

CHAPTER SIX

Environmental Review and Analysis

CHAPTER OVERVIEW

The airport environmental review and analysis developed in this chapter outlines several environmental components and several different types of studies performed. As part of the Airport Master Plan we are to review current and future environmental impacts to the airport and surround areas for the next 20-years. These basic reviews include land uses around the airport, a two-day wildlife site visit to visual view types of wildlife attracts that are currently on or surround the airport within 2, 5 and 10-mile radius, another impacts that could pose an issue as we start laying out the Airport Layout Plan, 20-year Airport development.

However, due to concerns by the Sponsors, they requested several additional environmental studies which included a FL Scrub-Jay site assessment, general environmental assessment, wetland delineations with recommendations, Habitat Conversation Plan (HCP) review, coordinate with the County and US Fish and Wildlife Services and update if needed. These studies will be outlined later in this chapter.

ENVIRONMENTAL ACTION PLAN

Existing conditions at X26 were determined using available literature and maps in addition to aerial photographs. FAA Order 1050.1E, *Environmental Impacts and Procedures*, provides guidelines in determining if an Airport project or action will require a categorical exclusion (CE), environmental assessment (EA) or environmental impact statement (EIS) documentation.

ENVIRONMENTAL DOCUMENTATION AND GUIDANCE

As airport improvements from the master plan are initiated, the FAA's Airports District Office (ADO) Environmental Program Manager will determine the required level of documentation for each project. **Figures 6-1 through 6-3** provide flowcharts related to typical environmental documentation requirements: Categorical Exclusion; Environmental Assessment and Environmental Impact Statement.

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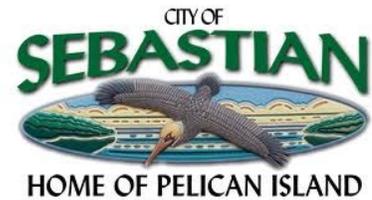
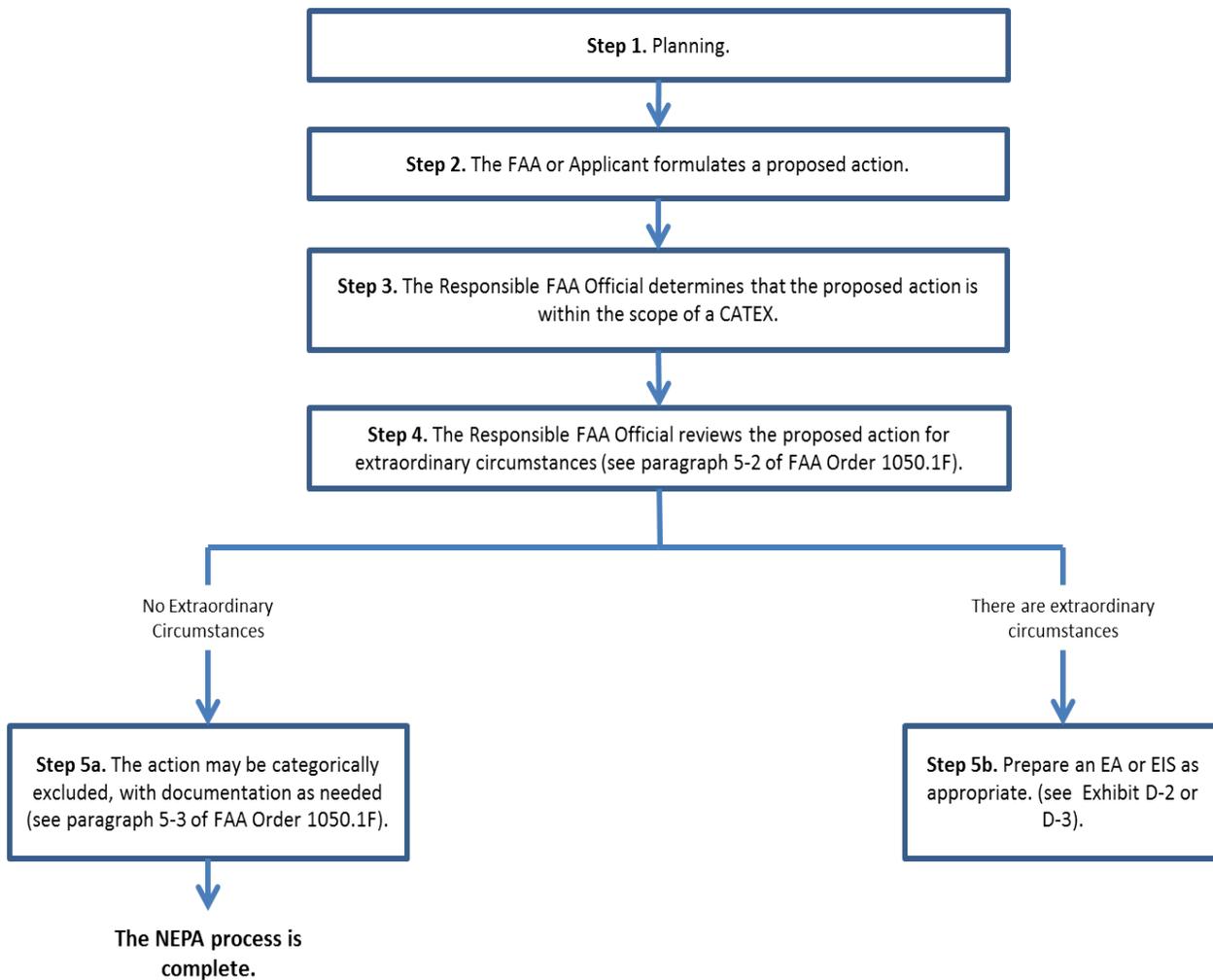
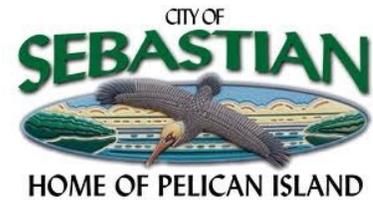


Figure 6-1
Typical Categorical Exclusion Process



Source: FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, Appendix D, 7/16/2015

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“The CATEXs are organized by the following functions:

- Administrative/General: Actions that are administrative or general in nature;
- Certification: Actions concerning issuance of certificates or compliance with certification programs;
- Equipment and Instrumentation: Actions involving installation, repair, or upgrade of equipment or instruments necessary for operations and safety;
- Facility Siting, Construction, and Maintenance: Actions involving acquisition, repair, replacement, maintenance, or upgrading of grounds, infrastructure, buildings, structures, or facilities that generally are minor in nature;
- Procedural: Actions involving establishment, modification, or application of airspace and air traffic procedures; and

Regulatory: Actions involving establishment of, compliance with, or exemptions to, regulatory programs or requirements.”¹

¹ FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, Chapter 4, pg. 5-4, July 16, 2015.

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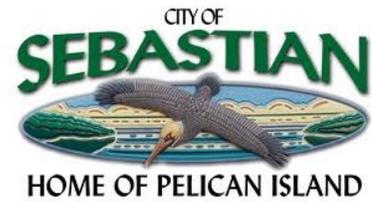
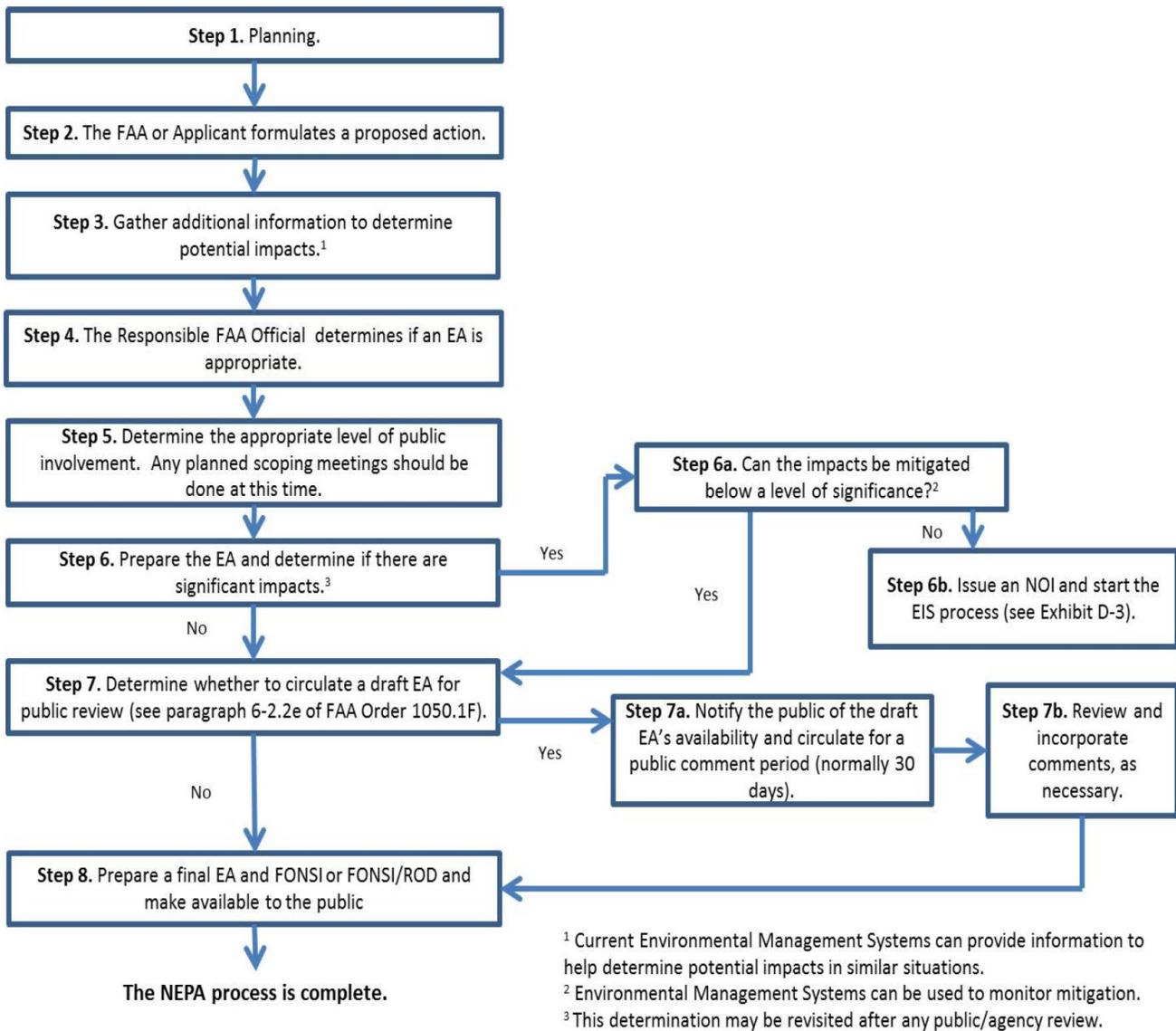


Figure 6-2
Typical Environmental Assessment Process



Source: FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, Appendix D, 7/16/2015

