

**Environmental Assessment**

**FINAL**

**Land Exchange with the State of Florida**

For

**ARTHUR R. MARSHALL LOXAHATCHEE  
NATIONAL WILDLIFE REFUGE  
PALM BEACH COUNTY, FLORIDA**

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# **CHAPTER 1 Purpose and Need for Action**

## **1.1 Introduction**

The National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. § 668dd et seq.) provides authority for the U.S. Fish and Wildlife Service (Service) to manage national wildlife refuges across the country. In accordance with the Act, refuges will be managed to fulfill the mission of the National Wildlife Refuge System; fulfill the individual purpose of each refuge; and maintain the biological integrity, diversity, and environmental health of the natural system.

The Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge) was established in 1951 under authority of the Migratory Bird Conservation Act of 1929. The Refuge (Figure 1) includes 141,374 acres operated under a license agreement with the State of Florida and 2,550 acres held in fee title. Since 1951, Water Conservation Area 1 (WCA1) has been managed as a national wildlife refuge, initially under a 50-year license agreement between the State of Florida and the Service. The license agreement was amended in 1994 to include a 1,604-acre portion of the Strazzulla Marsh, which lies adjacent to WCA1 (part of the Strazzulla Marsh area highlighted in Figures 1 and 2). In 2002, the initial license agreement was revised and renewed for an additional 50 years. The partial Strazzulla Marsh area was not included in the 2002 license renewal agreement and, therefore, is not currently managed by the Service. Lands held in fee title for the Refuge include Compartments A, B, and C; the cypress swamp units on the eastern side of the Refuge; and Compartment D on the western side of the Refuge (Figures 1 and 3).

Strazzulla Marsh (Figure 2) is a cypress-dominated wetland that provides habitat for a variety of wildlife species, including federally endangered Everglade snail kites, State threatened Florida sandhill cranes, and “secretive” marsh birds (Brandt 2005, Rutchey et al. 2006). In addition, a 2003 investigation by Refuge staff found that the Strazzulla Marsh showed little or no influence from surrounding urban and agricultural lands, with measured water total phosphorus levels lower than impacted parts of the Refuge (Brandt 2005). Much of the Strazzulla Marsh area was previously included in the approved acquisition boundary of the Refuge. A Minor Expansion Proposal planning process may be needed to add small additional areas to the Refuge’s approved acquisition boundary that were not previously included (Figure 2), facilitating the proposed land exchange.

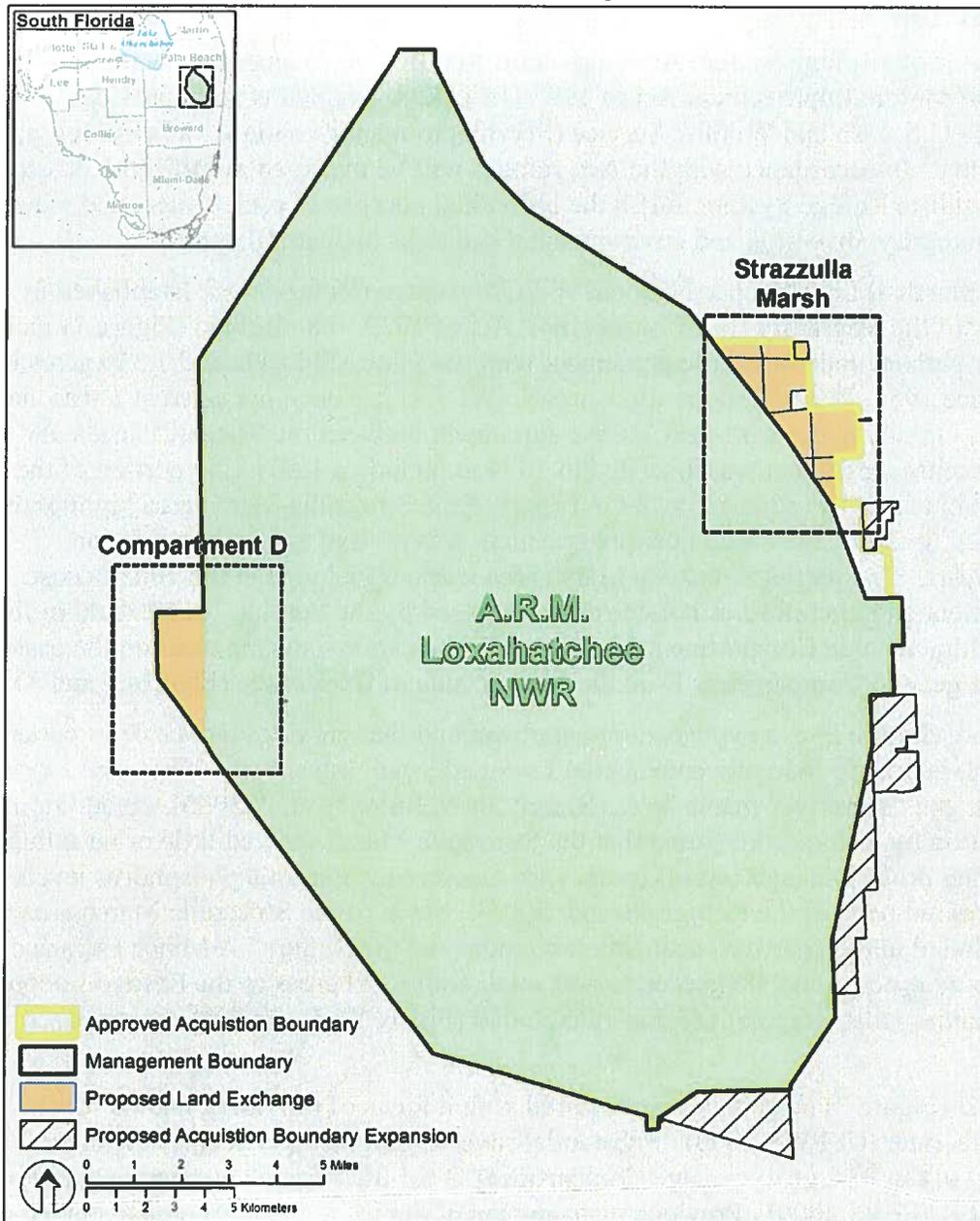
Compartment D (Figure 3) originally was acquired with a focus of providing habitat for the Florida sandhill crane (USFWS 2000). Substantial rates of groundwater seepage from this site limit the ability of the Refuge to manage Compartment D for the targeted wetland vegetation and wildlife habitat (USFWS 2000). Previous management activities in this area have included aerial herbicide treatment and mechanical removal of exotic plants, and the use of prescribed fire to limit the expansion of woody vegetation (USFWS 2010).



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A.R.M. Loxahatchee National Wildlife Refuge

Land Exchange - Overview Map



**Figure 1.** Land Exchange overview map, showing the Arthur R. Marshall Loxahatchee National Wildlife Refuge, Compartment D, and Strazzulla Marsh, and approved and proposed expansion of the U.S. Fish and Wildlife Service acquisition boundaries.



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A.R.M. Loxahatchee National Wildlife Refuge

Land Exchange - Strazzulla Marsh

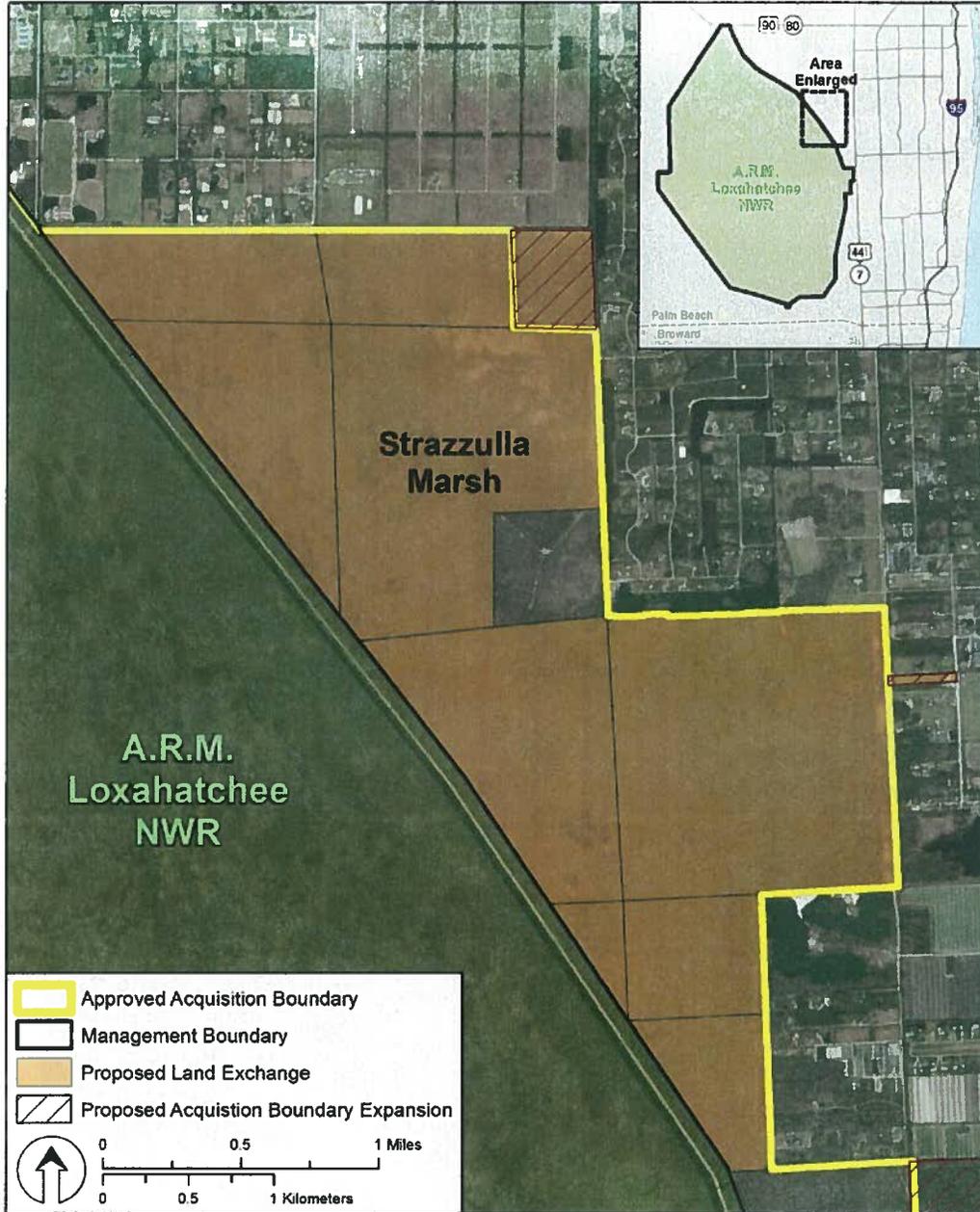


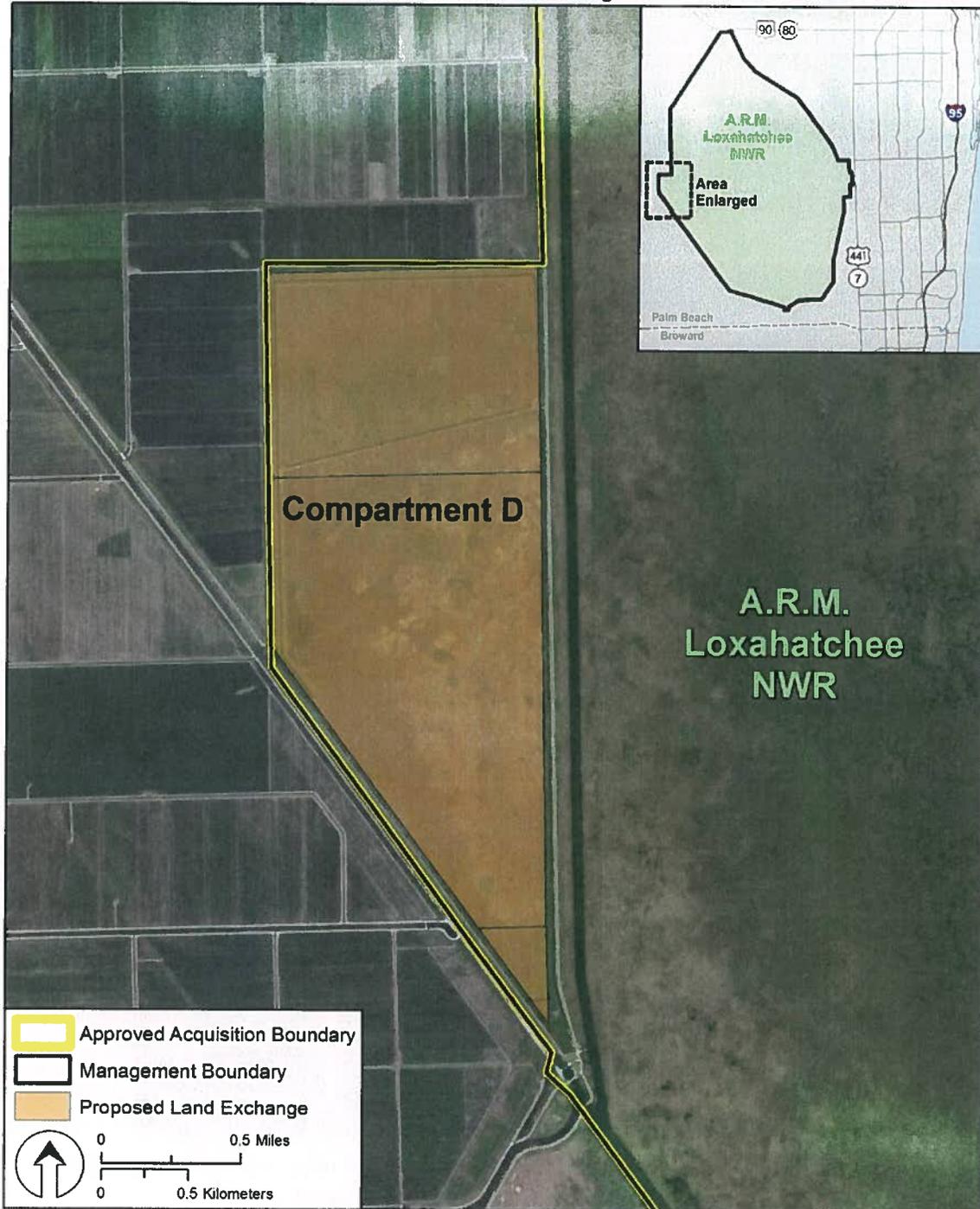
Figure 2. Detail of Strazzulla Marsh location and boundaries, and approved and proposed expansion of the U.S. Fish and Wildlife Service acquisition boundaries.



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A.R.M. Loxahatchee National Wildlife Refuge

Land Exchange - *Compartment D*



**Figure 3.** Detail of Compartment D location, boundary, and approved U.S. Fish and Wildlife Service acquisition boundary.

## **1.2 Purpose and Need**

The purpose of this Environmental Assessment is to evaluate the environmental impacts of a land exchange between the State of Florida and the Service, ensuring that the proposed action promotes conservation of wildlife, fish, game, natural diversity, natural abundance, and ecological functions on the Refuge; provides for conservation, maintenance, and management of wildlife, habitat, and cultural resources on the Refuge; serves as an inviolate sanctuary for migratory birds; supports appropriate and compatible public use activities; and continues the valued partnership between the Service and the State of Florida.

This action would provide the Service with conservation lands (Strazzulla Marsh) that capture an important transition zone from cypress forest to sawgrass marsh adjacent to the current Refuge management boundary. The Service's need for this action is to contribute to meeting multiple goals and objectives outlined in the Refuge's Comprehensive Conservation Plan (USFWS 2000). These include:

- Goal 1 (Wildlife Habitat and Population Management): Objectives 2 (Water Quality Monitoring) and 7 (Habitat Management for Trust Species);
- Goal 2 (Resource Protection): Objective 3 (Protect Areas of Concern and Buffer Lands); and
- Goal 3 (Public Use): Objectives 2 (Provide Public Access to Strazzulla Marsh), and 6 (Environmental Education).

The action would provide the State of Florida with 1,327 acres of land (Compartment D) to be managed by the South Florida Water Management District (SFWMD) to implement a portion of its Restoration Strategies initiative, as described in Section 2.2 below.

## **CHAPTER 2 Proposed Action and Alternatives**

### **2.1 Alternative A: No Action – Current Land Ownership**

Under Alternative A, no land exchange would occur, and the current land ownership and management would continue with Compartment D owned by the Service and Strazzulla Marsh owned by the State of Florida. Management of Compartment D would continue by the Service, including removing and treating for the presence and spread of exotic plants and minimizing the expansion of woody vegetation into the wetlands. Management of Strazzulla Marsh would continue by SFWMD.

### **2.2 Alternative B: Proposed Action – Exchange Compartment D for Strazzulla Marsh**

The proposed action is the proposed land exchange between the State of Florida and the Service. The Service would convey in fee title the 1,327-acre Compartment D parcel to the State of Florida to be managed by the SFWMD. In exchange for Compartment D, the State of Florida would convey in fee title the 2,586-acre Strazzulla Marsh parcel to the Service to be managed by the Refuge.

