

United States Department of the Interior



FISH AND WILDLIFE SERVICE Deepwater Horizon Gulf Restoration Office 341 Greeno Road North, Suite A Fairhope, Alabama 36532

In Reply Refer To: FWS/R4/DH NRDAR

Memorandum

July 7, 2021

To: Memorandum to File

Holly N. Blalock-Herod From: Holly Herod, Deepwater Horizon Gulf Restoration Office

Subject: No Further Consultation Required for Florida Trustee Implementation Group's (FL TIG) Restoration Planning Activity Northeast Florida Coastal Predation Management

Under the Endangered Species Act (ESA) Section 7(a)(2), each Federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species, or destroy/adversely modify designated critical habitat. If a Federal agency determines that a Federal action is covered by an existing consultation or other documentation, then the Federal agency is not required to conduct any further consultation with the US Fish and Wildlife Service (USFWS) for purposes of ESA, unless the project changed in a way that wasn't previously considered or new species have been listed that may be affected.

I reviewed the project materials provided (see attached Biological Evaluation Form), for the proposed planning activity titled "Northeast Florida Coastal Predation Management." This project will be implemented by the Florida Fish and Wildlife Conservation Commission (FWC) under their existing ESA Section 6 Cooperative Agreement (Agreement) which allows authorized employees or agents to take threatened and endangered species when acting in the course of official duties (e.g., predator removal purpose of restoring listed and at risk migratory birds). Thus, this activity will require no further ESA evaluation. Should the project be modified in a way that could adversely impact ESA-listed species or habitats not consistent with the Agreement or if the Agreement is nullified, this determination will be reevaluated as appropriate.

Bald eagles and migratory birds could be present in the action area. All standard conservation measures or best management practices will be followed to avoid take, except for specifically targeted predators which will be culled under FWC's Migratory Bird Depredation permit #MB86892C-0. This memo does not include any information or effects determinations for protected species under the jurisdiction of the National Marine Fisheries Service.

If you have questions or concerns regarding this action, please contact Holly Herod, Fish and Wildlife Biologist, at 251-215-5325 or <u>holly_herod@fws.gov</u>.

Attachment

Cooperative Agreement between the

United States Department of the Interior Fish and Wildlife Service and

Florida Fish and Wildlife Conservation Commission for the

Conservation of

ENDANGERED AND THREATENED FISH AND WILDLIFE

This Cooperative Agreement ("Agreement") is entered into between the United States Fish and Wildlife Service ("Service"), an agency of the Department of the Interior, and the Florida Fish and Wildlife Conservation Commission ("Commission") (hereinafter collectively referred to as the "Parties" and individually as the "Party") pursuant to section 6(c) of the Endangered Species Act of 1973, as amended, 16 U.S.C, §§1531-43 (hereinafter referred to as the "Act"), IV, Section 9 of the Florida Constitution, and Chapter 68A-27 of the Florida Adminisfrative Code (F.A.C,) Annotated.

WHEREAS, the Parties acknowledge that the Commission possesses authority and jurisdiction over resident Federally-listed endangered and threatened fish and wildlife ("Federally-listed species") in upland, freshwater and marine environments; and

WHEREAS, the Service and the State of Florida first entered into a section 6 cooperative agreement in 1976, which was renewed annually until 2001, when it was superseded by the agreement dated July 1 8, 2001, and renewed annually thereafter through 2011, when it was superseded by the agreement dated May 15, 2012, and renewed annually thereafter through 2017;

WHEREAS, the Parties desire that this Agreement amend and supersede the agreement of May 15, 2012; and

WHEREAS, the Congress of the United States has found that there are Federally-listed and at-risk species of fish, wildlife and plants which are in danger of extinction or in danger of extinction in the foreseeable future, and that these species are of aesthetic, ecological, educational, scientific, economic, and other value to the Nation and its people; and

WHEREAS, the purposes of the Act are to provide a means to encourage the protection and conservation of the ecosystems upon which Federally-listed species depend, to provide a program for the conservation of such species and to take such steps as may be appropriate to achieve the purposes of the various treaties and conventions related to the conservation of fish and wildlife; and

WHEREAS, the Congress of the United States has declared that encouraging the States and other interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs that meet national and international standards is key to fulfilling the Nation's international commitments and to better safeguarding the Nation's heritage in its fish and wildlife resources for the benefit of all citizens; and

WHEREAS, the Secretary of the Interior has delegated his responsibilities under section 6 of the Act to the Director of the Service ("Director"), who, in turn, has delegated such responsibilities to the respective Regional Directors of the Service; and

WHEREAS, the Southeast Regional Director ("Regional Director") desires to enter into this Agreement for the purpose of assisting in the implementation of the State of Florida's conservation program for Federally-listed and at-risk species (petitioned, proposed, and candidate for Federal listing under the Act); and

WHEREAS, the Commission has the responsibility to consewe Federally-listed and atrisk species; and WHEREAS, the State of Florida, through the Commission, wishes to administer its program for the conservation of Federally-listed and at-risk species in harmony with the terms and spirit of the Act; and

WHEREAS, the Parties agree that programs of the State of Florida are desigled to assist Federally-listed and at-risk species, and acknowledge their mutual desire to work in harmony for the common purposes of planning, developing and conducting programs to protect, manage and enhance the populations of all such species within the State of Florida; and

WHEREAS, the Regional Director is authorized to establish programs for the conservation of Federally-listed and at-risk species; to provide periodic review of the approved State programs at no greater than annual intervals;' to provide funding to such programs in accordance with the terms of the Act provided such funds are available; to provide coordination among the programs of the various States and Territories; and to exchange with the Commission such biological data or other information that may result in the enhancement of opportunities for the continued survival of Federally-listed and atrisk species; and

WHEREAS, the Regional Director has found that the Commission (a) has the authority to conserve resident fish and wildlife determined by the Commission or the Secretary of the Interior to be endangered or threatened; (b) has established an acceptable conservation program, consistent with the purposes and policies of the Act, for all resident fish and wildlife species in the State of Florida that are deemed by the Secretary to be Federally-listed species and has fumished a copy of such plan and program to the Regional Director together with all pertinent details, information, and requested data; (c) has the authority to conduct investigations to deterrnine the status and requirements for survival of resident fish and wildlife; (d) has the authority to establish programs, including the acquisition of land or aquatic habitat or interests therein, for the conservation of Federally-listed species; and (e) has provided for public participation in designating resident species of fish and wildlife as endangered or threatened; and

WHEREAS, the Commission has authority to regulate take of Federally-listed and at-risk species over which the Commission has Constitutional authority, that regulatory authority is commensurate with that of the Service, the Commission has authority to permit incidental take of those species provided there is no net negative impact to the species, the Commission provides public transparency and participation in its programs, and the Commission has authority to enforce prohibitions on take.

NOW, THEREFORE, the Parties agree as follows:

Section I. Cooperation

- a. The Commission will carry out the activities identified in its conservation program for the benefit of Federally-listed and at-risk species in the State of Florida.
- b. The Parties agree to cooperate in the development of programs, plans, and projects for the conservation of resident species of fish and wildlife that are listed as endangered or threatened by the Commission and/or the Service, as well as for at-risk species that may be listed in the future. Activities include but are not limited to: biological planning, conservation program development and delivery, monitoring, and research in the development and implementation of landscape-level conservation plans; future conservation

needs of species due to accelerated climate change; coordination, development and implementation of species management plans and recovery plans to promote consistency and effectiveness in conservation efforts with stakeholders; and coordination, development and implementation of Permitting Guidelines pursuant to subsection 2.d.1, below.