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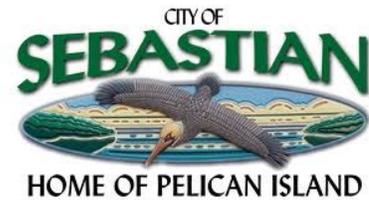
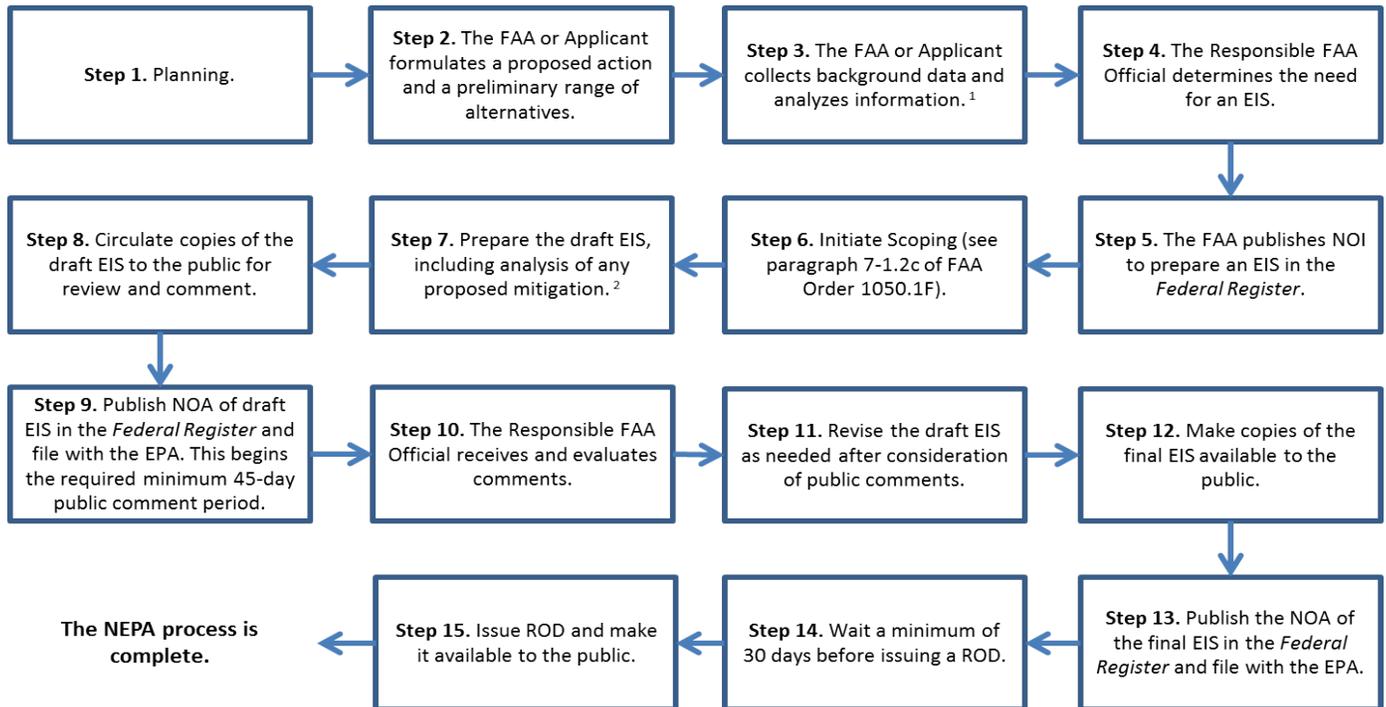


Figure 6-3

Typical Environmental Impact Statement Process ²²



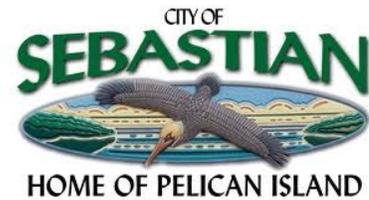
¹ Current Environmental Management Systems can provide information to help determine potential impacts in similar situations.

² Environmental Management Systems can be used to monitor mitigation.

Source: FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, Appendix D, 7/16/2015

²² In November 2014, DOT released guidance on implementing Section 1319 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), 42 U.S.C. § 4332a, which alters the EIS process for DOT actions. Section 1319(a) relates to errata sheets and reflects the CEQ regulations (see 40 CFR § 1503.4(c) and Paragraph 7-1.2(f) of this Order). Section 1319(b) requires DOT, to the maximum extent practicable, to expeditiously develop a single document that consists of a final EIS and a ROD, unless certain conditions exist. The DOT guidance is available at http://www.dot.gov/sites/dot.gov/files/docs/MAP-21_1319_Final_Guidance.pdf. AEE is preparing additional, FAA-specific guidance on implementing Section 1319 of MAP-21. LOBs/SOs are encouraged to work with AGC-600 and AEE-400 to ensure compliance with Section 1319(b).

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Construction projects were identified as either having a low potential for natural resource environmental impacts or moderate to high potential for environmental impacts. **FAA Order 1050.1E**, Chapter 3, Section 310, *Categorical Exclusions for Facility Siting, Construction and Maintenance*, provides a list of categorical exclusions for FAA actions which are considered “generally minor in nature”. However, “An action on the categorically excluded list is not automatically exempted from environmental review under NEPA. The responsible FAA official must also review paragraph 304, *Extraordinary Circumstances*, before finalizing a decision to categorically exclude a proposed action”.² Moderate to high potential for environmental impact may require either an Environmental Assessment (EA) or Environmental Impact Statement (EIS) since they may cause a change in airport operations and/or land use, such as increased use by heavy corporate jets, or are proposed in areas that may contain streams or forested uplands or are located in undeveloped uplands that do not have existing structures, access roads or buildings.

Anticipated permitting requirements are based upon current federal, state, and local environmental regulations. Anticipated environmental permitting associated with planned development at the airport may include:

**TABLE 6-1
ENVIRONMENTAL DOCUMENTATION**

Type of Impact	Permits Typically Required
Wetland, Swales and additional stormwater treatment	US Army Corps of Engineers (USACE) Section 404
Surface Water Impact	USACE Clean Water Act Section 404 Permit
One acre or more of land impacts	National Pollutant Discharge Elimination System (NPDES) Permit
Stormwater Management	Stormwater Pollution Prevention Plan Permit and Stormwater Construction Permit
Endangered Species	US Endangered Species Act Permit

Source: TKDA 2017

Further an environmental survey is recommended for all construction, drainage and lighting projects to identify and delineate wetlands, swales, surface waters, wildlife habitats, as well as

² FAA 1050.1F Desk Reference and FAA Order 1050.1F, July 2015

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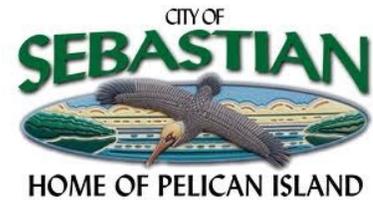
potential native vegetation impacts. Further, staging areas for the stockpiling of construction debris and materials should be selected in order to avoid impacts to these areas. If impacts to one or more of these areas are unavoidable then permitting, relocation and/or mitigation will be required.

An NPDES construction permit is required if the disturbance of greater than one acre of soil is proposed. If the area of land disturbance, including project staging area, is less than five acres, the NPDES permit would be for a small construction activity. If the area of land disturbance is greater than five acres, an NPDES permit for a large construction activity would be required.

If asbestos removal thresholds would be exceeded (removal of 260 linear feet or more of regulated asbestos containing materials (RACM) on pipe, removal of 160 square feet or more of RACM, removal of 35 cubic feet or more of RACM, proper notification should be provided to Florida Department of Environmental Protection (FDEP) prior to removal of RACM.

Lastly, any anticipated development (e.g. runway strengthening or extension) which may initiate changes to an airport's operations and fleet mix, would likely trigger a FAR Part 150 Noise Study and Environmental Assessment/Environmental Impacts Statement depending upon the level of impacts. Such a determination would be made by the Federal Aviation Administration – Airport District's Office based upon established FAA Orders, current guidelines, and potential local impacts. Additional environmental documentation required in conjunction with proposed development includes a Wetland and Protected Species Enhancement Plan, a Stormwater Pollution and Prevention Plan as well as maintaining and periodically updating the Airport Master Stormwater Drainage Plan.

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Wildlife Hazard Site Visit

Because airports typically consist of large areas of open space and may be surrounded by undeveloped properties or property used for grazing or other agricultural uses, they are wildlife attractants. Birds, mammals and reptiles may be a hazard to air navigation when they congregate near the airport operating area (i.e. runways, taxiways, etc.) as well as within the runway approach and departure paths. Since wildlife on and adjacent to an airport can negatively impact aircraft operations, an initial two-day wildlife site visit was included as part of this master plan update as recommended under FAA Grant Assurance 19.

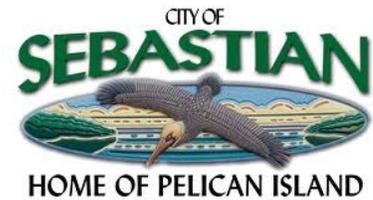
The two-day wildlife site visit was performed by Mr. Gary Exner who is a FAA qualified wildlife biologist and Danielle Gernert (FAA wildlife biologist in training). Mr. Exner and Ms. Gernert conducted daytime wildlife surveys in the morning and evening hours of February 8th - February 10th. The report of their findings based upon existing habitat conditions, observations of current wildlife migration, movement and other knowledge in addition to their interviews with airport staff is provided in of this report.

Although there are only two reported wildlife strikes documented in the FAA Wildlife Strike Databased at X26, there have been unreported bird strikes. According to users and airport staff, bird strikes do occur but have not caused any damage to aircraft.

In addition, Mr. Exner and Ms. Gernert saw many types of bird species, including raptors. In addition, we noticed mammal activity on the airport including small mammals, such as moles, mice, ground squirrels, and rabbits. Although these small mammals do not normally pose a direct hazard to aeronautical activity, their presence may be likely to attract large predatory species of birds and mammals, which can cause damage to aircraft, passenger injury and possible death. Further, since X26 is surrounded by residential and conservation land, the study assumed that other meso-mammals and large mammals such as hogs, coyotes and bobcats may be found within the vicinity of the airport.

The biologists did observe various species of birds and waterfowl within the vicinity of the airport. With the Indian River less than five-miles of the airport's east-side and conservation land on the north and west sides of the airport, biologists noted witnessed birds and waterfowl in the morning coming out of roost, flying over the airport to the river and back again in the evening. Also, noted that a large portion of the airport is surrounded by a very active golf course which in itself is a wildlife attractant. Ponds are known to attract birds, waterfowl and

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other wildlife species, discussions with the owner and operators of the ponds as well as airport management, the Sponsor and on-airport tenants have stated that they have never seen any waterfowl or other birds on or near the ponds.

Since wildlife activity both on and around the airport was observed during the morning and evening site visit, it is recommended that a year-long wildlife hazard assessment be performed to determine the level and type of activity. Based upon the wildlife site assessment, it will be subsequently determined if a Wildlife Hazard Management Plan is required for Sebastian Municipal Airport. With new regulations about wildlife management on the horizon, we feel that X26 would benefit greatly and easily be able to implement a Wildlife Hazard Management Plan.

In the meantime, the initial findings and facility recommendations of the preliminary wildlife site visit used to populate the airport layout plan set as well as 20-year Airport Capital Improvement Program developed as part of this master plan update. Facility recommendations include repairs and maintenance to existing fence, (upgrade to approved wildlife fence) around the perimeter of the airport as well as some habitat modification. It was also recommended that X26 staff utilize a wildlife log to record wildlife observations, dispersal and other efforts to keep wildlife off the airport.

These initial recommendations along with others will be incorporated into recommended airport development. Preliminary cost estimates will be created to support infrastructure improvements including fencing and possible pond relocation, if found viable, as well as costs for the recommended year-long wildlife hazard assessment and potential development of a wildlife hazard management plan and associated airport personnel training. Although FAA Airport Improvement Program (AIP) funding may not be available to support a recommended Wildlife Site Assessment and Management Plan since aircraft operations at X26 are not expected to exceed 75,000 during the twenty-year planning period, funding may be available from other sources including FDOT Aviation, United States Wildlife Services, and the airport sponsor. Anticipated project phasing, costs and anticipated funding analysis is provided in Chapter 9, Airport Implementation Plan.