Due to the clearly defined mutual benefits to the State of Florida and the Service, and the lack of funds available from both parties for fee simple land acquisitions, this land exchange is the only feasible alternative to obtain the benefits described in this document.

The land exchange would only transfer land ownership. Any future proposed changes to land management of Compartment D or Strazzulla Marsh are not included in this action and, thus, are not analyzed in this Environmental Assessment. Any future change in land use would constitute a separate action, for which appropriate assessments and reviews would be required.

Although future proposed changes to land management of Compartment D and Strazzulla Marsh are not included in this Environmental Assessment, we present the current status of their potential future uses for information purposes.

Potential Future Use of Compartment D. When initiating the process for this proposed land exchange (by letter from E. Barnett [SFWMD] to S. Pelizza [Refuge], December 6, 2012), the SFWMD stated that it planned to use Compartment D as part of its Restoration Strategies initiative, which involves a suite of projects that will work in conjunction with the existing Stormwater Treatment Areas (STAs) to meet a Water Quality Based Effluent Limit for water going into the Everglades Protection Area. STAs are constructed wetlands that remove excess nutrients from stormwater that will enter the Everglades. Based on publicly available current plans (SFWMD 2014), Compartment D would be included in the “Eastern Flowpath STA Expansion #2” projects, for which the design phase is planned to begin in 2018 and construction phase in 2021. However, before moving forward with any such future proposals (following completion of this proposed land exchange), SFWMD would need to conduct appropriate assessments and reviews, such as consultation under Section 7 of the Endangered Species Act and consultation with the Native American Tribes under Section 106 of the Historic Preservation Act for specific projects. The Service, the public, and other entities would provide comment on any specific plans for Compartment D at that time.

Potential Future Use of Strazzulla Marsh. The Refuge’s 2000 Comprehensive Conservation Plan (USFWS 2000) and associated Environmental Assessment included Strazzulla Marsh in its 15-year plan for managing the Refuge. The preferred alternative management plan (referred to as the “Ecosystem Emphasis Alternative 2”) included opening Strazzulla Marsh to the public on a limited basis, expanding water quality monitoring in Strazzulla Marsh, and managing Strazzulla Marsh for trust species. Consultation and coordination on this plan included five meetings of the 23-member interagency planning team, a public scoping meeting, and a period of public review and consideration (USFWS 2000). Based on this Plan, water quality monitoring was conducted in Strazzulla Marsh (Frakes et al. 2010, as discussed below), but no further development of public use or trust species management has occurred in Strazzulla Marsh at this time. Future uses for Strazzulla Marsh (following completion of this proposed land exchange) would need to be reconsidered in relation to the Refuge’s 2000 Comprehensive Conservation Plan and/or in a new environmental assessment or conservation plan.

## CHAPTER 3 Affected Environment

This chapter describes the environmental conditions of the lands being proposed for exchange: Compartment D (Figures 1 and 3) and Strazzulla Marsh (Figures 1 and 2). When information specific to Compartment D and Strazzulla Marsh are limited or not available, descriptions are drawn from or supplemented with information available for the adjacent Refuge interior marsh.

### 3.1 Physical Environment

The Refuge is the last remnant of the once vast northern Everglades ridge and slough landscape. It is located seven miles west of the city of Boynton Beach, in Palm Beach County, Florida. Palm Beach County is the largest county in terms of land area and the largest agriculture producing county in terms of dollar value east of the Mississippi River.

The Refuge (as well as Compartment D and Strazzulla Marsh) is within the Southern Florida Coastal Plain ecoregion (USEPA 2011) and the Equatorial monsoon climate zone (minimum monthly average temperature  $\geq +18$  °C, and accumulated annual precipitation (mm)  $\geq 25$  times [100 minus precipitation of the driest month (mm)]; Kottek et al. 2006). In general, there are two seasons—wet and dry. The wet season occurs from about May to October. Wet season rainfall averages 38.1 inches (968 mm), 73% of the average annual rainfall (52.2 inches). Dry season occurs from about November to April.

Geologically, the Everglades are recent, having been formed only about 5,000 years ago. The limestone bedrock of this once vast freshwater marsh is covered with a layer of peat up to 12 feet thick. Underlying the Refuge is a large aquifer that provides water to the nearby coastal area. Land elevations vary from about 17 feet msl at the northern tip of the Refuge to 11 feet msl on the southern boundary. The managed interior marsh of the Refuge is entirely impounded by three levees/borrow canals (L-40, L-39, and L-7) that form a 57-mile border around the perimeter of the Refuge marsh.

Compartment D is located on the western side of the Refuge along the L-7 canal and levee (Figures 1 and 3). The area is divided into two impoundments and has substantial seepage from the site. The NRCS Web Soil Survey indicates that soils in this area are entirely Terra ceia muck (drained), a very poorly drained soil with 5½ feet of muck overlaying 4 inches of unweathered bedrock, very high available water storage in the soil profile, high to very high capacity to transmit water ( $K_{sat} = 2$  to 20 in/hr), water table near the surface, and frequent ponding (NRCS 2014). Other published information that documents the physical characteristics of Compartment D has not been found.

The Strazzulla Marsh, located on the eastern side of the Refuge along the L-40 canal and levee (Figures 1 and 2), was originally the meeting point of the Everglades and the huge, north-flowing swamp known as the Loxahatchee Slough. This slough served as headwaters for the Loxahatchee River near Jupiter. The NRCS Web Soil Survey indicates that soils in this area are 86% fine sand (Boca, Holopaw, Pineda, and Riviera fine sands), 13% muck (Sanibel, Tequesta, and Okeelanta mucks), and 1% other soils (NRCS 2014). Generally, the fine sand soils are poorly drained (very poorly drained in depressional areas) with 5 to 6 feet of fine sand and/or sandy loam soil layers, very low to low available water storage in the soil profile, moderately high to very high capacity to transmit water ( $K_{sat} = 0.2$  to 20 in/hr), depth to water table of 0 to 12 inches, and frequency of ponding ranging from frequent (in depressional areas) to none (NRCS 2014). The mucks

(drained) are generally very poorly drained soil with 1 to 2½ feet of muck overlaying 2½ to 5 feet of fine sand and/or sandy loam layers, moderate to high available water storage in the soil profile, moderately high to very high capacity to transmit water ( $K_{sat} = 0.6$  to 20 in/hr), water table near the surface, and frequent ponding (NRCS 2014).

Strazzulla Marsh is primarily a rainfall-driven system. Low, largely rainfall-driven phosphorus and chloride values in Strazzulla Marsh area (Richardson et al. 1990; USEPA 2001) reflect a cypress swamp that would benefit from being further isolated from adjacent land management practices in the future (USFWS 2003). Results of a monitoring study of Strazzulla Marsh (Frakes et al. 2010) suggest the area exhibits high wetland quality and functional values relative to the surrounding areas.

A 3-year monitoring study (May 2001 through April 2004) by Service biologists was undertaken to determine baseline levels of phosphorus, chloride, metals, and pesticides in Strazzulla Marsh surface water and soils (Frakes et al. 2010). They found concentrations of metals in surface water and sediments seldom exceeded State surface water quality criteria (SWQC) or sediment quality assessment guideline (SQAG) values. Adverse impacts from these exceedances were stated to be unlikely (Frakes et al. 2010). Legacy pesticides DDD and DDE were present in several sediment samples above SQAG values. However, food-web modeling confirmed that there was little, if any, risk to aquatic dependent birds (Frakes et al. 2010).

## **3.2 Biological Environment**

### **3.2.1 Vegetation and Habitat**

The Refuge's 2000 Comprehensive Conservation Plan (USFWS 2000) describes the habitat in Compartment D as "overgrown with woody shrubs such as willow and myrtle and dense sawgrass." Although recent management activities (e.g., control of invasive plants with herbicides and prescribed fire) have sought to improve habitat, the underlying hydrologic variability in Compartment D has prevented the restoration of water levels, prey base, and vegetative structure required to support foraging and nesting by the Everglade snail kite and the wood stork.

A vegetation classification for southern Florida (Rutchey et al. 2006) found the "Strazzulla property adjacent to eastern Loxahatchee NWR" to be characteristic of a Cypress Forest having the following general description: "Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) dominant forest with common understory vegetation consisting of Pond Apple (*Annona glabra*), Wax Myrtle (*Myrica cerifera*), Pop Ash (*Fraxinus caroliniana*), Cocoplum (*Chrysobalanus icaco*), and Leather Fern (*Acrostichum danaeifolium*)." A land assessment effort completed by the SFWMD (2013) documented the vegetation communities in the Strazzulla Marsh as "transition[ing] from cypress in the east to sawgrass marsh in the west and...wet prairie towards the center of the site." This parcel has a direct hydrologic connection to portions of the Refuge and serves as habitat for wildlife in the region. The Refuge staff performed partial removal and management of exotic vegetation in the Strazzulla Marsh from 1997 through 2000, which included treatment of 433 acres. Exotic plant management and control activities included cutting, clearing, and the introduction of bio-control measures.

### 3.2.2 *Wildlife Resources*

The Refuge provides important feeding, roosting, and nesting habitats for many birds, mammals, reptiles, amphibians, and fish species. In a given year, as many as 257 species of birds may use the diverse habitats found on the Refuge (USFWS 2000). Of those, approximately 93 species are considered to be common or abundant during certain seasons (USFWS 2000). Numerous duck species, including mottled, ring-necked, fulvous whistling, wood, ruddy, blue and green-winged teal, lesser scaup, northern pintail, American widgeon, northern shoveler, hooded merganser, gadwall, and coot, can be found on the Refuge during the fall and winter when water levels are appropriate and habitat is available (USFWS 2000).

Twenty-three species of mammals commonly found in south Florida are known to occur on the Refuge, including the Mexican free-tailed bat (*Tadarida basiliensis*), cotton mouse (*Peromyscus gossypinus*), river otter (*Lutra canadensis*), eastern gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), white-tailed deer (*Odocoileus virginianus*), round-tailed muskrat (*Neofiber alleni*), and marsh rabbit (*Sylvilagus palustris*) (USFWS 2000).

Amphibians and reptiles are also well represented on the Refuge. Approximately ten species of turtles, eight species of lizards, 24 snake species, and American alligators (*Alligator mississippiensis*) are present on the Refuge (USFWS 2000).

There are at least 46 species of temperate fresh water fish that occur regularly on the Refuge, including mosquito fish, topminnow, largemouth bass, gar, and bowfin (Loftus and Kushlan 1987). Structurally simple sloughs and canals are dominated by bass and other predatory fish (Loftus and Kushlan 1987). Prawns and crayfish tend to occur more often in densely vegetated wet prairies than in sloughs (Lowe 1986). Small fish and large arthropods manage to avoid large fish in sloughs, but large arthropods feed on small fish in wet prairies and sawgrass stands.

In a study by the USACE (1999), the Strazzulla Marsh area was found to provide the following benefits: (1) expands the spatial extent of protected natural areas; (2) makes a hydrological and ecological connection to the Refuge; (3) acts as a buffer between higher water stages to the west and agricultural lands to the east that must be drained; (4) provides vital habitat connectivity for species that require large unfragmented tracts of land for survival; and (5) protects the only remaining cypress habitat in the eastern Everglades and one of the few remaining sawgrass marshes adjacent to the coastal ridge.

### 3.2.3 *Threatened and Endangered Species*

At least 63 plant or animal species listed by the State or Federal government as endangered, threatened, or species of special concern are known to occur on the Refuge, either currently or historically. These species include, but are not limited to, the Everglade snail kite (*Rostrhamus sociabilis plumbeus*), wood stork (*Mycteria americana*), Florida panther (*Puma concolor coryi*), eastern indigo snake (*Drymarchon corais couperi*), Audubon's crested caracara (*Polyborus plancus audubonii*), bald eagle (*Haliaeetus leucocephalus*), Florida sandhill crane (*Grus canadensis pratensis*), snowy egret (*Egretta thula*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), and roseate spoonbill (*Ajaia ajaia*) (USFWS 2000).

The entire 143,924 acre Refuge, including Compartment D (but not Strazzulla Marsh), is designated as critical habitat for the Everglade snail kite (50 CFR§ 17.95(b), 1977). Everglade snail kites forage and sometimes nest in the interior marsh of the Refuge with a preference for

wet prairie and slough habitats. However, Everglade snail kites are highly nomadic, and are usually not abundant on the Refuge unless environmental conditions are optimal: abundant apple snail populations and water levels that maximize forage potential. Snail kites are usually encountered during the winter months (December to March), as this coincides with the period when water levels are the highest within the interior marsh, allowing them to more effectively forage on apple snails. If breeding occurs, it generally takes place from January to March. Snail kite foraging and nesting has not been documented in Compartment D or in Strazzulla Marsh.

Wood storks forage in the interior marsh during periods of low water encountered during the spring draw down (April through early June) in preparation for hurricane season, or during extreme droughts as experienced in 2001 and 2011. The time frame for optimal wood stork foraging, breeding, and roosting is even shorter than that observed with the snail kite. Wood storks are extremely susceptible to water level fluctuations and generally disperse with the onset of summer rains (late May or early June). High numbers of wood storks (300) have been observed foraging on the Refuge interior and impoundments when water levels are very low. Historically, before the Everglades ecosystem was modified for water management purposes, wood storks began to nest as early as November. However, wood storks now nest from February to May due to habitat and hydro pattern modifications that have disrupted the natural synchronization between forage availability and energetic requirements of reproductive birds. As such, even minor fluctuations in water levels can cause wood storks to abandon their nests. Occasionally, but infrequently, wood storks will nest and have nested successfully in the Refuge. For example, two pairs nested successfully in 1990, one unsuccessfully in 1999, 21 successfully in 2009. Wood stork foraging and nesting has not been documented in Compartment D or in Strazzulla Marsh.

### **3.3 Socioeconomic Environment**

#### **3.3.1 Demographics**

Palm Beach County is a county of extremes. Along the east coast lies a highly urbanized area, part of the South Florida urban system of some three million people. Urbanization extends westward through the county to the Refuge's eastern boundary. Around the Refuge, agriculture and low density urban dwellings exist. West of the Refuge lies an extensive system of highly productive agricultural fields where sugar cane and other crops or sod are grown. Palm Beach County and proximal counties, including Broward and Martin, are slowly losing their rural character and becoming urbanized. Broward County (to the south of Palm Beach) has already extended its urban fringe to the border of levees that surround the southern Everglades, similar to Dade County (further south). Martin County (to the north of Palm Beach) is slowly developing into its western reaches. The population in Palm Beach County grew 16.7% from a population of 1,131,184 in 2000 to 1,320,134 in 2010 (U.S. Census Bureau 2014). Median household income (\$51,278) and per capita income (\$31,743) for Palm Beach County for 2012 were higher than State averages (U.S. Census Bureau 2014).

#### **3.3.2 Recreation Use**

There are no developed public use facilities on the Strazzulla Marsh property (SFWMD 2013) or Compartment D. Recreation associated with Strazzulla Marsh is primarily walking and hiking

on the levee adjacent to the tract extending from the northern edge of Strazzulla Marsh (ACME 2 Station) to the Hillsboro Recreation Area (12 miles).

### **3.4 Cultural and Historic Resources**

#### ***3.4.1 Prehistoric Background***

Archaeologists suspect that prehistoric occupation did not occur on the Refuge because of little dry land on which to live. Even tree islands, which are thought to have formed within the last 1,000 years, would have been unsuitable for prehistoric occupation (Griffin et al. 1979). Three sites show evidence of the Glades tradition within close proximity to the Refuge (Griffin et al. 1979). The sites mentioned include the Cagles Hammock site, the Markham Park site (Williams and Mowers 1977), and the Peace Camp site (Mowers and Williams 1972).

#### ***3.4.2 Belle Glade (Okeechobee) Area***

Griffin et al. (1979) have hypothesized that the Refuge may have been used by the Belle Glade People to travel east toward the Atlantic. Once there, the Belle Glade people could have traded with the groups occupying the area, or harvested the marine goods recovered at Fort Center (Griffin et al. 1979).

The closest Belle Glade site to the Refuge (according to Griffin et al. 1979) is the Boynton Mound Complex located within ½ mile of the eastern Refuge boundary.

#### ***3.4.3 Historic Period***

By the time European explorers stepped foot on the Florida peninsula, there were five tribal groups associated with the east coast of Florida. These groups were the Timicua to the north, the Ais, the Guacata, the Jeaga, and the Tequesta to the south. All tribes were known to collect shellfish and other marine and aquatic resources, which resulted in large shell and bone middens near the villages (Andrews and Andrews 1985). There is evidence that these middens/mounds were used as safe-havens of dry land when coastal flooding occurred (Andrews and Andrews 1985). Tribal groups most associated with the Refuge area were the Guacata, the Jeaga, and the Tequesta (Griffin et al. 1979). It appears that the Guacata occupied territory in a band north of the Refuge, including the eastern shore of Lake Okeechobee and the coast near St. Lucie. Other groups, the Jeaga and perhaps even the Tequesta, were located south of what is now the Refuge. By the 1800s, Native Americans from Georgia, Alabama, and South Carolina began filtering down into the Florida peninsula. These people became more cohesive through time as they fought together against the encroaching Europeans in the Second Seminole War of 1835-1842 (Neill 1956). The war's end could be nothing but a loss for the Seminoles, as they were forcibly moved west. Those that chose to remain made their way into the Everglades inhabiting a land that the newer Americans did not seem to want (Griffin et al. 1979). With improved transportation, more non-Native American settlers began to move into the area. Small communities, most of which were short lived, sprang up near the Refuge. These consisted of Belle Glade (c. 1913), Glade Crest (c. 1914) on the Hillsboro Canal, Shawano (c. 1924) on the Hillsboro Canal, 20 Mile Bend at the juncture of the Hillsboro and West Palm Beach Canals, Gladeview on Hillsboro Canal, and Loxahatchee (c. 1913) on West Palm Beach Canal (Will 1964, p. 180; Will 1968, p. 33; Griffin et al. 1979). The new settlements, with associated road construction, managed to bypass the Refuge due to the inhospitable environment.