- c. The Regional Director may provide financial assistance to the Commission to assist in the development and implementation of projects for the conservation of Federally-listed and at-risk species in accordance with 50 C.F.R. Part 81. Such financial assistance will be contingent upon the availability of funds and the Commission's compliance with the requirements of 50 C.F.R. Part 81.
- d. Federal funding to the Commission pursuant to section 6(d) of the Act and the Service's implementing regulations at 50 C.F.R. Part 81 shall be contingent upon a determination by the Regional Director that the Commission's conservation program for Federally-listed species is "adequate and active" pursuant to section 6 of the Act and the implementing regulations at 50 C.F.R. Part 81.
- e. The law enforcement authorities of the Service and the Commission will assist in the implementation and enforcement of this Agreement and will cooperate in the detection, apprehension and prosecution of violators of the Act, of permits issued in accordance with this Agreement, or of any State law intended to conserve Federally-listed and at-risk species.
- f. If the Regional Director determines that the Commission's conservation program is inadequate or inactive, this Agreement and all associated funding may be terminated in accordance with section 7, below, section 6 of the Act and the associated implementing regulations at 50 C.F.R. Part 81.
- g. If the Regional Director determines that the Commission's issuance of permits pursuant to this Agreement does not satisfy the criteria set forth in subsections 2.b., 2.c., and 2.d. below, or that the Commission has failed to exercise its authority to issue any such pennit in the manner provided herein, or that the permitting processes fail to achieve the results anticipated by the Service, the Service may suspend and/or revoke such permitting authority, Any suspension and/or revocation will be in accordance with one or more of subsections 2.b., 2.c., and 2.d. below.
- h. The parties agree that the information included in Commission and Service files (including but not limited to reports, data, maps, expert opinion of our staff, etc.) is considered to be held "in common" for the purposes of fulfilling our obligation to conserve the nation's fish, wildlife, plants and their habitats.
- Section 2. Take of Endangered and Threatened Wildlife
 - a. General Rule
 - 1. Except as provided in subsections 2.b., 2.c., 2.d., and below, pursuant

to a 50 CFR 17.40-48 special rule, Commission agrees to not engage in, or issue a permit authorizing take of a Federally-listed species without prior issuance of a Service pennit to the Commission or to a permit applicant authorizing such take.

- 2. With respect to the importation or exportation of, or interstate or foreign commerce in, Federally-listed species, the Commission agrees to not to authorize that which is prohibited by the Act or by any regulation issued thereunder.
- 3. Any person holding a permit issued in accordance with this section of the Agreement shall:
 - a. Assume all liability and responsibility for the conduct of any activity conducted under the authority of such permit;
 - b. Allow the Service to enter onto the premises where permitted activities occur at any reasonable hour to inspect and monitor for permit compliance; and
 - c. Comply with all conditions of the permit and applicable laws and regulations.
- 4. Subsections 2.b., 2.c., and 2,d. of this Agreement are intended to authorize the Commission to issue permits in accordance with the provisions herein and as contemplated by 68A-27.007(1), F.A.C.
- b. Conservation Permits for Federally-listed Endangered Species

Any authorized employee or agent of the Commission may, when acting in the course of official duties, take a resident Federally-listed endangered species for purposes that are consistent with the Act, Chapter 68A-27, F.A.C., this Agreement and the provisions of any section 6 Grant Agreement attached hereto, provided that such taking is not reasonably anticipated to result in:

- 1. the death or pennanent disabling of the specimen;
- 2. the removal of the specimen from the State of Florida;
- 3. the introduction of the specimen or any of its progeny into an area beyond the historical range of the species; or
- 4. the holding of the specimen in captivity for a period of more than forty-five (45) consecutive days.

Any authorized employee of the Commission may issue a conservation permit authorizing the take of a resident Federally-listed endangered species for purposes that are consistent with the Act, Chapter 68A-27, F.A.C., this Agreement and the provisions of any section 6 Grant Agreement attached hereto, provided that such taking is not reasonably anticipated to result in:

- 1. the death or permanent disabling of the specimen;
- 2. the removal of the specimen from the State of Florida;
- 3. the introduction of the specimen or any of its progeny into an area beyond the historical range of the species; or
- 4. the holding of the specimen in captivity for a period of more than forty-five (45) consecutive days.

The authority conveyed to the Commission by this subsection may be suspended by the Service. The suspension may apply to all authority under this subsection. The Service may suspend the Commission's authority under this subsection upon a determination by the Regional Director that there exists substantial evidence that such authority has been used inconsistent with this subsection and written notice of this determination to the Commission. Within thirty (30) days of receipt of the notice, the Commission may submit a written request for review of the suspension along with infonnation demonstrating compliance to the Director. The Director shall promptly consider the Commission's submission and may (1) affinn the Regional Director's determination and revoke the authority that was suspended or (2) reverse the Regional Director's determination and reinstate the authority that was suspended.

c. Conservation Permits for Federally-listed Threatened Species

Any authorized employee or agent of the Commission may, when acting in the course of official duties, take a resident Federally-listed threatened species for purposes that are consistent with the Act, Chapter 68A-27, F.A.C., this Agreement and the provisions of any section 6 Grant Agreement attached hereto.

Any authorized employee of the Commission may issue a conservation permit authorizing the take of a resident Federally-listed threatened species for purposes that are consistent with the Act, Chapter 68A-27, F.A.C., this Agreement and the provisions of any section 6 Grant Agreement attached hereto.

The authority conveyed to the Commission by this subsection may be suspended by the Service. The suspension may apply to all authority under this subsection. The Service may suspend the Commission's authority under this subsection upon a determination by the Regional Director that there exists substantial evidence that such authority has been used inconsistent with this subsection and written notice of this determination to the Commission. Within thirty (30) days of receipt of the notice, the Commission may submit a written request for review of the suspension along with information demonstrating compliance to the Director. The Director shall promptly consider the Commission's submission and may (1) affirm the Regional Director's determination and revoke the authority that was suspended or (2) reverse the Regional Director's determination and reinstate the authority that was suspended.

d. Incidental Take Permits for Federally-listed species

Any authorized employee of the Commission, when acting in the course of official duties, may issue a pennit authorizing take of a Federally-listed species incidental to and not the purpose of an otherwise lawful activity provided:

- 1. the issued pennit is consistent with provisions of a Permitting Guideline appended to this Cooperative Agreement pursuant to the provisions of section 6 below;
- 2. the Permitting Guideline will ensure that: the permit must only address incidental take; the permit must include impact avoidance, minimization, and mitigation measures in a manner consistent with the conservation (i.e., recovery) of the species; the pennit must have a scientific or net conservation benefit; the permit must provide for adequate funding for conservation measures and procedures to deal with unforeseen circumstances; the permitted activity must have no net negative impact on survival and recovery of the species in the wild; the permit must contain other measures and assurances [e.g., duration of commitments, deed resfrictions, monitoring, reporting, perfonnance requirements, etc.] that the Service and/or Commission may require as being necessary or appropriate; the pennit must meet any more restrictive conditions required by any subsequent amendments in Federal or State laws and regulations.
- 3. the permit provisions are enforceable by both the Service and the Commission;
- 4. the authorized take is not otherwise prohibited by other federal treaty or statute beyond the Act;
- 5. the Service has conducted intra-Service consultation pursuant to section 7(a)(2) of the Act on the Permitting Guideline;
- 6. the permits will not exceed any incidental take thresholds specified in the intra-Service consultation;
- 7. the Service has completed the analysis required by the National Environmental Policy Act (NEPA) and noticed the availability of the resultant NEPA document for public comment in the Federal Register;
- 8. the Commission has provided opportunity for public stakeholder participation in development of its input into the Permitting Guidelines;

- 9. the Commission provides for real time public access to permit applications, associated information, and permit decisions;
- 10. the Commission notifies the Service upon receipt of an application and issuance of a permit or provides access to a system that allows for the Service to monitor receipt of an application and issuance of a permit; and
- I l. the Commission provides for administrative challenge procedures of its final permit decisions per Section 68- I .001 ; Section 68-1.008; and Chapter 28-106, F.A.C.

The authority conveyed to the Commission by this subsection may be suspended by the Service. The suspension may apply to all authority under this subsection. The Service may suspend the Commission's authority under this subsection upon a detennination by the Regional Director that there exists substantial evidence that such authority has been used inconsistent with this subsection and written notice of this determination to the Commission. Within thirty (30) days of receipt of the notice, the Commission may submit a vwitten request for review of the suspension along with information demonstrating compliance to the Director. The Director shall promptly consider the Commission's submission and may (1) affrm the Regional Director's determination and revoke the authority that was suspended or (2) reverse the Regional Director's determination and reinstate the authority that was suspended. e. Emergency Provisions

Any authorized employee or agent of the Commission may, when acting in the course of official duties, take Federally-listed species without a permit if such action is necessary to:

1. aid a sick, injured, or orphaned specimen; or

- 2. dispose of a dead specimen; or
- 3. salvage a dead specimen which may be useful for scientific study; or
- 4. remove a specimen that constitutes a demonstrable but non^e immediate threat to human safety provided that the taking is done in a humane manner and that take by killing or injuring occurs only if it is not reasonably possible to eliminate such threat by live capture and release of the specimen unharmed in a remote area.

Any taking pursuant to this subsection 2.e. must be reported in writing within five (5) days to the Regional Director for transmission to the Service's Division of Law Enforcement Atlanta, Georgia. The specimen may be retained, disposed of or salvaged only in accordance with directions from the Service.