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Wildlife Hazard Assessment Site Visit Evaluation Data

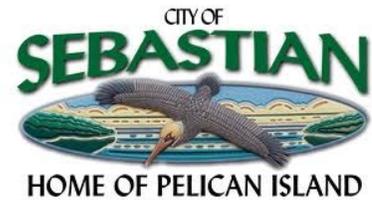
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AC 150/5200-XX (WHSV, WHA, WHMP)

Airport Wildlife Hazard Site Visit Checklist

Airport Name: Sebastian Municipal Airport (X26)		
Date of Site Visit: Feb. 8 – Feb. 10		Time: Morning, Midday and Night
Airport Representative: Scott Baker, Airport Director		
Qualified Airport Wildlife Biologist: Gary Exner / Danielle Gernert (Wildlife Biologist)		
	Yes/No	Comments/Observations
Information review		
Personnel and departments responsible for airport ops	Yes	
Type of airport/annual movements	Yes	
Recent improvements	Yes	
Strike records (in database or airport records)	Yes	
Depredation permits	n/a	Sebastian currently does not have a Migratory Bird Depredation Permit. (Recommended)
Review of habitat management activities		
Mowing	Yes	
Clearing ditches of vegetation	Yes	Some areas need to be addressed for habitat management
Tree removal	Yes	Some trees have been removed; however, in the Master Plan we address additional tree removal along with side-slope vegetation management.
Other		
Review wildlife management activities		
Pyrotechnics	n/a	
Fencing	Yes	Currently 6ft high with 3 strands of barbed wire. Some areas need repair and Wildlife Exclusion Fencing is Recommended for future development.
Wildlife removal (lethal, trapping, etc.)	n/a	
Nest removal	n/a	
Other		
Review Plan (if applicable)	n/a	No management plan
Observe features on airport property that may attract wildlife		
Wetlands	Yes	See Wetland Survey
Ditches	Yes	
Stormwater Treatment Areas	Yes	
Forested/Shrub Areas	Yes	Scrub-Jay on airport property. See Scrub-Jay Assessment
Abandoned Structures	Yes	
Construction Sites/Debris	Yes	Large Dirt Piles

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AC 150/5200-XX (WHSV, WHA, WHMP)

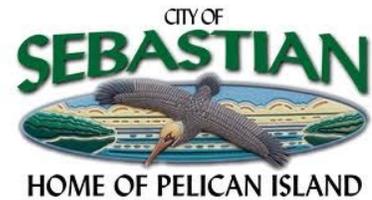
Airport Wildlife Hazard Site Visit Checklist (page 2)

Observe features adjacent to airport property that may attract wildlife (5,000 ft 10,000 ft 5 miles)		
Wetlands	Yes	
Agriculture	No	
Forested/Shrub Areas	Yes	Conversation areas within 5 miles of the Airport
Golf Courses	Yes	On Airport Property. Recommend that the golf course have a habitat management agreement and coordinate with the Airport on best practices.
Other		
Observe and identify wildlife species and/or sign		
List all wildlife observed	Yes	Please list on separate data sheet
List all wildlife sign observed	Yes	Please list on separate data sheet
State and/or Federally Listed Species	Yes	
Site Visit Report		
General airport information	Yes	
Strike data analysis	Yes	Only 2 strikes reported
List of bird/mammal species observed and times of observations	Yes	
State and federal status of species	Yes	
Description of habitat features (natural and man-made) that may attract wildlife on and near the airport	Yes	
Map of airport with location of wildlife attractants on or near airport and observations	Yes	
Recommended actions* for reducing identified wildlife hazards to air carrier operations	n/a	
Recommendation regarding whether a 12-month wildlife hazards assessment is necessary	Yes	Recommended and justified

***Recommendations can include (but are not limited to) the following:**

- Clearing vegetation in ditches to improve drainage and reduce nesting habitat
- Mowing grass to recommended heights
- Tree removal inside the perimeter fence
- Repair breaches in perimeter fence when observed
- Keep vegetation maintained along fencing (clearing and removal as needed)
- Install perching deterrents on signs and lights
- Use pyrotechnics to disperse hazardous wildlife
- Trap and remove hazardous mammal species (beavers, feral hogs, etc.)

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State and Federally Listed Species for Indian River County

State and Federally Listed Species for Indian River County

- Note: Only federally listed plant species are included; "=" means a.k.a.; "SA" means similarity of appearance



Scientific Name	Common Name	State	USFWS	Habitats Used
Amphibians				
<i>Rana capito</i>	Gopher (=crawfish) frog		Sp. Spec. Concern	Longleaf Pine/Turkey Oak Hills, Sand Pine Scrub, Scrubby Flatwoods, Xeric Oak Hammock (uses ephemeral wetlands for breeding)
Birds				
<i>Aphelocoma coerulescens</i>	Florida scrub-jay		Threatened	Sand Pine Scrub and Scrubby Flatwoods
<i>Aramus guarana</i>	Limpkin		Sp. Spec. Concern	Mangrove Swamp, Freshwater Marsh & Ponds, Cypress Swamp, Springs, Slough, Sawgrass Marsh, Ruderal (impoundments, canals, sugarcane, etc.)
<i>Athene cucularia floridana</i>	Florida burrowing owl		Sp. Spec. Concern	N. & S. FL Flatwoods (dry prairie or grassland habitat), Ruderal (primarily pasture)
<i>Egretta caerulea</i>	Little blue heron		Sp. Spec. Concern	N. & S. FL Coastal Strand, Wet Prairie or Slough, Freshwater Marsh & Ponds, Mangrove Swamps, Cypress Swamp, Sawgrass Marsh, Salt Marsh, Shrub Bog & Bay Swamp, Ruderal
<i>Egretta rufescens</i>	Reddish egret		Sp. Spec. Concern	Mangrove Swamp, N. & S. FL Coastal Strand, Salt Marsh
<i>Egretta thula</i>	Snowy egret		Sp. Spec. Concern	N. & S. FL Coastal Strand, Wet Prairie or Slough, Freshwater Marsh & Ponds, Mangrove Swamps, Cypress Swamp, Sawgrass Marsh, Salt Marsh, Shrub Bog & Bay Swamp, Ruderal
<i>Egretta tricolor</i>	Tricolored (=Louisiana) heron		Sp. Spec. Concern	N. & S. FL Coastal Strand, Wet Prairie or Slough, Freshwater Marsh & Ponds, Mangrove Swamps, Cypress Swamp, Sawgrass Marsh, Salt Marsh, Shrub Bog & Bay Swamp, Ruderal
<i>Eudocimus albus</i>	White ibis		Sp. Spec. Concern	N. & S. FL Coastal Strand, Wet Prairie or Slough, Freshwater Marsh & Ponds, Mangrove Swamps, Cypress Swamp, Sawgrass Marsh, Salt Marsh, Shrub Bog & Bay Swamp, Ruderal
<i>Falco peregrinus</i>	Peregrine falcon		Endangered	N. & S. FL Coastal Strands (winter), Various Terrestrial and Ruderal Habitats
<i>Falco sparverius paulus</i>	Southeastern American kestrel		Threatened	Open Forests, Clearings, Ruderal, Various Open Habitats

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State and Federally Listed Species for Indian River County

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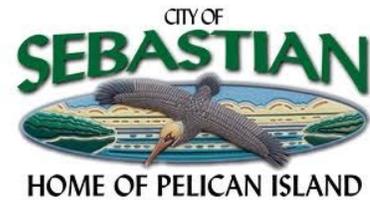
Scientific Name	Common Name	State	USFWS	Habitats Used
<i>Grus canadensis pratensis</i>	Florida sandhill crane	Threatened		N. & S. FL Flatwoods, Wet Prairie or Slough, Dry Prairie, Shallow Freshwater Marsh, Ruderal (pasture, crop fields, etc.)
<i>Haematopus palliatus</i>	American oystercatcher	Sp. Spec. Concern		Exposed Mollusk Reef, N. & S. FL Coastal Strand, Ruderal Areas
<i>Haliaeetus leucocephalus</i>	Bald eagle	Threatened		Nearly throughout (estuarine, lacustrine, riverine, terrestrial); nests are usually near water
<i>Mycteria americana</i>	Wood stork	Endangered	Endangered	N. & S. FL, Everglades & Cabbage Palm Flatwoods, Pitcher Plant Bog, Sloughs, Sawgrass Marsh, Swamp & Bottomland Hardwoods, Cypress Swamp, Freshwater Marsh & Ponds, Salt Marsh, Wetland Hardwood Hammock, Shrub Bog and Bay Swamp, Cuthroat Seeps
<i>Pelecanus occidentalis</i>	Brown pelican	Sp. Spec. Concern		Coastal Islands, Open Water
<i>Platalea ajaja</i>	Roseate spoonbill	Sp. Spec. Concern		Freshwater Marsh & Ponds, Sloughs, Mangrove Swamp, Sawgrass Marsh, Ruderal (impoundments, spoil banks)
<i>Polyborus plancus audubonii</i>	Audubon's crested caracara	Threatened	Threatened	S. FL & Cabbage Palm Flatwoods, Dry Prairie, Wet Prairie or Slough, Wetland Hardwood Hammock, Ruderal (pasture & grasslands)
<i>Rostrhamus sociabilis plumbeus</i>	Everglades snail kite	Endangered	Endang. - Crit. Hab. Designated	S. FL Flatwoods, Sloughs, Sawgrass Marsh, Freshwater Marsh & Ponds, Cypress Swamp
<i>Rynchops niger</i>	Black skimmer	Sp. Spec. Concern		N. FL Coastal Strand, Ruderal (commonly nests in rooftops)
<i>Sterna antillarum</i>	Least tern	Threatened		N. FL Coastal Strand, Ruderal (commonly nests in rooftops)
Fish				
<i>Rivulus marmoratus</i>	Mangrove rivulus; rivulus	Sp. Spec. Concern		Salt Marsh, Mangrove Swamp
Mammals				
<i>Peromyscus polionotus niveiventris</i>	Southeastern beach mouse	Threatened	Threatened	S. FL Coastal Strand
<i>Podomys floridanus</i>	Florida mouse	Sp. Spec. Concern		Longleaf Pine/Turkey Oak Hills, Sand Pine Scrub, Scrubby Flatwoods

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FOTG Section II (D)(1)(c)

December 2007

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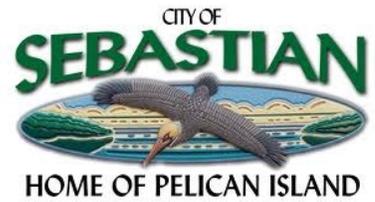


