastal Waterway to the west, and Atlantic Ocean to the east. The only existing infrastructure on State-owned property at SDP includes a boardwalk. A pavilion, restrooms, office building, U.S. Coast Guard Station, and a NASA spaceflight tracking facility are located on adjoining property owned by the U.S. Bureau of Land Management.

10. A brief description of soil types, attaching USDA maps when available.

Soils on the State-owned property consist of Palm Beach Sand, beach, and accreted marine sands, as shown in Figure 3. These soils are highly drained sands that are low in organic content. They are also susceptible to accretion and depletion from wave action and storm events.

11. Is the property adjacent to an aquatic preserve or designated area of critical state concern?

YES \_\_\_\_\_ NO X

If YES, please identify

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12. Was the property acquired by a conservation land acquisition program? If YES, please identify.

No. Park boundaries have expanded via accretion of sand on previously submerged State lands.

13. Do any agency-specific statute requirements or legislative/executive directives constrain the use of the property? (These restrictions can frequently be found in the lease)

YES \_\_\_\_\_ NO X

If YES, please identify

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14. Are there any reservations or encumbrances on the property?

YES \_\_\_\_\_ NO X

If YES, please identify

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**B. Natural and Cultural Resources**

15. Are there any archeological or historical sites on this property?

YES \_\_\_\_\_ NO X

If YES,

A) How do you plan to locate, protect and preserve these resources?

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B) Please describe the actions the agency plans to take to locate and identify unknown resources such as surveys of unknown archeological or historical sites.

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16. Are there any buildings on the property that are fifty or more years old?

YES \_\_\_\_\_ NO X

If YES,

A) Please identify \_\_\_\_\_

B) Have these buildings been evaluated by a historian or historic architect to determine their historical and/or architectural significance.

If YES, please identify both the building(s) and the evaluators(s)

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C) Please state whether any such buildings are listed in the Florida Master Site File, National Register of Historic Places or a local register of historic places and identify such buildings.

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By law, the managing agency must consult with the Division of Historical Resources with regard to any proposed land clearing or ground disturbing activities or with regard to any proposed rehabilitation, restoration or demolition of structures 50 or more years old. Please contact the Division of Historic Resources if you would like to obtain information on archeological/historical sites.

Division of Historical Resources  
Florida Department of State  
R.A. Gray Building, MS-8  
Tallahassee, Florida 32399-0250  
(850) 245-6312

17. Please identify natural resources on the property that are listed in the Florida Natural Areas Inventory.

**Natural Resources Identified by the Florida Natural Areas  
Inventory for Smyrna Dunes Park**

**Natural Communities**

Beach Dune

Coastal Strand

Maritime Hammock

Scrub

**Plants**

<b>Scientific Name</b>	<b>Common Name</b>
<i>Calopogon multiflorus</i>	Many-Flowered Grass-Pink
<i>Centrosema arenicola</i>	Sand Butterfly Pea
<i>Chamaesyce cumulicola</i>	Sand-Dune Spurge
<i>Conradina grandiflora</i>	Large-Flowered Rosemary
<i>Glandularia maritima</i>	Coastal Vervain
<i>Harrisia simpsonii</i>	Simpson's Prickly Apple
<i>Lantana depressa var. floridana</i>	Atlantic Coast Florida Lantana
<i>Lechea cernua</i>	Nodding Pinweed
<i>Lechea divaricata</i>	Pine Pinweed
<i>Nemastylis floridana</i>	Celestial Lily
<i>Nolina atopocarpa</i>	Florida Beargrass

**Animals**

<b>Scientific Name</b>	<b>Common Name</b>
<i>Acipenser oxyrinchus osyrinchus</i>	Atlantic Sturgeon
<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay
<i>Caretta caretta</i>	Loggerhead
<i>Charadrius melodus</i>	Piping Plover
<i>Chelonia mydas</i>	Green Turtle
<i>Dermochelys coriacea</i>	Leatherback
<i>Drymarchon couperi</i>	Eastern Indigo Snake
<i>Eretmochelys imbricata</i>	Hawksbill
<i>Gopherus polyphemus</i>	Gopher Tortoise
<i>Lepidochelys kempii</i>	Kemp's Ridley
<i>Mustela frenata peninsulae</i>	Florida Long-Tailed Weasel
<i>Mycteria americana</i>	Wood Stork
<i>Nerodia clarkii taeniata</i>	Atlantic Salt Marsh Snake
<i>Neofiber alleni</i>	Round-Tailed Muskrat
<i>Peromyscus polionotus niveiventris</i>	Southeastern Beach Mouse
<i>Rynchops niger</i>	Black Skimmer
<i>Setophaga discolor paludicola</i>	Florida Prairie Warbler
<i>Sternula antillarum</i>	Least Tern
<i>Trichechus manatus</i>	Manatee

18. Are any imperiled natural communities, unique natural features, or any State and federally listed endangered or threatened plant or animal species, on site?

YES  NO

If YES, please provide a specific description of how you plan to identify, locate, protect and preserve these species.

No State or federally-listed plant species are known to occur at SDP. However, if any are subsequently identified, the primary management tool for their protection will be the removal of exotic vegetation, which competes with native species for space, water, and nutrients.

Based on current habitat conditions, informal observations, and other surveys, SDP is known or likely to be utilized by several State and federally-listed species, as shown in the table below. All species of sea turtles nesting within Park boundaries, as well as the wintering piping plover are protected under Volusia County's Habitat Conservation Plan (HCP). The HCP, which is managed by the County's Environmental Management Department, was developed to minimize and mitigate impacts to listed species resulting from beach driving. Daily surveys are conducted throughout sea turtle nesting season and all nest locations are conspicuously marked and monitored throughout their incubation periods. Systematic piping plover surveys are conducted throughout the overwintering period (July 15 – May 15 each year). The County has an Incidental Take Permit (ITP) from the U.S. Fish and Wildlife Service that authorizes any take of these species that might result from on-beach parking and driving. The ITP has been in effect since 1996 and will not expire until 12/31/2030.

The listed faunal species found at SDP will benefit from the continued preservation of the park in its natural condition, application of Volusia County's existing management practices, and through additional active management of the park under the provisions of the Federal Smyrna Dunes Park Management Plan (attached). Collectively, these management activities will maintain and enhance the value of native habitats for these and other wildlife species.

<b>Listed Animal Species Known or Likely to Occur on the Smyrna Dunes Park Property</b>			
<b>Reptiles</b>			
<b>Scientific Name</b>	<b>Common Name</b>	<b>State Status<sup>2</sup></b>	<b>Federal Status<sup>2</sup></b>
<i>Caretta caretta</i>	Loggerhead Turtle	T	T
<i>Chelonia mydas</i>	Green Sea Turtle	E	E
<i>Dermochelys coriacea</i>	Leatherback Turtle	E	E
<i>Gopherus polyphemus</i>	Gopher Tortoise	T	C
<i>Nerodia clarkia taeniata</i>	Atlantic Salt March Snake	T	T
<b>Birds</b>			
<b>Scientific Name</b>	<b>Common Name</b>	<b>State Status<sup>2</sup></b>	<b>Federal Status<sup>2</sup></b>
<i>Charadrius melodus</i>	Piping Plover	T	T
<i>Rynchops niger</i>	Black Skimmer	SSC	N
<i>Sterna antillarum</i>	Lease Tern	T	N
<i>Egretta caerulea</i>	Little Blue Heron	SSC	N
<i>Egretta thula</i>	Snowy Egret	SSC	N
<i>Eudocimus albus</i>	White Ibis	SSC	N
<i>Mycteria americana</i>	Wood Stork	E	E
<i>Ajaja ajaja</i>	Roseate Spoonbill	SSC	N
<i>Egretta tricolor</i>	Tricolored Heron	SSC	N
<i>Pelecanus occidentalis</i>	Brown Pelican	SSC	N/F
<b>Mammals</b>			
<b>Scientific Name</b>	<b>Common Name</b>	<b>State Status<sup>2</sup></b>	<b>Federal Status<sup>2</sup></b>
<i>Peromyscus polionotus niveiventris</i>	SE Beach Mouse	T	T
<sup>2</sup> E=Endangered; T=Threatened; C=Candidate; SSC=Species of Special Concern; N=None; N/F=Not Listed in Florida, Endangered Elsewhere.			

