

**Resolution 2020-78**  
**Exhibit “A”**

Habitat Conservation Planning Assistance Grant Proposal

Development of a Habitat Conservation Plan for the Beaches of Amelia Island, Florida

Prepared by:  
City of Fernandina Beach and Nassau County  
in cooperation with  
Florida Fish and Wildlife Conservation Commission  
for submission to  
United States Fish and Wildlife Service  
Cooperative Endangered Species Conservation Fund  
HCP Planning Assistance Grant

May 20, 2020  
Development of a Habitat Conservation Plan for the beaches of Amelia Island, Florida

## **I. PROJECT STATEMENT**

### **Project Summary**

More than seven state and federal threatened and endangered species depend on habitats found on the beaches of Amelia Island and adjacent dunes (Table 1). Specifically, Amelia Island beaches are home to three species of nesting sea turtles, two threatened shorebirds, as well as other migratory and resident shorebirds.

This \$179,500 grant will assist the City of Fernandina Beach and Nassau County with the initiation of the development of a Habitat Conservation Plan (HCP) to address impacts to federally listed species related coastal activities on Amelia Island. The HCP will help to address the conservation needs of state and federal listed species, while coordinating and streamlining the regulatory requirements of federal, state, and city/county agencies.

## **II. NEED FOR AN HABITAT CONSERVATION PLAN**

Over the past few decades, Florida has experienced a rapid increase in human population growth. This growth and the associated developmental pressures have greatly stressed the natural resources of the state. This is especially true of the state's coastal areas. Beaches and coastal strand are identified as high priorities in Florida's Wildlife Action Plan (FFWCC 2005). The Florida Natural Areas Inventory (FNAI) (2005) lists the habitats associated with this HCP as imperiled due to rarity and ongoing vulnerability.

Amelia Island is a barrier island on the northeast coast of Florida that attracts hundreds of thousands of tourists each year with its numerous shops, restaurants, golf courses, and wide beaches. Sea turtles utilize the beaches each summer to deposit nests, averaging about 300 nests last year. Beach driving is also permitted on the beaches of Amelia Island, both recreationally and for emergency response. While the City and County already have beach driving training courses and ordinances in place, the potential for impacts to sea turtle nesting habitat still exists. This HCP will address impacts including, but not limited to, beach driving, emergency response operations, beach nourishment, beach scraping, beach cleaning, development, and disruption of natural processes.

The following federally listed species may benefit from implementation of this HCP.

### **A. Sea Turtles**

The beaches of Amelia Island provide nesting habitat for three species of sea turtles: loggerhead (*Caretta caretta*), green (*Chelonia mydas*), and leatherback (*Dermochelys coriacea*). With the exception of the loggerhead, which is federally listed as threatened, all of Florida's sea turtles are state and federally listed as endangered species. Beach front lighting, excessive pedestrian use, and large equipment can have adverse effects on

the nesting behavior and survivorship of sea turtles. Protection of nesting beaches and associated uplands is necessary for the long-term recovery of these species.

## **B. Piping Plover**

Non-breeding piping plovers (*Charadrius melodus*) are consistently found in Florida from July 15 to May 15. The 2004 and 2005 hurricane seasons created and/or altered non-breeding piping plover habitats. Areas used by migrating and wintering piping plovers are ephemeral habitats due to their natural change over time. Hurricanes and episodic storm events increase overwash processes that transport sediment (sand) across barrier islands and form inlets and sand and mud flats. Migrating and wintering piping plovers use overwash areas for feeding and roosting. Overwash areas are created by the flow of water through the primary dune line with deposition of sand on the barrier flats, marsh, or into a lagoon, depending on the storm magnitude and the width of the beach. On developed beaches, structures may prevent or minimize this occurrence.

Piping plovers are dependent on a mosaic of habitat patches and move among these patches depending on local weather and tidal conditions (U.S. Fish and Wildlife Service, 1996). Construction and human recreational activities can disturb roosting and feeding piping plovers. Regulatory controls through an HCP will serve to minimize loss of habitat and disturbance as well as to facilitate a holistic approach to these issues.