State and Federally Listed Species for Indian River County

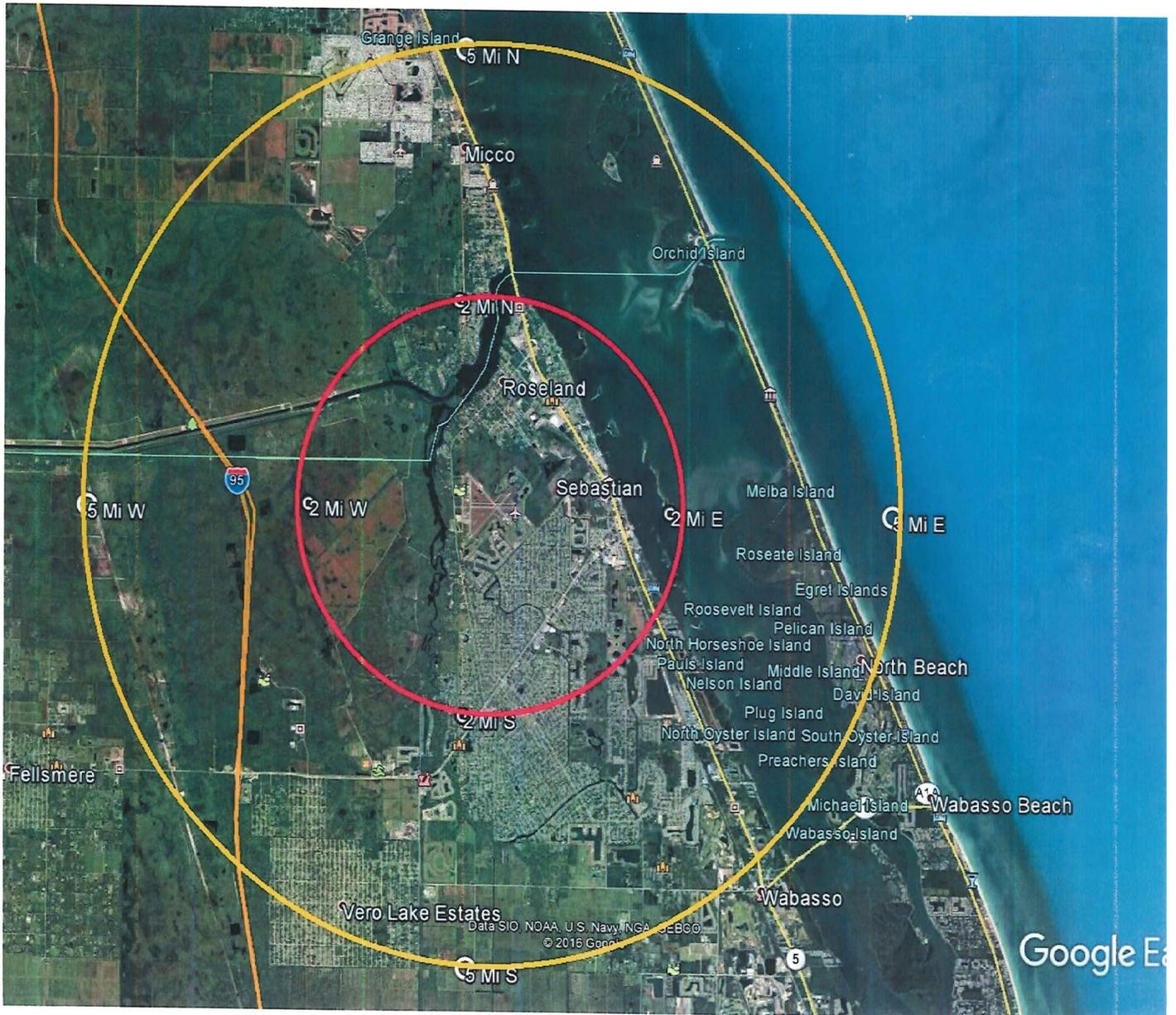
- Note: Only federally listed plant species are included; "=" means a.k.a.; "SA" means similarity of appearance

Scientific Name	Common Name	State	USFWS	Habitats Used
<i>Sciurus niger shermani</i>	Sherman's fox squirrel	Sp. Spec. Concern		N. & S. FL Flatwoods, Longleaf Pine/Turkey Oak Hills, Ruderal
<i>Trichechus manatus</i>	West Indian (=Florida) manatee	Endangered	Endang. - Crit. Hab. Designated	Mangrove Swamp, Seagrass, Nearshore Reef, Alluvial, Blackwater & Spring-run Streams
Plant - Monocots				
<i>Halophila johnsonii</i>	Johnson's seagrass		Threatened	Seagrass
Reptiles				
<i>Alligator mississippiensis</i>	American alligator	Sp. Spec. Concern		All Flatwoods, Bogs, Sloughs, Swamps, Marshes, Sloughs and Perennial Water Bodies
<i>Caretta caretta</i>	Loggerhead turtle	Threatened	Threatened	N. & S. Coastal Strand, Seagrass, Nearshore Reef
<i>Chelonia mydas mydas</i>	Green sea turtle	Endangered	Endangered	N. & S. Coastal Strand, Seagrass, Nearshore Reef
<i>Dermochelys coriacea</i>	Leatherback turtle	Endangered	Endang. - Crit. Hab. Designated	N. & S. Coastal Strand, Seagrass, Nearshore Reef
<i>Drymarchon corais couperi</i>	Eastern indigo snake	Threatened	Threatened	E. indigo snakes use just about all FL Ecol. Communities, Ruderal
<i>Gopherus polyphemus</i>	Gopher tortoise	Sp. Spec. Concern		N. & S. Coastal Strand, Longleaf Pine/Turkey Oak Hills, Sand Pine Scrub, Scrubby Flatwoods, Tropical Hammock, Ruderal
<i>Nerodia clarkii taeniata</i>	Atlantic salt marsh snake	Threatened	Threatened	Salt Marsh, Mangrove Swamp
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	Sp. Spec. Concern		Longleaf Pine/Turkey Oak Hills, Scrubby Flatwoods, Xeric Oak Hammock, Ruderal

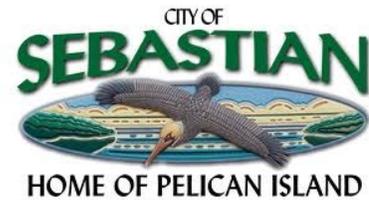
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Map Showing the Observation Radius



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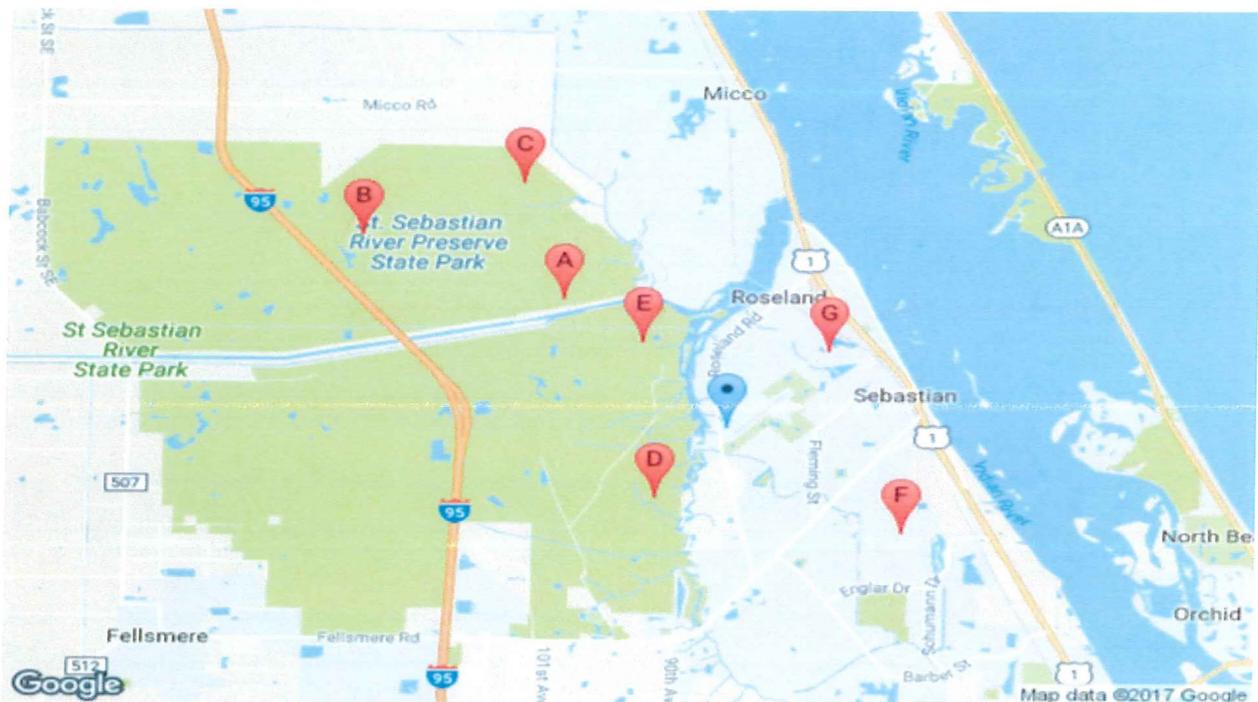
Report and Map Showing Bald Eagle Nest Near the Airport

This report was generated using the bald eagle nest locator at <https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx> on 2/8/2017 8:05:11 PM.

Search Entered: Within 5 miles of 202 Airport Drive, Sebastian, FL (latitude 27.8098294 and longitude -80.501977); All Search Results

7 record(s) were found; 7 record(s) are shown

Bald Eagle Nest Map:



Bald Eagle Nest Data Search Results:

Results per page:

Letter	Nest ID	County	Latitude	Longitude	Township	Range	Section	Gaz Page	Last Known Active	Last Surveyed	Act 11	Act 12	Act 13	Act 14	Act 15	Dist. (Mi)
A	BE014	Brevard	27 50.12	80 31.87	30S	38E	00	96	2012	2012	*	Y	*	*	*	2.51
B	BE035	Brevard	27 50.89	80 34.00	30S	38E	00	96	2012	2012	*	Y	*	*	*	4.76
C	BE043	Brevard	27 51.50	80 32.30	30S	38E	00	96	2002	2012	*	-	*	*	*	4.02
D	IN001	Indian River	27 47.74	80 30.88	30S	38E	00	96	2014	2014	*	Y	*	Y	*	1.25
E	IN004	Indian River	27 49.61	80 31.03	30S	38E	00	96	2014	2014	*	Y	*	Y	*	1.50
F	IN011	Indian River	27 47.32	80 28.27	31S	39E	18	96	2012	2014	*	Y	*	N	*	2.38
G	IN017	Indian River	27 49.50	80 29.05	30S	38E	00	96	0	2014	*	*	*	U	*	1.51

"Y" denotes an active nest
 "N" denotes an inactive nest
 "-" denotes an unobserved nest
 "U" denotes a nest that was visited but status was undetermined
 "*" denotes a nest that was not surveyed

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Wildlife Hazard Daily Inspection Forms

Wildlife Hazard Assessment Report

Date: February 10, 2017

Observer: Gary Exner/Danielle Gernert/Kristie Anderson

Time	Location	Weather	Animal/Species	Activity	Action Taken
Early AM	Inside AOA	Cool – Partly Cloudy	Cattle Egrets (5)	Foraging	
		Cool – Partly Cloudy	Crows (8)	Flying	
		Cool – Partly Cloudy	3 Active Gopher Tortoise Borrows		
	Outside AOA – 2 miles	Cool – Partly Cloudy	Kill Deer (3)	Foraging	
		Cool – Partly Cloudy	Osprey (2)	Flying	
		Cool – Partly Cloudy	White Pelicans (25-30)	In the Water	
		Cool – Partly Cloudy	Sand Hill Cranes	Foraging on Golf Course	
		Cool – Partly Cloudy	Bald Eagles (1 Mature & 1 Immature)	Flying	
		Cool – Partly Cloudy	Great Heron	Foraging	
Midday	Inside AOA	Cool – Partly Cloudy	Cattle Egrets (5)	Foraging	
	Outside AOA – 2 miles	Cool – Partly Cloudy	Sea gulls	Flying	
	Outside AOA – 5 miles	Cool – Partly Cloudy	Osprey (2)	Flying	
Evening	Inside AOA	Cool – Partly Cloudy	Kill Deer (3)	Foraging	
		Cool – Partly Cloudy	Night Hawk	Flying	
	Outside AOA – 2 miles	Cool – Partly Cloudy	Raccoon (3)	walking	
	Outside AOA – 5 miles	Cool – Partly Cloudy	Deer (4)	foraging	