If you would like further information regarding natural resources or endangered species please contact the Florida Natural Areas Inventory (FNAI)

Florida Natural Areas Inventory  
 1018 Thomasville Road, Suite 200-C  
 Tallahassee, Florida 32303  
 (850) 224-8207

- Please identify the water resources including swamps, marshes or other wetlands, on the property including the water quality classification for each water body and if the water body has been designated "Outstanding Florida Waters".

The following water resources have been identified at SDP: salt marsh/mangrove swamp, the Atlantic Ocean, and the Indian River Lagoon/Intracoastal Waterway. None of these resources have been designated as Outstanding Florida Waters.

20. Are any known mineral resources, such as oil, gas and phosphates, or any unique natural features, such as coral reefs, beaches, dunes, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams, and outstanding native landscapes containing relatively unaltered flora, fauna, and geological features on site?

YES  NO

If YES, please identify and provide locations on a map.

The State-owned portion of SDP contains beach dune and open beach and there are many scenic vistas of the adjacent Indian River Lagoon/Intracoastal Waterway and Atlantic Ocean. A lighthouse is also visible on the north side of Ponce Inlet. See native habitat locations on map included in No. 9 above.

21. Are there fish or wildlife resources (both game and non-game) on the property?

YES  NO

If YES, please describe:

Fishing for game and non-game species in surrounding waters is allowed from the beach at SDP.

### **C. Use of the Property**

22. Please provide a statement of the purpose for which the lands were acquired, the projected use or uses as defined in Chapter 253.034, Florida Statutes, and the statutory authority you have for such uses.

The land has been, and will continue to be, used solely for passive public recreation, including but are not limited to, nature watching, photography, walking/jogging, fishing, sunbathing, picnicking, surfing, shell collection, and dog walking. The County is committed to the conservation and protection of the Park's environmentally sensitive resources for ongoing use and enjoyment of the general public. Volusia County is a Home Rule County chartered under Chapter 125, Florida Statutes and thereby has the

authority to manage public lands for public access, recreation and conservation (Ch. 70-966, Laws of Florida (Sp. Acts), Art. I, § 102).

23. Please state the desired outcome for this property, and key management activities necessary to achieve the desired outcome, including public access.

SDP has been managed as a public park by Volusia County since 1982. Management of the Park continues to focus on protecting the property's environmentally sensitive resources while accommodating public access for passive recreation. SDP is a highly popular destination for local and non-County residents alike, and is open to the public year-round, with the exception of those days needed for maintenance and land management activities. SDP supports several native biological communities, including beach and dune, coastal strand, maritime hammock, mangrove swamp, and tidal marsh. These habitats will be maintained primarily through programs to remove invasive exotic vegetation, such as Brazilian pepper, as described in the attached Federal Smyrna Dunes Park Management Plan.

24. Please state the single or multiple uses currently made of the property and if the property is single use, please provide an analysis of its potential for multiple-use.

Single  multiple  use/s is/are

Public access for passive recreation.

25. Were multiple uses considered but not adopted?

YES  NO

If YES, please describe why.

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26. Please provide an analysis of the potential use of private land managers to facilitate the restoration or management of these lands.

SDP is currently managed by Volusia County's Coastal Division and all habitat restoration/management activities will be conducted under its direction. No private land managers are envisioned at this time.

27. Please provide an analysis of the potential of the property to generate revenues to enhance the management of the property.

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The park generates revenue through park entrance fees. A portion of park management and operation costs are funded by the entrance fee. Supplemental funding for park management and operations is provided by the Ponce de Leon Inlet and Port District taxing authority.

28. Describe the projected, current and recent past uses of the property, and any unauthorized uses, if known.

The entire SDP property has been managed as a public park by Volusia County since 1982 and will continue to be used in the same capacity over the life of the State lease. The adjacent Federal property is leased from the U.S. Bureau of Land Management. The County is committed to the continued protection of the property's environmentally sensitive resources while accommodating public access for passive recreation.

29. Do the planned uses impact renewable and non-renewable resources on the property?

YES \_\_\_\_\_ NO X

If YES, please describe what specific activities will be taken to protect or enhance and conserve those resources and to compensate/mitigate the damage that is caused by the impacting use.

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30. Should any parcels of land within or adjacent to the property be purchased because they are essential to management of the property?

YES \_\_\_\_\_ NO X

If YES, please attach a map of this area.

31. Are there any portions of this property no longer needed for your use?

YES \_\_\_\_\_ NO X

If YES, please attach a map of this area.

32. Please describe what public uses and public access that would be consistent with the purpose for which this property was acquired.

Park uses include nature watching, photography, walking/jogging, fishing, sunbathing, picnicking, surfing, shell collection, and dog walking. The property will be open to the public year-round and operated as a passive recreational area, with the exception of those days needed for maintenance and land management activities. Vehicular upland access is afforded through a central controlled point of entry.

#### **D. Management Activities**

33. If more than one agency manages this property, describe the management responsibilities of each agency and how such responsibilities will be coordinated.

Volusia County's Coastal Division is the only management agency.

34. Please discuss management needs and problems on the property including conservation of soil and water resources and control and prevention of soil erosion and water and soil contamination.

There are no major soil and water conservation issues on upland property. Coastal erosion of accreted sand may periodically occur, but there has been a net accretion of marine sands over the last several decades. Routine management of site amenities, including the boardwalk, will be performed and renovations made, as needed. Natural plant communities will be maintained through accepted invasive exotic vegetation control techniques, such as low-impact mechanical removal, controlled burns, and/or herbicide applications, as described in the attached Federal Smyrna Dunes Park Management Plan. The primary public access management problem relates to enforcement of dog leash rules and boardwalk access restrictions for dogs.

- 
35. Identify adjacent land uses that will conflict with the planned use of this property, if any.

Adjacent land uses are wholly consistent with, and do not conflict with, the current and planned use of the State-owned property at SDP.

36. Please describe measures used to prevent/control invasive, non-native plants.

The principal exotic pest plant on the SDP property is the Brazilian pepper. It has colonized portions of the maritime hammock and coastal berm communities and has established itself within the other upland communities.

Volusia County intends to implement a maintenance program to address Brazilian pepper infestations at SDP. This program is described in detail in the attached Federal Smyrna Dunes Park Management Plan. The goal will be to initially remove these plants from the property and then maintain their coverage within acceptable levels. This will be accomplished through a combination of low-impact mechanical removal (i.e., chainsaw, pruning saw), controlled burns, and/or applications of an approved herbicide. All activities will be performed by qualified Volusia County personnel, contractors, and/or volunteers managed by the County. It is anticipated that removal of these plants will allow for the successful natural recruitment of desirable native species.

Informal monitoring for Brazilian pepper at SDP will be performed by Park staff during routine operations. Maintenance treatments will occur for the duration of the County's lease to the extent allowed by funding and qualified staff.

37. Was there any public or local government involvement/participation in the development of this plan?

YES \_\_\_\_\_ NO

If YES, please describe.

38. If an arthropod control plan has been established for this property, please include it as an attachment. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the managing agency.