## **C. Red Knot**

The red knot (*Calidris canutus*) is a medium-sized shorebird that undertakes an annual 30,000 km hemispheric migration, one of the longest among shorebirds. The red knot breeds in Arctic Canada, and a portion of the population winters in Florida. Florida wintering red knots are capable of foraging predominantly on coquina clams (*Donax variabilis*) along intertidal habitats. However, knots also utilize algae covered sand or mud flats within back barrier sounds, sheltered bays, or lagoons presumably feeding on bubble shells. Red knots are not site-specific in their foraging requirements but rather move frequently following the patchy distribution of coquina clams and, considering this mobility, are tolerant of limited disturbance. Unlike the mobile foraging behavior of red knots, roosting knots require wide open stretches of beach with limited human disturbance. Roosting knots are more temperamental than foraging knots and are less tolerant of disturbance. Beaches that have roosting habitat features but maintain consistent human activity will not be utilized by roosting red knots without sufficient management to prevent disturbance. Little is known on use patterns by red knots in Florida. Consistent surveys are necessary to begin to understand the potential importance of Florida's coastal environment for this species.

## **III. OBJECTIVES**

The main objective of this project is to conduct the necessary planning required for the development of an HCP that would encompass the beach and dune systems, and cover all activities associated with special events that may result in incidental take of state and federal listed species. An HCP will facilitate and streamline incidental take permitting for both the City, State and Federal governments, while implementing measures that offer protection to state and federally listed threatened and endangered species.

Objectives for the first phase of planning for the HCP are as follows:

1. Establish an HCP Work Group to oversee the development and implementation of the HCP;
2. Delineate the areas to be covered by the HCP;
3. Refine the list of species to be covered by the HCP;
4. Determine the coastal-related activities to be covered by the HCP;
5. Determine the impacts that occur as a result of activities covered by the HCP;
6. Identify avoidance and minimization measures and alternatives for those activities to be covered by the HCP;
7. Identify mitigation measures that will apply to activities that cannot be minimized;
8. Develop an implementation strategy for the HCP, which will outline a funding mechanism and monitoring plan;
9. Finalize and submit the HCP.

#### **IV. EXPECTED RESULTS**

The results of these objectives would provide the necessary information to map the agenda and timeline for the HCP. Ultimately, an HCP would be prepared with the corresponding National Environmental Policy Act documents for application of an incidental take permit from the Service to address the potential impacts to listed species as a result of the issuance of the City/County's coastal permits.

#### **V. APPROACH**

The Florida Fish and Wildlife Conservation Commission will enter into an agreement with the City of Fernandina Beach Commission and Nassau County Commission to accomplish the objectives of this planning grant. The City/County Commissions have

procured the services of a qualified consultant to conduct the HCP planning covering the City/County's permits for activities associated with development and other activities on their beaches. The HCP planning effort will use existing Federal guidelines and policies set forth in the "2016 Habitat Conservation Planning and Incidental Take Permit Processing Handbook" ([https://www.fws.gov/endangered/improving\\_ESA/hcp-handbook.html](https://www.fws.gov/endangered/improving_ESA/hcp-handbook.html)).

The HCP planning effort will include, but not be limited to the following:

1. Review of other multi-species HCPs to ascertain any pitfalls or necessary actions needed to ensure success of such an effort;
2. Review of literature sources pertinent to the development of an island-wide coastal HCP. This will be inclusive of, but not limited to the biological and geomorphologic coastal literature;
3. Meet with potential partners to facilitate participation in the HCP. These meetings will also provide the information exchange between partners necessary for development of the HCP.
4. Meet with stakeholders to facilitate participation in the HCP. These meetings will also provide the information exchange between partners necessary for development of the HCP.

The following anticipated partners will be represented on the HCP development Work Group:

1. City of Fernandina Beach
2. Nassau County
3. Florida Fish and Wildlife Conservation Commission
4. Consulting firm
5. Amelia Island Sea Turtle Watch

Although the U.S. Fish and Wildlife Service may not be an official member of the Work Group, it is presumed that regular interaction between the local USFWS Ecological Services field office in Jacksonville and the Work Group will occur throughout the development phase.

## **VI. LOCATION**

The project will address approximately 10 miles of beach on Amelia Island, Florida, including coastal sandy beach shoreline and associated dunes, which encompass important habitat for state and federally listed species (FFWCC 2005). This includes the beaches from Amelia Island State Park to Fort Clinch State Park (4.5 miles in Fernandina Beach and 5.5 miles in Nassau County). The beach and dune system is an integral part of the coastal system and represents one of the most valuable natural resources in Florida,

providing protection to adjacent upland properties, recreational areas, and habitat for wildlife.