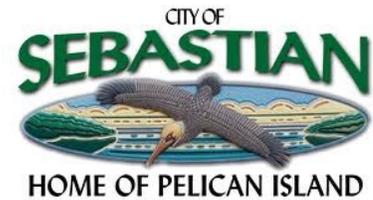
Date: February 9, 2017

Observer: Gary Exner/Danielle Gernert/Kristie Anderson

Time	Location	Weather	Animal/Species	Activity	Action Taken
Early AM	Inside AOA	Cool	Cattle Egrets (8)	Foraging	
		Cool	Tree Swallows (1)		
		Cool	3 Active Gopher Tortoise Borrows		
		Cool	Palm Warbler (3)	Flying	
		Cool	Kill Deer (7)	Foraging	
		Cool	Mocking Birds (2)	Flying	
		Cool	Hawks (2) - Flying and Nesting in Trees on Golf Course Next to AOA Fence Line		
		Cool	Sand Hill Cranes	Foraging on Golf Course	
	Outside AOA – 5 miles	Cool	Bald Eagles (1 Mature & 1 Immature)	Flying	
		Cool	2 Vultures	Flying	
		Cool	Cattle Egrets (5)	Foraging	
Midday	Inside AOA	Cool	Sea gulls	Flying	
	Outside AOA – 2 miles	Cool	Bald Eagles (1 Mature & 1 Immature)	Flying	
Evening	Inside AOA	Cool	Kill Deer (3)	Foraging	
		Cool	Night Hawk	Flying	
	Outside AOA – 2 miles	Cool	Raccoon	walking	
	Outside AOA – 5 miles	Cool	Deer (1)		

Wildlife Hazard Daily Inspection Notes of Concern

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- Muck with snails
- Various bird prints in muck
- Grass within AOA cut to short
- Trees and vegetation to close to fence
- Large body of water with muck and animal prints
- Several large dirt piles within the AOA allowing for birds to perch

Florida Scrub-Jay Assessment

Florida Scrub-Jay General Survey Guidelines and Protocols

(Updates 08/24/2007 - 05/02/2016 office address only)

Adapted from: *J.W. Fitzpatrick, G.E. Woolfenden and M.T. Kopeny. 1991. Ecology and development-related habitat requirements of the Florida scrub-jay (Aphelocoma coerulescens). Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program Technical Report No. 8. Tallahassee, FL. 49pp.*

The most effective method for surveying a site for Florida scrub-jays is to traverse the area systematically, using a high quality tape recording of Florida scrub-jay territorial scolding in an attempt to attract the jays. The recording should include clear examples of all typical territorial scolds, including the female "hiccup" call. Vocalizations are available by contacting:

Macaulay Library
Cornell Lab of Ornithology
159 Sapsucker Rd.
Ithaca, NY 14850

Contact them via email [by clicking here](#) or visit them online at: <http://birds.cornell.edu>

Map plant communities either on a 7.5 foot U.S. Geological Survey (USGS) topographic map or an aerial photograph at a scale of no more than 400 feet per inch. The vegetation map must show all forms of existing development. On the vegetation map, establish parallel line transects with playback stations along each transect. Space the transects and playback stations so that all different scrub types will be sampled for jays (i.e., so that the taped calls will be effectively broadcast across areas of concern). These scrub types should include not only the more "

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classic" xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, and sand pine scrub, but should also include:

- pine-mesic oak
- xeric oak
- sand live oak
- improved, unimproved, and woodland pastures;
- citrus groves;
- rangeland;
- pine flat woods;
- longleaf pine xeric oak;
- sand pine;
- sand pine plantations;
- forest regeneration areas;
- sand other than beaches;
- disturbed rural land in transition without positive indicators of intended activity; and disturbed burned areas.

The presence of scrub oaks, no matter how sparsely distributed, is the key indicator of " scrub" habitat.

Distances between transects, and between stations along transects, depend on many factors, including power of the speaker used for broadcasting the calls, topography of the site, and the density of the surrounding vegetation. Adequate spacing between transects can be estimated roughly as the distance at which a person listening to the tape directly in front of the speaker perceives the " bird" to be no more than about 100 meters away. A distance of 100 to 200 meters between transects and between stations is generally adequate when using a good-quality, hand-held cassette player broadcasting at full volume.

Surveys should be carried out on calm, clear days about one hour after sunrise, and should terminate before midday heat or wind. Surveys should not be conducted in winds stronger than a moderate breeze (5-8 mph), in mist or fog, or in precipitation exceeding a light, intermittent drizzle. Heat and especially wind lowers the tendency for jays to respond to distant territorial scolds, and wind reduces the distance over which recordings can be heard. Jays are also reluctant to fly on windy days regardless of hour or season. Surveys also should NOT be conducted if accipiters or other scrub-jay predators are present in the area; in the event this is the case, the surveyor should either wait until the predator is gone or come back on another day.

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Surveys may be conducted anytime between March 1 through October 31. However, ideal survey periods include: 1) spring (especially March), 2) fall (September and October), when territorial displays are most frequent and vigorous, and 3) midsummer (July) when young of the year are independent but still distinguishable by plumage. The poorest times of the year to survey are late winter, when jays are most likely to fly far for food, and late spring when the young are quiet and the adults are occupied with molt and feeding fledglings.

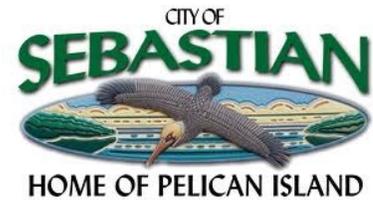
Transects may be driven or walked. If driven, step out or stand atop the vehicle at each playback station. Broadcast the calls at each station for at least 1 minute in all four directions around the playback station, emphasizing any direction in which low-growing oak scrub is the predominant vegetation. On the vegetation map, plot the locations and indicate group size of all Florida scrub-jays where they are first seen or heard. Distinguish adult-plumaged jays from juvenile-plumaged jays whenever possible.

At localities with car trails, large areas of scrub can be surveyed with a vehicle in one day. On foot, the process is more laborious because of the relatively large size of territories (often 10 to 40 acres). Once a group is located, stop broadcasting at that station. Remaining at this station briefly should result in the assembly of the entire group. This allows one to estimate group size and, if done during the midsummer, to distinguish young of the year from adults.

Sometimes two or more groups will be attracted to one station, usually from different directions. Observers should be careful, therefore, to plot each group where it was first spotted or heard, not at the site to which the jays were attracted. In rare circumstances, especially at sites where numerous groups congregate at artificial food or water sources, it may be difficult to differentiate groups. This is especially true where jays have become habituated and tame to human approach. Again, in such cases careful observation is extremely important. Studies of such congregations using color-marked jays have confirmed that almost always they consist of members of different family groups. Often they may have crossed several territory boundaries to reach the neutral feeding or drinking areas. The result gives a false impression of extremely high jay density.

It is essential that the subject area be surveyed as often as necessary (for a minimum of 5 days) to establish an accurate count of jay groups and territorial boundaries. If more than 8 to 10 jays are encountered at a single playback station during a fall or spring survey period, the jays at this site should be monitored carefully over several visits and different times of day. Numbers will shift as groups arrive and depart. Often it is possible to watch where the jays come from or return to as a means of determining how many groups are represented. For determining territorial boundaries, it is essential that the surveyor be familiar with different types of behavior exhibited by scrub-jays. Territorial boundaries may be most accurately predicted through a combination of observing scrub-jays and listening for territorial behavior (in the case

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where several families of scrub-jays exist in contiguous habitat) or by including habitat suitable for occupation by scrub-jays within a territorial boundary (in the case where a family of scrub-jays is somewhat isolated from other groups). If a question exists as to how many groups of scrub-jays are onsite, or where to draw territorial boundaries, it is strongly recommended that the U.S. Fish and Wildlife Service receive permission from the land owner to conduct an independent survey onsite.

The key end products of this procedure are: (1) a complete count of all jay groups onsite and (2) an approximate territory map or home range center for each group. Provide the U.S. Fish and Wildlife Service with a final report that includes the following, as applicable:

A. An information sheet including:

- Dates and starting and ending times of all surveys conducted.
- Weather conditions during all surveys, including average temperature, wind speed and direction, visibility, and precipitation.
- Total number of jay groups found, number of jays in each group and number of juvenile-plumaged jays in each of these groups.

B. An aerial photograph or vegetation map depicting:

- The entire area of interest.
- Transect lines and playback stations.
- Locations of all jays seen or heard while conducting the survey or at any other time, including flight direction.
- Approximate suspected territory boundaries between jay groups or suspected home range centers for each group.

Mail Scrub-jay survey reports to:

[North Florida Counties](#)

Scrub-Jay Survey
U.S. Fish and Wildlife Service
7915 Baymeadows Way, Suite 200
Jacksonville , FL 32256-7517

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South Florida Counties

Scrub-Jay Survey
U.S. Fish and Wildlife Service
1339 20 th St.
Vero Beach, FL 32960-3559

Scrub-Jay Surveyed Areas

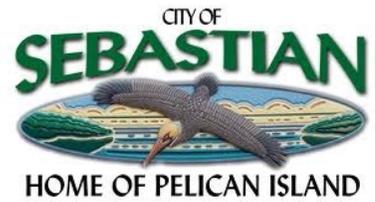
Survey Days: Sunday May 7, 2016 - Thursday May 11, 2016

Time: 6:30am – noon each day.

Area 1 is near the conservation area with reported current Jay population, we are looking for birds in number, nesting, feeding and flying. These birds maybe banded, if so we need to try to get band numbers so I can report this active back to the county and include in the site visit daily reports.

Area 2 is totally cleared and last monitored no birds on the site, just doing this as a formality so that we have it documented that this area is not active.

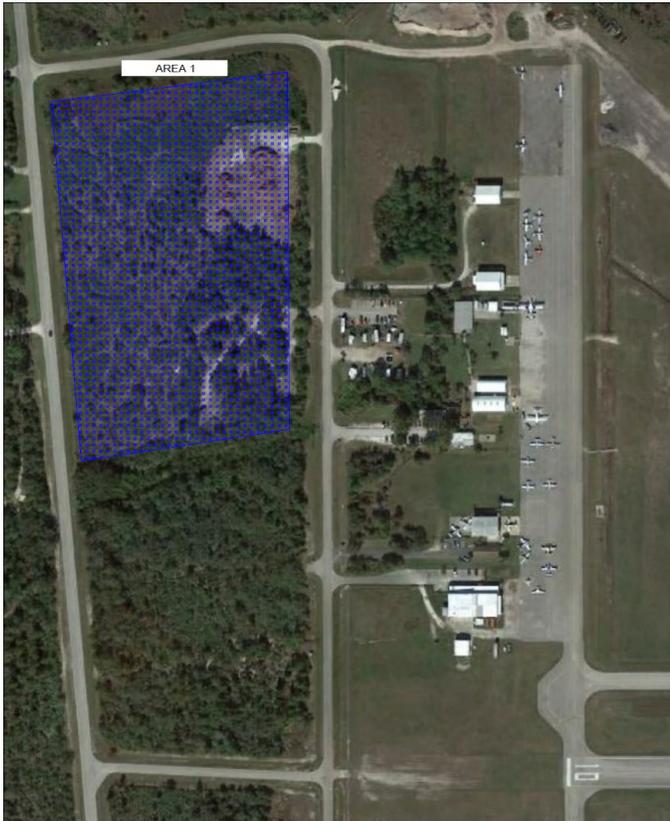
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We did not enter the AOA during these visits as both locations are outside the fence.