No arthropod control plan specific to SDP exists or is deemed necessary at this time. The East Volusia Mosquito Control (EVMC) is a division of the Volusia County's Public Works Department and is thereby an inter-organizational agency partner of the County's Coastal Division, which manages the park. In this context, arthropod issues occurring at SDP can be immediately reported to the EVMC for rapid action/response.

The need for arthropod control is minimized to the greatest extent practicable to limit the use of chemicals on all County park lands.

39. Management Goals -**The following 8 goals may not all be applicable to your site. Write N/A where appropriate. Also please add as many additional goals, objectives and measures as you wish.**

Core Objectives	Measure	Timeframe	Expenses and Manpower Budget
1	<b><u>Habitat restoration and improvement</u></b> <b><u>Description – Habitat restoration and improvement will be achieved primarily through exotic vegetation control (see No. 5 below). Prescribed burns may be performed in the coastal strand community, as described in the attached Federal Smyrna Dunes Park Management Plan, although the frequency and associated costs have not yet been determined.</u></b>		
	Prescribe burn _____ acres per year	_____ acres burned per year	Within 2 yrs Within 10 yrs Expense \$ _____ Personnel \$ _____
	Maintain _____ acres per year within target fire return interval.	_____ acres within fire return interval target	Within 2 yrs Within 10 yrs Expense \$ _____ Personnel \$ _____
	Conduct habitat/natural community improvement on _____ acres	_____ acres with restoration underway	Within 2 yrs Within 10 yrs Expense \$ _____ Personnel \$ _____
	Conduct habitat/natural community restoration activities on _____ acres.	_____ acres restored	Within 2 yrs Within 10 yrs Expense \$ _____ Personnel \$ _____
	Conduct timber harvest for the purposes of habitat restoration on _____ acres	_____ acres harvested	Within 2 yrs Within 10 yrs Expense \$ _____ Personnel \$ _____
2	<b><u>Public Access and recreational opportunities</u></b> <b><u>Description – SDP is used solely for passive recreation. The Park is open to the public from sunrise to sunset, 7 days per week with the exception of select holidays and during periods when certain maintenance activities are needed.</u></b>		

	Maintain public access and recreational opportunities to allow for a recreational carrying capacity of <u>250</u> visitors per day	<u>250</u> visitor opportunities/day	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Develop additional public access and recreational opportunities to allow for a carrying capacity of <u>375</u> visitors/day	<u>375</u> visitor opportunities/day	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Continue to provide <u>0</u> interpretive/education programs	<u>0</u> interpretive/education programs	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Develop <u>2</u> new interpretive/education programs	<u>2</u> interpretive/education programs	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
<b>3</b>	<b><u>Hydrological preservation and restoration.</u></b> <b><u>Description – NA</u></b> _____ _____			
	Conduct or obtain a site assessment/study to identify potential hydrology restoration needs	Assessment conducted? y/n	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Restore natural hydrologic condition and functions to _____ acres on site	_____ acres for which hydrologic restoration is underway (planning, grant writing, earth moving, etc.)	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
		_____ acres for which natural hydrologic conditions and function are restored	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
<b>4</b>	<b><u>Sustainable forest management.</u></b> <b><u>Description – NA</u></b> _____ _____			

	Prepare and implement a silviculture management plan including reforestation, harvesting, prescribed burning, restoration, and timber stand improvement activities and goals.	Silviculture management plan complete? y/n _____ acres treated	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Develop and implement a process for conducting stand descriptions and forest inventory including a GIS database containing forest stands, roads & other attributes ( including but not limited to: threatened & endangered species, archeological resources, exotic species locations, historical areas)	Complete GIS database and reinventory all attributes every 3-5 years or as needed.	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
		_____ acres of forest inventoried annually	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
5	<b><u>Exotic and invasive species maintenance and control.</u></b> <b><u>Description - The specific methods, schedules, and associated funding for exotic vegetation control have not yet been determined. All habitat restoration activities will be performed by County staff, with funding provided, as needed, by the Coastal Division.</u></b>			
	Annually treat _____ acres of EPPC Category I and Category II invasive exotic plant species.	_____ acres treated	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Implement control measures on _____ exotic and nuisance animal species	_____ nuisance and exotic species for which control measures are implemented	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
6	<b><u>Capital facilities and infrastructure</u></b> <b><u>Description - Comprehensive park renovation is envisioned to include boardwalk widening and renovation, parking area expansion, Brazilian pepper removal, fishing pier construction (\$375,000), new toll booth (\$8,500), entrance and gate renovations, septic tank and drain field abandonment, and removal and sanitary sewer hookup, restroom renovation and covered boardwalk rest areas/pavilions.</u></b>			

	To maintain _____ facilities, _____ miles of roads, and _____ miles of trails existing on site (as applicable)	_____ facilities, _____ miles roads, _____ miles trails maintained	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	To construct _____ facilities. _____ miles of roads, and _____ miles of trails (as applicable)	_____ facilities, _____ miles roads, _____ miles trails constructed	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	To improve or repair _____ facilities. _____ miles of roads, and _____ miles of trails existing on site (as applicable)	_____ facilities, _____ miles roads, _____ miles trails improved or repaired	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
7	<p><b><u>Cultural and historical resources</u></b>  <b><u>Description – NA. There are no cultural or historical resources located on SDP property.</u></b></p>			
	Ensure all known sites are recorded in the FL Division of Historical Resources Master Site file	_____ of recorded sites	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Monitor _____ recorded sites and send updates to DHR Master Site file as needed	_____ of sites monitored	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
	Bring ____ of ____ recorded sites/cultural resources into good condition	_____ of sites in good condition	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
8	<p><b><u>Imperiled species habitat maintenance, enhancement, restoration, or population restoration.</u></b>  <b><u>Description – Many of the imperiled species utilizing the property inhabit the sandy beaches and river shorelines. No restoration projects are planned for those areas. Maintenance and enhancement of upland natural communities will benefit listed species inhabiting interior portions of the park.</u></b></p>			
	Develop baseline imperiled species occurrence inventory list	Baseline imperiled species occurrence inventory list complete y/n	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____

Develop monitoring protocols for _____ selected imperiled species	_____ imperiled species for which monitoring protocols are developed	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
Implement monitoring protocols for _____ imperiled species	_____ species for which monitoring is ongoing	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____
[If applicable, provide additional measurable objective(s) for new or ongoing species-specific management activities for each of the priority species such as population augmentation, translocations, nest box projects, etc.]	Examples: Project-specific quantity, _____ of nestboxes, # of individuals introduced or translocated, etc.	Within 2 yrs Within 10 yrs	Expense \$ _____ Personnel \$ _____

#### 40. Costs

<u>Activity</u>	<u>Yearly Estimated Cost</u>		
	<u>Priority Cost</u>	<u>Other Management Cost</u>	<u>Cost Effective Methods</u>
<u>Resource Management</u>	<u>\$150,000/yr.</u>		<u>Use of partner county agencies at no cost or with lower costs for in-house services.</u>
<u>Administration</u>	<u>\$25,000/yr.</u>	<u>State special district fees</u>	<u>Use of shared and centralized administrative management services for all coastal park facilities to reduce overhead.</u>
<u>Support</u>	<u>\$30,000/yr.</u>		
<u>Capitol Improvements</u>	<u>\$25,000/yr.</u>		<u>Pursuit of local, state and federal grants for park facility improvements.</u>
<u>Recreation Visitor Services</u>	<u>\$25,000/yr.</u>		<u>Involvement of partner public agencies including local and regional post-secondary schools for program implementation.</u>
<u>Law Enforcement Activities</u>	<u>\$10,000/yr.</u>		<u>Seek mutual aid agreements with local jurisdiction law enforcement agencies.</u>

41. A finding regarding whether each planned use conforms with the appropriate policies and guidelines of the State Lands Management Plan is required. The Plan can be found at <http://www.dep.state.fl.us/lands/oes/slmp.pdf>, or by writing to the State of Florida Department of Environmental Protection, Division of State Lands, Office of Environmental Services, 3900 Commonwealth Boulevard, Mail Station 140, Tallahassee, Florida 32399-3000, or by calling (850) 245-2784. Does this plan conform to the State Lands Management Plan?