## **CHAPTER 4 Environmental Consequences**

This chapter describes the foreseeable environmental consequences of implementing the two alternatives in Chapter 2. Again, any future proposed changes to land management of Compartment D or Strazzulla Marsh are not included in this action and, thus, are not included in this Environmental Assessment, as discussed in Chapter 2.

When detailed information is available, a scientific and analytic comparison between alternatives and their anticipated consequences is presented, which is described as “impacts” or “effects.” When detailed information is not available, those comparisons are based on the professional judgment and experience of Refuge staff and Service and State biologists.

### **4.1 Physical Consequences**

The physical environment of Strazzulla Marsh appears sufficient for continued conservation, maintenance, and management as a natural area. Soil and water samples from Strazzulla Marsh exhibit low phosphorus and chloride values, low levels of mercury and lead, and low levels of the pesticide DDE, none of which were considered to be ecologically detrimental (Frakes et al. 2010; also see Section 3.1).

Any future changes to the physical environment of Compartment D by the SFWMD would require separate assessments and reviews based on the specific details of the proposed changes. The Service, the public, and other entities would provide comment on any specific plans for Compartment D at that time. In anticipation of any such future proposals for Compartment D, the Service, in its Section 7 Evaluation conducted in association with this Environmental Assessment (see Appendix B) has stated that “...when appropriate, the U.S. Fish and Wildlife Service commits to requiring the use of conservation guidelines for the Everglade snail kite, the wood stork, the Florida panther, the eastern indigo snake, and the Audubon’s crested caracara in any future consultation under Section 7 of the Endangered Species Act for projects that may be proposed in the Compartment D land parcel after the land exchange is completed.”

#### ***4.1.1 Impacts to Physical Environment***

Neither alternative inherently causes a change in the physical environment of either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on the physical environment, including hydrology, water quality, and air quality.

#### ***4.1.2 Impacts to Refuge Facilities***

Neither alternative requires the Refuge to develop, improve, or maintain any new or existing facilities (defined by the Service as “Real property that serves a particular function(s) such as buildings, roads, utilities, water control structures, raceways, etc.”) on either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on Refuge facilities.

### **4.2 Biological Consequences**

The transfer of the Strazzulla Marsh to the Service provides permanent protection for this important tract of remaining cypress habitat and sawgrass marsh, and ensures that this habitat

remains intact and available to support the maximum ecological benefits for Everglades' wildlife, including threatened and endangered species.

Any future changes to the biological environment of Compartment D by the SFWMD would require separate assessments and reviews based on the specific details of the proposed changes.

#### ***4.2.1 Impacts to Vegetation and Habitat***

Neither alternative inherently induces a change to vegetation within either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on localized vegetation, soil, water, or wildlife habitat.

#### ***4.2.2 Impacts to Wildlife***

Neither alternative inherently induces a change to wildlife or wildlife habitat within either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on wildlife resources.

#### ***4.2.3 Impacts to Threatened and Endangered Species***

Neither alternative inherently induces a change to wildlife or wildlife habitat in general, or to threatened and endangered species in particular, within either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on threatened and endangered species.

A Section 7 Evaluation was conducted in association with this Environmental Assessment (see Appendix B). It states that "...Compartment D does not currently provide suitable habitat for threatened and endangered species and that the Everglade snail kite critical habitat designation will remain attached to the parcel, it is not anticipated that the land exchange will cause adverse impacts to or affect designated critical habitat of any threatened and endangered species." It was determined that the proposed alternative was not likely to adversely affect endangered species (including Everglade snail kite, wood stork, Florida panther, eastern indigo snake, and Audubon's crested caracara).

The Section 7 Evaluation further states: "In addition, when appropriate, the U.S. Fish and Wildlife Service commits to requiring the use of conservation guidelines for the Everglade snail kite, the wood stork, the Florida panther, the eastern indigo snake, and the Audubon's crested caracara in any future consultation under Section 7 of the Endangered Species Act for projects that may be proposed in the Compartment D land parcel after the land exchange is completed."

### **4.3 Socioeconomic Consequences**

#### ***4.3.1 Impacts on Environmental Justice***

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was signed by President Bill Clinton on February 11, 1994, to focus Federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The Order directed Federal agencies to develop environmental justice strategies to aid in identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income

populations. The Order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority and low-income communities with access to public information and participation in matters relating to human health or the environment.

This assessment has not identified any adverse or beneficial effects for either alternative unique to minority or low-income populations in the affected area. Neither alternative will disproportionately place any adverse environmental, economic, social, nor health impacts on minority or low-income populations.

#### ***4.3.2 Impacts on Public Health and Safety***

Neither alternative inherently causes a change to the environment of either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on human health and safety.

#### ***4.3.4 Impacts on Recreation***

Neither alternative inherently causes a change to the public-use activities anticipated on either Compartment D or Strazzulla Marsh. Thus, each alternative would have similar minimal impact on wildlife dependent (or other) recreational activities.

### **4.4 Cultural Resource Consequences**

Neither Compartment D nor Strazzulla Marsh has any known archaeological or historic resources, and neither alternative inherently causes disturbance or disruption of the physical conditions of either Compartment D or Strazzulla Marsh. Both the Service and SFWMD are public agencies and are required to protect cultural resources, thus if any cultural resources were discovered on either property, they would continue to be protected in the public's trust.

### **4.5 Cumulative Impacts Analysis**

Cumulative impacts on the environment result from incremental effects of a proposed action when these are added to other past, present, and reasonably foreseeable future actions (**Appendix C and D**). While cumulative effects may result from individually minor actions, they may, viewed as a whole, become substantial over time.

As stated in Chapter 2, the proposed land exchange (Alternative B) would only transfer land ownership. Any future proposed changes to land management of Compartment D or Strazzulla Marsh are not included in this action and, thus, are not included in this Environmental Assessment. Any future change in land use would constitute a separate action, for which appropriate assessments and reviews would be required.

Compartment D. In the proposed land exchange (Alternative B), Compartment D would retain the physical, biological, socioeconomic, and cultural and historic characteristics of the current environment after the proposed transfer to the State. As such, the direct impacts of this action are expected to be minimal.

In addition as discussed in Chapter 2, the SFWMD plans to use Compartment D as part of its Restoration Strategies initiative, which has the overall goal of improving water quality going into the Everglades Protection Area. Although specifics of any such plan will not be known until

after initiation of the design phase in 2018 (SFWMD 2014), the cumulative impacts of development of Compartment D within the Restoration Strategies initiative will be fully assessed and will likely be positive relative to the current state and impacts of Compartment D.

Strazzulla Marsh. In the proposed land exchange (Alternative B), Strazzulla Marsh would retain the physical, biological, socioeconomic, and cultural and historic characteristics of the current environment after the proposed transfer to the Service. As such, the direct impacts are expected to be minimal.

In addition as discussed in Chapter 2, the Refuge's 2000 Comprehensive Conservation Plan (USFWS 2000) included Strazzulla Marsh in its 15-year plan for managing the Refuge. Any future uses for Strazzulla Marsh (following completion of this proposed land exchange) would be consistent with the recommendations that resulted from this Plan, which presented a comprehensive Environmental Assessment of the cumulative impacts of four Refuge management alternatives, including the preferred alternative. However, no such changes in use or management are planned at this time, and no such changes are inherently caused by the proposed alternative.

## **CHAPTER 5 Consultation and Coordination with Others**

The following actions were taken to announce the Strazzulla Landswap Environmental Assessment to the public and other interested parties. Notification of the opportunity to comment, the date and location of a public meeting, and where to get copies of the Environmental Assessment (EA) were announced to provide the public a chance to review and comment.

The Refuge and SFWMD have discussed the possibility of a land exchange involving Strazzulla Marsh and Compartment D for many years. For example, various proposed land swaps involving Strazzulla Marsh and Compartment D are reported in a June 2, 2002 Sun Sentinel newspaper article, the 2005 Annual Report from the SE Region Division of Realty for the Service, and a June 26, 2013 Miami Herald newspaper article. In general, the public has been kept well informed of this land swap. This Environmental Assessment addresses the specific, most-recent proposed Strazzulla Marsh for Compartment D land exchange, as detailed above.

The Service and SFWMD have actively communicated and coordinated regarding the proposed land exchange. Preliminary meetings were held in April and May 2012 to discuss the potential land exchange. The letter from E. Barnett (SFWMD) to S. Pelizza (Refuge) on December 6, 2012 formally initiated the land-exchange process, and ongoing communication and coordination have occurred since that time.

Over the past year, Refuge has communicated generally about the land exchange at meetings with various stakeholders. Events at which the potential land exchange was mentioned and discussed include the Friends of the A.R.M. Loxahatchee NWR Board meeting, a meeting with Florida Wildlife Commission on hunting operations, and several meetings with select hunters and hunter groups who use the Refuge. In addition, the land exchange was formally discussed at two recent public meetings of the SFWMD Governing Board (September 12, 2013, Discussion

Agenda Item, Resolution No. 2013-0922; and January 9, 2014, Public Hearing Item, Resolution No. 2014-0114).

Although not anticipated at this time, any future changes in use or management to Strazzulla Marsh would be consistent with the Refuge's 2000 Comprehensive Conservation Plan (USFWS 2000). Development of this 15-year plan included extensive consultation and coordination with others about future management of the Refuge, including Strazzulla Marsh. The planning process included a public scoping meeting on August 17, 1998, five facilitated planning-team meetings spanning 8 days in July through October 1999, development and review of the Plan by the planning team, and a public outreach and comment period, including a public meeting on April 26, 2000. The planning team included 23 members from six outside organizations (SFWMD, US Army Corps of Engineers, Palm Beach County's Department of Environmental Resources, University of Florida's Department of Recreation, Parks and Tourism, University of Florida's Institute of Food and Agricultural Sciences, and Florida Atlantic University's Department of Anthropology) and four organizational branches within the USFWS (A.R.M. Loxahatchee and Hobe Sound National Wildlife Refuges, Southeast Regional Office, Savannah Coastal Refuges, and Ecological Services).

On March 4, 2015, an announcement of the April 8, 2015 public meeting was sent to Refuge's volunteers, visitors on the mailing list, and was posted on the Friends of Loxahatchee National Wildlife Refuge's website, and posted in the Refuge's Visitor Center.

All substantive comments from the public were summarized and categorized under general topics as **Appendix E**. The meeting minutes are attached as **Appendix F**. Original letters from the FWC, SFWMD, FDEP, and the Division of Historical Resources appear in their entirety in **Appendix G**.

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**APPENDIX B:  
Section 7 Intra-Service Consultation**

**REGION 4**

**INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM**

[Note: This form provides the outline of information needed for intra-Service consultation. If additional space is need, attach additional sheets, or set up this form to accommodate you responses.]

**Originating Person:** Sylvia R. Pelizza

**Telephone Number:** (561) 735-6021    **Email:** Sylvia\_Pelizza@fws.gov

**Fax Number:** (561) 369-7190

**Date:** XX/XX/14

**PROJECT NAME:** Land Exchange between the South Florida Water Management District and the U.S. Fish and Wildlife Service.

**I. Service Program:**

- Ecological Services
- Federal Aid
  - Clean Vessel Act
  - Coastal Wetlands
  - Endangered Species Section 6
  - Partners for Fish and Wildlife
  - Sport Fish Restoration
  - Wildlife Restoration
- Fisheries
- Refuges/Wildlife

**II. State/Agency:** Florida, U.S. Fish and Wildlife Service

**III. Station Name:** Arthur R. Marshall Loxahatchee National Wildlife Refuge  
(FF04RFLX00)

**IV. Description of Proposed Action:**

The purpose of this action is to evaluate a proposed land exchange between the State of Florida and the U.S. Fish and Wildlife Service (USFWS). The action will provide the State of Florida with an additional 1,327 acres of land (Compartment D) to be managed by the South Florida Water Management District (SFWMD) to implement a portion of its Restoration Strategies initiative. In exchange for Compartment D, the State of Florida will convey to the USFWS the 2,840 acre Strazzulla Marsh parcel to be managed by the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge).

V. Pertinent Species and Habitat:  
A. Location Map

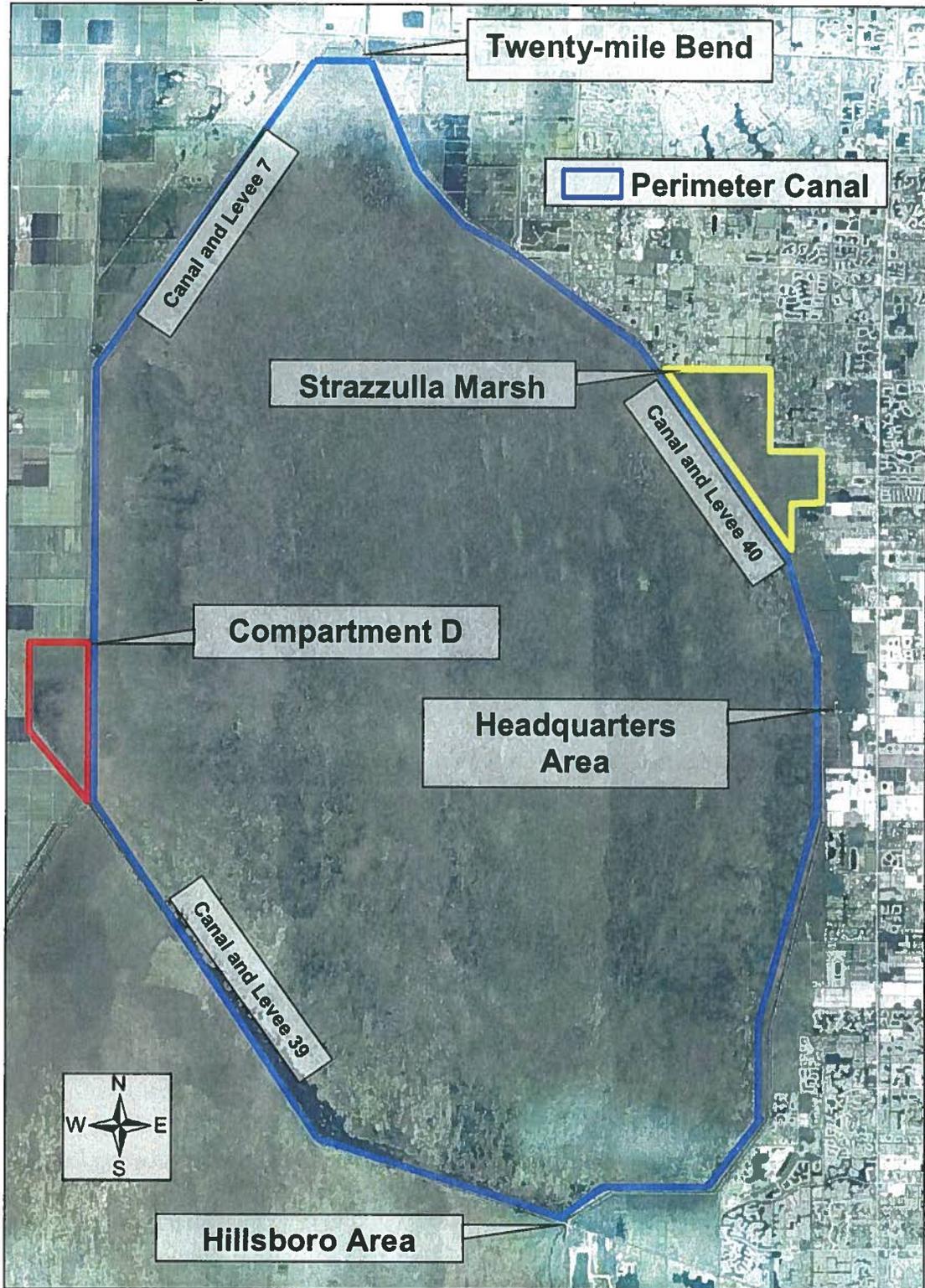


Figure 1. Shows the A.R.M. Loxahatchee National Wildlife Refuge interior marsh (blue line), Compartment D (red line) and Strazzulla Marsh (yellow line) boundaries.

Compartment D is located on the western side of the Refuge along the L-7 canal and levee (Figure 1). The Refuge’s 2000 Comprehensive Conservation Plan describes the habitat in Compartment D as “overgrown with woody shrubs such as willow and myrtle and dense sawgrass.” Although recent management activities (e.g. control of invasive plants and prescribed fire) have sought to improve habitat, the underlying hydrologic variability in Compartment D has prevented the restoration of water levels, prey base, and vegetative structure required to support foraging and nesting by the Everglade snail kite and the wood stork.