Section 3. Records

The Commission shall maintain records of its federally-funded projects for the conservation of Federally-listed and at-risk species in accordance with 50 C.F.R. Part 81, including, but not limited to, the Service's Federal Aid Manual. The Commission also shall maintain records of the numbers of specimens of each species taken by the Commission's employees or agents pursuant to subsections 2.b., 2.c., and 2.e. of this Agreement. Those records shall also document the conservation purposes for which each species was taken as well as of any mortalities or permanently disabling injuries resulting from such take. The Commission shall maintain records of the extent of take authorized pursuant to subsection 2.d.

Section 4. Notifications

The Commission agrees to inform the Service in writing of any changes in circumstances that could cause its conservation program(s) to be out of conformance with the requirements of section 6(c) of the Act, the applicable implementing regulations and this Agreement, including, without limitation, any changes in the Commission's relevant constitutional, statutory or regulatory authority. The Commission shall promptly furnish to the Service a written assessment of the effect of such a change on the State's ability to

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remain in compliance with the requirements of section 6(c) of the Act, the applicable implementing regulations and this Agreement. The Regional Director agrees to notify the State of all regulations and rulemakings, in accordance with section 4 of the Act, which might affect the adequacy and activeness of the State's program.

Section 5. Effective Date and Renewal

- a. This Agreement shall become effective when signed by the Regional Director and the Executive Director of the Commission, and may be renewed in the following manner. Not later than August 30th of each year, the Commission shall submit a written program submission to the Service containing the following information: (1) any species added to or deleted from the list of resident Federal and State-listed endangered or threatened fish or wildlife and at-risk species; (2) a memorandum of law analyzing (a) any changes in the Commission's statutory and regulatory authority for any Federally and/or State-listed endangered and threatened species since the date of the previous program submission and (b) the application of State law to any resident fish or wildlife species that has been Federally-listed as well as any species that has been proposed for such listing since the date of the previous program submission; (3) a list of any substantial changes in the State's conservation program for resident endangered or threatened fish or wildlife that have been Federally-listed or proposed for listing since the date of the previous program submission; (4) a detailed description of the number of specimens of each species taken pursuant to subsections 2.b, 2.c., and 2.e. of this Agreement.
- b. The Service will, on or before October 1 st of each year, notify the Commission in writing that the Agreement will be renewed effective October of that year or that the Commission's endangered or threatened fish or wildlife conservation program and/or authorities are not in compliance with the criteria of section 6(c) of the Act and the associated implementing regulations at 50 C.F.R. Part 81 or that the Commission is not properly implementing the permitting processes of subsections 2.b,, 2.c., and/or 2.d., above. If the Service finds that the program or authorities are non-compliant, this Agreement shall be terminated unless the appropriate changes are made by the date specified by the Service.

For purposes of this section, the phrase "previous program submission" means the most recent renewal application for the Agreement.

Section 6. Amendment

This Agreement may be amended for any purpose at any time upon the written concurrence of the Parties. Such amendments will be effective when signed by the Regional Director and the Executive Director of the Commission.

Section 7. Termination

This Agreement may be terminated: (a) by mutual agreement; (b) by the Commission upon sixty (60) days written notice to the Service; or (c) notwithstanding the renewal provisions in section 5(b), above, upon sixty (60) days written notice from the Regional Director to the Executive Director of the Commission terminating the Agreement on the grounds that the State's endangered or threatened fish or wildlife conservation program(s) is no longer in compliance with the criteria of section 6(c) of the Act and the associated implementing regulations and/or that the State has violated a provision of this Agreement. The Commission may submit a written request for review of the Regional Director's determination to the Director within thirty (30) days of receipt of the notice. The Director will consider the Commission's submission and either affirm the conclusion of the Regional Director and terminate this Agreement at the end of the 60-day notification period Q! reverse the conclusion of the Regional Director and revoke the notice of termination.

All Federal Funds that have been obligated to, but not expended by, the Commission as of the date of the Regional Director's notice of termination shall be retained by the Service for reallocation pursuant to section 6(d) of the Act, unless: (I) those funds are specifically approved by the Regional Director for expenditure before the date of actual termination or (2) the notice of termination is revoked by the Director.

Section 8. Notices

Notices pursuant to this Agreement shall be made in writing and, unless otherwise provided herein, delivered in person, by mail, by telecopy (facsimile) or by electronic mail (e-mail) to the other Party. Notice shall be effective on the date received by the other Party. Any change to the following contact information shall be communicated in writing to the other Party within ten (10) calendar days of such change.

If to the Commission: Florida Fish and Wildlife Conservation Commission AINN: Brad Gruver, Listed Species Coordinator 620 South Meridian Street Tallahassee,

Florida 32399-1600

brad.gruver@myfwc.com

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If to the Service: U.S. Fish and Wildlife Service A"INN: Leopoldo Miranda, Assistant Regional Director, Ecological Services 1875 Century Blvd. Atlanta, Georgia 30345 oldO Miranda fws. ov facsimile (404) 679-7081

Section 9. Defined Terms

With the exception of the following terms, all terms used in this Cooperative Agreement are intended to have meanings consistent with the Act and the Service's implementing regulation at 50 C.F.R. 81.1 and should be given the meaning ascribed in the Act or the implementing regulations if defined therein.

- a. "Permitting Guideline" is a document containing permitting requirements and Best Management Practices satisfying the criteria under subsection 2.d. (above) for a species or group of species within all or a portion of its range under the jurisdiction of the Commission.
- b. "Person" means any individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of any State, municipality, or political subdivision of a State; or any State, municipality, or political subdivision of a State.

U.S. DEPARTMENT OF THE INTERIOR

FLORIDA FISH AND WILDLIFE

FISH AND WILDLIFE SERVICE COMMISSION

CONSERVATION

Mike Oetker

mas H. Zon BY: / Eric Sutton

BY:

TITLE: Acting Regional Director TITLE: Executive Director DATE:

DATE: ______

APPROVED AS TO FORM AND LEGAL SUFFICIENCY hission Attome



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Boulevard

1875Atlanta, Georgia 30345 Century

In Reply Refer To: FWS/IR2&4/ES/DCN074206

March 5, 2021

Mr. Eric Sutton, Executive Director Florida Fish and Wildlife Conservation Commission 620 South Meridian Street Tallahassee, Florida 32399-1600

Dear Mr. Sutton:

This is to inform you that the Cooperative Agreement between the U.S. Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission for the conservation of threatened and endangered plant species has been renewed, effective October 1, 2020.

This letter will also serve as our official notification to solicit funding requests for Fiscal Year (FY) 2021. Your agency's allocation for FY 2021 will likely resemble that of FY 2020. Our Florida Ecological Services Field Office will contact you to provide assistance in determining the projects best suited for your anticipated share of the funds that are available, using the following criteria: (1) listed species recovery priority number; (2) recovery plan task number, where appropriate for listed species; and (3) Candidate and At-risk species survey and monitoring needs. We encourage you to work closely with this office in developing your agency's funding requests.

We look forward to another year of cooperation in the recovery of threatened and endangered species. Please submit your traditional Section 6 grant funding requests directly to our Florida Ecological Services Field Office by March 15, 2021. For more information, contact Jay Herrington, Field Supervisor, at (904) 731-3191 or Jay_Herrington@fws.gov.

Sincerely,

And And land.

Leopoldo Miranda-Castro Regional Director

INTERIOR REGION 2 SOUTH ATLANTIC-GULF ALABAMA, FLORIDA, GEORGIA, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, US VIRGIN ISLANDS INTERIOR REGION 4 MISSISSIPPI BASIN ARKANSAS, IOWA, MISSOURI, MISSISSIPPI, LOUISIANA

Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

U.S. Fish and Wildlife Service & National Marine Fisheries Service

This form will be filled out by the Implementing Trustee and used by the regulatory agencies. The form will provide information to initiate informal Section 7 consultations under the Endangered Species Act (ESA) and may be used to document a No Effect determination or to initiate pre-consultation technical assistance.

It is recommended that this form also be completed to inform and evaluate additional needs for compliance with the following authorities: Migratory Bird Treaty Act (MBTA), Marine Mammal Protection Act (MMPA), Coastal Barrier Resources Act (CBRA), Bald and Golden Eagle Protection Act (BGEPA) and Section 106 of the National Historic Preservation Act (NHPA).

Further information may be required beyond what is captured on this form. Note: if you need additional space for writing, please attach pages as needed.