YES  NO

42. Please provide the following contact information below:

Name:	Joe Nolin
Managing Agency:	Volusia County
Address:	700 Catalina Drive Suite 300 Daytona Beach, FL 32114
Phone:	386-248-8072
Email Address:	jnolin@co.volusia.fl.us

Date Management Plan Prepared: December 12, 2014

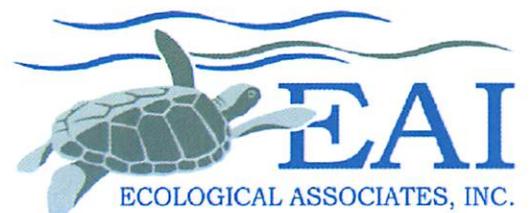
Please send this form to:

[avis.lockett@dep.state.fl.us](mailto:avis.lockett@dep.state.fl.us)

Or to  
 Division of State Lands  
 D.E.P. M.S. 140  
 3900 Commonwealth Blvd.  
 Tallahassee Fl. 32399-3000  
 850-245-2562



Figure 1. Existing and Proposed Physical Improvements on the State Lands property at Smyrna Dunes Park.



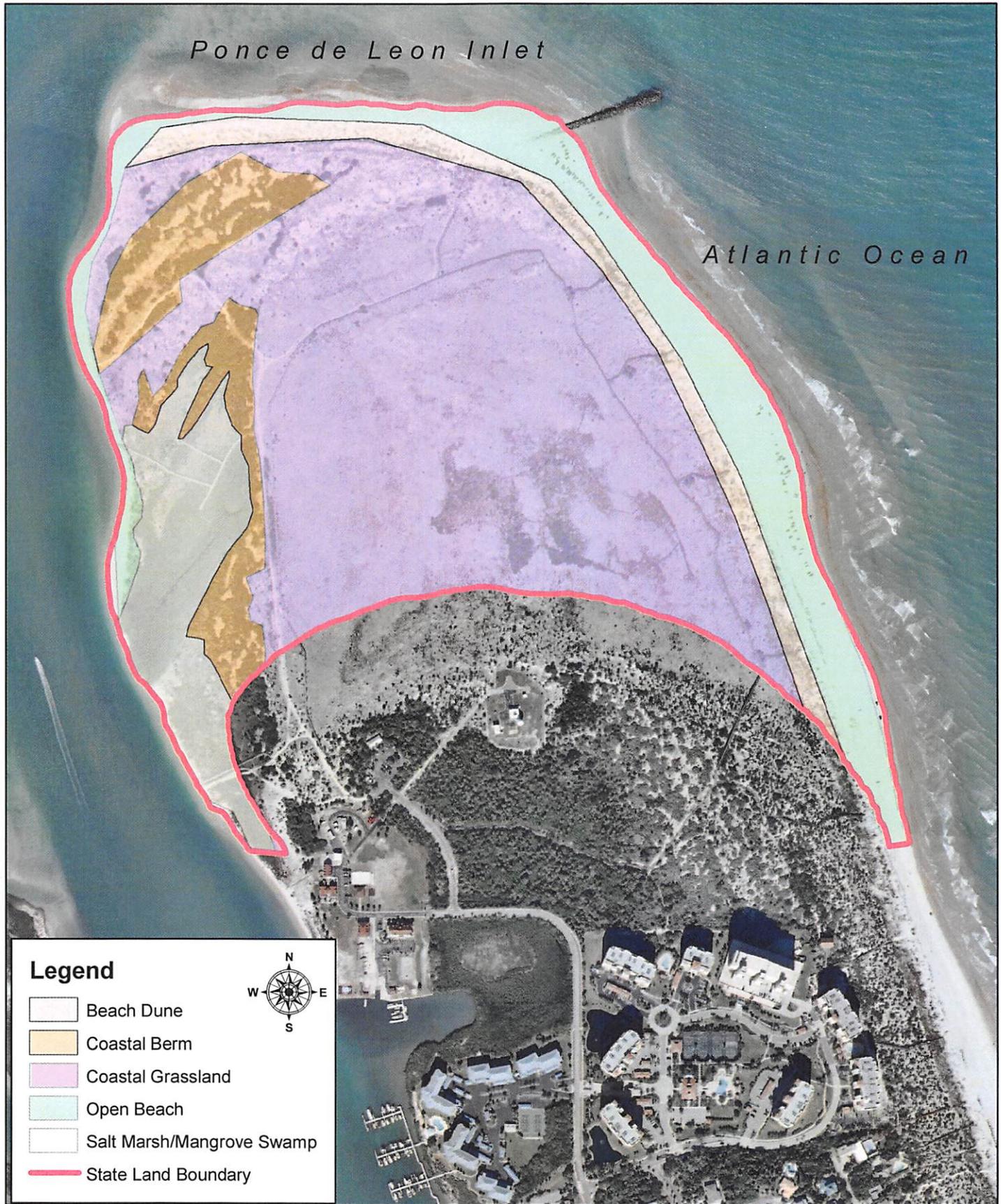


Figure 2. Natural Communities Map, Smyrna Dunes Park.

Figure 3. USDA Soils Map for the State lands portion of Smyrna Dunes Park.



**ATTACHMENT 1**  
**LEGAL DESCRIPTION**

**Legal Description (State owned Lands at New Smyrna Dunes Park):**

A portion of Section's 32 and 33, Township 16 South, Range 34 East, Volusia County, Florida being more particularly described as follows:

Commence at the Southwesterly corner of said Section 33; thence run N 89°32'00" E, along the South line of said section, a distance of 623.77 feet to intersection with the Historic Meander line of 1963 as shown on the Supplemental Plat of Township's 16 and 17 South, Range 34 East, of the Tallahassee Meridian, by the Chief Cadastral Surveyor of the Eastern States, dated April 17, 2014 and the Point of Beginning: thence continue, N 89°32'00" E, along said South line of Section 33, a distance of 83.36 feet to the its intersection with the meandered high water / vegetation line of the Atlantic Ocean as depicted on the aforementioned Supplemental Plat; thence, departing said South line, run along said meandered high water / vegetation line the following courses and distances; N 16°11'00" W, a distance of 254.96 feet; thence N 19°16'00" W, a distance of 217.54 feet; thence N 18°32'00" W, a distance of 384.19 feet; thence N 22°29'00" W, a distance of 381.22 feet; thence N 20°18'00" W, a distance of 683.69 feet; thence N 26°31'00" W, a distance of 132.33 feet to its intersection with the East line of aforesaid Section 32; thence, continuing along said meandered high water / vegetation line, run N 26°31'00" W, a distance of 256.74 feet; thence N 32°05'00" W, a distance of 217.67 feet; thence N 33°50'00" W, a distance of 275.42 feet; thence N 33°34'00" W, a distance of 451.84 feet; thence N 41°43'00" W, a distance of 235.55 feet to the point where the said meandered high water / vegetation line leaves the Atlantic Ocean and enters the Hillsborough River, now known as the Indian River; thence continue along said meandered high water / vegetation line the following courses and distances, N 61°07'00" W, a distance of 294.43 feet; thence N 70°06'00" W, a distance of 313.70 feet; thence N 82°46'00" W, a distance of 227.96 feet; thence S 89°42'00" W, a distance of 515.66 feet; thence S 87°07'00" W, a distance of 235.88 feet; thence S 81°46'00" W, a distance of 127.51 feet; thence S 57°31'00" W, a distance of 101.24 feet; thence S 35°28'00" W, a distance of 154.31 feet; thence S 18°58'00" W, a distance of 118.93 feet; thence S 16°55'00" W, a distance of 159.65 feet; thence S 24°18'00" W, a distance of 226.71 feet; thence S 03°01'00" E, a distance of 278.78 feet; thence S 18°57'00" E, a distance of 245.32 feet; thence S 18°29'00" E, a distance of 299.57 feet; thence S 00°50'00" W, a distance of 192.85 feet; thence S 06°31'00" W, a distance of 338.65 feet; thence S 00°06'00" W, a distance of 94.84 feet; thence S 20°13'00" E, a distance of 218.53 feet; thence S 31°55'00" E, a distance of 95.04 feet; thence S 27°46'00" E, a distance of 214.70 feet; thence S 29°50'00" E, a distance of 258.39 feet; thence S 26°43'00" E, a distance of 73.13 feet; thence S 64°11'00" E, a distance of 34.25 feet; thence S 52°21'00" E, a distance of 47.19 feet; thence S 26°42'00" E, a distance of 46.79 feet; thence S 33°18'00" E, a distance of 107.51 feet; thence S 38°16'00" E, a distance of 244.46 feet; thence S 30°04'00" E, a distance of 145.00 feet; thence S 26°21'00" E, a distance of 65.64 feet to a point on the South line of aforementioned Section 32; thence run N

