



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

May 19, 2021

To: Memorandum To File

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

Subject: No Further Consultation Required for Florida Trustee Implementation Group's (FL TIG) Restoration Planning Activity Evaluating Orientation Response of Sea Turtle Hatchlings to Physical Cues on Nesting Beaches

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 "Evaluating Orientation Response of Sea Turtle Hatchlings to Physical Cues on Nesting Beaches." 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., scientific data collection for the purpose of restoring sea turtle populations). There will be no effect to other listed or proposed species or proposed or designated critical habitats. 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 and Golden eagles are not present in the action area and all standard conservation measures or best management practices will be followed for migratory birds that could be present near sea turtle nests. 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 holly_herod@fws.gov.

Attachments (1)

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: Michael Barron at michael_barron@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: Evaluating orientation response of sea turtle hatchlings to physical cues on nesting beaches

DIVER ID# [Click to enter text](#) TIG: Florida TIG Restoration Plan # [Click here to enter text](#)

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:

N/A

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 overlaid

C. Project Location

I. State and County/Parish of action area

Florida Gulf and Atlantic Coasts. All laboratory experiments will be conducted in FWC or partner agency facilities adjacent to the high-density nesting beaches in Palm Beach, Martin, and/or Brevard Counties to ensure we have access to a sufficient number of loggerhead and green hatchlings. Environmental data will be collected on beaches in Northwest and Southwest Florida including Pensacola Beach, Panama City Beach, Clearwater Beach, and/or Captiva/Sanibel Island Beach. Field tests will be conducted on beaches on the Florida Gulf and Atlantic Coasts to ensure we have access to enough hatchlings and nests to complete the work and to minimize the potential that coastal storms will disrupt the investigations.

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>]

N/A

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: Cooperative Section 6 Agreement – please below for more information.

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.

See FL TIG’s Restoration Planning Activity Implementation Plan – Evaluating orientation response of sea turtle hatchlings to physical cues on nesting beaches.

See *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* (Dated 4/13/18).

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

Name of Person Completing this Form: Amy Raker and Gareth Leonard

Name of Project Lead: Robbin Trindell

Date Form Completed: 04/22/2021

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.

N/A

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.

N/A

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.

Study beaches will be located in sea turtle habitat along developed areas ranging from single family homes to high rise condos.

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.

N/A

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.).

Potential study areas will consist of beach and dune habitat, specifically in locations where unconsolidated sandy substrate with sufficient depth, hydrology, and gas exchange for successful sea turtle nest deposition and incubation is exposed to existing lights causing known disorientation issues.

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 <http://www.nmfs.noaa.gov/pr/sars/region.htm>

N/A

h. Soils and Sediments

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

Unconsolidated sandy substrate.

i. Land Use

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

This project would occur in beach and adjacent dune habitat that will likely vary in size, quality, type, protections (e.g., conservation lands), development, recreational use, and management regimes.

j. Essential Fish Habitat

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

N/A

F. Project Description

*I. 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.*

The purpose of this restoration planning activity implementation plan is to obtain a better understanding of hatchling perception of and response to visible light using laboratory and field experiments. FWC will measure the visual landscape (e.g., light and dark areas) on study beaches likely to have artificial lighting issues (identified below: Subtask 2.1). We will also use behavioral assays (hatchling orientation indices and arena assays) to assess the relationship between hatchling orientation and different structural alterations (e.g., installing a light shield or taller artificial vegetation) designed to alter the existing light environment on the beaches (identified in Subtask 2.2). None of the project activities will take place in the dune habitat and access to the beach will be through defined access points.

Task 1: Laboratory investigations of loggerhead and green sea turtle hatchling visual perspective.