For assistance, please contact the compliance liaisons USFWS: Erin Chandler at erin_chandler@fws.gov NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS 🛛 NOAA 🗌 EPA 🗌 USDA 🗌

Implementing Trustee(s): Florida Fish and Wildlife Conservation Commission (FWC)

Contact Name: Gareth Leonard Phone: 850-617-9452 Email: gareth.leonard@myfwc.com

Project Name: Northeast Florida Coastal Predation Management

DIVER ID# Click to enter text TIG: Florida TIG Restoration Plan # 2

B. Project Phase and Supporting Documentation

Please choose the box which best describes the project status, as proposed in this BE form:

Planning/Conceptual □ Construction/Implementation ⊠ Engineering & Design □

If "Engineering & Design" was selected, please describe the level of design that has been completed and is available for review:

Click here to enter text.

Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in this BE form. Examples of such supporting documentation include, but are not limited to:

Plan view of design drawings

Aerial images of project action area and surrounding area

Map of project area with elements proposed (polygons showing proposed construction elements)

Map of action area with critical habitat units or sensitive habitats overlayed

C. Project Location

I. State and County/Parish of action area

This project would occur in Nassau, Duval, and St. Johns counties, Florida. See Figure 1.

II. Latitude/Longitude for action area (Decimal degrees and datum [e.g., 27.71622°N, 80.25174°W NAD83) [online conversion: https://www.fcc.gov/encyclopedia/degrees-minutes-seconds-tofrom-decimal-degrees] Approximate center of project: 30.033405 °N, -81.31368 °W WGS84. See Figure 1

D. Existing Compliance Documentation

NEPA Documents

Are there any existing draft or final NEPA analyses (not PDARP/PEIS) that cover all or part of this project? YES NO

Examples:

-TIG Restoration Plan/EA or EIS (draft or final)

-USACE programmatic NEPA analysis

-USACE Clean Water Act individual permit for the project

-NEPA analysis provided by a federal agency that gave approval, funding or authorization

Permits

Have any federal permits been obtained for this project, if so which ones and what is the permit number(s)? YES NO Permit Number and Type: U.S. Fish and Wildlife Service (USFWS) Migratory Bird Depredation Permit #MB86892C-0

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)?

YES NO Permit Number and Type: Click or tap here to enter text.

If yes to any question above, please provide details in the text box (i.e. link to the NEPA document, or name of the document, year, lead federal agency, POC, copy of the permit or permit application, etc.). This is needed to check for consistency of the project scope across different sources and to facilitate the NEPA analysis. If you do not have a link, email the documents to the TIG representative for the Trustee designated as lead federal agency for the restoration plan.

Complete National Environmental Policy Act (NEPA) analysis for project activities would be included in the Florida Trustee Implementation Group's Restoration Plan #2 and Environmental Assessment (EA). Additionally, the U.S. Department of Agriculture has completed NEPA analysis for predator management activities in Florida through two EAs: U.S. Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (USDA-APHIS-WS). 2003.

Management of Predation Losses to State and Federally Endangered, Threatened, and Species of Special Concern; and Feral Hog Management to Protect Other State and Federally Endangered, Threatened, Species of Special Concern, and Candidate species of Fauna and Flora in the State of Florida. Prepared in coordination with U.S. Department of the Interior (USFWS and NPS), U.S. Department of Defense (U.S. Air Force), FDEP, and FWC. USDA-APHIS-WS. 2013. Environmental assessment for mammal damage in Florida. January.

A migratory bird depredation permit from USFWS is required for lethal and non-lethal control of avian species. This permit is already in place and is renewed annually by FWC staff covering statewide activities (Attachment A). Additionally, FWC and USFWS have a cooperative agreement for FWC to conduct conservation and management of endangered and threatened fish and wildlife, including birds (Attachment B).

Mammal removal would be conducted by FWC. FWC is the permitting agency for non-listed mammal trapping and removal (Florida Administrative Code [FAC] 68A-9.002) and does not require FWC staff to obtain a permit for these activities. FWC staff follow protocols and standard permit holder requirements set by the agency for mammalian removal.

Any documentation or information provided will be very helpful in moving your project forward.

Name of Person Completing this Form: Nadia Martin, IEc Name of Project Lead: Gareth Leonard, FWC Date Form Completed: September 25, 2020 Date Form Updated: Click here to enter text.

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action.

If CH is not designated in the area, then describe any suitable habitat in the area

a. Waterbody

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If applicable, please describe water quality, depth, hydrology, current flow, and direction of flow.

This project would occur on beaches and in nearshore habitats at multiple bird nesting sites in Nassau, Duval, and St. Johns counties in Northeast Florida (see Figure 1). No in-water work would occur. Various estuarine and marine, freshwater emergent, and freshwater forest/shrub wetlands exist along the Northeast Florida coast.

Does the project area include a river or estuary?

YES NO 🛛

If yes, please approximate the navigable distance from the project location to the marine environment. Click or tap here to enter text.

b. Existing Structures

If applicable. Describe the current and historical structures found in the action area (e.g., buildings, parking lots, docks, seawalls, groynes, jetties, marina). If known, please provide the years of construction.

This project would occur at various bird nesting sites in Northeast Florida, including developed beach and nearshore locations. One particular site where project activities are likely to occur is Fort Matanzas National Monument, which contains a historical fort built in the 1700s. Project activities would not impact historical structures.

c. Seagrasses & Other Marine Vegetation

If applicable. Describe seagrasses found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the seagrasses in the action area.

N/A

d. Mangroves

If applicable. Describe the mangroves found in action area. Indicate the species found (red, black, white), the species area of coverage in square footage and linear footage along project shoreline. Attach a separate map showing the location of the mangroves in the action area.

Mangroves are present in Northeast Florida and could be present near bird nesting sites that are monitored or managed as part of this project.

e. Corals

If applicable. Describe the corals found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the corals in the action area. Click here to enter text.

N/A

f. Uplands

If applicable. Describe the current terrestrial habitat in which the project is located (e.g. pasture, forest, meadows, beach and dune habitats, etc.).

This project would occur in various beach and nearshore upland habitats along Florida's Northeast Coast. Uplands could be a mix of developed and undeveloped spaces, depending on where bird nesting sites are located.

g. Marine Mammals

Please select the following marine mammals that could be present within the project area:

Dolphins	YES	NO⊠
Whales	YES	NO⊠
Manatees	YES	NO⊠

If applicable. Indicate and describe the species found in the action area. Use NMFS' Stock Assessment Reports (SARs) for more information, see <u>http://www.nmfs.noaa.gov/pr/sars/region.htm</u>

Click here to enter text.

h. Soils and Sediments

If applicable. Indicate topography, soil type, substrate type.

Beaches and nearshore bird nesting habitats in Northeast Florida are primarily composed of fine sands or other welldrained soils. Based on USDA's Natural Resource Conservation Service (2020), soils and sediments that are present for greater than five percent of the total project area include beaches, Fripp-Corolla complex, Newhan-Corolla complex, and Fripp-Satellite complex. Numerous other complexes are present in small amounts. Ground-disruption related to carcass burial could occur as part of this project.

i. Land Use

If applicable. Indicate existing or previous land use activities (agriculture, dredge disposal, etc).

This project would occur in various beach and nearshore bird nesting habitats along the Florida's Northeast Coast (Nassau, Duval, and St. Johns Counties). Areas along the coast vary in the degree of developed from undeveloped to high intensity development. Bird nesting sites are typically located in undeveloped habitats; as such, project activities are likely to occur in relatively undeveloped areas.

j. Essential Fish Habitat

If applicable. Describe any designated Essential Fish Habitat within the project area

N/A

F. Project Description

1. Describe the Proposed Action/Project Objectives: What are you trying to accomplish and how with this project? Describe in detail the construction equipment and methods** needed; long term vs. short term impacts; duration of short term impacts; dust, erosion, and sedimentation controls; restoration areas; if the project is growth-inducing or facilitates growth; whether the project is part of a larger project or plan; and what permits will need to be obtained.

Attach a separate map showing project footprint, avoidance areas, construction accesses, staging/laydown areas.

**If construction involves overwater structures, pilings and sheetpiles, boat slips, boat ramps, shoreline armoring, dredging, blasting, artificial reefs or fishery activities, list the method here, but complete the next section(s) in detail.

This project would be implemented by FWC. The goal of the project is to implement predation management measures at critical nesting sites to increase breeding success for state-threatened American oystercatchers (*Haematopus palliatus*), least terns (*Sternula antillarum*), black skimmers (*Rynchops niger*), and Wilson's plovers (*Charadrius wilsonia*).