89°32'00" E, along said South line, a distance of 45.79 feet to its intersection with the Historic Meander line of 1963 as shown on the aforementioned Supplemental Plat; thence , run along said Historic Meander line the following courses and distances, N 26°25'00" W , a distance of 773.55 feet; thence N 04°40'00 W, a distance of 269.87 feet; thence N 39°09'00" E, a distance of 173.45 feet; thence N 57°30'00" E, a distance of 296.87 feet; thence N 67°40'00" E, a distance of 246.97 feet; thence N 82°28'00" E, a distance of 381.94 feet; thence N 88°43'00" E, a distance of 290.14 feet; thence S 82°06'00" E, a distance of 383.20 feet; thence S 71°24'00" E, a distance of 528.40 feet; thence S 44°21'00" E, a distance of 633.53 feet; thence S 17°41'00" E, a distance of 747.38 feet to a point on the South line of aforementioned Section 33 and the Point of Beginning. Described Parcel contains 125.60 Acres more or less.

**APPENDIX D  
DRAFT BUREAU OF LAND MANAGEMENT BIOLOGICAL  
ASSESSMENT**

**DRAFT**

**Biological Assessment**

**New Smyrna Dunes Park Recreation and Public Purposes Act Lease**

**Prepared by**

**Bureau of Land Management - Southeastern States Field Office**

**Oct. 31, 2014**

## **Proposed Action**

The U.S. Coast Guard is in the process of relinquishing public domain land in coastal Volusia County associated with Smyrna Dunes Park (SDP). The land was originally reserved for lighthouse purposes in 1842 and withdrawn (84.36 acres) to the Coast Guard in 1924. SDP currently leases this acreage from the U.S. Coast Guard. Contingent on the revocation, the Bureau of Land Management (BLM) is proposing to grant Volusia County a Recreation and Public Purposes Act (R&PP) lease for the continued use as part of SDP. The R&PP lease would be issued with an option for the future patenting of the land, which would give the County the right for perpetual use of the property for recreational purposes, within the constraints of the patent document. During the lease period, which is typically 3 – 5 years, BLM would reserve the right to review proposed developments to ensure compliance with federal laws, regulations, and policies. This would include additional consultation and coordination with the U.S. Fish and Wildlife Service, as appropriate, under the Endangered Species Act for actions with the potential to affect federally listed or proposed species. Stipulations in support of these laws, regulations and policies may also be included as provisions in the patent.

During the processing of this application the State of Florida claimed 102.64 acres of land that have accreted since the original survey. We understand that the State is in the process of leasing this land to the County for the continued use by SDP. The SDP management plan developed by Volusia County would apply across the BLM and State land; however BLM's responsibilities would be limited to the 62.40 acres of public domain included in Tract 37, which comprises the remnants of fractional Lot 1, Section 32, and fraction Lot 1, Section 33, T. 16 S., R. 34 E.. Within the original withdrawal two areas are being excluded from the proposed R&PP lease: the USCG Station Ponce de Leon Inlet containing approximately 7.07, and that portion used by NASA containing approximately 2.60 acres pursuant to a BLM Communication Use Lease under the 2800 rights-of-way regulations. These areas are not addressed in the biological assessment. See Attachments for maps.

SDP management plan includes the following planned actions (see Map 4 below for locations). Bolded items are expected to occur at least partially within the proposed R&PP lease:

- 1. Expanded Parking Area. A shellrock or paved parking lot connecting to North Peninsula Drive may be constructed within uplands in the southwest portion of the property. Once constructed, standardized signage with Park rules, regulations, and hours of operation will be placed near the lot. The parking area may also include bicycle racks.**
2. Fishing Pier. The construction of a fishing pier over the IRL is planned for the southwest portion of the property.
- 3. Boardwalk. The existing 1.5 miles 28-year old elevated boardwalk may be renovated within the same footprint.**

- 4. Control of invasive plants within natural communities, where necessary, and then maintain to less than 10% aerial coverage in the next 5 years. Efforts to eradicate Brazilian pepper within the coastal strand community may employ a variety of techniques, including but not limited to basal bark treatments, cut stump treatments, foliar applications, mechanical or physical removal, and prescribed burning.**
- 5. Use prescribed fire in accordance with established procedures, and/or other methods to limit the succession of maritime hammock into the coastal strand community, with a prescribed fire frequency target of 5 to 10 years. If mechanical and/or chemical treatments within the coastal strand are used, they will be limited to those areas that are not immediately adjacent to the sensitive coastal dune community.**
- 6. Develop an annual monitoring program to compile a comprehensive wildlife and botanical inventory of the Park, particularly with State and federally protected species. County staff will amend this inventory, as needed, over the term of the lease agreement to reflect additional species found during incidental observations.**
- 7. Establish a program to regularly monitor, in accordance with state and Federal protocols, the Southeastern beach mouse population within SDP, and use the additional and existing information to develop, in coordination with state, Federal and other species' authorities, a long term species and habitat management plan.**
- 8. Unregulated domestic animals found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.**
- 9. Conduct as time and resources permit, Spring shorebird nesting surveys in coordination with other Volusia County staff, to document and mark shorebird nesting sites on and adjacent to County beaches in support of the County's HCP. Additionally, County staff and sea turtle monitoring personnel report any beach nesting activity they observe during the course of their routine activities. Nesting sites are cordoned off with stakes and ribbon and the sites are periodically monitored until the chicks have fledged.**
- 10. Assist as time and resources permit, wintering piping plover monthly surveys each year within Critical Habitat Unit FL-34. Opportunistic sightings of piping plovers and red knots are also recorded at any time of year.**
- 11. Collect ill and injured birds from SDP and contiguous County Beaches and coordinate their transport to State and/or federally licensed wildlife rehabilitation facilities, including the shorebird and seabird rehabilitation facility within the Volusia County Marine Science Center.**
- 12. Coordinate visitor marine environmental education opportunities with Volusia County.**

- 13. Maintain, update, and expand public awareness programs and educational materials (e.g., Birds of the Beach brochure and Environet Newsletter) relevant to the natural resources within and adjacent to SDP.**
- 14. Maintain and expand as appropriate the county-wide monofilament fishing line recycling program within SDP.**
- 15. SDP will cooperate with Volusia County Environmental Management staff in soliciting for qualified volunteer personnel from academia, government agencies, scientific research organizations, and/or private consulting firms to develop and implement a gopher tortoise management plan. The plan is intended to monitor and assess the size, demographics, and trends of the population present at SDP, and describe the appropriate management actions. Environmental Management staff is authorized to conduct gopher tortoise surveys as FWC Authorized Gopher Tortoise Agents and may assist in park surveys. Environmental Management also established a Gopher Tracker Volunteer Program. Volunteers from this program may be used to assist with surveys of the park.**

#### **Federally Listed and Proposed Species**

The following federally listed species are known to occur within the area proposed for R&PP lease, or could be affected by activities planned within the SDP. It should be noted that the Atlantic beaches, majority of the dune habitats, and the Indian River shoreline in the SDP boundary are on land claimed by the State of Florida, having accreted since the original government survey. As such, that land is outside of the proposed R&PP lease area (see attached Map 2).