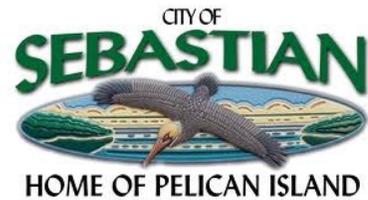
Area 1

Area 2



Observation Points for Area 1

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FLORIDA SCRUB JAY SURVEY

SEBASTIAN MUNICIPAL AIRPORT – WEST STUDY AREA 5/8/2017

Approximate Range Limits identified per surveys 5/7/2017 and 5/8/2017.

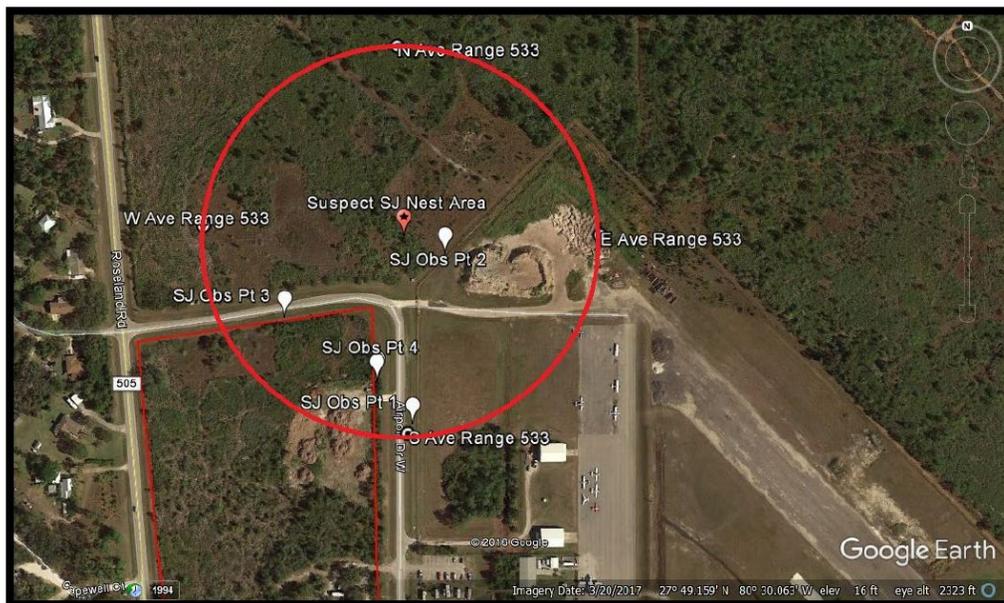
Degrees-Minutes.Minutes

Ops. Pt. 1- S.E. 27° 49.107'N, 80° 30.112' W. South along the AOA fence.

Ops. Pt. 2- N.E. 27° 49.182'N, 80° 30.092' W. North along the AOA fence north of Gate.

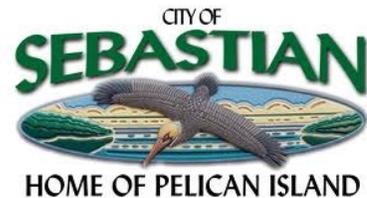
Ops. Pt. 3- N.E. 27° 49.155'N, 80° 30.173' W. West along Airport Road- south side.

Ops. Pt. 4- N.E. 27° 49.127'N, 80° 30.127' W. West side of Airport Road north of Mulch Gate.



APPROXIMATE RANGE FOR POSSIBLE SINGLE FLORIDA SCRUB JAY COLONY

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Sebastian Airport Scrub Jay Survey Sunday, May 8, 2017 - Thursday, May 11, 2017

Initials of Observer: GE/DG/KA

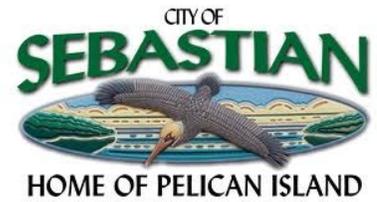
Site Location	Date	Start Time	End Time	Average Temp.	Wind Speed	Wind Direction	Visibility	Precipitation
1	5/11/17	6:30AM	12:00pm	60° 75°	3mph	WSW	Clear	0

Total Number of Jay Groups	Number of Jays in Each Group	Number of Juvenile Plumaged Jays in Each Group	Jay Activity	Jay Band Number	Additional Information
1	2	0	Pair FY/FG	photos	Pair in photos
					Made responded to calls till 8:22am

Activity: Flying - FY, Feeding - FG, Nesting - NG, Perching - PG

Areas 1 is part of the current incidental take permit and is able to be developed in the future. This area is home to gopher tortoise populations (medium to high). During the planning phase of development, a plan needs to be in place as to how and where these animals will be removed and relocated. Permits will be required.

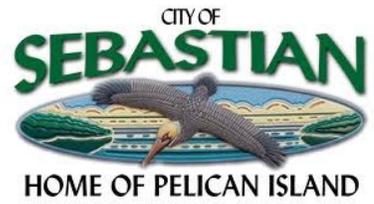
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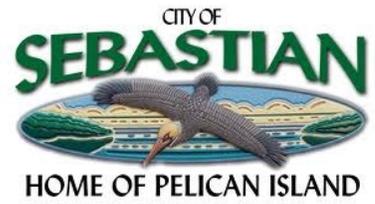
Photos During Daily Site Visits (Area 1)



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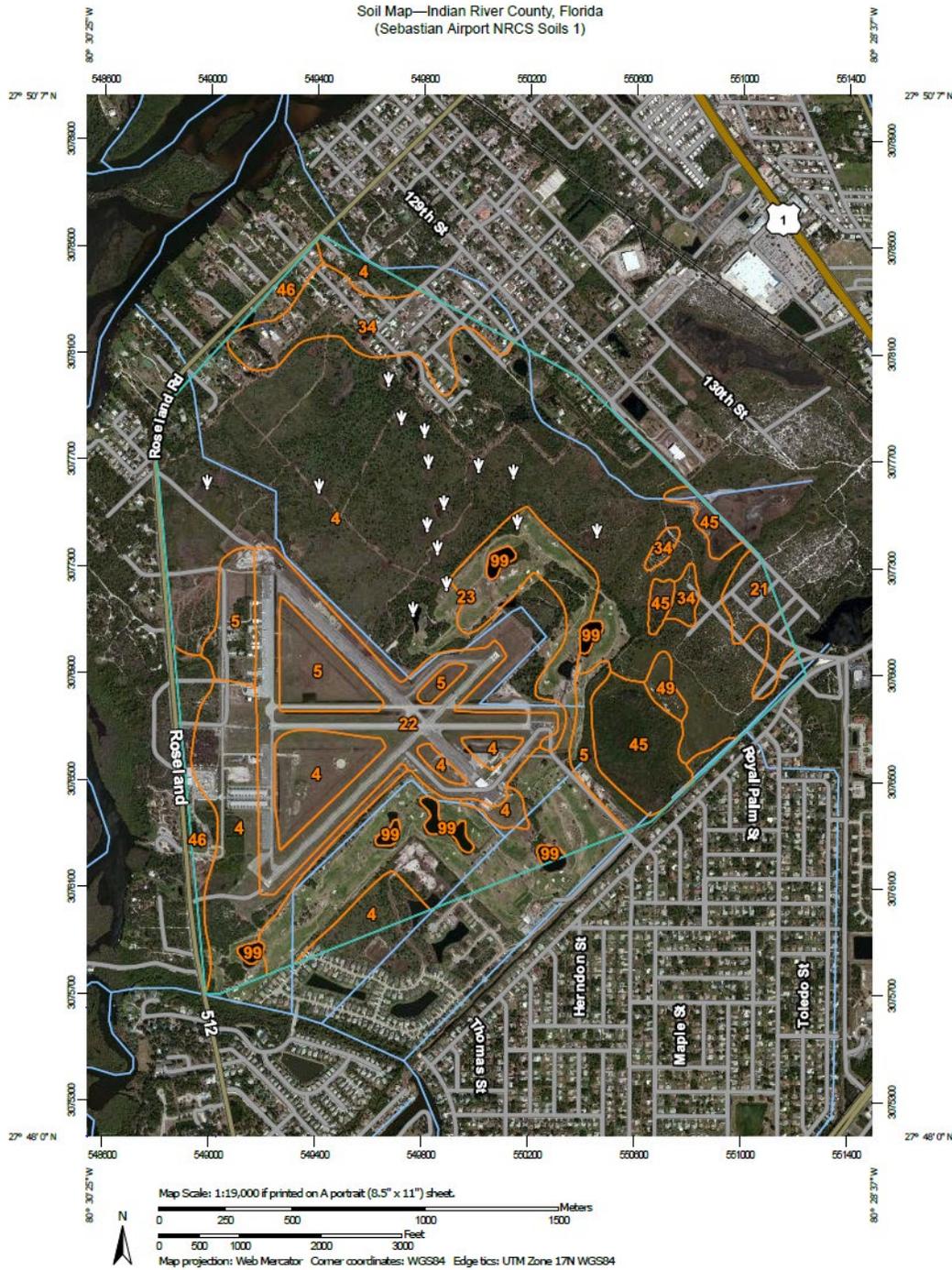
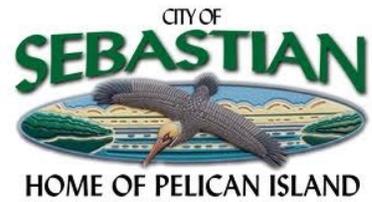


Wetland Delineations and Recommendations

The TKDA team along with Gary Exner (Advantage Consulting) conducted a wetland delineation site survey. Site survey was completed August 30, 2017 – September 1, 2017. The team using the map from the U.S. Fish and Wildlife Services (USFWS) National Wetlands Database to identify potential wetland locations and determine if in fact a wetland existed as noted by USFWS. A total of 7 potential wetlands were identified and investigated, below are the areas in question and determinations of the finds at each location. All guidelines from The Florida Wetland Delineation Manual were followed as each site was surveyed.