This project facilitates timely, targeted predation management and associated monitoring to determine success, and would be implemented in an adaptive manner consistent with Florida's predation management efforts elsewhere in the State. This project would be conducted as an essential component of FWC's larger existing Shorebird Program that includes posting shorebird nesting habitat, monitoring, stewarding, and law enforcement patrol efforts.

Specifically, project activities would include:

- Annual prioritization of predation management at priority sites based on:
 - 1. Rates of nest and chick predation
 - 2. The relative contribution of a site to statewide productivity goals
 - 3. Past demonstrated success of predation management activities;
- Pre-season predator tracking (using game cameras and individual observation) to determine movement of predator species known to impact nesting colonies;
- Proactive non-lethal predation management, such as perch deterrent deployment/removal, trash management, predator effigies, and electric fence deployment/maintenance;
- Targeted lethal predation management (e.g., coyote trapping, crow shooting) where specific predators have been documented to be causing damage to a nest site or nesting colony;
- Coordination and communication for site access and rapid response to emerging threats at active nesting sites;

- Coordination with on-going shorebird and seabird monitoring; and
- Increasing public understanding of predation management on Florida's beaches (e.g., installing educational materials around non-lethal predator measures such as crow effigies or goshawk traps in public spaces).

Project activities include implementation (non-construction) such as agency coordination, implementation of predation management activities, effort tracking, coordination with monitoring activities, and evaluation of project outcomes. The project would be implemented at bird nesting sites throughout Nassau, Duval, and St. Johns counties in Northeast Florida, and most activity would occur within the same locations as do existing agency operations, including offices and equipment used by FWC, Florida Department of Environmental Florida Park Service, National Park Service, local/county governments, and other protected sites. Project activities would also occur in a variety of public agency offices, private properties, and public lands along the Northeast Florida Coast.

Specific bird colony locations where project activities could occur include: Fort Clinch State Park, Amelia Island State Park, Big Talbot Island State Park, Little Talbot Island State Park, Huguenot Memorial Park, Guana Tolomato Matanzas National Estuarine Research Reserve, Anastasia State Park, and Fort Matanzas National Monument.

Rare and protected species and sensitive habitats (e.g., wetlands) could be disturbed from work activities of project staff seeking to reduce depredation of target bird species. The affected species could include any ESA-listed species that are potentially found on Florida beaches and nearshore habitats. The activities of project staff while outside of the office, on land or water, could include temporary disturbances to individual animals, resulting from traffic, noise, and human presence. However, these activities would not create substantially greater human presence on coastal Florida lands and potential effects to ESA-listed species would not be adverse. All predation management and monitoring work would be conducted entirely by land. A handful of monitoring sites would be accessed by kayak (i.e., solely transporting people/equipment to the breeding sites) as currently occurs for the program.

There would be long-term, benefits to beach-nesting birds (particularly American oystercatchers, least terns, black skimmers, and Wilson's plovers) because the project's purpose is to increase shorebird and seabird nesting success, productivity, and population density through targeted predator management.

II. Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.) The project would be completed in five years. After the initial hiring and training period, approximately three months, project activities would be implemented each year that the project is active (Years 1-5).

III. Specific In-Water and/or Terrestrial Construction Methods

Does this project include in-water work?	YES	NO⊠
Does this project include terrestrial construction?	YES	NO⊠
Does this project include construction of an overwater structure?	YES	NO⊠
Will fishing be allowed from this overwater structure?	YES	NO⊠
Will wildlife observation be allowed from this overwater structure?	YES	NO⊠
Will boat docking be allowed from this overwater structure?	YES	NO⊠
Will fishing be allowed from this overwater structure?	YES	NO⊠

Please check yes or no for the following questions related to in-water work and overwater structures

If this is a fishing pier, please provide the following information: public or private access to pier, estimated number of people fishing per day, plan to address hook and line captures of protected species, specific operating hours/open 24 hours, artificial lighting of pier (if any), number of fish cleaning stations, and number of pier attendants (if any).

N/A

Construction: Provide a detailed account of construction methods. It is important to include step-by-step descriptions of how demolition or removal of structures is conducted and if any debris will be moved and how. Describe how construction will be implemented, what type and size of materials will be used and if machines will be used, manual labor, or both. Indicate if work will be done from upland, barge, or both.)

iii. Use of "Dock Construction Guidelines"? http://sero.nmfs.noaa.gov/protected resources/section 7/quidance docs/documents/dockkey2002.pdf

- iv. Type of decking: Grated 43% open space; Wooden planks or composite planks proposed spacing?
- v. Height above Mean High Water (MHW) elevation?
- vi. Directional orientation of main axis of dock?
- vii. Overwater area (sq ft)?

Click or tap here to enter text.

N/A

b. Pilings & Sheetpiles: If this project includes installation of pilings or sheets, please provide answers to questions 1-11 listed below

1.	Method of pile installation	N/A
2.	Material type of piles used	N/A
3.	Size (width) of piles/sheets	N/A
4.	Total number of piles/sheets	N/A
5.	Number of strikes for each single pile	N/A
6.	Number of strikes per hour (for a single pile)	N/A
7.	Expected number of piles to be driven each day	N/A
8.	Expected amount of time needed to drive each pile (minutes of driving activities)	N/A
9.	Expected number of sequential days spent pile driving	N/A
10.	Whether pile driving occurring in-water or on land	N/A
11.	Depth of water where piles will be driven	N/A

c. Marinas and Boat Slips (Describe the number and size of slips and if the number of new slips changes from what is currently available at the project. Indicate how many are wet slips and how many are dry slips. Estimate the shadow effect of the boats - the area (sqft) beneath the boats that will be shaded.)

N/A

d. Boat Ramp (Describe the number and size of boat ramps, the number of vessels that can be moored at the site (e.g., staging area) and if this is a public or private ramp. Indicate the boat trailer parking lot capacity, and if this number changes from what is currently available at the project.)

N/A

e. Shoreline Armoring (This includes all manner of shoreline armoring (e.g., riprap, seawalls, jetties, groins, breakwaters, etc.). Provide specific information on material and construction methodology used to install the shoreline armoring materials. Include linear footage and square footage. Attach a separate map showing the location of the shoreline armoring in the action area.

N/A

f. Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft2) to be dredged, volume of material (yd3) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans,

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and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods. If using devices/methods/turtle relocation dredging to relocate sea turtles, then describe the methods here.

N/A

g. Blasting (Projects that use blasting might not qualify as "minor projects," and a Biological Assessment (BA) may need to be prepared for the project. Arrange a technical consultation meeting with NMFS Protected Resources Division to determine if a BA is necessary. Please include explosive weights and blasting plan.)

N/A

h. Artificial Reefs (Provide a detailed account of the artificial reef site selection and reef establishment decisions [i.e., management and siting considerations, stakeholder considerations, environmental considerations, long term maintenance plan (periodic clean-up of lost fishing gear/debris]), deployment schedule, materials used, deployment methods, as well as final depth profile and overhead clearance for vessel traffic. For additional Information and detailed guidance on artificial reefs, please refer to the artificial reef program websites for the particular state the project will occur in.

N/A

i. Fishery Activities (Describe any use of gear that could entangle or capture protected species. This includes activities that may enhance fishing opportunities (e.g. fishing piers) or be fishery/gear research related (e.g. involve trawl gear, gillnets, hook and line gear, crab pots etc)).

N/A

G. NOAA Species & Critical Habitat and Effects Determination Requested

If your project occurs in a location that does not contain any listed NOAA species or designated Critical Habitats, please check the box below. If this box is checked, you may skip Section G. and proceed to Section H.

⊠This project occurs in a location that does not contain any listed NOAA species or designated Critical Habitats.

$\Box \mathsf{ESA}$ effects have been accounted for under an existing consultation.

1. List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area. Species that do not currently occur in the action area (but are listed on county species lists) do not need to be listed in drop downs.

2. Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit:

http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For "No Effect", please select justification.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.

Choose an item.	Choose an item.	Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.	Choose an item.

Determination Definitions

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.

NLAA = may affect, 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 concurrence with the not likely to affect determination. This conclusion is appropriate when effects to the species or critical habitat will be wholly beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

LAA = may affect, 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 for action with a likely to adversely affect determination, with a biological opinion as the concluding document. This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable or insignificant. In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination is "likely to adversely affect." Any LAA determination requires formal section 7 consultation and will require additional information.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

H. USFWS Species & Critical Habitat and Effects Determination Requested

If your project occurs in a location that does not contain any listed USFWS species or designated Critical Habitats, please check the box below. If this box is checked, you may skip Section G. and proceed to Section H.

□This project occurs in a location that does not contain any listed USFWS species or designated Critical Habitats.

⊠ESA effects have been accounted for under an existing consultation.