The Strazzulla Marsh is located on the eastern side of the Refuge along the L-40 canal and levee (see above image). A 2013 Land Assessment effort completed by the SFWMD documented the vegetation communities in the Strazzulla Marsh as “transition[ing] from cypress in the east to sawgrass marsh in the west and...wet prairie towards the center of the site.” This parcel has a direct hydrologic connection to portions of the Refuge and serves as habitat for wildlife in the region. The proposed land exchange will transfer ownership of the Strazzulla Marsh to the USFWS providing a permanent protection for this parcel and ensuring that this habitat remains available to support Everglades’ wildlife, including threatened and endangered species.

**B. Complete the following table:**

SPECIES/CRITICAL HABITAT	STATUS <sup>1</sup>
Everglade snail kite ( <i>Rostrhamus sociabilis plumbeus</i> )	E, CH
Wood stork ( <i>Mycteria americana</i> )	E
Florida panther ( <i>Puma concolor coryi</i> )	E
Eastern indigo snake ( <i>Drymarchon corais couperi</i> )	T
Audubon’s crested caracara ( <i>Polyborus plancus audubonii</i> )	T

<sup>1</sup>STATUS: E=endangered, T=threatened, PE=proposed endangered, PT=proposed threatened, CH=critical habitat, PCH=proposed critical habitat, C=candidate species.

VI. **Location (attach map):**

A. **Ecoregion Number and Name:** Ecoregion 76, Southern Florida Coastal Plain

B. **County and State:** Palm Beach, FL

C. **Section, township, and range (or latitude and longitude):**

26E30.00N 80E14.00W (Headquarters Area)

D. **Distance (miles) and direction to nearest town:**

10 miles west of Boynton Beach, FL

E. **Species/habitat occurrence:**

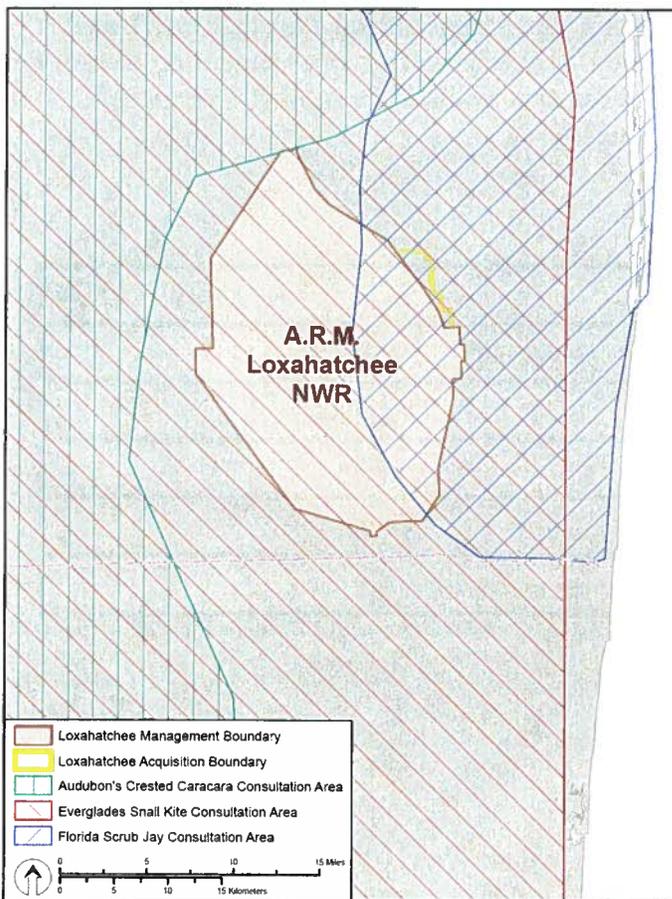


Figure 2. Shows the Species Consultation Areas that overlap A.R.M. Loxahatchee National Wildlife Refuge management boundaries (red border).

### ***Everglade Snail Kite***

The entire Refuge including Compartment D is designated as critical habitat for the Everglade snail kite. Everglade snail kites forage and sometimes nest in the interior marsh of the Refuge with a preference for wet prairie and slough habitats. However, Everglade snail kites are highly nomadic, and are usually not abundant on the Refuge unless environmental conditions are optimal: abundant apple snail populations and water levels that maximize forage potential. Snail kites are usually encountered during the winter months (December to March) as this coincides with the period when water levels are the highest within the interior marsh, and they can more effectively forage on apple snails. If breeding occurs, it generally takes place from January to March. Snail kite foraging and nesting has not been documented in Compartment D of the Refuge.

### ***Wood Stork***

Wood storks forage in the interior marsh during periods of low water encountered during the spring draw down (April through early June) in preparation for hurricane season, or during extreme droughts as experienced in 2001 and 2011. The time frame for optimal wood stork foraging, breeding, and roosting is even shorter than that observed with the snail kite. Wood storks are extremely susceptible to water level fluctuations and generally disperse with the onset of summer rains (late May or early June). Historically, before the Everglades ecosystem was modified for water management purposes, wood storks began to nest as early as November. However, wood storks now nest from February to May due to habitat and hydro pattern modifications which have disrupted the natural synchronization between forage availability and energetic requirements of reproductive birds. As such, even minor fluctuations in water levels can cause wood storks to abandon their nests. Wood stork foraging and nesting has not been documented in Compartment D of the Refuge.

### ***Florida Panther***

The Florida panther prefers native, upland forests, especially hardwood hammocks and pine flatwoods, over wetlands and disturbed habitats. The Panther Focus Area was developed based on the results of panther habitat models south of the Caloosahatchee River (Kautz et al. 2006) and north of the Caloosahatchee River (Thatcher et al. 2006).

The Kautz et al. (2006) model of landscape components important to Florida panther habitat conservation was based on an analysis of panther habitat use and forest patch size. This model was used in combination with radio-telemetry records, home range overlaps, land use and land cover data, and satellite imagery to delineate primary and secondary areas that comprise a landscape mosaic of cover types important to help support the current panther breeding population south of the Caloosahatchee River.

Thatcher et al. (2006) developed a habitat model using Florida panther home

ranges in south Florida to identify landscape conditions (land-cover types, habitat patch size and configuration, road density and other human development activities, and other similar metrics) north of the Caloosahatchee River that were similar to those associated with the current panther breeding population.

The Panther Focus Area (Figure 3) south of the Caloosahatchee River is divided into Primary, Secondary, and Dispersal Zones; the area north of the Caloosahatchee River is defined as the Primary Dispersal and Expansion Area.

The Primary Zone is currently occupied and supports the only known breeding population of Florida panthers. These lands are important to the long-term viability and persistence of the Florida panther in the wild.

Secondary Zone lands are contiguous with the Primary Zone, and although these lands are used to a lesser extent by panthers, they are important to the long-term viability and persistence of the panther in the wild. Panthers use these lands in a much lower density than in the Primary Zone.

The Dispersal Zone is a known corridor between the Panther Focus Area south of the Caloosahatchee River to the Panther Focus Area north of the Caloosahatchee River. This Zone is necessary to facilitate the dispersal of panthers and future panther population expansion to areas north of the Caloosahatchee River. Marked panthers have been known to use this zone.

The Primary Dispersal and Expansion Area is the Fisheating Creek/Babcock-Webb Wildlife Management Area region. These are lands identified by Thatcher et al. (2006) as potential panther habitat with the shortest habitat connection to the Panther Focus Area in south Florida. Several collared and uncollared male panthers have been documented in this area since 1973, and the last female documented north of the Caloosahatchee River was found in this area.

Compartment D of the Refuge is approximately 9.4 miles away from the Primary Panther Focus Area and 10 miles from Secondary Panther Focus Area. In addition, telemetry data have not documented the presence of Florida panthers in Compartment D of the Refuge.

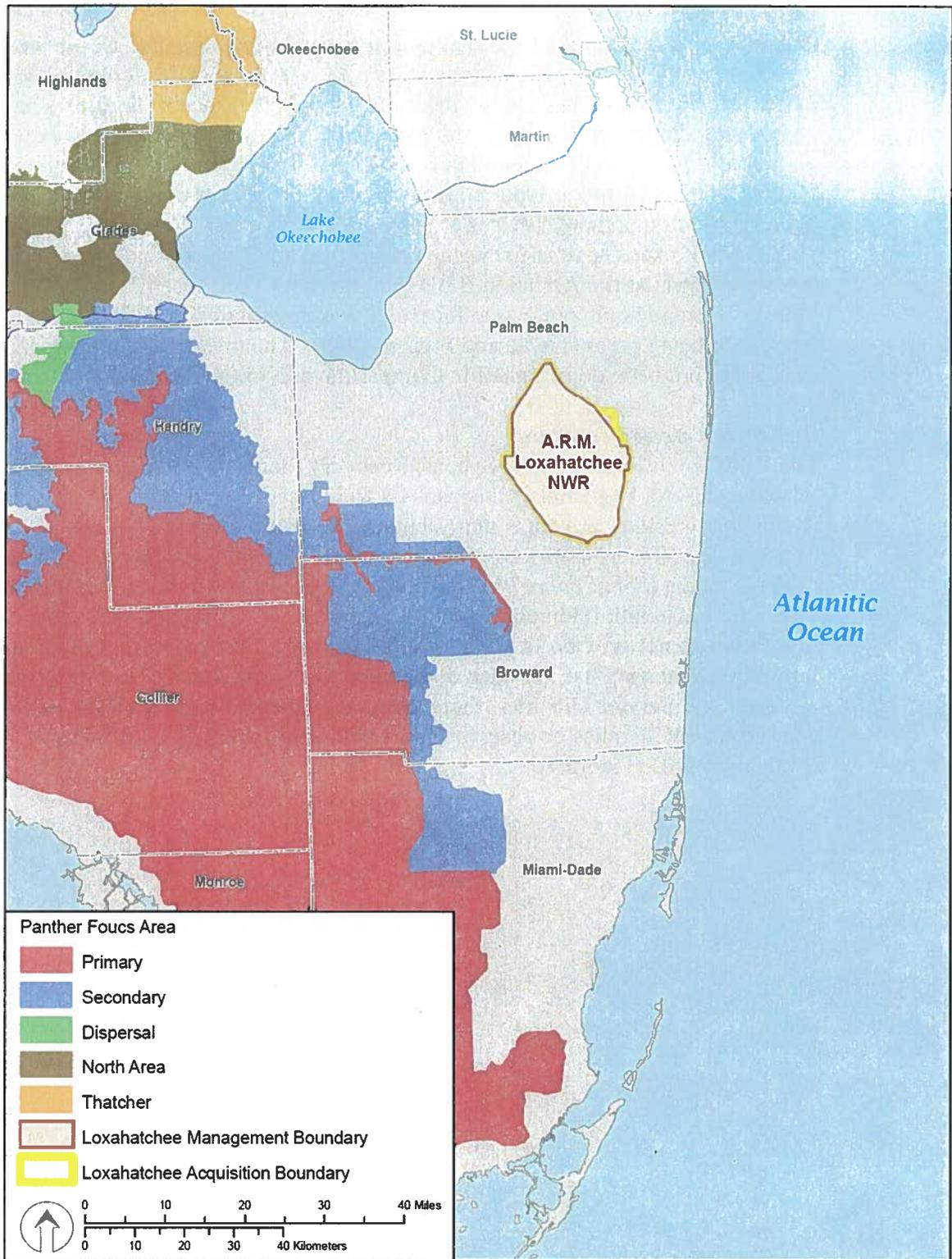


Figure 3. Shows the Panther Focus Areas and habitats in relation to the A.R.M. Loxahatchee National Wildlife Refuge boundaries.

### ***Eastern indigo snake***

In south Florida, eastern indigo snakes range over large areas and use various habitats throughout the year, with most activity occurring in the summer and fall (Moler 1985a; Smith 1987). Over most of its range, this species frequents habitat types that include tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, and human-altered habitats. Underground refugia used by this species include natural ground holes, hollows at the base of trees or shrubs, ground litter, trash piles, and the crevices of rock-lined ditch walls (Layne and Steiner 1996). Adult males have larger home ranges than adult females and juveniles (Moler 1985b). At the Archbold Biological Station (ABS) located in central Florida, average home range size for males was determined to be 185 acres and females to be 47 acres (Layne and Steiner 1996). The presence of eastern indigo snakes has not been documented in Compartment D of the Refuge.

### ***Audubon's crested caracara***

The 1999 South Florida Multi-Species Recovery Plan lists a five-county region (Glades, Desoto, Highlands, Okeechobee, and Osceola) as the area where the Audubon's crested caracara is most abundant in South Florida. A study of active caracara nest sites in south-central Florida found that this species prefers to nest in cabbage palms (*Sabal palmetto*) surrounded by open habitats with vegetation less than 1 foot in height (Humphrey and Morrison 1997). Locations with taller vegetation do not provide suitable foraging habitat for the caracara. Caracara foraging and nesting has not been documented in Compartment D of the Refuge. According to Service GIS files, there are no documented caracara nests within approximately 21 miles or observations within approximately 23.6 miles of Compartment D (Figure 4).

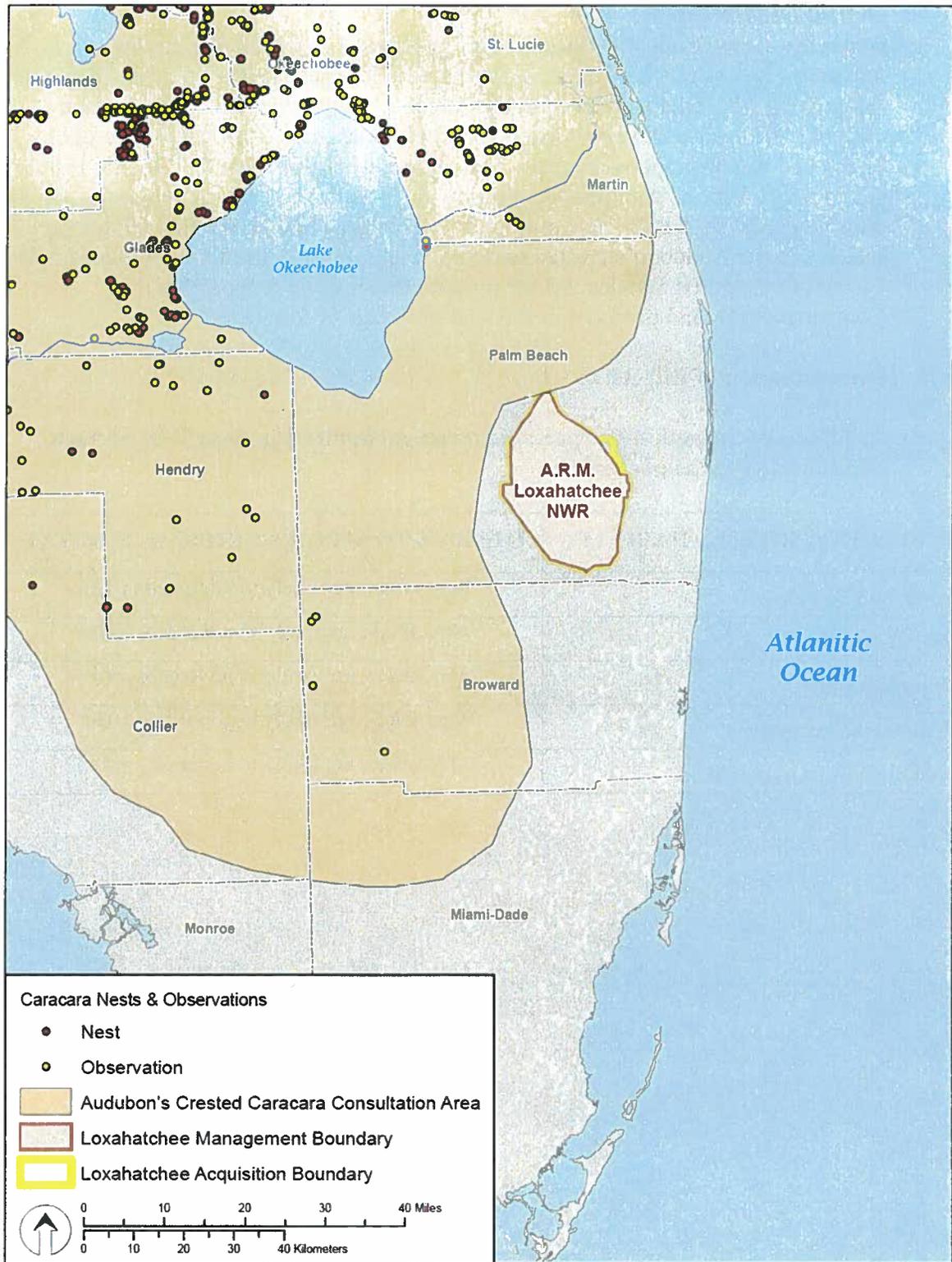


Figure 4. Shows the Caracara nest and observation locations in relation to the A.R.M. Loxahatchee National Wildlife Refuge boundaries.