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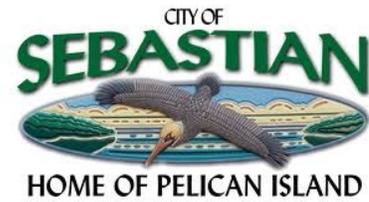


USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

2/8/2017 Page 1 of 3

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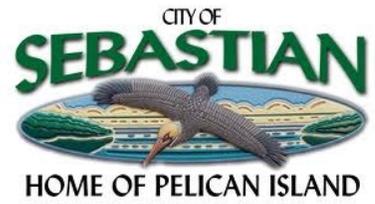
Soil Map—Indian River County, Florida
(Sebastian Airport NRCS Soils 1)

MAP LEGEND		MAP INFORMATION	
Area of Interest (AOI)	Area of Interest (AOI)	Spoil Area	The soil surveys that comprise your AOI were mapped at 1:20,000. Please rely on the bar scale on each map sheet for map measurements.
Soils	Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points	Stony Spot Very Stony Spot Wet Spot Other Special Line Features	
Special Point Features	Blowout Borrow Pit Clay Spot Closed Depression Gravel Pit Gravelly Spot Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot	Water Features Streams and Canals	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Indian River County, Florida Survey Area Data: Version 15, Sep 16, 2016 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Mar 12, 2011—Mar 13, 2011 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
		Transportation Rails Interstate Highways US Routes Major Roads Local Roads Background Aerial Photography	

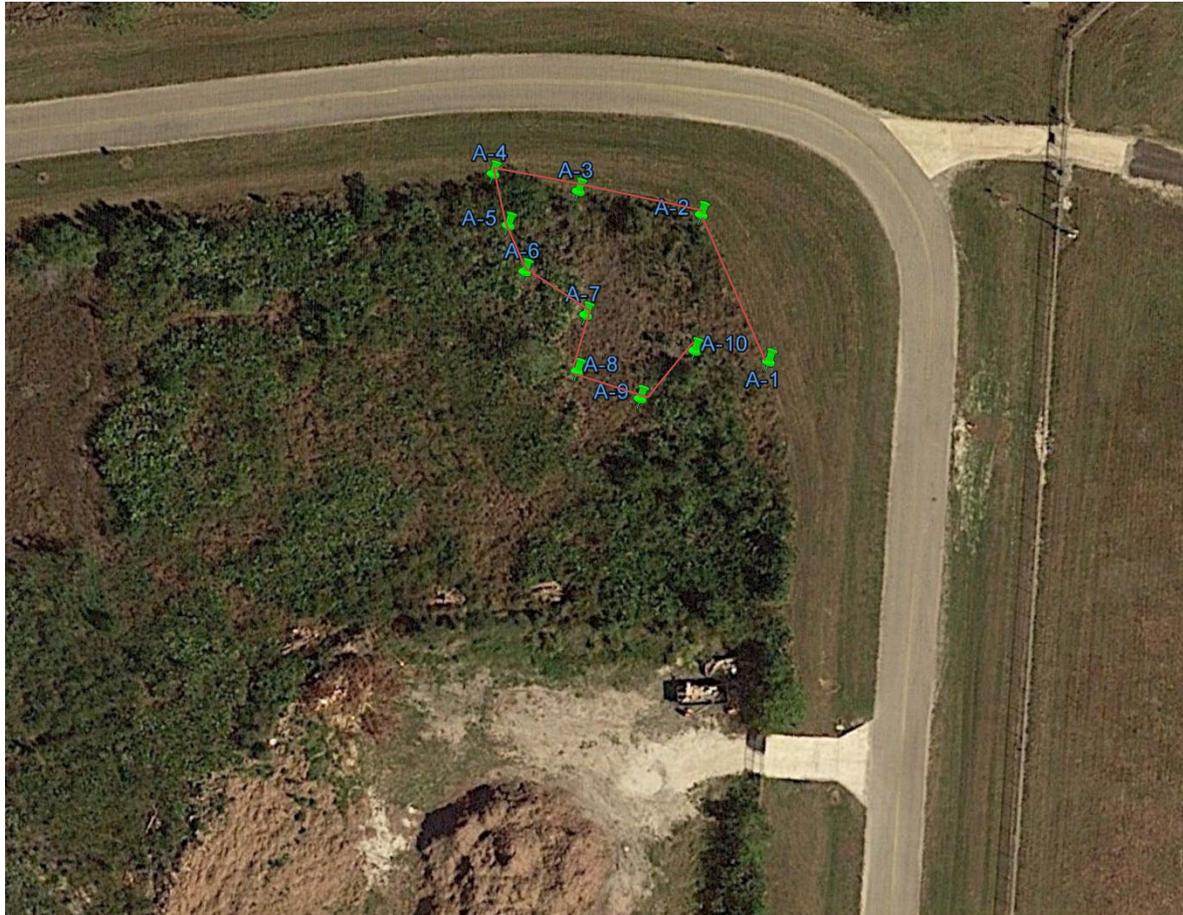
Map Unit Legend

Indian River County, Florida (FL061)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Immokalee fine sand	619.9	56.9%
5	Myakka-Myakka, wet, fine sands, 0 to 2 percent slopes	61.8	5.7%
21	Pomello sand, 0 to 5 percent slopes	17.1	1.6%
22	Urban land	109.1	10.0%
23	Arents, 0 to 5 percent slopes	138.5	12.7%
34	Satellite fine sand	56.6	5.2%
45	Myakka fine sand, frequently ponded, 0 to 1 percent slopes	43.1	4.0%
46	Orsino fine sand, 0 to 5 percent slopes	27.0	2.5%
49	Pompano fine sand, 0 to 2 percent slopes	5.3	0.5%
99	Water	11.1	1.0%
Totals for Area of Interest		1,089.3	100.0%

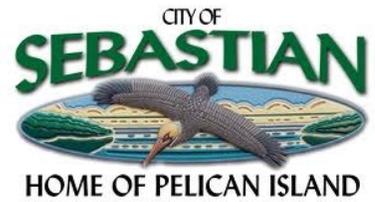
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Site A:



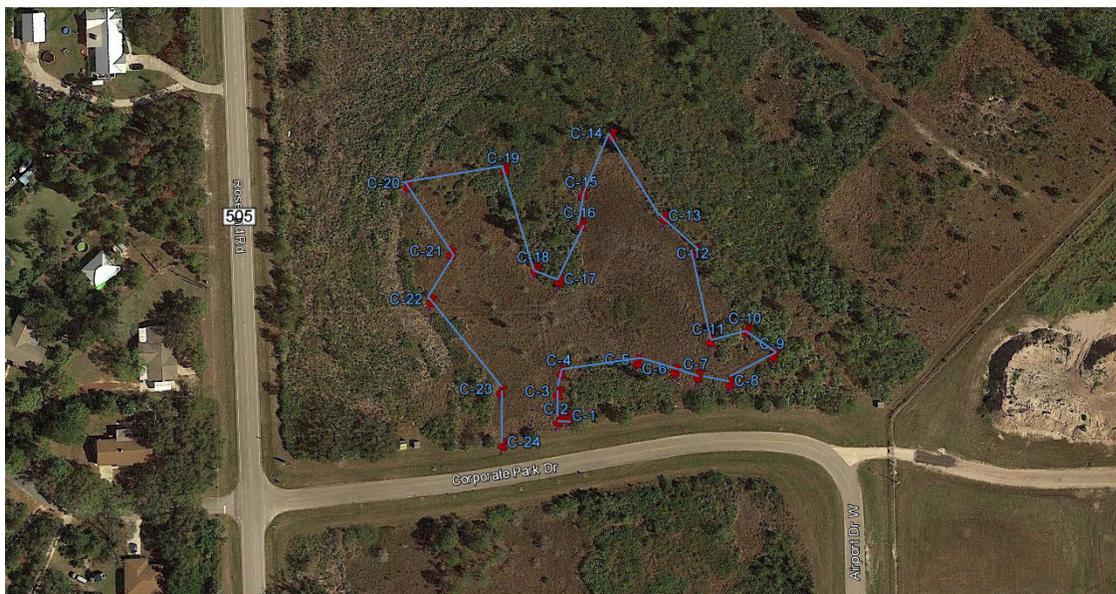
Sebastian Municipal Airport Master Plan Update



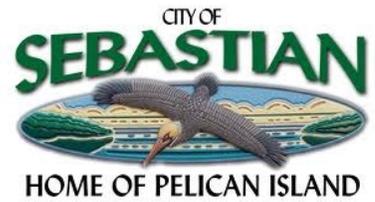
Site B:



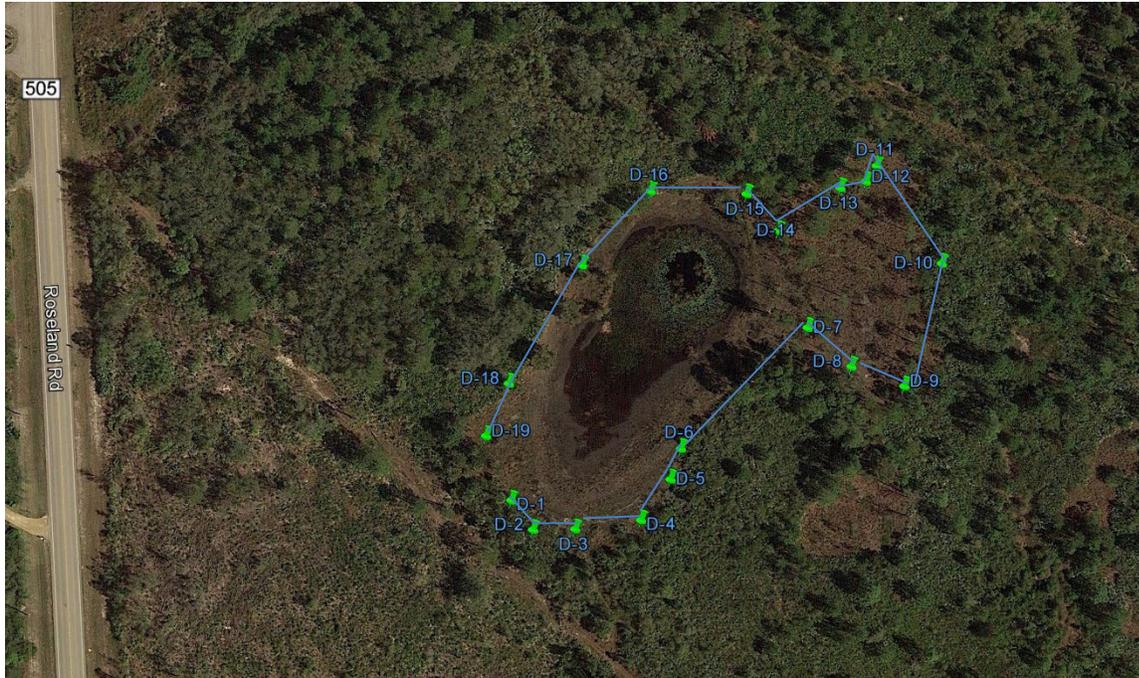
Site C:



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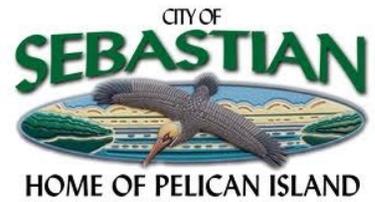
Site D:



Site E:



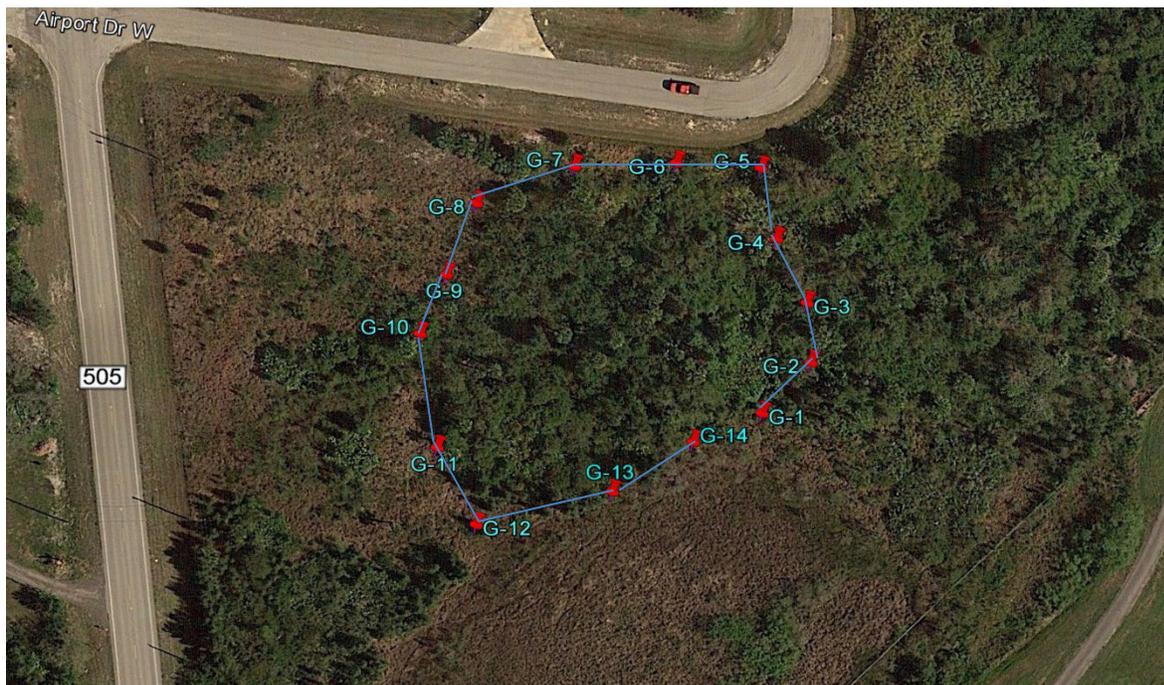
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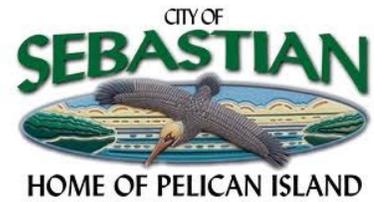
Site F:



Site G:



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Wetland Map Legend

WETLANDS

A	Size: 662 SY	B	Size: 3,112 SY	C	Size: 8,805 SY	D	Size: 9,608 SY	E	Size: 897 SY	F	Size: 17,641 SY	G	Size: 4,979 SY
1.	27.8192 -80.5022	1.	27.8192 -80.5033	1.	27.8193 -80.5031	1.	27.8218 -80.5031	1.	27.8161 -80.4953	1.	27.8099 -80.5019		27.8090 -80.5019
2.	27.8192 -80.5025	2.	27.8190 -80.5033	2.	27.8194 -80.5031	2.	27.8218 -80.5031	2.	27.8164 -80.4953	2.	27.8100 -80.5035	1.	27.8092 -80.5019
3.	27.81926 -80.5024	3.	27.81891 -80.50344	3.	27.8195 -80.5031	3.	27.8217 -80.5029	3.	27.8164 -80.4953	3.	27.8098 -80.5019	2.	27.8093 -80.50202
4.	27.81926 -80.5025	4.	27.81895 -80.50354	4.	27.8195 -80.5031	4.	27.8217 -80.5027	4.	27.8162 -80.4953	4.	27.8098 -80.5019	3.	27.8094 -80.50202
5.	27.8192 -80.5025	5.	27.81900 -80.50354	5.	27.8196 -80.5028	5.	27.8217 -80.5027	5.	27.8162 -80.4951	5.	27.8095 -80.5019	4.	27.809510 -80.50208
6.	27.81916 -80.50248	6.	27.8090 -80.5039	6.	27.8196 -80.5028	6.	27.8217 -80.5027	6.	27.8161 -80.4952	6.	27.80920 -80.5015	5.	27.809510 -80.50225
7.	27.8191 -80.50248	7.	27.8190 -80.5039	7.	27.8196 -80.5028	7.	27.8223 -80.5022			7.	27.80920 -80.5013	6.	27.809510 -80.50245
8.	27.81905 -80.5024	8.	27.8188 -80.5038	8.	27.8196 -80.5028	8.	27.8223 -80.5022			8.	27.80955 -80.5011	7.	27.809510 -80.50260
9.	27.81902 -80.50232	9.	27.8187 -80.5038	9.	27.8196 -80.5026	9.	27.8223 -80.5022			9.	27.80990 -80.5011	8.	27.80930 -80.50270
10.	27.81908 -80.50226	10.	27.8188 -80.5034	10.	27.8196 -80.5026	10.	27.8227 -80.5020			10.	27.8103 -80.5011	9.	27.80900 -80.50270
		11.	27.8187 -80.5032	11.	27.8196 -80.5026	11.	27.8224 -80.5018			11.	27.8108 -80.5011	10.	27.80900 -80.50270
		12.	27.81883 80.50305	12.	27.8201 -80.5027	12.	27.8227 -50.5020			12.	27.8110 -80.5015	11.	27.80885 -80.50265
		13.	27.8190 -80.5030	13.	27.8201 -80.5027	13.	27.8227 -50.5020			13.	27.8110 -80.5019	12.	27.80892 -80.50235
		14.	27.8191 -80.5030	14.	27.8204 -80.5029	14.	27.8925 -80.5023			14.	27.8107 -80.5019	13.	27.80900 -80.502220
		15.	27.81915 -80.50308	15.	27.8202 -80.5030	15.	27.8226 -80.5024						
				16.	27.8202 -80.5030	16.	27.8226 -80.5027						
				17.	27.8199 -80.5031	17.	27.8224 -80.5029						
				18.	27.8199 -80.5031	18.	27.8218 -80.5028						
				19.	27.8203 -80.5033	19.	27.8219 -80.5032						
				20.	27.8202 -80.5037								
				21.	27.8200 -80.5035								
				22.	27.8198 -80.5036								
				23.	27.8195 -80.5033								
				24.	27.8193 -80.5033								

Wetland Identification and Recommendations

Sebastian Municipal Airport Master Plan Update



Area A: This area is currently .14 acres, less than a ¼ acre. Since this area is less than ¼ acre, mitigation is very unlikely. However, coordination at the time of development is suggested.

Recommendation: Area can be developed, however, this area is home to gopher tortoise, during the planning phase of development a plan needs to be developed as to how and where these animals will be relocated. Permits will be required.

Area B: This area is currently .64 acres, over a ½ acre. Since this area is large than ¼ acre, mitigation will need to be done a time of development. **Recommendation:** Design development around the wetland. This area is home to gopher tortoise, during the planning phase of development a plan needs to be developed as to how and where these animals will be relocated. Permits will be required.

Area C: This area is currently 1.82 acres. Since this area is large than ¼ acre, mitigation will need to be done a time of development. **Recommendation:** Due to the size and nature of the site, development in this area will be extensive and expensive. This area is currently a habitat for Florida Scrub-Jays, however, this area is part of the City's Incidental Take Permit.

Area D: This area is currently 1.99 acres. Since this area is large than ¼ acre, mitigation will need to be done a time of development. **Recommendation:** Due to the size and nature of the site, development in this area will be extensive and expensive. This area is currently a habitat for Florida Scrub-Jays, however, this area is part of the City's Incidental Take Permit.

Area E: This area is currently .19 acres, less than over ¼ acre. This area is not a wetland due to the plant base and lack of water. **Recommendation:** No action needed for future development. This area is home to gopher tortoise, during the planning phase of development a plan needs to be developed as to how and where these animals will be relocated. Permits will be required.

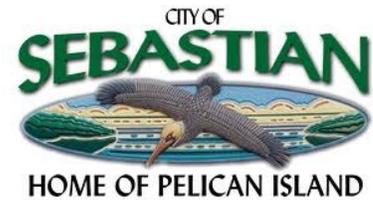
Area F: This area is currently 3.64 acres. Since this area is large than ¼ acre, mitigation will need to be done a time of development. **Recommendation:** Due to the size and nature of the site, development in this area could be extensive and expensive.

Area G: This area is currently 1.03 acres. Since this area is large than ¼ acre, mitigation will need to be done a time of development. **Recommendation:** Due to the size and nature of the site, development in this area could be extensive and expensive.

General Environmental Assessment

The TKDA team was asked to perform a General Environmental Assessment of the Airport and the areas for future development. In the Airport's proposed Master Plan and Layout Plan (ALP)

Sebastian Municipal Airport Master Plan Update



future development is shown for the next 20-years. As the TKDA team started to develop the ALP we looked at potential environmental impacts to each area of proposed development. Currently the City and Airport have Incidental Take Permit in place for the taking of Florida Scrub-Jay Habitat for development on Airport property. The permit allows for 88 acres to be taken if need for future development. The City and Airport are extremely proactive in only taking habitat that is crucial for the continuing sustainability of the Airport. Throughout this chapter we have noted several types of surveys/studies that the TKDA performed as part of the overall environmental assessment and we have also made recommendations.

Habitat Conservation Plan (HCP) Review and Agency Coordination

The TKDA team was asked to review the current HCP and Incidental Take Permit. As part of our review we met with U.S. Fish and Wildlife Services (USFWS) and Indian River County Staff to discuss the ongoing master plan and layout plan for future development of the Airport. We are still currently working with USFWS and Indian River County to make updates to the HCP if needed. As of right now the current permits in place allow for the future development proposed in this master plan update. We anticipate all coordination with USFWS and the County to be complete by the final approval issued by Federal Aviation Administration (FAA) and Florida Department of Transportation (FDOT). We have provided the notes from our meeting with USFWS and Indian River County Staff.

Sebastian Municipal Airport Master Plan Update



Meeting Notes with USFWS and Indian River County Staff



800 20th Place, Suite 1
Vero Beach, FL 32960
772.217.9521
tkda.com

Memorandum

To:	<u>Project File</u>	Reference:	<u>Meeting with USFWS and IRC Staff</u>
Copies To:	<u>File</u>		<u>Sebastian Airport Conservation</u>
	<u>Scott Baker– Sebastian</u>		<u>Areas</u>
	<u>Airport</u>		
From:	<u>Danielle Gernert</u>	Project No.:	<u>0016256.001</u>
Date:	<u>6/2/17</u>	Routing:	<u></u>

On June 2, 2017, a meeting was held at the USFWS Office in regards to the conservation areas at the Sebastian Airport.

- Attendees: Danielle Gernert (TKDA), Kristie Anderson (TKDA), Beth Powell (IRC), Wendy Swindell (IRC), and Ashleigh Blackford (USFWS)

Points of Interest and Discussion

- Explained to the County and USFWS that the Airport is not a wildlife sanctuary and the federal government has rules for how the land is used. The Airport cannot contain a conversation easement per the Airport governing bylaw's and grant assurances. They are understood in the meeting that the land is not protected for future development and if the land is needed for Aviation use the Airport and City will come back to the Service and the County to work out mitigation of the land to be used.
- 88 Acres under the current Take Permit – was not defined in the HCP so the Services stated that the Airport needs to identify the Areas of Take.
 - Area for the City's Public Works Compound cleared of Scrub Jays and is considered under the Take Permit. Acreage needs to be determined as part of the 88 Acres in question. Other environmental issues to deal with in that area include Gopher Tortoise and Wetlands. Number of tortoise in the areas yet to be determined and Wetland Survey will be conducted over the next few months.
- Areas inside the AOA fence to be excluded from conservations monitoring, to include the dirt pile. However, the dirt pile needs to be removed and surrounding areas cleaned up as this is causing other environmental hazards for the Airport and the public. However, may have to note this area as part of the 88 acres under the Take Permit, need to determine the acreage).
- The 100' buffer on the north side of Airport that backs up to the Counties conservation to be removed if the Airport will agree to help maintain the property lines that separated the Airport Property and the County Conservation Land.
- Main entrance to the Airport is clear of environmental hazards and can be developed at any time. Note: this area is not part of the 88 acres in question under the Take Permit.

TKDA will continue working with the County and USFWS to complete the HCP and clearly identify areas of conservation and conservation management.

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