1. List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area. Species that do not currently occur in the action area (but are listed on county species lists) do not need to be listed in drop downs.

2. Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit: http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For "No Effect", please select justification.
West Indian Manatee		Choose an item.	No Effect	Species does not occur within action area
West Indian Manatee CH		Choose an item.	No Effect	Species does not occur within action area
Gopher Tortoise		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Green Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Hawksbill Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Leatherback Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle CH	LOGG-T-FL-01 & 02	Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Red Knot		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Piping Plover		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Piping Plover CH	FL-35	Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Anastasia Island Beach Mouse		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Eastern Black Rail		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Florida Scrub-Jay		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Wood Stork		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Eastern Indigo Snake		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Frosted Flatwoods Salamander		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.

Determination Definitions

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.

NLAA = may affect, 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 concurrence with the not likely to affect determination. This conclusion is appropriate when effects to the species or critical habitat will be wholly beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

LAA = may affect, 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 for action with a likely to adversely affect determination, with a biological opinion as the concluding document. This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable or insignificant. In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination is "likely to adversely affect." Any LAA determination requires formal section 7 consultation and will require additional information.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

I. Effects of the proposed project to the species and actions to reduce impacts

NOTE: Species selected as "No Effect" with justification in table do not need to be addressed in Section I or J.

1. Explain the potential beneficial and adverse effects to each species listed above. Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects.

If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.

No in-water work would be done nor would any effects reach a waterway that could affect species or habitats protected under the ESA under the jurisdiction of NMFS. Therefore, no ESA consultation with NMFS is necessary.

Specific bird colony locations where project activities could occur include: Fort Clinch State Park, Amelia Island State Park, Big Talbot Island State Park, Little Talbot Island State Park, Huguenot Memorial Park, Guana Tolomato Matanzas National Estuarine Research Reserve, Anastasia State Park, and Fort Matanzas National Monument. Other privately- or publiclyowned lands hosting shorebird colonies in Nassau, Duval, or St. Johns may be included in this project if identified as needed through monitoring data. Project activities would primarily occur during shorebird nesting season, which is March through September.

Lethal and non-lethal predator control measures are predicted to have benefits to protected species due to decreased predation and habitat damage. Non-lethal predator management methods (e.g., perch deterrent deployment/removal, trash management, predator effigies, and electric fence deployment/maintenance) are intended to exclude or disperse predators by making an area unattractive and would not result in harm or mortality to animals. Lethal methods would only be applied when other non-lethal methods are ineffective and would follow American Veterinary Medical and American Association of Zoo Veterinarians Association guidelines on euthanasia.

Predator carcass disposal is dependent upon site characteristics (e.g., visibility/public access to the property, accessibility of remote wooded habitat, subsurface archeological sites that limit digging). Carcasses may be disposed of by remote burial in the woods (at least two feet below the surface of the ground and above the water table), remote surface disposal in the woods without burial, or by using three-millimeter-thick plastic trash bags and disposing of carcasses at a Class I landfill with prior approval from landfill owner/operator. Lethal management would not involve chemical euthanasia that could contaminate soils, sediments, or water from carcass burial that could impact protected species.

Previous NEPA analyses have determined that non-lethal and lethal predator control methods may affect but is not likely to adversely affect non-predator protected species due to habitat disturbance from human presence and accidental trapping (USDA 2003; USDA 2013). Habitat-related disturbance from human presence would be temporary. FWC, as the

Implementing Trustee, would avoid night-time activities to reduce disturbance to nocturnal species and limit light pollution on sea turtle nesting beaches. As described in the USDA EA, "lethal removal by shooting is nearly 100% selective for target species" and would therefore only impact non-target wildlife through temporary habitat disturbance (USDA 2003). Additionally, carcasses would be removed from nesting areas to avoid attracting additional predators.

Terrestrial protected species (birds, reptiles, mammals, and amphibians) may be accidentally caught in live traps intended for target predators. FWC would employ best management practices¹ (BMPs) including using the most selective methods for target species, using attractants that are specific to target species, and placing traps in areas that avoid exposure to non-target species (USDA 2013). Additionally, set traps would be checked frequently, and if a non-target animal is inadvertently caught it would be released if the animal is injury-free or it is otherwise safe to release the animal. Consistent with determinations from the USDA EA's described in Section D, this project may affect, but is not likely to adversely affect protected species near the project area and this project would not impact overlapping critical habitat.

West Indian manatee (*Trichechus manatus*) inhabits freshwater, brackish, and marine environments. It typically occurs in coastal and inland tidal rivers and streams, mangrove swamps, salt marshes, freshwater springs, canals, lagoons, and vegetated bottoms. It moves to warm-water sites, including industrial warm-water discharges, during the winter. West Indian manatee critical habitat is designated in various riverine and estuarine environments in Nassua, Duval, and St. Johns counties. No in-water work would occur as part of this project. Additionally, chemicals attractants or euthanasia drugs, which could contaminate water, would not be used for predator control measures. For these reasons, this project has no effect on West Indian manatees.

Green sea turtles (*Chelonia mydas*), hawksbill sea turtles (*Eretmochelys imbricata*), leatherback sea turtles (*Dermochelys coriacea*), and loggerhead sea turtles (*Caretta caretta*) nest along Atlantic-ocean-facing beaches in Nassau, Duval, and St. Johns Counties from May through October. Nesting sea turtles could be present near seabird and shorebird colonies that will be managed for this project. Nesting sea turtles may be disturbed by foot traffic or other human-related habitat disturbance associated with monitoring or lethal and non-lethal predator control measures. Sea turtle hatchlings can be disoriented by artificial lighting or get entrapped in physical barriers on the beach. To minimize impacts to sea turtles, the following BMPs could be employed: avoid night-time activities to limit light pollution on sea turtle nesting beaches; siting live traps or other physical barriers away from open beach habitat; utilize existing designated dune crossovers and beach walkways to minimize foot traffic on sensitive habitats; and, avoiding marked sea turtle nests or areas of the beach with sea turtle traps to avoid trampling nests. With implemented BMPs, this project may affect, but is not likely to adversely affect, nesting sea turtles. Sea turtles may benefit from this project as their nests can be lost to predation.

Gopher tortoise (*Gopherus polyphemus***) and Eastern indigo snake (***Drymarchon couperi***)** inhabit a variety of terrestrial habitats such as well drained sandy soils in sandhill, scrub, xeric hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, and mixed hardwood pine habitats. Eastern indigo snake frequently co-inhabits gopher tortoise burrows. While nesting seabirds and shorebirds primarily inhabit unconsolidated beach habitats, non-lethal and lethal predator control could occur in adjacent coastal dune, coastal grassland, and maritime hammock habitats where gopher tortoises and Eastern Indigo snake could be present. Additionally, staff may need to traverse habitats containing gopher tortoise or Eastern indigo snake, and carcasses may be buried in wooded areas that provide habitat to these species. As described above, gopher tortoises and Eastern indigo snakes could be affected by foot traffic or disturbance from human presence related to implementing lethal and non-lethal predator control measures. Additionally, they may be inadvertently caught in live traps. To minimize impacts to gopher tortoises and Eastern indigo snakes, the following BMPs could be employed: using designated foot trails where possible; siting live traps away from known burrows; checking traps frequently to release

¹ FWC follows trapping standards outlined by the Association of Fish and Wildlife Agencies (https://www.fishwildlife.org/afwa-inspires/furbearer-management).

inadvertent captures; and, using appropriately-sized traps for target predators. With implemented BMPs, this project may affect, but is not likely to adversely affect, gopher tortoise and Eastern indigo snake.

Frosted flatwoods salamander (*Ambystoma cingulatum***)** inhabits palustrine wet flatwoods, dome swamps, basin swamps, and mesic flatwoods. While nesting seabirds and shorebirds primarily inhabit unconsolidated beach habitats, non-lethal and lethal predator control could occur in adjacent coastal dune, coastal grassland, and maritime hammock habitats where wetlands and the frosted flatwoods salamander may be present. Additionally, staff may need to traverse habitats containing gopher tortoise or Eastern indigo snake, and carcasses may be buried in wooded areas that provide habitat to these species. As described above, frosted flatwoods salamanders may be affected by foot traffic or disturbance from human presence related to implementing lethal and non-lethal predator control measures. Additionally, they may be inadvertently caught in live traps. To minimize impacts on frosted flatwoods salamanders, the following BMPs could be employed: using designated foot trails or otherwise avoiding wetlands where possible; siting live traps away from known burrows; checking traps frequently to release inadvertent captures; and, using appropriately-sized traps for target predators. With implemented BMPs, this project may affect, but is not likely to adversely affect, frosted flatwoods salamanders.