#### **Sea turtles**

Smyrna Dunes Park includes about 1.7 miles of linear shoreline that are suitable nesting habitat for sea turtles. Species that have nested within Volusia County, and therefore have the potential to nest within SDP, include the threatened loggerhead (*Caretta caretta*), and endangered green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles. Based upon available monitoring data from the three most recent nesting seasons (2010-2012), the section of shoreline associated with SDP receives an average of about 10 loggerhead nests per year (Volusia County, unpublished data). Nesting by green and leatherback sea turtles within SDP are rare events, and no Kemp's ridley sea turtles have nested within this area. Sea turtles within this stretch of beach are protected and managed by Volusia County, the State of Florida, and the U.S. Fish and Wildlife Service with respect to beach driving through a Federal Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP), issued to Volusia County on November 22, 1996 and which expires on December 31, 2030. As a result of the preceding regulatory mechanisms, and their resulting protection and conservation benefits, the SDP Management Plan does not address additional provisions to protect these species. SDP staff would continue to report sea turtle nesting activity observed on inlet beaches.

The issuance of the R&PP lease would allow the current levels of public uses to continue, including use of boardwalks that provide for public access to suitable sea turtle nesting habitat on the beaches. The SDP monitors the beachfront daily for crawls and nests during the sea turtle nesting season (May through October). With daily monitoring and sea turtle nest protection measures required under the HCP, this action is not expected to result in adverse effects or add to additional take.

The public domain lands included in this proposal are all outside of suitable nesting habitat for sea turtles. The proposed R&PP lease would have no direct effect on nesting sea turtles, but by supporting the continued public use of the SDP the lease may affect loggerhead sea turtles, but is not likely to adversely affect because of the protections measures in place under the HCP.

SDP is not within the recently designated critical habitat for the Northwest Atlantic population of loggerhead sea turtles, and the proposed lease would not affect designated critical habitat.

**Atlantic salt marsh snake (*Nerodia clarkia taeniata*), listed as threatened**

There are historic records of Atlantic salt marsh snake in the estuarine wetland habitats in and around the vicinity of Ponce Inlet. Its current occurrence there is not known.

The proposed project occurs primarily outside of the preferred habitat, and may affect but is not likely to adversely affect this species.

**Southeastern beach mouse (*Peromyscus polionotus niveiventris*)**

The southeastern beach mouse occurs in beach dune, coastal strand, and coastal grassland portions of SDP. Historically, this subspecies was distributed from Ponce de Leon Inlet in Volusia County, south to Miami-Dade County (Stout 1992), although it is currently believed to have been extirpated south of Indian River County (USFWS 2008). Preferred habitat is the sea oat zone of primary coastal dunes; however, they can also colonize secondary dunes and coastal strand habitat (USFWS 2008). Recent evidence indicates that the Park supports a viable beach mouse population. Trapping studies conducted in 2004 captured a considerable number of beach mice (Suazo 2004), and subsequent trapping studies conducted in 2006-2007 led to the conclusion that the SDP beach mouse population was stable and secure (> 500 individuals; USFWS 2008). This population may also extend onto private property up to one-half mile south of the Park where houses and condos are set well behind the primary dune and swale system, although no surveys have been conducted there. The beach mouse population at SDP is considered to be disjunct from the closest known population located approximately 10 miles south of the Park within the Canaveral National Seashore.

Conservation of southeastern beach mice is considered by SDP to be an important goal of their management plan. The following conservation measures are included in the proposed SDP management plan.

1. Establish a program to regularly monitor, in accordance with state and Federal protocols, the Southeastern beach mouse population within SDP, and use the additional and existing information to develop, in coordination with state, Federal and other species' authorities a long term species and habitat management plan.
2. Public access to the beach at SDP is currently restricted to an extensive system of elevated boardwalks. These boardwalks have been very effective in minimizing trampling of the dune system by pedestrian traffic. The County will continue to maintain these boardwalks in good working order during the term of their lease using existing funding mechanisms. It is anticipated that the boardwalk system will be replaced within the lease term. Prior to construction, the County will conduct a survey to locate and mark beach mouse burrows potentially affected by construction and work with the USFWS to develop appropriate protective measures.
3. Strategically-placed signage within the SDP notifies the public that it is illegal to disturb the dunes or dune vegetation, further discouraging people from traversing the dune system. Park staff will continue to be vigilant of visitors, vehicles, and/or pets that encroach on the dune system. Minor violations will be addressed politely with the Park visitor. Repeated and/or egregious violations will be referred to law enforcement.
4. Domestic cats are a known predator of beach mice. SDP lies adjacent to a residential portion of New Smyrna Beach where feral and/or domesticated cats may be present. The extent to which domestic cats utilize the parcel is unknown, but sightings have been reported. Park staff will discourage visitors from feeding free-ranging animals on the property and will maintain its existing network of animal-proof garbage cans. Unregulated domestic animals that are found on site will be reported by Park staff to the County's Animal Control Unit and will be removed in accordance with County ordinances and State Statutes. Other nuisance animals (e.g., raccoons) will be removed in instances when they exhibit signs of disease or aggression.
5. Dogs would be allowed at SDP, but only at certain times and locations, and they must be kept on a leash at all times. Current regulations separate dogs both spatially (i.e., limiting them to boardwalks and inlet beaches) and temporally (i.e., prohibiting dogs at night when mice are active) from beach mice. Signage placed throughout SDP informs visitors of the regulations, and free dog waste collection bags are provided at strategic locations. Park staff will enforce leash regulations. During times of peak visitation (Memorial Day to Labor Day), a dedicated Park staff member will monitor inlet beaches to enforce these regulations.

The vast majority of the suitable habitat at the SDP is located on land claimed by the state. There are some records of southeastern beach mouse on the land included in the R&PP application. However, given the protective measures being employed throughout SDP the proposed lease is expected to affect, but not adversely affect southeastern beach mouse. Future projects, such as replacement of the dune boardwalks may require additional site specific

analysis, and if it is determined that there is potential for an adverse effect, a separate Section 7 consultation with FWS would be required.

**Piping plover (*Charadrius melodus*), listed as threatened,** also includes acres within designated critical habitat.

SDP is known to provide loafing habitat for piping plover, and the contiguous intertidal beach provides foraging habitat. Birds present during the spring and summer represent part of an overwintering, non-nesting population. During 2010 to 2012, an average of about 30 incidental sightings of wintering piping plovers were documented on SDP shorelines by staff of Volusia County Environmental Management, Beach Safety, and Ecological Associates, Inc. (EAI). During that period, piping plovers have been observed in Volusia County from August through May.