**Overall Determination**

Given that Compartment D does not currently provide suitable habitat for threatened and endangered species and that the Everglades snail kite critical habitat designation will remain attached to the parcel, it is not anticipated that the land exchange will cause adverse impacts to or affect designated critical habitat of any threatened and endangered species. In addition, when appropriate, the U.S. Fish and Wildlife Service commits to requiring the use of conservation guidelines for the Everglade' snail kite, the wood stork, the Florida panther, the Eastern indigo snake, and the Audubon's crested caracara in any future consultation under Section 7 of the Endangered Species Act for projects that may be proposed in the Compartment D land parcel after the land exchange is completed.

**VII. Determination of Effects:**

**A. Effects of the action on species and critical habitats in item V. B, (attach additional pages as needed):**

<b>SPECIES/CRITICAL HABITAT</b>	<b>IMPACTS TO SPECIES/CRITICAL HABITAT</b>
Everglade snail kite	"May affect, not likely to adversely affect"
Wood stork	"May affect, not likely to adversely affect"
Florida panther	"May affect, not likely to adversely affect"
Eastern indigo snake	"May affect, not likely to adversely affect"
Audubon's crested caracara	"May affect, not likely to adversely affect"

**B. Actions to be implemented to reduce adverse effects:**

<b>SPECIES/CRITICAL HABITAT</b>	<b>ACTIONS TO MINIMIZE ADVERSE EFFECTS</b>
Everglade snail kite	N/A
Wood stork	N/A
Florida panther	N/A
Eastern indigo snake	N/A
Audubon's crested caracara	N/A

**VIII. Effect Determination and Response Requested:**

<b>SPECIES/ CRITICAL HABITAT</b>	<b>DETERMINATION</b>			<b>RESPONSE<sup>1</sup> REQUESTED</b>
	<b>NE</b>	<b>NA</b>	<b>AA</b>	
Everglade snail kite		X		concurrence
Wood stork		X		concurrence
Florida panther		X		concurrence
Eastern indigo snake		X		concurrence
Audubon's crested caracara		X		concurrence

<sup>1</sup>DETERMINATION/RESPONSE REQUESTED:

NE=no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested is optional but a "Concurrence" is recommended for a complete Administrative Record.

NA= not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response Requested is a "Concurrence".

AA= likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested for listed species is "Formal Consultation". Response Requested for proposed or candidate species is "Conference".

P. Kolon 9/10/14  
Signature (originating station) Date

PROJECT LEADER  
Title

**LX. Reviewing Ecological Services Office Evaluation:**

A. Concurrence X

B. Formal consultation required \_\_\_\_\_

C. Conference required \_\_\_\_\_

D. Informal conference required \_\_\_\_\_

E. Remarks (attach additional pages as needed):

Donald M. Puzich 12/9/14  
Signature Date  
Everglades Program Supv.  
Title

**X. Literature Cited:**

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# APPENDIX C: Environmental Action Statement

## UNITED STATES FISH AND WILDLIFE SERVICE

### ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the proposed land exchange with the State of Florida at the Arthur R. Marshall Loxahatchee National Wildlife Refuge, located in Palm Beach County, Florida:

Check One:

- is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1, Section 1.4 A (4). No further NEPA documentation will therefore be made.
- is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.
- is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- is an emergency action within the context of 40 CFR 1508.1 i. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other Supporting Documents:

Environmental Assessment  
Endangered Species Act, Section 7 Consultation, 2014

Signature Approval:

 _____ (1) Originator	2/26/15 _____ Date	 _____ (2) Regional Environmental Coordinator	6/22/15 _____ Date
 _____ (3) Regional Chief, NWRS, Southeast Region	3/3/15 _____ Date	Only Needed for EIS/ROD _____ (4) Regional Director, Southeast Region	_____ Date

## **APPENDIX D: Finding of No Significant Impact (FONSI)**

### *Finding of No Significant Impact (FONSI)*

#### **Introduction**

The U.S. Fish and Wildlife Service (Service) proposes a Land Exchange with the State of Florida. The Service would convey in fee title the 1,327-acre Compartment D parcel to the State of Florida to be managed by the South Florida Water Management District (District). In exchange for Compartment D, the State of Florida would convey in fee title the 2,586-acre Strazzulla Marsh parcel to the Service to be managed by the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge). An Environmental Assessment has been prepared to inform the public of the possible environmental consequences of implementing the Land Exchange. A description of the alternatives, the rationale for selecting the preferred alternative, the environmental effects of the preferred alternative, the potential adverse effects of the action, and a declaration concerning the factors determining the significance of effects, in compliance with the National Environmental Policy Act of 1969, are outlined below. The supporting information can be found in the Environmental Assessment.

#### **Alternatives**

In developing the Land Exchange, the Service evaluated two alternatives.

The Service adopted Alternative B, the "Preferred Alternative," as the proposed action to allow for long-term resource protection, enhanced wildlife habitat and population management, and further public wildlife-oriented recreation on the Refuge. The overriding concern reflected in this plan is ensuring quality habitat and protection to native species while providing compatible recreational experiences for the public.

#### *Alternative A. No Action Alternative - Current Land Ownership*

Under Alternative A, no land exchange would occur, and the current land ownership and management would continue with Compartment D owned by the Service and Strazzulla Marsh owned by the State of Florida.

#### *Alternative B. Proposed Action - Exchange Compartment D for Strazzulla Marsh*

The preferred alternative is considered to be the most effective management action for meeting the purposes of the Refuge. The proposed action would include American alligators in the hunt program along with waterfowl which is currently hunted. The hunt area would be located south of latitude 26° 27.130 and north of mile markers 12 and 14. All or parts of the Refuge may be closed to hunting at any time if necessary for public safety, to provide wildlife sanctuary, or for biological, habitat management, and administrative reasons.

### **Selection Rationale**

Strazzulla Marsh is important conservation land that captures the transition zone from cypress forest to sawgrass marsh next to the Arthur R. Marshall Loxahatchee National Wildlife Refuge management boundary. Future management of the Strazzulla Marsh would be guided by the Refuge's current 15-year Comprehensive Conservation Plan, which specifically included the Marsh. The Refuge managed a portion of Strazzulla Marsh parcel from 1994 to 2002.

### **Environmental Effects and Consequences**

Strazzulla Marsh would retain the physical, biological, socioeconomic, and cultural and historic characteristics of the current environment after the proposed transfer to the Service. As such, the direct impacts are expected to be minimal.

The Strazzulla Marsh area provides the following environmental benefits: (1) expands the spatial extent of protected natural areas; (2) makes a hydrological and ecological connection to the Refuge; (3) acts as a buffer between higher water stages to the west and agricultural lands to the east that must be drained; (4) provides vital habitat connectivity for species that require large unfragmented tracts of land for survival; and (5) protects the only remaining cypress habitat in the eastern Everglades and one of the few remaining sawgrass marshes adjacent to the coastal ridge.

The transfer of the Strazzulla Marsh to the Service provides permanent protection for this important tract of remaining cypress habitat and sawgrass marsh, and ensures that this habitat remains intact and available to support the maximum ecological benefits for Everglades' wildlife, including threatened and endangered species.

Compartment D would retain the physical, biological, socioeconomic, and cultural and historic characteristics of the current environment after the proposed transfer to the State. As such, the direct impacts of this action are expected to be minimal.

In addition, the SFWMD plans to use Compartment D as part of its Restoration Strategies initiative, which has the overall goal of improving water quality going into the Everglades Protection Area. Although specifics of any such plan will not be known until after initiation of the design phase in 2018, the cumulative impacts of development of Compartment D within the Restoration Strategies initiative will be fully assessed and will likely be positive relative to the current state and impacts of Compartment D.

### **Cumulative Impacts**

Cumulative impacts on the environment result from incremental effects of a proposed action when these are added to other past, present, and reasonably foreseeable future actions. While cumulative effects may result from individually minor actions, they may, viewed as a whole, become substantial over time. The proposed land exchange (Alternative B) would only transfer land ownership. Any future proposed changes to land management of Compartment D or Strazzulla Marsh would constitute a separate

action, for which appropriate assessments and reviews would be required. Therefore, cumulative effects of this action are not expected to be substantial.

### **Coordination**

The Service and SFWMD have actively communicated and coordinated regarding the proposed land exchange. The Service and SFWMD have discussed the possibility of a land exchange involving Strazzulla Marsh and Compartment D for many years, and the public has been kept well informed of this land exchange through various media. The Service has communicated about the land exchange at meetings with various stakeholders over the past year and in a public meeting on the land exchange. The Service also provided an in depth review by the Regional Office (RO) personnel and staff biologists. Numerous contacts were made throughout the area of the Refuge soliciting comments and perspectives on the land exchange.

### **Findings**

It is my determination that the management action does not constitute a major federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required. This determination is based on the following factors (40 C.F.R. 1508.27), as addressed in the Environmental Assessment for the Arthur R. Marshall Loxahatchee National Wildlife Refuge:

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the human environment. (Environmental Assessment, page 12).
2. The actions will not have a significant effect on public health and safety. (Environmental Assessment, page 14).
3. The project will not significantly affect any unique characteristics of the geographic area such as proximity to historical or cultural resources, wild and scenic rivers, or ecologically critical areas. (Environmental Assessment, page 14).
4. The effects on the quality of the human environment are not likely to be highly controversial. (Environmental Assessment, page 15).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment. (Environmental Assessment, page 15).
6. The actions will not establish a precedent for future actions with significant effects nor do they represent a decision in principle about a future consideration. (Environmental Assessment, page 15).
7. There will be no cumulatively significant impacts on the environment. Cumulative impacts have been analyzed with consideration of other similar activities on adjacent lands, in past action, and in foreseeable future actions. Cumulative impacts will

continue to be monitored throughout the duration of the proposed hunts (Environmental Assessment, page 14).

8. The actions will not significantly affect any site listed in, or eligible for listing in, the National Register of Historic Places, nor will they cause loss or destruction of significant scientific, cultural, or historic resources. (Environmental Assessment, page 14).
9. The actions are not likely to adversely affect threatened or endangered species, or their habitats. (Environmental Assessment, page 13; Section 7, Chapter VII.).
10. The actions will not lead to a violation of federal, state, or local laws imposed for the protection of the environment. (Environmental Assessment, page 14).

Supporting References

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Document Availability

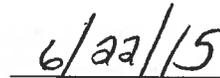
The Environmental Assessment was made available to the public in March 2015. Additional copies are available by writing:

Arthur R. Marshall Loxahatchee National Wildlife Refuge  
10216 Lee Road  
Boynton Beach, FL 33473  
561/732 3684  
<http://Loxahatchee.fws.gov>



David Viker  
Assistant Regional Director

for



Date

## **APPENDIX E: Public Comment on Land Swap**

On March 4, 2015, an announcement of the April 8, 2015 public meeting was sent to Refuge's volunteers, visitors on the mailing list, and was posted on the Friends of Loxahatchee National Wildlife Refuge's website, and posted in the Refuge's Visitor Center. All substantive comments from the public were summarized and categorized under general topics

***Comment 1:*** Strazzulla is one of the few remaining pieces of the northern Everglades where you have a truly rainfall driven marsh. It was at one time a part of the Refuge, and hopefully it will be again as a result of the proposed land exchange with the SFWMD.

***Service Response 1:*** Comment noted. The Refuge would like the opportunity to manage Strazzulla in perpetuity and protect one of the largest rainfall driven tracts left in Palm Beach County.

***Comment 2:*** The public would like the opportunity to visit Strazzulla and enjoy nature.

***Service Response 2:*** If the Refuge acquires Strazzulla, a second Environmental Assessment will be drafted in late spring/early summer of 2015 regarding proposed public use opportunities. A public meeting will be held in the summer of 2015. The public is requested to comment on how they would like to see Strazzulla managed.

***Comment 3:*** Will the Refuge want a buffer against Strazzulla? Is the buffer going to be moved if the Refuge acquires Strazzulla?

***Service Response 3:*** The Refuge does not plan to ask for an additional buffer adjacent to Strazzulla. Strazzulla is surrounded by homeowners to the north and east, the Refuge to the west, and Palm Beach County property to the south; therefore the buffer cannot be expanded. The Refuge might acquire additional land on a voluntary basis in the future but this new land would not be used as a buffer.

***Comment 4:*** Would the Refuge accept water to help control exotic species such as Old World climbing fern (Lygodium), and control native woody species from encroaching into sawgrass?

***Service Response 4:*** The Everglades Forever Act requires water discharging into the Refuge have a phosphorus limit of 10 parts per billion, so the Refuge would not accept untreated water into Strazzulla. Lygodium grows in both uplands and wetlands and would not be controlled by adding water. Strazzulla is a rain driven system with a wet and dry season, which can be healthy on some frequency. Management techniques such as bringing prescribed fire back to this unit will help control the invasion of woody species into the sawgrass. Control of invasive/exotic species within Strazzulla will be easier to

treat as access would involve less logistics than needing the use of an airboat or helicopter to provide habitat management in the interior of the Refuge. The pool of contractors willing to bid on a scope of work east of the L-40 levee is much larger than the pool of contractors willing to work in the interior of the Refuge. The Refuge is open to ideas that will add water to Strazzulla as long as this new water is appropriate and compatible with the mission of the Refuge.

**Comment 5:** How will Strazzulla be accessed by the public?

**Service Response 5:** Access to Strazzulla is difficult at this time. Strazzulla is surrounded by private land and land controlled by other State and Local agencies. The Refuge would like to partner with the Village of Wellington, ACME Drainage District, Palm Beach County, and the SFWMD to provide better public access. Partnering with other agencies could allow access to the northern and eastern side of Strazzulla. Current access is limited to the L-40 levee north from the Lee Road boat ramp by hiking or biking and possibly boats traveling in the L-40 Canal. The Refuge is committed to providing access to Strazzulla, but this access is largely dependent on partnerships other agencies who have indicated a willingness to provide access to Strazzulla. Agreements with these partners will have to be developed and approved once the transfer is complete.

**Comment 6:** How will funding affect public use access?

**Service Response 6:** Tight budgets pose a challenge to most government agencies, but the Refuge is effectively managing the cypress swamp through invasive/exotic control on species such as Brazilian pepper, Lygodium, Shoebuttan ardisia and other Florida Exotic Pest Plant Council (FLEPPC) Category I and II listed plants. The Refuge has been named an Urban Refuge which will hopefully attract more visitors to the Refuge, and having Strazzulla as a public use opportunity would be great for the National Wildlife Refuge System and the local economy. The Refuge plans to use existing trails and levees as much as possible within Strazzulla to minimize both environmental impacts and construction costs. Existing trails will provide considerable access with limited improvement needs. Other infrastructure (parking lots, boardwalks, towers, fishing piers, etc.) will have to be constructed as funding becomes available. There are special programs for public use infrastructure development and enhancement that the Refuge can apply for. Non-governmental organizations, like the Friends of the Arthur R. Marshall Loxahatchee National Wildlife Refuge have indicated an interest in helping fund infrastructure development within Strazzulla.

**Comment 7:** The public is looking forward to some limited recreational access while preserving the swamp in perpetuity. Continued development and land swapping makes you realize the government is getting skinny and we know funding is rough. We are looking forward to the land swap, and looking forward to getting some recreational opportunities in there.

**Service Response 7:** The Refuge is looking to engage the public to help us come up with ideas on specifically what the community would like to see in Strazzulla. The public may be able to help the Refuge come up with some solutions to access, and provide good ideas of how they would like Strazzulla managed in the future. See *Comment 6* for funding.

**Comment 8:** The Sierra Club supports the land swap.

**Service Response 8:** Comments noted. The Refuge would like the opportunity to manage Strazzulla in perpetuity and protect one of the largest rainfall driven tracts left in Palm Beach County.

**Comment 9:** What is the square piece of brown property that's been blocked off on the map on the top and bottom?

**Service Response 9:** These two areas are included in the proposed transfer and will become part of the Refuge. These areas were noted on the map because they are outside of the current acquisition boundary. The acquisition boundary has since been modified to include these two areas.

**Comment 10:** The Audubon Society supported this from the very beginning.

**Service Response 10:** Comment noted.

**Comment 11:** The Strazzulla Marsh offers protection and a major example of native vegetation that was 'everglades' prior to the construction of the dike surrounding the Refuge. It is a well-conceived exchange of land and should be consummated.

**Service Response 11:** Comment noted.

**Comment 12:** We are in strong support of the addition of the Strazzulla Marsh to Loxahatchee National Wildlife Refuge. The land is a natural extension of the Refuge. We volunteer at the Refuge, and have done bird surveys in that area. Doing a complete plant and animal survey would show the public the wide variety of species they might find there.

**Service Response 12:** Comment noted. The Refuge will conduct wildlife and vegetation surveys within Strazzulla to create a species list and identify areas where public use opportunities may be compatible.