Anastasia Island beach mouse (*Peromyscus polionotus phasma*) inhabits primary and secondary dunes dominated by sea oats and scrub dunes dominated by scrub oaks. While nesting seabirds and shorebirds primarily inhabit unconsolidated beach habitats, non-lethal and lethal predator control could occur in adjacent coastal dune habitats where Anastasia Island beach mice may be present. As described above, the Anastasia Island beach mouse may be impacted by foot traffic or disturbance from human presence related to implementing lethal and non-lethal predator control measures. Additionally, they may be inadvertently caught in live traps. To minimize impacts to Anastasia Island beach mouse, the following BMPs could be employed: using designated dune crossovers and avoiding vegetated dune habitat; siting live traps away from known beach mice locations; checking traps frequently to release inadvertent captures; using appropriately-sized traps for target predators; avoiding working at night; and, avoiding leaving equipment out on dunes overnight that could be colonized by beach mice. With implemented BMPs, this project may affect, but is not likely to adversely affect, Anastasia Island beach mouse.

Piping plover (*Charadrius melodus***) and red knot (***Calidris canutus***)** inhabit exposed unconsolidated substrates around bays, inlets, and tidal flats. They winter on sandy beaches in Florida near the foot of sand dunes. Nesting piping plover and red knot are likely to be present along the same beaches where seabirds and shorebirds nest. Although they are not targeted for this project, piping plovers and red knots are likely to experience benefits associated with reduced predator presence around nesting beaches. As described above, piping plovers or red knots may be disturbed by foot traffic or disturbance from human presence related to implementing lethal and non-lethal predator control measures. Additionally, they may be inadvertently caught in live traps. To minimize impacts to piping plovers and red knot, the following BMPs could be employed: using designated dune crossovers and beach walkways; siting live traps away from known nest location; checking traps frequently to release inadvertent captures; and, using appropriately-sized traps for target predators; avoiding working at night. With implemented BMPs, this project may affect, but is not likely to adversely affect, Anastasia Island beach mouse.

Wood stork (*Mycteria americana*), Eastern black rail (*Laterallus jamaicensis*) inhabit estuarine and upland marshes or herbaceous wetlands with elevated refugia. Florida scrub-jay (*Aphelocoma coerulescens*) inhabit upland scrub-shrub habitats. While nesting seabirds and shorebirds primarily inhabit unconsolidated beach habitats, non-lethal and lethal predator control could occur in adjacent coastal dune, coastal grassland, and maritime hammock habitats where wetlands or the wood stork, Eastern black rail, and Florida scrub-jay may be present. Additionally, staff may need to traverse habitats containing gopher tortoise or Eastern indigo snake, and carcasses may be buried in wooded areas that provide habitat to these species. As described above, these birds may be impacted by foot traffic or disturbance from human presence related to implementing lethal and non-lethal predator control measures. Additionally, they may be inadvertently caught in live

traps. To minimize impacts on wood stork, Eastern black rail, and Florida scrub-jay, the following BMPs could be employed: using designated foot trails or otherwise avoiding wetlands where possible; siting live traps away from known nests or individuals; checking traps frequently to release inadvertent captures; and, using appropriately-sized traps for target predators. With implemented BMPs, this project may affect, but is not likely to adversely affect, wood stork, Eastern black rail, and Florida scrub-jay.

Piping plover (FL-35 complex) and loggerhead sea turtle terrestrial (LOGG-T-FL-01 & 02) critical habitat is present along beaches in Nassau, Duval, and/or St. Johns Counties where nesting seabirds and shorebirds also occur. Piping plover and loggerhead sea turtles would likely be present in their designated critical habitats during project implementation. As described in the above narrative, various BMPs could be employed to reduce disturbance to protected species in their critical habitat and reduce impacts to critical habitat. For example, existing designated foot paths and dune crossovers would be utilized to reduce foot traffic impacts to beach and dune habitats. This project would not change the primary constituent elements for each critical habitat and may improve habitat by managing predators that damage habitat. For these reasons, this project may affect but is not likely to adversely affect piping plover and loggerhead sea turtle critical habitat.

II. Explain the actions to reduce adverse effects to each species listed above. For each species for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.

Please see the above Section I.I for species-specific BMPs that could be employed during project implementation. FWC follows trapping standards outlined by the Association of Fish and Wildlife Agencies to increase selectivity of trapping efforts and reduce the change of trapping non-target species.

Additional BMPs that could be implemented include: using the most selective methods for target species; using attractants that are specific to target species; placing traps in areas that avoid exposure to non-target species; checking set traps frequently; releasing inadvertently caught a non-target animals (if the animal is injury-free or it is otherwise safe to release the animal); using designated dune crossovers or designated walkways to minimize foot traffic impacts; avoiding working at night during sea turtle nesting season; and, removing carcasses from nesting areas. Chase hounds (i.e., dogs that chase predators away from nest sites), chemical attractants, and chemical toxins are prohibited. Vehicle operators would avoid posted closed areas and would avoid driving on closed roads. Low tire pressure vehicle operators would follow standards and well accepted Florida BMPs for operating four-wheel drive low tire pressure vehicles on nesting beaches, such as accessing nesting beaches only at designated access points (road intersections), operating at very low speeds (less than ten miles per hour), driving close to the waterline, avoiding negatively impacting dune and beach vegetation, and avoiding the wrack line.

<u>Frequently Recommended BMPs</u>: This checklist provides standard BMPs recommended by NOAA and USFWS. Please select any BMPs that will be implemented:

USFWS Standard Manatee In Water Conditions
NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions ²
NMFS Measures for Reducing the Entrapment Risk to Protected Species ¹
NFMS Vessel Strike Avoidance Measures and Reporting for Mariners ¹

² Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

Additional BMPs or Conservation Measures

Chapter 6 of the PDARP included an important appendix (6.A) of best practices, see information starting on page 6-173. http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-6_Environmental-Consequences_508.pdf Use the box below to indicate which best management practices or conservation measures you'll be using in your project (that were not listed in Section I above)

The project would follow BMPs included in the Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement for birds (bald eagles, migratory birds, and piping plover and red knot), mammals (beach mouse), reptiles and amphibians (eastern indigo snake), and tortoises/turtles (gopher tortoise, sea turtles – nesting beaches), where applicable (DWH Trustees 2016).

J. Effects to critical habitats and actions to reduce impacts

NOTE: Species selected as "No Effect" with justification in table do not need to be addressed in Section I or J.

I. Explain the potential beneficial and adverse effects to critical habitat listed above. Describe what, when, and how the critical habitat will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts to physical and biological features, and where possible, quantify effects (e.g. acres of habitat, miles of habitat).

Describe your rationale if designated or proposed critical habitats are present and will not be adversely affected.

West Indian manatee Critical Habitat (CH). The West Indian manatee inhabits freshwater, brackish, and marine environments. Since this project would not have any in-water work, there would be no effect on West Indian manatee critical habitat.

Loggerhead sea turtle terrestrial CH (LOGG-T-FL-01 & LOGG-T-FL-02) & wintering piping plover CH (FL-35 complex). Project activities (including monitoring and lethal/non-lethal predator control) may occur on beach or nearshore habitats that have been designated CH for loggerhead sea turtles or piping plover. Project activities would primarily occur during shorebird nesting season (approximately March 1-September 1), during which time loggerhead sea turtles and piping plover may also be present in their critical habitat. This project may provide long-term ancillary benefits to loggerhead and piping plover CH by reducing the impact of predation on nesting beaches. For this reason, this project may affect, but is not likely to adversely affect, critical habitat.

II. Explain the actions to reduce adverse effects to critical habitat listed above. For critical habitat for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.

Please see the above Section I.I for species-specific BMPs that could be employed during project implementation. FWC follows trapping standards outlined by the Association of Fish and Wildlife Agencies to increase selectivity of trapping efforts and reduce the change of trapping non-target species. Additional BMPs that would be implemented include: using the most selective methods for target species; using attractants that are specific to target species; placing traps in areas that avoid exposure to non-target species; checking set traps frequently; releasing inadvertently caught a non-target animals (if the animal is injury-free or it is otherwise safe to release the animal); using designated dune crossovers or designated walkways to minimize foot traffic impacts; avoiding working at night during sea turtle nesting season; and, removing carcasses from nesting areas. Chase hounds (i.e., dogs that chase predators away from nest sites), chemical attractants, and chemical toxins are prohibited. Vehicle operators would avoid posted closed areas and would avoid driving on closed roads. Low tire pressure vehicle operators would follow standards and well accepted Florida BMPs for operating four-wheel drive low tire pressure vehicles on nesting beaches, such as accessing nesting beaches only at designated access

points (road intersections), operating at very low speeds (less than ten miles per hour), driving close to the waterline, avoiding negatively impacting dune and beach vegetation, and avoiding the wrack line.