While there is potential for pedestrian recreational use to flush piping plovers, in general this recreational beach use is considered negligible. Visitor use is highest during the summer months (Memorial Day to Labor Day) when plovers are not typically present. There is potential for harassment of foraging and loafing plovers from off-leash dogs, but SDP policy requires dogs be leashed at all times in SDP. Dogs are allowed on the natural trails along the western side of the Park and on inlet beaches any time of day, but can only be taken on the elevated boardwalks between sunrise and 10:00 AM and within one hour of sunset.

None of the land in the proposed lease area is considered preferred shoreline habitat for piping plover. In addition, the protection measures in place across the SDP are expected to reduce the potential to affect piping plover. Additional loafing and foraging habitat is available within Lighthouse Point Park across Ponce Inlet, as well as on the Rockhouse Creek shoals and emergent lands complex associated with that inlet feature located west of SDP and the confluence of the North Indian and Halifax Rivers. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect, piping plover.

In July 2001, the USFWS published its Final Determination of Critical Habitat for wintering piping plovers. Two areas were designated in Volusia County, one on the north side and one on the south side of Ponce de Leon Inlet, collectively referred to as FL-Unit 34. The southern portion of that unit lies entirely within SDP and includes beaches on both the Atlantic and inlet sides of SDP. The proposed lease area is generally south of the designated critical habitat, except for approximately 6 acres on the Atlantic side. These 6 acres are coastal grassland and coastal strand and do not include preferred beach/shoreline habitats.

The proposed lease supports the continuing use of SDP by the public and there is potential for that use to affect non-breeding piping plover as a result of conflicts with pedestrian and vehicle use of beach and intertidal areas. It is generally considered that typical beach use by the public in piping plover wintering habitat does not have serious consequences at the population level (Unsworth et al . An Economic Analysis of Piping Plover Recovery Activities on the Atlantic Coast. Prepared for the U.S. Fish and Wildlife Service, Division of Economics, Arlington, VA,

1998). With adequate enforcement of the leash rule in SDP, the proposed lease is not expected to result in adverse effects to wintering piping plovers or designated critical habitat within SDP.

### **Red knot (*Calidris canutus rufa*), listed as threatened**

Migrating and overwintering rufa red knot utilize the beaches of SDP, although there is potential for non-breeding individuals year round. Adult red knots, presumably females, have been recorded at SDP as early as August. Red knots forage on intertidal flats for mollusks, crustaceans, and other marine invertebrates. According to the Rufa Red Knot Background Information and Threats Assessment, population declines of 70 to 75 percent have been documented since 2000 based on survey data from Tierra Del Fuego (wintering grounds) and Delaware Bay (key spring stop-over location). Because of shifting migration patterns, the same conclusion cannot be made of the southeastern wintering population, despite some years with lower survey counts in Florida. Primary threats in the nonbreeding portion of the range identified by the U.S. Fish and Wildlife Service are reduced food availability at Delaware Bay stopover sites, timing of optimal food sources during migration, sea level rise, shoreline stabilization, and coastal development. In many wintering and stopover areas, quality high-tide roosting habitat (i.e., close to feeding areas, protected from predators, with sufficient space during the highest tides, free from excessive human disturbance) is limited.

Like wintering piping plovers, red knots are apt to be flushed by pedestrian and vehicle beach use. This may limit access to some feeding area where public use is highest in SDP. Frequent disturbance by both humans and roaming dogs within close vicinity to flocks of red knots can cause the birds to flush and increase energy expenditures. This can be detrimental to individuals of the rufa subspecies, as they migrate long distances and must retain as much energy and body fat as possible to both fly the long distance to and from wintering grounds and successfully breed when they reach the Arctic (COSEWIC 2007).

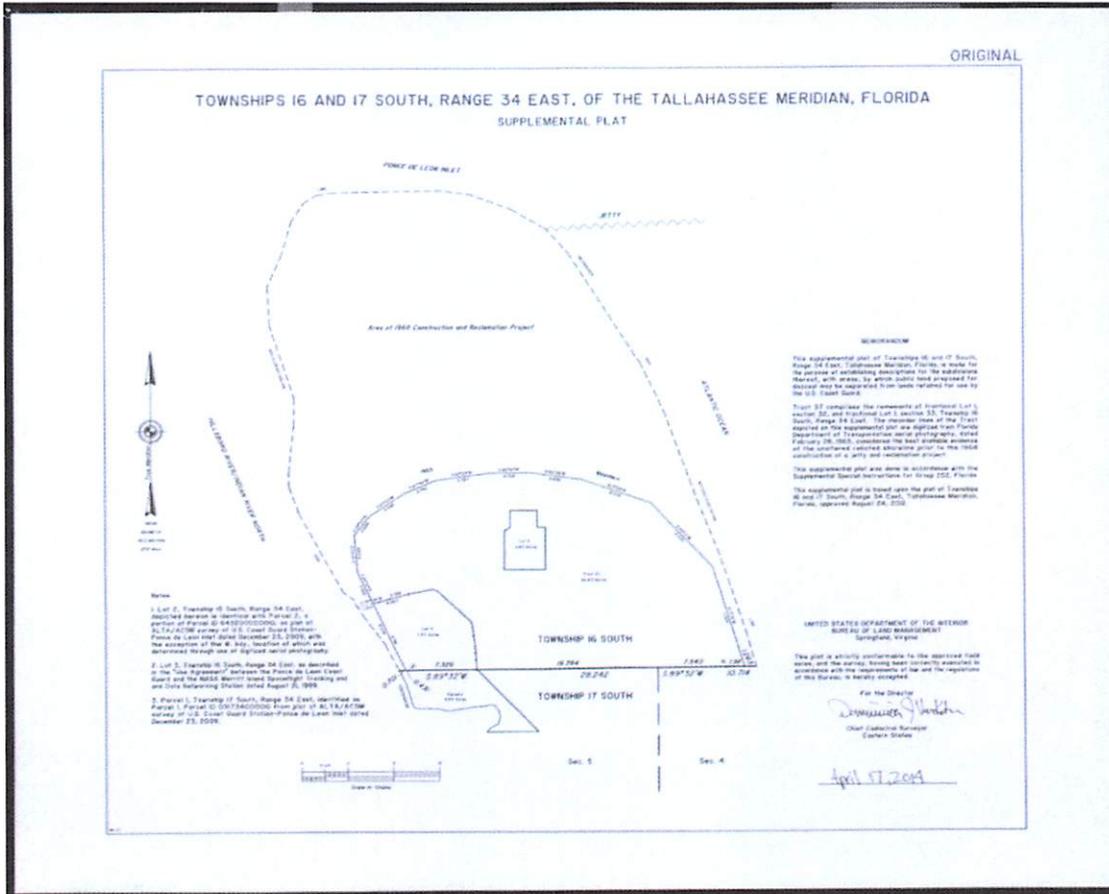
As with the piping plover, none of the land in the proposed lease area is considered preferred shoreline habitat for rufa red knot. Protection measures in place across the SDP are expected to reduce the potential to affect both species. Additional loafing and foraging habitat is available within Lighthouse Point Park across Ponce Inlet, as well as on the Rockhouse Creek shoals and emergent lands complex associated with that inlet feature located west of SDP, and the confluence of the North Indian and Halifax Rivers. As a result, it is expected that the proposed lease may affect, but is not likely to adversely affect, rufa red knot.

### **Summary**

In summary, the proposed R&PP lease to Volusia County for the continued use of SDP may affect but not adversely affect loggerhead sea turtles, green sea turtles, leatherback sea turtles, southeastern beach mouse, piping plover, and the red knot. The proposed lease is not expected to affect Kemp's ridley sea turtle, or to result in adverse effects to piping plover critical habitat.