**APPENDIX F:  
Public Comment Meeting Minutes from April 8, 2015**

Page: 1

1	
2	
3	-----
4	ARTHUR R. MARSHALL LOXAHATCHEE
5	NATIONAL WILDLIFE REFUGE
6	PALM BEACH COUNTY, FLORIDA
7	LAND EXCHANGE WITH THE STATE OF FLORIDA
8	STRAZZULLA MARSH
9	U.S. FISH & WILDLIFE SERVICE
10	PUBLIC MEETING
11	APRIL 8, 2015
12	10216 LEE ROAD
13	BOYNTON BEACH, FLORIDA 33473
14	6:00 P.M. - 6:52 P.M.
15	-----
16	STAFF APPEARANCES
17	Xavier Cathey
18	Rolf Olson
19	William Miller
20	Jacob Tuttle
21	William Calvert
22	Scott Engstler
23	
24	
25	
26	STENOGRAPHICALLY REPORTED BY:
27	Tracy L. Fazio, FPR
28	Notary Public - State of Florida

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(Thereupon, the following proceedings began at 6:00 P.M. and were transcribed as follows:)

MR. CATHEY: So my name is Xavier Cathey. I'm the Wildlife Refuge Specialist here on the Refuge. I just wanted to welcome everybody and say thank you for coming out, and give you sort of an overview of what is going to happen during this meeting. I'm going to go over a few things about the comment period, and then I'm going to pass it off to Rolf who is the commentator.

So comments are recorded by transcription. I'm going to call one speaker at a time in the order that you filled your cards out. Whenever your name is called, please come up to the podium here. You have three minutes for your comments. We will have Melissa here, she will be the timekeeper. She'll hold up the green card when your portion time starts. The yellow card signifies one minute, and then the red will mean stop. Please as soon as you see the red, please finish your thought and then we can get to the next person. And with the size of

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1 this group, we can definitely circle back  
2 around if there's some follow-up comments.

3 So we're going to be doing two separate  
4 sort of comments. First we're going to do the  
5 land swap comments first. Once we get through  
6 them, then we'll go on to the public use  
7 comments. And then like I said, the yellow  
8 card is one minute and the red card time is up.  
9 One person speaks at a time. Be careful on the  
10 issues, but kind on the people.

11 So also about comments. So they started  
12 on March 4th and they'll last until May 15th.  
13 You can do the comments by verbally or  
14 handwritten tonight or you can write them by  
15 email, fax, mail or hand delivery up until May  
16 15th. For email, you can contact  
17 marciekapsch@fws.gov. Here's our fax number  
18 here and the mailing address. I'll put this  
19 slide back up whenever we get to the comment  
20 section. That way you can write everything  
21 down if you don't have time.

22 With that being said, I'm going to pass it  
23 off to Rolf Olson here and he'll get started  
24 with the presentation.

25 MR. OLSON: We didn't really know how many

1 people would come tonight. So what we had  
2 planned was just a very short talk on  
3 Strazzulla and what we're proposing, and then  
4 we were just going to have mostly public  
5 comment, and if we can, have time for public  
6 discussion. So let me see.

7 So this is the mission of the U.S. Fish  
8 and Wildlife Service to administer a national  
9 network of lands and waters for the  
10 conservation, management, and where  
11 appropriate, restoration of the fish, wildlife,  
12 and plant resources within the United States  
13 for the benefit of present and future  
14 generations of Americans.

15 This is the area we're talking about. The  
16 Refuge, the majority of the Refuge,  
17 141,000 acres is actually owned by the South  
18 Florida Water Management District and it's  
19 managed under a 50 year license agreement with  
20 the U.S. Fish and Wildlife Service. There's  
21 two parts that we actually own in fee title,  
22 that's Compartment D, and the area where we are  
23 right now on Lee Road.

24 What we're proposing to do is actually  
25 swap -- way back when Strazzulla was acquired,

1 it was actually managed by us. Back in the  
2 early 2000's, it was switched over or taken  
3 away from us for a couple of reasons. The  
4 reason I heard was in 2006, the Everglades  
5 Forever Act required water discharged into the  
6 Loxahatchee National Wildlife Refuge to be 10  
7 parts per billion. We weren't sure how we were  
8 going to do that at the time. So the Water  
9 Management District when they did the second  
10 lease took Strazzulla and put it under their  
11 management. What we're planning on doing is  
12 swapping Compartment D, which is 1,327 acres  
13 for Strazzulla, which is 2,586 acres.

14 Compartment D was originally acquired by the  
15 U.S. Fish and Wildlife Service for snail kites  
16 and -- I'm drawing a blank. I call them  
17 whooping cranes. Sandhill cranes. It's not a  
18 whooping crane. Sandhill cranes. It never  
19 really performed the way it was supposed to  
20 perform. The way it was built, it didn't  
21 retain water. So it's never really performed.  
22 There's still pretty good wildlife habitat, but  
23 it's not really what we had intended for.

24 Strazzulla Marsh is the last pristine,  
25 rain driven -- maybe not the last, but one of

1 the last pristine, rain driven marshes. It  
2 also contains the largest remnant of cypress  
3 swamp. And that cypress swamp starts right  
4 here behind Bedner's, runs up across the Refuge  
5 that we own now through Strazzulla -- I mean  
6 through some County land and into Strazzulla.  
7 This is the last largest remanent of cypress  
8 swamp, contiguous cypress swamp in Palm Beach  
9 County.

10 We have basically two alteratives that  
11 we're kind of looking at and discussing  
12 tonight. The first one is no exchange of land.  
13 So we would keep Compartment D. South Florida  
14 Water Management District would keep  
15 Strazzulla. Alternative B is we would trade.  
16 South Florida Water Management District would  
17 get Compartment D and we would get Strazzulla.

18 The South Florida Water Management  
19 District would like to have Compartment D, and  
20 they're going to use that as part of their  
21 Restoration Strategies Program, and use that  
22 1,300 acres for stormwater treatment,  
23 additional stormwater treatment area.

24 The wildlife in Strazzulla is pretty much  
25 what you see throughout the Everglades.

1           There's mammals, deer, raccoons. There are  
2           hogs in Strazzulla and a little bit of water  
3           fowl. Of course alligators, snail kites, other  
4           hawks and sandhill cranes. I don't know why  
5           I'm having such a bad time with that.

6           So what we're trying to do and Xavier  
7           explained a little bit. We're trying to  
8           combine two meetings. So one meeting is  
9           commenting on the land swap itself, and the  
10          other meeting is kind of assuming that we're  
11          going to get the land swap. That won't be  
12          decided until tomorrow or may be postponed  
13          again. But right now we're scheduled for  
14          tomorrow at the Governing Board meeting.

15          If we do get it, we're trying to do like a  
16          public scoping meeting to see what public uses  
17          the public would like within Strazzulla.

18          So those are the two things we're trying  
19          to accomplish tonight. One is to allow you  
20          guys to comment on the actual land swap itself.  
21          If we have time you can ask questions on the  
22          land swamp. And the second thing is to talk  
23          about any uses that you would like to see. And  
24          this is really open process. I mean, if you  
25          have any use at all that you would like to see

1 in Strazzulla, this would be a good time to  
2 bring it up and discuss it.

3 You're going to have -- so our plan kind  
4 of on that tonight is to have a scoping meeting  
5 coming up with those public uses. We're going  
6 to have to come up with a Public Use Plan and  
7 another environmental assessment. We hope to  
8 have that done by June 30th, and then we'll  
9 have another meeting right around the June 30th  
10 period. And then hopefully we'll take those  
11 comments from that public meeting and then do a  
12 final plan -- or the comment period will end  
13 around July 31st is our target date. And then  
14 hopefully take those comments and come up with  
15 a final plan and publish it. And then have all  
16 that wrapped up by January 29th, 2016.

17 The thing with that is whatever we decide  
18 on we'll still be depending on funding to  
19 implement. If we decide on boardwalks or  
20 trails or whatever, that's pretty much the  
21 process we have. Xavier.

22 MR. CATHEY: Thank you, Rolf. Okay. As I  
23 stated before, at this time we'll allow for the  
24 comments. So as I said before, I'm going to  
25 read these names off. Whenever you hear your

1 name, please just step up to the podium and  
2 your three minutes. Once all these comments  
3 are done, like I said, with the number here  
4 we'll be able to definitely loop back around  
5 and also allow some time to probably do some  
6 questions also.

7 So first up, Michael O'Dell. Is everybody  
8 okay as far as this information? Jay, you can  
9 hit the lights, please, sir. Thank you very  
10 much.

11 MR. O'DELL: Michael O'Dell with the  
12 Village of Wellington representing the Village  
13 here tonight. I have some questions with  
14 regards to this property being utilized. Is it  
15 still the intent -- and I'm asking questions  
16 and I don't know whether you get these answers  
17 here. Will you still retain this as a buffer  
18 area? That's one of the questions I have. All  
19 the readings that I've been able to do, it was  
20 South Florida Water Management District's plan  
21 to use this as a buffer. So is that still part  
22 of your program that you would use it as a  
23 buffer?

24 Another one is the transfer, when you  
25 consider the transfer of this land. The reason

1 I ask that is the Everglades National Park when  
2 it was transferred, it was also considered as a  
3 buffer, but that went away when that transfer  
4 actually occurred. So that raises that  
5 question.

6 South Florida Water Management and the  
7 Everglades Buffer Plan, the East Coast Plan was  
8 also proposing this for water storage. Is that  
9 something that you would still also do? Would  
10 you continue to use it for that purpose?

11 And my next question has to do with  
12 funding. Does the Refuge have the funding  
13 sources to keep any improvements going on  
14 Strazzulla? Rainfall driven as it's supposed  
15 to be as it is right now appears to be somewhat  
16 insufficient to retain the hydro periods that  
17 are currently on place. And you can see that  
18 through the exotic vegetation that someone  
19 taking over at least the southern end of the  
20 property at this point. Willow climbing vine  
21 are already in the southern half and continue  
22 to move forward. And I would assume over time  
23 they'll continue to move northward into that.  
24 So I would expect that there's a fair amount of  
25 dollars need to be spent to keep the exotics

1 under control.

2 Also access to Strazzulla is somewhat  
3 limited. How do you plan on providing access  
4 into the facilities? Knowing that there's only  
5 a TV tower that has some public access to a  
6 private gate community. I guess that's really  
7 all the comments that I have on that.

8 MR. CATHEY: Thank you very much. Cook.

9 MR. COOK: Would you answer a couple of  
10 those questions, particularly access?

11 MR. OLSON: Do we want to do that now?

12 MR. COOK: That gentleman asked pretty  
13 basic questions regarding --

14 MR. OLSON: The idea was to just comment  
15 and then --

16 MR. COOK: Public access. From where  
17 would public access come? I think that's  
18 important to know. Would you be able to have  
19 public access off of the levee that runs there?  
20 That's the question I have. Can you walk in  
21 off the levee?

22 MR. OLSON: You can walk in off the levee.

23 MR. COOK: Where's the law enforcement  
24 guy?

25 MR. OLSON: So are we going to answer

1 questions?

2 MR. COOK: I think that would be  
3 appropriate.

4 MR. OLSON: Does anyone object to that?

5 MR. O'DELL: Would you answer mine as well  
6 then?

7 MR. COOK: That's what we're talking  
8 about. You had some good questions.

9 MR. OLSON: So right now it is mentioned  
10 in our 2000 Comprehensive Conservation Plan,  
11 the management of Strazzulla. Right now it is  
12 pretty locked by private property. The only  
13 way that we would have access today to get into  
14 Strazzulla is to come in Lee Road and then you  
15 would have to walk or bike up the L-40, and  
16 then into the Strazzulla somehow.

17 MR. COOK: Okay.

18 MR. OLSON: Maybe we can make some other  
19 access through boardwalks or something like  
20 that into along in here or something like that.  
21 But right now that would be the only access  
22 that you would have the right to at this time.  
23 Let me just finish.

24 MR. COOK: How far it is from here to  
25 here, half mile, two miles?

1 MR. OLSON: No. More like five or six  
2 miles.

3 MR. COOK: Five or six miles.

4 MR. OLSON: Let me just finish one theme  
5 at a time. We have not really entered like  
6 formal negotiations with the Town of  
7 Wellington. But I mean another option would be  
8 where the old acme pump is or the current acme  
9 pump to kind of come in that way. Access along  
10 this side is kind of blocked by gated  
11 communities. I don't think we're going to get  
12 access through there. There might be something  
13 that we can work out in the future with this  
14 county land down in this area. But access is a  
15 problem for the public, yes.

16 MR. COOK: Sir, did you get your questions  
17 answered?

18 MR. OLSON: We'll come back to him. Ask  
19 your questions and we'll bring Mike back.

20 MR. COOK: The reason I asked that  
21 obviously we've been looking at this piece of  
22 property for a long time. There's some of us  
23 who have had a lifetime of experience on this  
24 piece of property. And it seems an opportunity  
25 in a way to go into the Refuge Management. We

1           spent last night with National Wildlife Refuge  
2           Association people and we're spending a lot of  
3           time in Florida increasing public access to the  
4           Refuges. In our particular case, particularly  
5           hunting access. And we know for a fact that  
6           this place is loaded with deer. And we also  
7           know for a fact that you have to -- give us  
8           permits so that the public is actually not  
9           being able to access the resource. Some of the  
10          adjacent land owners are having a field day  
11          with the game animals that actually live there.

12                 So we're looking forward to the  
13          acquisition. I'll probably speak to it again  
14          as I do at the Governing Board meeting. And I  
15          hope that the public will be able to have  
16          access and that we will put this into the  
17          hunting program. And when you write your plan,  
18          hunting will be listed as one of the public.

19                 We aim high often with hunting access.  
20          But we also understand that this is not a large  
21          piece of property. We also understand it's not  
22          too far from development areas. But it could  
23          at least support some very vigorous bow hunting  
24          at the very least, very least. We know you  
25          have hogs on there. That's another where we do

1 a real favor for the Refuge, getting the hogs  
2 off. Although, you have to pay for it. That  
3 would be like shotgun only type access, because  
4 obviously we're very safety conscious. So I  
5 look forward to this.

6 Now the other question I have is on the  
7 Compartment D. That is outside the levee; is  
8 that correct?

9 MR. OLSON: It is.

10 MR. COOK: It's actually like the Brown  
11 Farms type property; that side. Because I'm  
12 going to have somewhat questions for the  
13 District. Because that land is going to lay  
14 foul for years at least and we ought to get  
15 some public access on that as well. So we see  
16 this as a positive, very, very positive thing.

17 MR. OLSON: So Browns Farm Road comes  
18 right in this area. Like right in this area  
19 somewhere. The levee itself runs right down  
20 that line right there, Newton. So it is on the  
21 west side of the levee.

22 MR. COOK: We think it's very positive.

23 MR. OLSON: Access is probably easier into  
24 Compartment D.

25 MR. COOK: No doubt about that. I can

1           only tell you that the National Wildlife Refuge  
2           of Florida is doing a super job. We just had  
3           an alligator hunting. Very small program, but  
4           a good one. And St. Marks is expanding.  
5           Merritt Island is getting ready to expand. So  
6           we appreciate that very much. And it's  
7           bringing Florida back up to where other states  
8           are. We really appreciate it. Thank you.

9           MR. OLSON: Mr. O'Dell, I guess you can  
10          come back up or if you can ask them from there.  
11          If you'd re-ask your questions, I'd be glad to  
12          try to address them.

13          MR. O'DELL: The first one was does the  
14          Refuge have the ability to still offer to  
15          function in its true property as a buffer?

16          MR. OLSON: So I know that there's a  
17          concern about buffer. And I'm not really sure  
18          what happened with Parks Service. At one time  
19          there was talk about this whole area being a  
20          buffer and there were different things. And I  
21          think that's why the County bought the farm  
22          property just north of Lee Road here. I don't  
23          think that we're really worried about a buffer  
24          anymore. If you're asking are we going to get  
25          Strazzulla and then declare that we want

1 another buffer? I don't think that we're going  
2 to be doing that.

3 MR. O'DELL: That's why I raised the  
4 question about the Everglades. That's  
5 essentially what happens with -- when the  
6 Refuge was taken over down south. They  
7 purchased a property. It was a buffer area.  
8 And then all of a sudden it comes under the  
9 Wildlife Group and now it's part of the park  
10 system. Now there's no buffer for that.  
11 That's part of the concern. We keep moving the  
12 buffer.

13 MR. OLSON: You don't have that concern  
14 now, because there's no way to move a buffer  
15 against homes.

16 MR. O'DELL: The next one is really the  
17 rainfall driven scenario that this has been  
18 talked about. My concern is that after looking  
19 at the property, looking at the aerials, being  
20 out on the property driving through it, I see  
21 the southern half with the Old World climbing  
22 vine and the exotic vegetation taking over. I  
23 see that increasing in the northern half. And  
24 the saw grass that is there. You can see the  
25 different level of saw grass, which shows that

1           there is some evidence of water ponding even at  
2           this time of the year. But water to that  
3           facility would help that exotic activity as  
4           well. Help to reduce those exotics. But I'm  
5           not sure where you would get that from. That's  
6           my concern about, you know, cleaning up the  
7           water and keeping it clean as well. That's  
8           part of the buffering program as well. So  
9           would you look at trying to do something else?

10           MR. OLSON: We're open to all kinds of  
11           suggestions right now. I don't think we're  
12           going to be open to taking untreated water.  
13           That would be one extreme. But there's going  
14           to be a buffer in there somewhere that we would  
15           be willing to address. The Everglades Forever  
16           Act requires water discharging into the  
17           Loxahatchee National Wildlife Refuge at 10  
18           parts per billion. So that would be one  
19           probably all the way up until May.