Florida's beaches are long, often narrow strips of unconsolidated sand and shells that extend landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation. This habitat is greatly influenced by wind, salt spray, erosion and deposition (FNAI 1990). Florida's beaches are also important nesting areas for sea turtles and shorebirds, which also support numerous other species (FFWCC 2005). The beach berm is the nearly horizontal part of the beach or backshore formed by the deposit of material by wave action. Some beaches have no berm; others have one or several.

## VI. ESTIMATED COSTS

Item	Main Sub-tasks	Estimated Total Planning Assistance Request	Estimated FWC Match	Estimated City/County Match
Investigative Services	<ul style="list-style-type: none"> <li>Literature Review</li> <li>Identify Direct and Indirect Project Impacts</li> <li>Collect, Synthesize, and Assess Ecological and Critical Habitat Data</li> <li>Determine Incidental Take Levels</li> <li>Conduct On-Site Field Investigations</li> </ul>	20,000	1,500	5,000
Minimization, Mitigation and Monitoring Services	<ul style="list-style-type: none"> <li>Develop Minimization, Mitigation and Monitoring Plan</li> <li>Develop Adaptive Management Procedures</li> </ul>	25,000	2,500	8,000
Environmental Documentation and Reporting Services	<ul style="list-style-type: none"> <li>Interim Status Reports and Final Report</li> <li>GIS/Map Production</li> <li>Draft Habitat Conservation Plan</li> <li>Draft Implementing Agreement</li> </ul>	25,125	3,000	8,375
Administrative and Technical Services	<ul style="list-style-type: none"> <li>Telecommunication/Planning/ Meetings</li> <li>Stakeholder Workshops</li> </ul>	15,000	3,000	7,500
NEPA Analysis	<ul style="list-style-type: none"> <li>Assess impacts to environment</li> <li>Draft EA/EIS</li> </ul>	15,000	1,000	5,000
<b>Subtotals</b>		100,000	11,000	34,000
FWC Direct Costs		30,000		
FWC Indirect Costs (15% of Subtotal)		4,500		
Totals		134,625	11,000	33,875
<b>Grand Total:</b>		<b>179,500</b>		

## **Budget Justification**

Florida Fish and Wildlife Conservation Commission is a U.S. state entity receiving less than \$35 million in direct Federal funding with an indirect cost rate of 15%. We are required to prepare and retain for audit an indirect cost rate proposal and related documentation to support those costs.

It should be noted that the following costs for the Planning Assistance Request and associated match are rough estimates. The cost of the HCP planning and development will not exceed the requested federal assistance request. Additionally, the State and City/County match are the minimal amounts required but it is assumed that the in-kind match from all entities will exceed the minimum match requirements.

The estimated federal request was determined by examining previous HCP funding requests for projects of similar size and scope, in the State of Florida over the last ten years. The requested amount for the task assignments shown below are commensurate with previous projects:

• Florida Beaches HCP Year 1	\$241,628.00
• Highlands County Scrub HCP Year 1	\$277,247.00
• Polk County Scrub HCP Year 1	\$277,247.00
• East Collier Multiple Species HCP Year 1	\$149,949.00
• City of Cape Coral Scrub Jay HCP	\$151,450.00
• Lake County Scrub HCP	\$153,820.00
• Indian River Scrub Jay HCP	\$288,298.00
• Perdido Key Beach Mouse HCP	\$492,000.00
• Gulf County HCP	\$312,497.00
• Charlotte County Scrub Jay HCP Year 1	\$210,017.00
• Charlotte County Scrub Jay HCP year 2	\$150,260.00

Below is a summary of scope of work and associated timelines. State and City/County match associated with each task will be derived from staff time, travel costs, and in-kind services.

1. Investigative Services  
Timeline- months 1-4  
Estimated Request \$20,000.00  
FWC Match \$1,500.00  
City/County Match \$5,000.00

- a. Literature Review

A thorough review of pertinent peer reviewed papers, grey literature and agency white papers and reports for beach and dune habitat and covered species will assist in compiling species accounts. It will also allow the applicant to ascertain is the all covered species will benefit from an HCP. Additionally, it will allow the working group to determine any additional state-listed or otherwise rare species that may need to be included in the HCP.