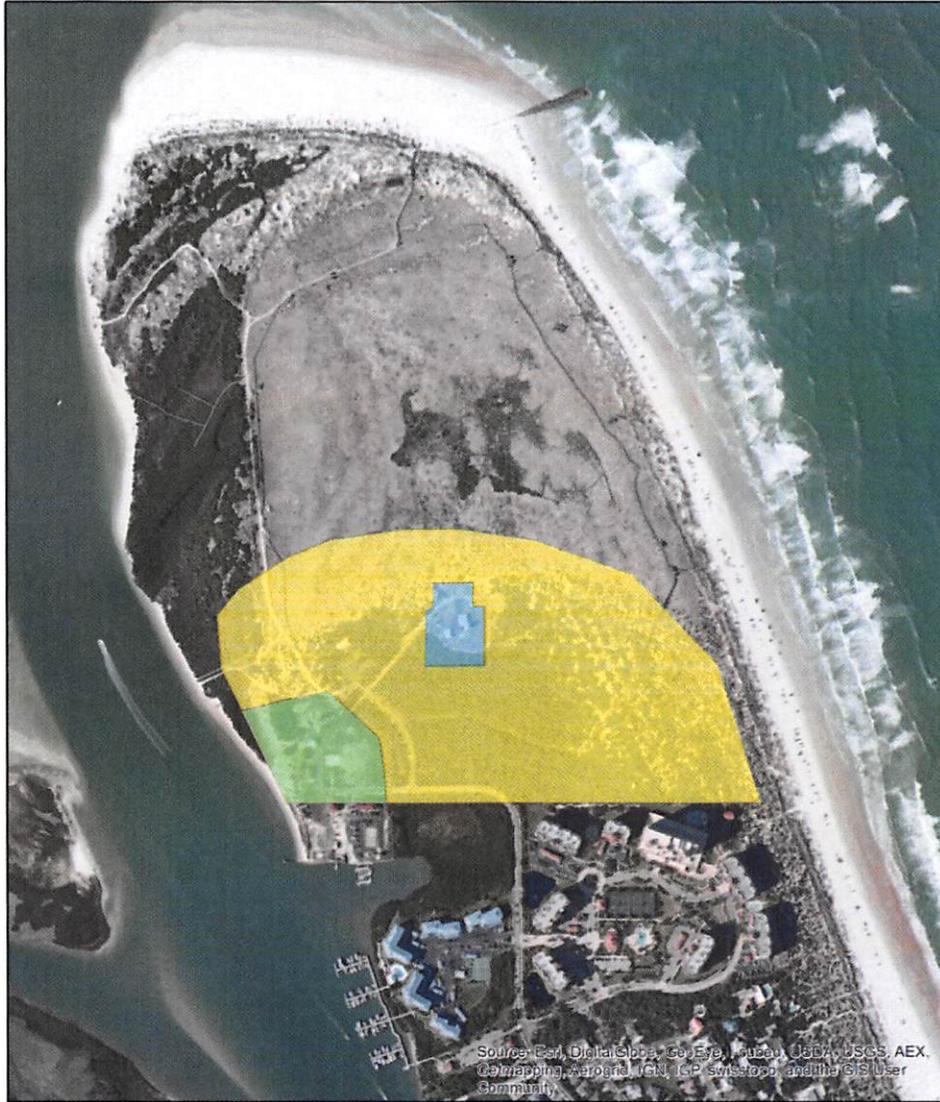
## Attachments

Map 1. Ponce de Leon Cadastral Survey Map



Map 2. Aerial

### Status of Ponce de Leon Tract 37 in Volusia County, Florida



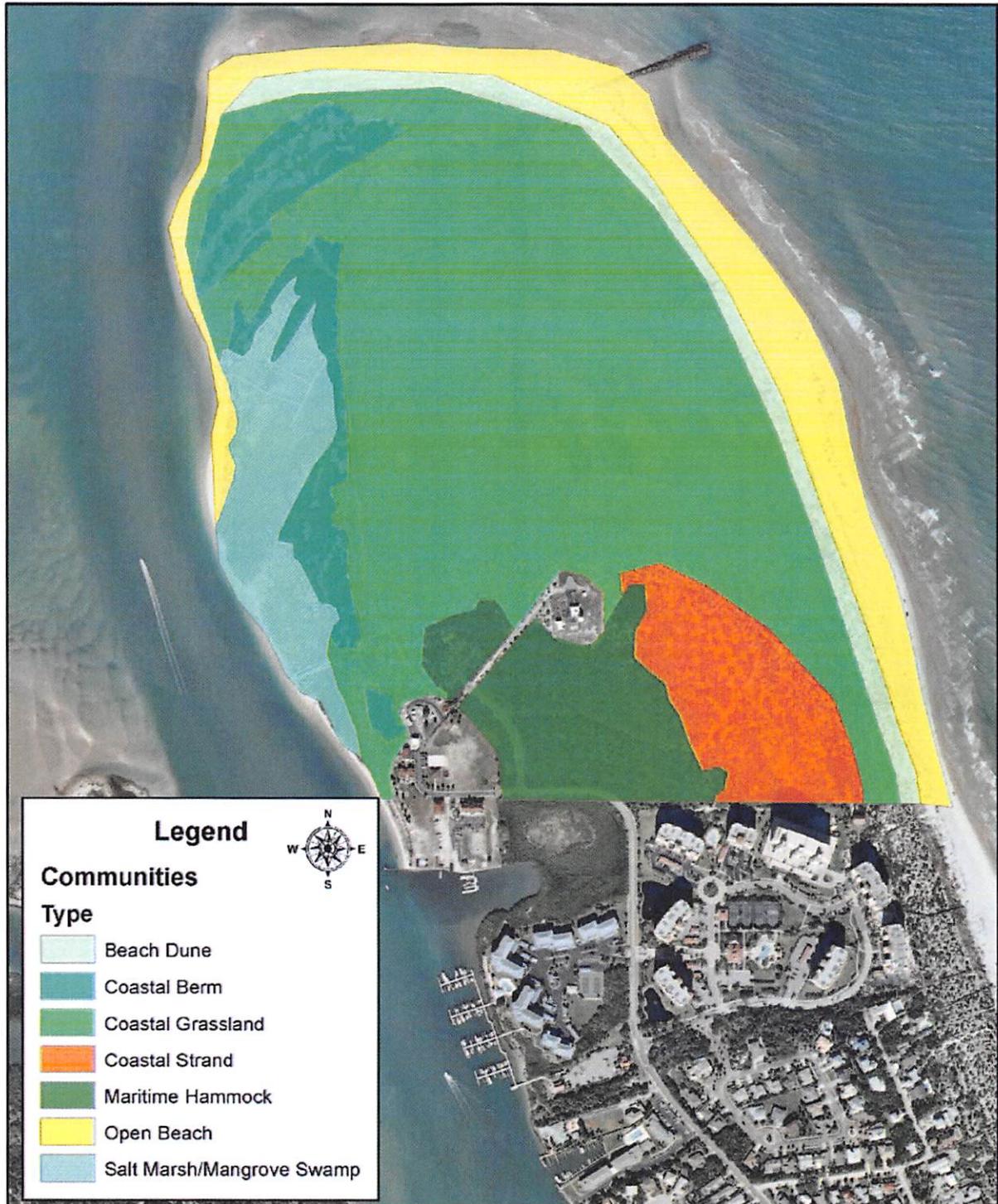
Legend	
Ponce de Leon Tract 37	
Status	
	NASA used 2.6 acres under Communication Lease
	To be retained by Coast Guard - 7.07 acres
	Being returned to BLM - 62.4 acres



U.S. Department of the Interior  
Bureau of Land Management  
Eastern States  
Southeastern States Field Office  
Jackson, Mississippi

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

Map 3. Vegetation Communities



Map 4. Existing and Proposed Improvements