20           So we were open to ideas there. I don't  
21           know how we would do that. Under certain  
22           scenarios, we would be willing to accept water.  
23           But I'm not sure I totally agree with you on  
24           the Lygodium. Because Lygodium grows in  
25           wetlands and dry areas. So I'm not sure if

1 water would really help us with our Lygodium  
2 problem.

3 MR. O'DELL: There's other --

4 MR. OLSON: Those are native.

5 MR. O'DELL: Not in saw grass areas.

6 MR. OLSON: If it is a rain driven system,  
7 you are going to have dry periods and wet  
8 periods, which can be healthy on some  
9 frequency, but probably not the frequency that  
10 we're getting now. Actually in the entire  
11 cypress marsh. I think you had another  
12 question.

13 MR. O'DELL: Access was my other question.

14 MR. OLSON: Yeah, access. We had talked  
15 briefly totally off the cuff about, you know,  
16 partnering with you guys. Of course that's  
17 just -- I mean, there's no agreement there or  
18 anything like that. But we are open to, you  
19 know, partnering with perhaps the Village of  
20 Wellington if you guys were willing to do that  
21 or the County. Like I told Mr. Cook, access is  
22 going to be a problem to Strazzulla. It's  
23 pretty much surrounded by private land. And,  
24 you know, maybe on some limited things, like if  
25 we did have a hunt, maybe we could allow some

1 vehicles to drive up there. But I don't know  
2 that we would be allowed to have regular  
3 vehicle traffic on the L-40 levee, flood  
4 protection levee. But that's really South  
5 Florida Water Management District's call. I  
6 don't think you're going to see that levee open  
7 in my opinion to vehicle traffic on a routine  
8 basis. And I think you had a question on  
9 funding or something like that.

10 MR. O'DELL: You mentioned earlier you  
11 didn't have much money. But I guess that's  
12 part of problem. Whatever program gets  
13 developed, whether it's maintenance or  
14 improvements or whatever, funding is always  
15 going to be one of your issues. That's what  
16 I've been able to read anyway.

17 MR. OLSON: Yeah, funding should be an  
18 issue with pretty much everyone in this  
19 environment. But we've done a pretty good job  
20 with managing the cypress swam. Logistically,  
21 getting into the cypress swamp is much easier  
22 for treating exotic than the interior. The  
23 pool of contractors is much larger than the  
24 pool of contractors in the interior. So I'm  
25 fairly confident we can get enough money to

1            treat exotics in Strazzulla. We have different  
2            pots of money that we can tap into like -- I  
3            mean we all have different streams. There's  
4            Department of Transportation money for public  
5            use enhancement. There's actually fee money  
6            that we collect and it's collected nationwide  
7            that some of it comes straight to us. Some of  
8            it goes to a pot that we can compete for. But  
9            those are all highly competitive processes. I  
10           mean, I can't say if we got the land within one  
11           year we'd have a boardwalk. But I think we  
12           would have a good shot at a boardwalk.

13                    Congress has actually been very kind to  
14                    the Fish and Wildlife Service once we have a  
15                    structure in in maintaining those structures.  
16                    It hasn't always been that way. Once we have  
17                    something, I'm pretty confident that we'll be  
18                    able to maintain it had.

19                    MR. O'DELL: Thank you.

20                    MR. CATHEY: Bishop Wright, Jr.

21                    MR. WRIGHT: I just want to say that I'm  
22                    definitely in favor of the land swap. I was  
23                    kind of sad when you all lost it. And, you  
24                    know, I know there's probably more access to  
25                    Compartment D as far as getting some kind of

1 recreational basis on it. But we're looking  
2 forward to whatever recreational. We know we  
3 can work some things out. We're not thinking  
4 it's going to be open 24/7 or anything like  
5 that. But we are looking forward to some  
6 limited recreational access in there. And I  
7 think, you know, we'd be open-minded to all of  
8 it. And we're really interested in preserving  
9 the swamp that it is and trying to keep it, you  
10 know, the cypress from being developed, which I  
11 don't see that even if the Water Management  
12 District kept it I would hope. But you see all  
13 this land swapping and all this trading off  
14 partials of land and stuff, and it makes you  
15 realize the government is getting skinny and I  
16 know funding is rough. But I really think we  
17 can get some funding for that. And I'm looking  
18 forward to the land swap honestly, and looking  
19 forward to getting some recreational  
20 opportunities in there.

21 MR. OLSON: Thanks Bishop. We are really  
22 looking to, you know, the public to help us  
23 come up with ideas on specifically what you  
24 guys would like to see with Strazzulla. You  
25 guys may have a better solution to access

1 issues that I can think of. So in this process  
2 we're looking forward to --

3 MR. WRIGHT: We'd like to see some horse  
4 trails in there. We'd like to see some youth  
5 hunts in there. The most recreational  
6 opportunity that we can put in to, you know,  
7 minimize the footprint. That's what we would  
8 like to see.

9 MR. OLSON: Thank you, Bishop.

10 MR. CATHEY: Kay Gates.

11 MS. GATES: Good evening. Kay Gates,  
12 Boynton Beach. And I am a member and an  
13 activist for the Sierra Club. And we support  
14 the land swap. If the Refuge thinks that  
15 that's how they can better manage preserving  
16 and protecting the Refuge. I don't know that  
17 we've commented or thought much about the uses,  
18 but if you were going to do uses for allowing  
19 hunting, I think it should be balanced with  
20 uses for passive tourism.

21 MR. CATHEY: Thank you, Kay.

22 So that concludes the land swap comments.  
23 If you have any comments for the public use  
24 aspect of what you would like to see done,  
25 please come up here. Same thing, I'll call

1 your name and you can come back up. Michael  
2 O'Dell.

3 MR. O'DELL: Again, Mike O'Dell with the  
4 Village of Wellington. As far as uses go,  
5 passive uses, the trail systems opening up to  
6 equestrian uses, things like that would be an  
7 addition that we see to our community. We have  
8 our equestrian population. So that would be  
9 something we would be supportive of.

10 I think the idea of hiking trails. I  
11 noticed in some documents I saw that there were  
12 concepts of some kind of towers where you can  
13 see out, get a visual of different things that  
14 you can look at. Right now in our Section 24,  
15 we have a five-story tower that you can get up  
16 and look around at. And that's very helpful  
17 for people to get a grasp of what's going on  
18 for bird watching and things like that.

19 I think that if there's again some open  
20 water sources and things like that where some  
21 pole boating and kayaking and canoeing type  
22 activities would be available certain times of  
23 the year, those would also be beneficial.

24 MR. CATHEY: Thank you. Cook.

25 MR. COOK: Well, I don't want to be too

1       repetitive. Obviously the first situation we  
2       have to address is access. I do agree that it  
3       would be temporary access up the levee road.  
4       There's not too many levee roads like that  
5       where the public is allowed in 24/7, 365. But  
6       if we had a youth hunt or a quarter hunt, which  
7       is what we're going to have, bow hunt, whatever  
8       it is for those three days period, you'd have  
9       the same opening that you have four o'clock  
10      till like we do with the duck hunts and the  
11      alligator hunts. So we're not creating any new  
12      situations that cause a lot of pain for people.  
13      It's something that is already done, proven,  
14      acceptable, no problems as far as I know.  
15      That's the only thing. I think access is the  
16      biggest problem.

17             So we look forward to all the hiking,  
18      biking. That levee is a great place to bike.  
19      The bird watching, I'll have to tell you, we  
20      love the bird watching. As a duck hunter, I  
21      watch more birds than most birdwatchers.  
22      Incredible opportunity particularly because of  
23      the cypress. Not many places where you can --  
24      actually, this is part of north central Florida  
25      where we are versus the Glades or Big Cypress

1 across the water. Not very many places where  
2 you can actually go in and be in a very large  
3 old stand cypress. That's going to be  
4 fascinating. New to a lot of people.  
5 Something that a lot of people haven't seen. I  
6 don't know that there's enough water for  
7 kayaking, but that would be wonderful. It is  
8 rain driven. But there should be opportunities  
9 where that levee is open for the birders and  
10 the kayakers and it should be managed. It's a  
11 managed access like we're used to. I know I'd  
12 like to take a kayak and take off down through  
13 there. Thank you.

14 MR. CATHEY: Thank you. Bishop Wright,  
15 Jr.

16 MR. WRIGHT: Again, I'd like to echo  
17 pretty much what Newton said. I'd just like to  
18 say we want the most recreational opportunity  
19 that we can get that the access will allow us  
20 to have whether it's passive or consumptive.  
21 We would just like to see access to the  
22 property, because we feel the eyes and the ears  
23 are the people that actually get to go into the  
24 area and look at it and learn to love it, learn  
25 to taste it, learn to feel it, learn to smell

1           it. When you just lock everybody out because  
2           there's no access or anything like that, no one  
3           ever gets to see the true value of the place.  
4           So we'd like to try and get as many users in  
5           there as it will allow and still keep it as  
6           pristine as it is. We're looking for uses is  
7           what we're looking for.

8           MR. CATHEY: Thank you. All right. So  
9           that concludes everybody who filled out a  
10          comment card. So now, yes, we can definitely  
11          open it up for anybody else. Please come up  
12          here one at a time.

13          UNIDENTIFIED SPEAKER: I just have a  
14          question. I've fished L-40 all my life, but  
15          I've never had the luxury of seeing what's on  
16          the other side of it. I don't think I've ever  
17          really -- is this a piece of property that say  
18          somebody could put a kayak on the boat and go  
19          up the L-40, and park their boat and utilize it  
20          to fish just like we do the other side?

21          MR. OLSON: There's not a lot of water.  
22          It's pretty shallow. There's not like a borrow  
23          ditch or something like that. The saw grass  
24          comes up pretty much through the levee itself.

25          UNIDENTIFIED SPEAKER: That's more like

1 the sound end with the grass. So where does  
2 the cypress run up through it?

3 MR. OLSON: So you can see the cypress.  
4 It's this lighter gray, lighter tan area is  
5 probably most likely willow or brush or saw  
6 grass. But you can see these little kind of  
7 brownish mustard color continuing up there;  
8 that's cypress. All this is cypress splashed  
9 in with some marsh. This is all cypress,  
10 contiguous cypress here. This is all cypress  
11 here. So it's kind of this broccoli textured  
12 kind of stuff throughout here.

13 UNIDENTIFIED SPEAKER: I got you.

14 MR. OLSON: Throughout here it's all  
15 cypress with a few little domes scattered out  
16 amongst the other vegetation types.

17 UNIDENTIFIED SPEAKER: Just asking.

18 MR. OLSON: I don't know what the fishing  
19 opportunities are just because it's mostly saw  
20 grass. There's not a lot of like a borrow dish  
21 or something.

22 UNIDENTIFIED SPEAKER: That's why I was  
23 asking if the cypress was more of a strand or  
24 if it was patches.

25 MR. OLSON: The cypress is mostly to the

1 east. The other stuff and the saw grass is to  
2 the west. Now that would be an option. That's  
3 a good thing you brought up. I mean, I don't  
4 see why you couldn't come up in a boat. I know  
5 it's not good for everybody. But you could  
6 anchor there and then potentially put some kind  
7 of facility.

8 UNIDENTIFIED SPEAKER: That's why I'm  
9 asking what the lay of the land is. Trying to  
10 come up with something to, you know, appease.  
11 Because I see where your problem is coming in.  
12 You got a lot of private property backing up to  
13 this piece.

14 MR. OLSON: But the L-40 levee is open  
15 right now to hiking. We're trying to open it  
16 up to biking. So there would be no reason why  
17 tomorrow you couldn't drive your boat up there  
18 and then walk across the levee. So that's a  
19 great option. Thank you for coming up with  
20 that.

21 UNIDENTIFIED SPEAKER: Like I said, I'm  
22 trying to get an idea of what the property is  
23 like.

24 MR. OLSON: Is Bill out there or is he  
25 gone? Calvert. Bill might be able to address

1 a little bit more on if there's actually  
2 fishing opportunities. I really don't think  
3 there's much currently fishing.

4 MR. CATHEY: Kay, you had a question?

5 MS. GATES: I'm looking at this more  
6 carefully studying the map. What's the little  
7 square piece of brown property that's been  
8 blocked off?

9 MR. OLSON: This one here or this one  
10 here?

11 MS. GATES: The top one and the bottom  
12 one.

13 MR. OLSON: I'm not sure why that is cut  
14 out. I'm just guessing, but I think that may  
15 not be owned by the Water Management District.  
16 Do you know Susan?

17 MS. TROKEY: I believe that's private.

18 MR. OLSON: Private property. This area  
19 right here is in order for National Wildlife  
20 Refuge to acquire land, we have to have an  
21 approved acquisition boundary. And for  
22 whatever reason, when this acquisition boundary  
23 was drawn, it was drawn on this yellow line  
24 here. I have no idea why. So we have to  
25 modify the acquisition boundary. That

1	red-hatched area is in the trade. But we're
2	going to have to modify our acquisition
3	boundary to include that.
4	MS. GATES: So it wouldn't be part of the
5	property?
6	MR. OLSON: It would be, yeah. Right now
7	that's just showing that we have to modify the
8	boundary.
9	MS. GATES: And then both of those green
10	areas, that's private property?
11	MR. OLSON: This right here, Kay, is what
12	you're talking about? That is the tower that
13	you see out there. And we're not acquiring the
14	land around the tower. You know, it's a really
15	tall radio and television tower.
16	Bill, there was a question about if there
17	were any fishing. I didn't think off the top
18	of my head if there was really anything deep
19	enough to fish in here. You've been over that
20	area way more than I have. So I thought maybe
21	you could answer that.
22	MR. CALVERT: No. It's mostly saw grass.
23	All this is saw grass up to here. And this is
24	all cypress. There's not much in the way of
25	any lakes or anything back there at all.

1 UNIDENTIFIED SPEAKER: Excuse me, Bill.  
2 That triangle, that was County, right?

3 MR. CALVERT: It's either County or  
4 private. I thought it was private. I know  
5 this is County probably right here. This is  
6 County property. Palm Beach County owns this.  
7 They may. I can look real quick.

8 MR. OLSON: The triangular piece comes up  
9 as state lands.

10 MR. CALVERT: State land. Okay.

11 MR. O'DELL: Do you know why that wouldn't  
12 be in the deal then?

13 MR. OLSON: You would have to ask someone  
14 besides me. I do not know, no. Unless it's  
15 not owned by the South Florida Water Management  
16 District. I'm just guessing at that though.

17 MR. O'DELL: Like I said, it comes up as  
18 trustee land. So it's state owned land.

19 MR. CALVERT: It's not owned by the South  
20 Florida Water Management.

21 MR. OLSON: Right. So, yeah, they don't  
22 own it. So they can't trade it. So I guess if  
23 we wanted to acquire that land, we'd have to  
24 talk to the state. Whatever bureau manages it  
25 in the state.

1 MR. CATHEY: Does anybody else have any  
2 other comments or questions?

3 MR. O'DELL: Who will be -- so the South  
4 Florida Water Management District will be  
5 retaining ownership of the radio tower and the  
6 TV tower lands?

7 MR. OLSON: Susan, do you know that at  
8 all?

9 MS. TROKEY: As far as I know -- well,  
10 it's not an ideal. But I don't know what their  
11 plans are for that.

12 MR. OLSON: I assume it's theirs now.

13 MS. TROKEY: They probably make a lot of  
14 money off of that from the various leases. I  
15 would assume that that's probably the reason  
16 why they're keeping that. Plus, that's not  
17 really compatible with Refuge lands. But I  
18 have no clue what they're going to do with  
19 that.

20 MR. O'DELL: It would be a good source of  
21 money for maintaining it.

22 MR. CATHEY: Kay.

23 MS. GATES: In that same vein, that  
24 private piece of property that's been commented  
25 the County owns. Was that land that they used

1 for -- what do they call that when they buy the  
2 environmental --

3 MS. TROKEY: The one down south?

4 MS. GATES: Yeah, south where they buy to  
5 take environmental. Mitigation.

6 MR. CALVERT: The County has owned that  
7 land since I've been here in 1997, '98.  
8 They've owned that before any of the property  
9 out here was sold.

10 MR. CATHEY: Still open for any questions,  
11 answers, comments, concerns.

12 MR. O'DELL: The only other comment that I  
13 have is this is a little off topic, but to your  
14 access point, the L-40 canal. I've approached  
15 the Water Management District about access into  
16 the STA for biking and hiking. And the comment  
17 was made that the overall trail plan would be  
18 great to create a hiking or biking trail down  
19 the L-40 to tie into this facility here. So it  
20 sounds like at least from my conversations with  
21 the Water Management District that they're open  
22 to the idea of creating some kind of pathway  
23 system to connect their STA down through and  
24 connect to this facility here on Lee Road.

25 MR. OLSON: That is a separate process

1 that we're going through. But Xavier is  
2 working on actually increasing bike access to  
3 the Refuge and hiking access to the Refuge.  
4 We've talked to South Florida Water Management  
5 District and they've indicated that it's  
6 exactly what you said. They would not mind  
7 seeing the whole L-7, 39 and 40 levees open.  
8 We're in the process of opening the L-7 to the  
9 S-6 pump house and then up right now to Acme.