- b. Identify Direct and Indirect Project Impacts  
These tasks are essential for determining the amount of current and to extrapolate this take over the term of the ITP.
  - c. Collect, Synthesize, and Assess Ecological and Critical Habitat Data
  - d. Determine Incidental Take Levels  
Tasks 1a, b, and c will provide the data necessary to accomplish this task. Determination of take levels will guide the development of minimization measures and mitigation models needed to offset the proposed take.
  - e. Conduct On-Site Field Investigations  
This task will be utilized to fine tune species occurrence data for potential covered species.
- 2. Minimization, Mitigation and Monitoring Services  
Timeline-months 5-9  
Estimated Request \$25,000.00  
FWC Match \$2,500.00  
City/County Match \$8,000.00
  - a. Develop Minimization, Mitigation and Monitoring Plan  
These actions are the core of the HCP; the totality of the minimization and mitigation should offset the take proposed for the life of the permit. Development of a monitoring plan will assure that the amount of permitted take does not exceed the minimization and mitigation proposed in the plan.
  - b. Develop Adaptive Management Procedures  
These procedures will allow the applicant to deal with any changes or unforeseen circumstances that may arise and affect the full implementation of the HCP
- 3. Environmental Documentation and Project Management Services  
Timeline- months 5-10  
Estimated Request \$25,125.00  
FWC Match \$3,000.00  
City/County Match \$8,375.00
  - a. GIS/Map Production  
This task will develop the shapefiles and maps needed to model anticipated take and minimization and mitigation actions need to offset the take permitted over the life of the ITP
  - b. Draft Habitat Conservation Plan
  - c. Draft Implementing Agreement
- 4. Administrative and Technical Services  
Timeline- months 1-12  
Estimated Request \$15,000.00  
FWC Match \$3,000.00  
City/County Match \$7,500.00
  - a. Project Management
  - b. Telecommunication/Planning/ Meetings

Telecommunication will be necessary as most FWC staff associated with the project are located in Tallahassee while all other partners and stakeholders are in south Florida. It is envisioned that Tallahassee staff will travel to Amelia Island on a quarterly basis to participate in face to face work group meetings.

c. Stakeholder Workshops

These meetings will be essential for obtaining stakeholder and general public input during plan development.

5. NEPA Analysis

Timeline- months 9-12

Estimated Request \$15,000.00

FWC Match \$1,000.00

City/County Match \$5,000.00

a. Assess impacts to environment

b. Draft EA/EIS

6. FWC Direct Costs

Estimated Request \$30,000.00

The requested \$30,000.00 will cover partial salary for a Project Manager who will oversee the progress of the HCP development and liaise between all parties involved in the project.

7. FWC Indirect Costs (15% of Direct Costs)

Estimated Request \$4,500.00

The requested \$4,500.00 covers part of the insurance costs of the above positions with the remainder covering indirect costs associated with the management of the grant.

**Table 1.** Federal and State protected species potentially affected by activities regulated under City permitting. E= endangered, T= threatened, SSC= species of special concern, C= Candidate, and N= non-listed species

Scientific Name	Common Name	Status Federal/ State
Reptiles		
<i>Caretta caretta</i>	Loggerhead	T/T
<i>Chelonia mydas</i>	Green Turtle	E/E
<i>Dermochelys coriaca</i>	Leatherback	E/E
Birds		
<i>Charadrius melodus</i>	Piping Plover	T/T
<i>Pelecanus occidentalis</i>	Brown Pelican	N/SSC
<i>Sterna antillarum</i>	Least Tern	N/T
<i>Calidris canutus rufa</i>	Red Knot	T/T

**Table 2.** Non-listed species that will benefit from the Amelia Island Beaches HCP.

<b>Scientific Name</b>	<b>Common Name</b>
<b>Birds</b>	
<i>Falco columbarius</i>	Merlin
<i>Haematopus palliatus</i>	American Oystercatcher
<i>Hydroprogne caspia</i>	Caspian Tern
<i>Rhynchops niger</i>	Black Skimmer
<i>Thalasseus maxima</i>	Royal Tern
<i>Sterna nilotica</i>	Gull-billed Tern
<i>Thalasseus sandvicensis</i>	Sandwich Tern

## Literature Cited

Florida Fish and Wildlife Conservation Commission. 2005. Florida's Wildlife Legacy Initiative. Florida's Comprehensive Conservation Strategy. Tallahassee, Florida.

Florida Natural Areas Inventory. And Department of Natural Resources. 2005. Guide to the natural communities of Florida. Tallahassee, Florida.

U.S. Fish and Wildlife Service. 1996. Piping plover (*Charadrius melodus*), Atlantic Coast population, revised recovery plan. Hadley, Massachusetts.