K. Marine Mammals

I. The Marine Mammal Protection Act prohibits the taking (including disruption of behavior, entrapment, injury, or death) of all marine mammals (e.g., whales, dolphins, manatees). However, the MMPA allows limited exceptions to the take prohibition if authorized, such as the incidental (i.e., unintentional but not unexpected) take of marine mammals. The following questions are designed to allow the Agencies to quickly determine if your action has the potential to take marine mammals. If the information provided indicates that incidental take is possible, further discussion with the Agencies is required.

Is your activity occurring in or on marine or estuarine waters?

If yes, is your activity likely to cause large-scale, ecosystem level impacts to the quality (e.g. salinity, temperature) of marine or estuarine waters? \boxtimes NO \square YES

II. If Yes, describe activities further using checkboxes. Does your activity involve any of the following:

NO	YES	ACTIVITY
\boxtimes		a) Use of active acoustic equipment (e.g., echosounder) producing sound below 200 kHz
\boxtimes		b) In-water construction or demolition
\boxtimes		c) Temporary or fixed use of active or passive sampling gear (e.g., nets, lines, traps; turtle relocation trawls)
\boxtimes		d) In-water Explosive detonation
\boxtimes		e) Aquaculture
\boxtimes		f) Restoration of barrier islands, levee construction or similar projects
\boxtimes		g) Fresh-water river diversions
\boxtimes		h) Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)
\boxtimes		i) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.
\boxtimes		j) Conducting driving of sheet piles or pilings
\boxtimes		k) Use of floating pipeline during dredging activities

III. If you checked "Yes" to any of the activities immediately above or the activity could impact the quality of marine or estuarine waters, please describe the nature of the activities in more detail or indicate which section of the form already includes these descriptions. See the NOAA Acoustic Guidance for more information: http://www.nmfs.noaa.gov/pr/acoustics/faq.htm

N/A

IV. <u>Frequently Recommended BMPs for marine mammals (manatees are covered in Section I above)</u>: This checklist provides standard BMPs recommended by NOAA. Please select any BMPs that will be implemented:

NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines ³
NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions ⁴

³ Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html

⁴ Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

NMFS Measures for Reducing the Entrapment Risk to Protected Species ³
NFMS Vessel Strike Avoidance Measures and Reporting for Mariners ³
Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign ³

If not listed above, please describe any additional BMPs or conservation measures that may be be implemented for marine mammals. N/A

L. Bald Eagles

Are bald eagles present in the action area? \Box NO \boxtimes YES

If YES, the following conservation measures should be implemented:

- 1. If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, all activities (e.g., walking, camping, clean-up, use of a UTV, ATV, or boat) should avoid the nest by a minimum of 660 feet. If the nest is protected by a vegetated buffer where there is *no* line of sight to the nest, then the minimum avoidance distance is 330 feet. This avoidance distance shall be maintained from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).
- 2. If a similar activity (e.g., driving on a roadway) is closer than 660 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
- 3. If a vegetated buffer is present and there is no line of sight to the nest and a similar activity is closer than 330 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
- 4. In some instances, activities conducted at a distance greater than 660 feet of a nest may result in disturbance. If an activity appears to cause initial disturbance, the activity shall stop and all individuals and equipment will be moved away until the eagles are no longer displaying disturbance behaviors.

Will you implement the above measures? \Box NO

⊠YES

If these measures cannot be implemented, then you must contact the Service's Migratory Bird Permit Office. Texas – (505) 248-7882 or by email: permitsR2MB@fws.gov Louisiana, Mississippi, Alabama, Florida – (404) 679-7070 or by email: permitsR4MB@fws.gov

M. Request approval for use of NMFS PDCs for this project

Complete this section only if your project qualifies for streamlined ESA consultation under the ESA Framework Programmatic Biological Opinion completed by NMFS on February 10, 2016. To be eligible for streamlined ESA consultation with NMFS, you must implement all Project Design Criteria (PDCs) applicable to your project. Check "yes" for PDC categories that apply to the proposed project, and request PDC checklist from NMFS.

NO	YES	ACTIVITY
\boxtimes		Oyster Reef Creation and Enhancement
\boxtimes		Marine Debris Removal
\boxtimes		Construction of Living Shorelines
\boxtimes		Marsh Creation and Enhancement
\boxtimes		Construction of Non-Fishing Piers

N. Submitting the BE Form

We request that all BE forms and consultation materials be placed on Sharepoint for review. Upon receipt, we will conduct a preliminary review and provide any comments and feedback, including any requests for modifications or additional information. If modifications or additional information is necessary, we will work with you until the Biological Evaluation form is considered complete. Once complete, we will use the Biological Evaluation form to initiate appropriate consultations.

Questions may be directed to:

NMFS ESA § 7 Consultation

Christy Fellas, National Oceanic Atmospheric Administration Email: Christina.Fellas@noaa.gov Phone: 727-551-5714

USFWS ESA § 7 Consultation

Erin Chandler, Department of the Interior Email: Erin_Chandler@fws.gov Phone: 470-361-3153

List of Appendices:

- A. USFWS migratory bird depredation permit 86892C issued to FWC.
- B. USFWS and FWC cooperative agreement for the conversation of endangered and threatened wildlife.

References and Data Sources:

- Deepwater Horizon Natural Resource Damage Assessment (DWH NRDA) Trustees. 2016. Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement. Baton Rouge, LA: National Oceanic and Atmospheric Administration. Available at: http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan.
- Environmental Response Management Application. Web application. Gulf of Mexico. National Oceanic and Atmospheric Administration, 2014. Web. <<u>http://response.restoration.noaa.gov/erma/</u>.>
- Federal Emergency Management Agency (FEMA). FEMA Flood Map. Available at: <u>https://msc.fema.gov/portal/search?kbid=62548#searchresultsanchor</u>.
- Florida Department of Environmental Protection (DEP). Updated April 30, 2020, "Statewide Comprehensive Verified List of Impaired Waters". <u>https://floridadep.gov/dear/watershed-assessment-section/documents/comprehensive-verified-list</u>.
- National Marine Fisheries Service (NMFS). 2006. Sea Turtle and Smalltooth Sawfish Construction Conditions; revised March 23, 2006.
- National Marine Fisheries Service (NMFS). 2008. NMFS Southeast Region Vessel Strike Avoidance Measures and Reporting for Mariners; revised February 2008.
- National Marine Fisheries Service (NMFS). 2012. Measures for Reducing Entrapment Risk to Protected Species; revised May 22, 2012.
- National Marine Fisheries Service (NMFS). 2020. US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2019. NOAA Technical Memorandum NMFS-NE-264. Available at: https://www.fisheries.noaa.gov/webdam/download/109188360.
- National Oceanic and Atmospheric Administration (NOAA). 2018. Essential Fish Habitat Gulf of Mexico. Silver Spring, MD: National Oceanic and Atmospheric Administration. Available at: <u>https://www.habitat.noaa.gov/application/efhinventory/index.html</u>.
- U.S. Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (USDA-APHIS-WS). 2003. Management of Predation Losses to State and Federally Endangered, Threatened, and Species of Special Concern; and Feral Hog Management to Protect Other State and Federally Endangered, Threatened, Species of Special Concern, and Candidate species of Fauna and Flora in the State of Florida. Prepared in coordination with U.S. Department of the Interior (USFWS and NPS), U.S. Department of Defense (U.S. Air Force), FDEP, and FWC.
- U.S. Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (USDA-APHIS-WS). 2013. Environmental assessment for mammal damage in Florida. January.
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

- U.S. Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC). 2011. Standard Manatee Conditions for In-Water Work.
- U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation (IPaC). Available at: https://ecos.fws.gov/ipac/.
- U.S. Fish and Wildlife Service (USFWS). 2020. National Wetlands Inventory Wetlands Mapper (NWI). Available at: <u>https://www.fws.gov/wetlands/data/Mapper.html</u>.
- U.S. Geological Survey (USGS). 2016. National Land Cover Database. Available at: <u>https://www.usgs.gov/centers/eros/science/national-land-cover-database?qt-science_center_objects=0#qt-</u> <u>science_center_objects</u>.

Version: August 21, 2018



Figure 1. Project sites for Northeast Florida Coastal Predation Management.