10 There's some issues. It doesn't really  
11 show up on this map too well. But getting  
12 around the pump house, the discharge pump house  
13 of the STA-1 East, we have to come up with some  
14 kind of issue or a bridge or something like  
15 that. So Xavier is writing that into our plan  
16 for that. But I think that that's going to be  
17 farther down the road. The Water Management  
18 District has indicated that they are interested  
19 in opening it to biking and hiking. I'm not  
20 sure about vehicle access would be the key for,  
21 you know, getting people to Strazzulla.

22 MR. CATHEY: So we have another speaker  
23 that just came in. Roy Snyder. If you'd like  
24 to come up to the podium here.

25 MR. SNYDER: Speaking for myself and the

1 part of the Audubon Society of the Everglades,  
2 we all think this is a long time coming and  
3 that finally, finally occurred. We just waited  
4 to get that 46,000 acres south of the lake.  
5 But we'll take whatever we can get and move on  
6 with that. But we thank all of the efforts  
7 everybody has taken. It's taken a lot of  
8 effort and we're glad finally seeing this  
9 coming to fruition. The Audubon Society  
10 supported this from the very beginning.

11 MR. CATHEY: Anymore comments? This is  
12 definitely y'all's time. Please, like me and  
13 Rolf said, anything you may want to see done,  
14 this is the perfect time.

15 UNIDENTIFIED SPEAKER: I speak for the  
16 Audubon Society. We're representing the Board  
17 and we are absolutely thrilled that you're  
18 finally going to get Strazzulla Marsh. Rosa  
19 Durando will really, really be thrilled when I  
20 tell her about it, because she has believed  
21 that it would never occur. But I think the  
22 value to the wildlife and the birds and just  
23 the water quality in general is going to be  
24 just such a big boom to our Refuge that belongs  
25 to all of us, and we think it's great.

1 MR. CATHEY: Is there any final  
2 communications or questions?

3 MR. WRIGHT: Thanks for putting the  
4 meeting together.

5 MR. OLSON: I really do appreciate you  
6 coming out tonight. This will probably  
7 conclude our formal meeting. I wanted to  
8 introduce the staff I had here tonight. If you  
9 want to take advantage while you're here to  
10 talk to them and ask them a hard question or  
11 something, that's good. This is Rebekah  
12 Gibble. She's our Senior Biologist. In the  
13 back if you could identify yourself. Scott  
14 Engstler, our Law Enforcement Officer. Jacob  
15 Tuttle, he's a Law Enforcement Officer. Also  
16 in charge of maintenance and the Public Use  
17 Program. Bill Calvert is our Senior Law  
18 Enforcement Officer. Sara Martinez is our  
19 intern for six months. She's been with us four  
20 months now. Kathy Skaggs is with our Water  
21 Quality Program. Susan Trokey is just visiting  
22 today. She's our realty specialist from Ding  
23 Darling. And Melissa Martin is our Senior  
24 Ecologist with the Everglades Program. And  
25 then Xavier is our -- right now he's in charge

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1 of volunteers and a bunch of other things.  
2 That's really all we had. Sorry, Bill. Bill  
3 Miller is helping me for a few months as the  
4 Assistant Manager. He's actually the Manager  
5 of Hope Sound National Wildlife Refuge, which  
6 is in our complex. So if you have any  
7 questions about Hobe Sound Refuge, you can hit  
8 Bill up. Thank you.

9 MR. CATHEY: As I said, comments are open  
10 until May 15. Please comment until then.  
11 Here's the information. Does anybody need this  
12 information? I can turn off the lights if you  
13 all want to copy it down real quick. Other  
14 than that, thank you all for coming out. We  
15 very much ask appreciate it.

16 MR. OLSON: Xavier and Marcie will be the  
17 two writing the Public Use Plan. So the more  
18 information you can get them on uses. If you  
19 know people that have ideas, have them start  
20 sending them to us. Then we can put them in  
21 our plan and it will just speed things up a  
22 little bit rather than having to change the  
23 plan once we go through the public review  
24 process. But that will go through a formal  
25 public review process. We'll have two shots at

1           that.  
2           MR. CATHEY: Any idea is fair game. So  
3           please give us your ideas. Definitely helps us  
4           out a lot. Thanks you all.  
5           (Thereupon, the meeting concluded at 6:52  
6           P.M.)  
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3	STATE OF FLORIDA )
4	COUNTY OF PALM BEACH )
5	
6	I, TRACY LYN FAZIO, Florida Professional
7	Reporter and Notary Public within and for the State of
8	Florida at Large, duly commissioned and qualified, do
9	hereby certify that pursuant to a notice to take said
10	proceedings heretofore filed, the examination was
11	reduced to writing under my supervision; and that the
12	transcript is a true record of my stenographic notes.
13	IN WITNESS WHEREOF, I have hereunto set my
14	hand and affixed my official seal this 27th day of
15	April, 2015.
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*Tracy Lyn Fazio*

TRACY LYN FAZIO, FPR  
Notary Public, State of  
Florida at Large

## Appendix G: Letters from State Agencies



### FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARJORY STONEMAN DOUGLAS BUILDING  
3900 COMMONWEALTH BOULEVARD  
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

JONATHAN P. STEVERSON  
INTERIM SECRETARY

May 29, 2015

Ms. Marcie Kapsch, Wildlife Biologist  
A.R.M. Loxahatchee National Wildlife Refuge  
U.S. Fish and Wildlife Service  
10216 Lee Road  
Boynton Beach, FL 33473

RE: U.S. Fish and Wildlife Service – Draft Environmental Assessment,  
Land Exchange with the State of Florida for Arthur R. Marshall  
Loxahatchee National Wildlife Refuge – Palm Beach County, Florida.  
SAI # FL201503107222C

Dear Ms. Kapsch:

The Florida State Clearinghouse has coordinated a review of the referenced Draft Environmental Assessment (EA) under the following authorities: Presidential Executive Order 12372; Section 403.061(42), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The Florida Department of Environmental Protection, South Florida Water Management District, Florida Fish and Wildlife Conservation Commission and Florida Department of State submitted comments regarding the Draft EA, all of which (memorandum and letters) are attached hereto, incorporated herein by this reference, and made an integral part of this letter.

Based on the information contained in the Draft EA and enclosed state agency comments, the state has determined that the proposed federal action is consistent with the Florida Coastal Management Program.

Thank you for the opportunity to review the draft document. Should you have any questions regarding this letter, please don't hesitate to contact me at [Lauren.Milligan@dep.state.fl.us](mailto:Lauren.Milligan@dep.state.fl.us) or (850) 245-2170.

Yours sincerely,

Lauren P. Milligan, Coordinator  
Florida State Clearinghouse  
Office of Intergovernmental Programs

[www.dep.state.fl.us](http://www.dep.state.fl.us)

## Memorandum

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**TO:** Florida State Clearinghouse

**THROUGH:** Edward C. Smith, Director  
Office of Ecosystem Projects

**FROM:** Chad Kennedy and Natalie Barfield  
Office of Ecosystem Projects

**DATE:** April 23, 2015

**SUBJECT:** U.S. Fish and Wildlife Service – Draft Environmental Assessment, Land Exchange with the State of Florida for Arthur R. Marshall Loxahatchee National Wildlife Refuge – Palm Beach County, Florida  
SAI # FL201503107222C

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### **Background:**

The purpose of this Environmental Assessment is to evaluate the environmental impacts of a land exchange between the State of Florida and the U.S. Fish and Wildlife Service (Service). This land exchange would provide the State of Florida with 1,327 acres of land to be managed by the South Florida Water Management District to implement a project in the Eastern Flow Path of the Restoration Strategies Regional Water Quality Plan (Restoration Strategies). The Strazulla Marsh conservation lands capture an important transition zone from cypress forest to sawgrass marsh adjacent to the current Refuge management boundary enabling them to meet multiple goals and objectives outlined in the Refuge's Comprehensive Conservation Plan. These goals and objectives include wildlife habitat and population management, habitat monitoring for trust species, resource protection, protection of areas of concern and buffer lands, as well as public use.

### **Comments:**

The proposed land exchange between the State of Florida and the Service is consistent with Florida's planning of Everglades Restoration, the Restoration Strategies (April 27, 2012), and also complies with the Consent Orders, Office of General Counsel # 12-1148 and 12-1149. The Department sincerely appreciates the opportunity to comment. Should you have any questions on the comments provided, please feel free to contact Natalie Barfield at (850) 245-3197.

### **Electronic copies to:**

Ed Smith  
Frank Powell  
Chad Kennedy

Kelli Edson  
Jordan Pugh  
Natalie Barfield



## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

May 28, 2015

Ms. Lauren P. Milligan  
Coordinator, Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard, MS 47  
Tallahassee, FL 32399-3000

**Subject: U.S. Fish and Wildlife Service – Draft Environmental Assessment, Land Exchange with the State of Florida for Arthur R. Marshall Loxahatchee National Wildlife Refuge, Palm Beach County, Florida - SAI # FL201503107222C**

Dear Ms. Milligan:

The South Florida Water Management District (District) recommends and fully supports the proposed land exchange of the District's Strazzulla Marsh property for the U.S. Department of the Interior's Compartment D Snail Farm property to meet the water quality objectives of the District's Restoration Strategies Program. The District initiated the process for the proposed land exchange in a letter from the District to the U.S. Fish and Wildlife Service (FWS) on December 6, 2012 and supports the mutual benefit to the District and the FWS of a fee simple land transaction.

The Snail Farm will be incorporated into the District's STA-1W expansion, and is an ideal location to work in conjunction with the District's existing water quality treatment features. Also it minimizes additional infrastructure needs, increases phosphorus treatment capacity, and assists in meeting state water quality standards for existing flows entering the Everglades. For the FWS, the Strazzulla Marsh would provide additional conservation lands as it is one of the last remaining cypress domes and is an important transition zone from cypress forest to sawgrass marsh on the eastern boundary of the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge).

In addition to supporting the proposed land exchange, the District strongly encourages and supports the FWS in continuing their ongoing public process to develop a management and public use plan for Strazzulla, as outlined in the Draft Environmental Assessment. The District also supports the public use goals and objectives that are outlined in the Refuge's Comprehensive Conservation Plan, developed in 2000.

Thank you for the opportunity to provide input to the Florida State Clearinghouse review of this important step toward Everglades restoration. If you have any questions or comments, please contact Thomas M. Teets, Director, Office of Everglades Policy and Coordination at 561.682.6993.

Sincerely,

Blake C. Guillory, P.E.  
Executive Director

BCG/pv

c: Melissa Martin, USFWS  
Rolf E. Olson, USFWS  
Thomas M. Teets, SFWMD



**Florida Fish and Wildlife Conservation Commission**

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April 20, 2015

**Lauren Milligan**  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard, M.S. 47  
Tallahassee, FL 32399-3000  
[Lauren.Milligan@dep.state.fl.us](mailto:Lauren.Milligan@dep.state.fl.us)

Re: SAI #FL201503107222C, U.S. Fish and Wildlife Service – Draft Environmental Assessment, Land Exchange with the State of Florida for the Arthur R. Marshall Loxahatchee National Wildlife Refuge, Palm Beach County

Dear Ms. Milligan:

Florida Fish and Wildlife Conservation Commission (FWC) staff has coordinated our agency's review of the above-referenced project, and provides the following comments for your consideration in accordance with the National Environmental Policy Act (NEPA).

The U.S. Fish and Wildlife Service (USFWS) has developed a Draft Environmental Assessment (EA) and Section 7 Evaluation to provide a foundation for the management and use of Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge) in Palm Beach County. The proposed action is a land exchange between the State of Florida and the USFWS. The USFWS would convey in fee title a 1,327-acre parcel known as "Compartment D" to the State of Florida to be managed by the South Florida Water Management District (SFWMD). In exchange for Compartment D, the State of Florida would convey in fee title the 2,586-acre Strazzulla Marsh parcel to the USFWS to be managed by the Refuge. Compartment D is located on the western side of the Refuge along the L-7 canal and levee and Strazzulla Marsh is located on the eastern side of the Refuge along the L-40 canal and levee. The proposed land exchange would only transfer land ownership and any future proposed changes to land management of Compartment D or Strazzulla Marsh are not codified in this proposed action and are not analyzed in this EA.

The potential future use of Compartment D includes a plan for SFWMD to use Compartment D as part of its "Restoration Strategies" initiative, which involves a suite of projects that will work in conjunction with the existing Stormwater Treatment Areas to meet a Water Quality Based Effluent Limit for water going into the Everglades Protection Area. However, any future proposals for activities on Compartment D would require additional assessments and reviews. Strazzulla Marsh is included in the Refuge's 2000 Comprehensive Conservation Plan for managing the Refuge. Potential future uses of the Strazzulla Marsh may include opening the marsh to the public on a limited basis, expanding water quality monitoring, and managing for trust species in accordance with the preferred alternative management plan. Future uses for Strazzulla Marsh (following the completion of the proposed land exchange) would need to be reconsidered in relation

Lauren Milligan  
Page 2  
April 20, 2015

to the Refuge's 2000 Comprehensive Conservation Plan or in a new EA or conservation plan.

The transfer of the Strazzulla Marsh to the USFWS provides an opportunity for permanent protection of an important tract of cypress habitat and sawgrass marsh and for this habitat to remain intact and available to support maximum ecological benefits for Everglades' wildlife, including threatened and endangered species. A Section 7 Evaluation (under the Endangered Species Act) was conducted in association with this EA and it was determined that the proposed land exchange was not likely to adversely affect endangered species including Everglade snail kite, wood stork, Florida panther, eastern indigo snake, and Audubon's crested caracara. Additionally, the USFWS (where appropriate) commits to requiring the use of conservation guidelines for the Everglade snail kite, the wood stork, the Florida panther, the eastern indigo snake, and the Audubon's crested caracara in any future consultation under Section 7 for activities that may be proposed in the Compartment D land parcel after the land exchange is completed.

FWC staff has reviewed the EA as well as the Section 7 Evaluation and agrees with the USFWS determination that the proposed land exchange is not likely to adversely affect threatened or endangered species. FWC staff support the land exchange in order to provide protection of Strazzulla Marsh and Florida's fish, wildlife, and habitat resources. Additionally, the FWC supports and promotes recreational use and access as a benefit to the public. We encourage the SFWMD to consider allowing recreational opportunities in Compartment D when appropriate. FWC staff can provide technical assistance on how to enhance recreational opportunities upon request.

We find the proposed evaluation consistent with FWC's authorities under the Coastal Zone Management Act/Florida's Coastal Management Program. If you need any further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or by email at [FWCConservationPlanningServices@MyFWC.com](mailto:FWCConservationPlanningServices@MyFWC.com). If you have specific technical questions regarding the content of this letter, please contact Marissa Krueger by phone at (561) 882-5711 or by email at [Marissa.Krueger@MyFWC.com](mailto:Marissa.Krueger@MyFWC.com).

Sincerely,



Ernest Marks  
Regional Director

em/mnk  
ENV 1-3-2  
Loxahatchee NWR Proposed Land Exchange Draft EA\_20810\_042015

cc: Marcie Kapsch, USFWS, [Marcie\\_Kapsch@fws.gov](mailto:Marcie_Kapsch@fws.gov)



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FLORIDA DEPARTMENT OF STATE

RICK SCOTT Governor

KEN DETZNER Secretary of State

Florida State Clearinghouse Agency Contact and Coordinator (SCH) Attn: Lauren Milligan 3900 Commonwealth Blvd. MS-47 Tallahassee, Florida 32399-3000

March 24, 2015

RE: DHR Project File No.: 2015-1149/ Received by DHR: March 10, 2015 Application No.: SAI FL201503107222C Project: Draft EA, Land Exchange with the State of Florida for Arthur R. Marshall Loxahatchee National Wildlife Refuge -- Palm Beach County

Dear Ms. Milligan,

Our office received and reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended and the National Environmental Policy Act of 1969. The State Historic Preservation Officer is to advise and assist federal agencies when identifying historic properties (archaeological, architectural, and historical resources) listed, or eligible for listing, in the National Register of Historic Places, assessing the project's effects, and considering alternatives to avoid or minimize adverse effects.

Thank you for providing the State Historic Preservation Office the opportunity to comment on the Draft Environmental Assessment for the Arthur R. Marshall Loxahatchee National Wildlife Refuge land exchange project. A review of the Florida Master Site File indicates that no significant archaeological or historical sites are recorded within the project area. Furthermore, because of the nature of this project, it is considered unlikely that historic properties will be affected. Therefore, it is the opinion of this office that the proposed land exchange will have no effect on historic properties listed, or eligible for listing in the National Register of Historic Places, or otherwise of historical or archaeological value.

For any questions concerning our comments, please contact Mary Berman, Historic Sites Specialist, by phone at 850.245.6333 or by electronic mail at Mary.Berman@dos.myflorida.com.

Sincerely,

[Handwritten signature of Robert F. Bendus]

Robert F. Bendus, Director Division of Historical Resources and State Historic Preservation Officer



Division of Historical Resources R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399 850.245.6333 • 850.245.6439 (Fax) dos.myflorida.com/historical/ Promoting Florida's History and Culture VivaFlorida.org