- **Description:** To design appropriate visual cues to trigger a specific orientation response requires determining the “cone of acceptance”, or vertical and horizontal field of view, hatchlings use to assess their surroundings. To do this, we would use standard lab protocols to measure hatchling attraction to light at different vertical angles (30°, 40°, 50°, 60°, and 70°: as in Witherington 1992).
- **Study Site:** We plan to conduct all laboratory experiments in FWC or partner agency facilities adjacent to high density nesting beaches in Palm Beach, Martin, or Brevard Counties. This will ensure we have access to sufficient number of loggerhead and green hatchlings to complete a statistically valid number of trials in a facility adjacent to areas with reliable numbers of nests and hatchlings. Hatchlings will be collected after natural emergence, held in darkness until the assay, and then released the same night in proximity to the beach where they were collected (Witherington and Bjorndal 1991; FWC 2016).
- **Equipment:** Laboratory optic equipment (as in Witherington 1992); materials to create lab test arena; a radiometer; materials for collecting and holding hatchlings.
- **Deliverable:** A summary of the laboratory investigations and a table of results with a description of dimensions to be used to create visual cues in the field to promote correct hatchling orientation toward the water.
- **Schedule:** From July 2021 to July 2022, we would purchase necessary equipment and create the laboratory test arena. Experiments would be implemented during sea turtle hatching season, August 2021 (if the test arena is completed) through October 2022.

Task 2: Design and implement visual cues to influence sea turtle hatchling orientation and assess response.

- **Subtask 2.1:** Collect environmental data to characterize the physical and biological features of study beaches.
 - **Description:** At nest sites, examine hatchling orientation and measure abiotic parameters, such as dune height, berm width, beach slope, and light measurements across the beach, and biotic parameters such as dune vegetation composition, shore-parallel length, and height. Photo document beaches (dune, dune vegetation).
 - **Equipment:** Inclinometers; tape measures; DLSR camera with wide-angle lens; measuring tripods; photometers; handheld GPS to collect elevation data.

- **Study Sites:** We will collect environmental and hatchling orientation data on southwest peninsular and northwest panhandle beaches including Pensacola Beach, Panama City Beach, Clearwater Beach, and Captiva/Sanibel Island Beach as well as on all beaches utilized for field tests described in Subtask 2.2.
 - **Deliverable:** A description of the biotic and abiotic parameters and a plan for implementing physical modifications based on specific beach characteristics to test their effect on hatchling orientation.
 - **Schedule:** Field measurements, June through August 2021, 2022, 2023, and 2024. The necessary equipment would be purchased and tested in July 2021.
- **Subtask 2.2:** Field tests of hatchling response to physical structures in the visual environment.
 - **Description:** Use information on hatchling visual perspective (Task 1) and study beach environmental and hatchling orientation parameters (Subtask 2.1) to design and implement specific visual cues to enhance loggerhead and green turtle hatchling orientation toward the water. Experiments will be done passively by placing cues in proximity to nests during the final incubation quarter and collecting orientation data (Hirama 2018; Salmon and Witherington 1995) on emerged nests. Hatchlings would be allowed to emerge naturally into restraining cages and then collected and transported to the lab or to the beach study site (arena). Arena assays will also be used to test orientation of hatchlings released in proximity to a specific visual cue (silt fence, artificial dune vegetation, or similar structure) compared to no visual cue. Groundwork to simulate a dune or vegetation landward of the nest would be minimal as silt fence would act as dune or artificial plants may be staked into the sand – similar to stakes used to mark turtle nests. Field assessments will be done on beaches exposed to existing lights with known disorientation issues. After experimental trials, hatchlings would be released from the beach the same night they emerge. Hatchlings would be placed a short distance from the shoreline and allowed to crawl into the water as required in the FWC Handbook (FWC 2016).
 - **Equipment:** Silt fence; artificial plants (or similar materials that would block light), a radiometer (photometer); live hatchlings; specially programmed DSLR camera; tripods; trail cameras.
 - **Study Sites:** We plan to conduct field tests on both the Atlantic and/or Gulf of Mexico beaches to ensure we have access to enough hatchlings and nests to complete the work and to minimize the potential that coastal storms will disrupt the investigations.
 - **Deliverable:** A summary of results including a technical note with design specifications based on specific light levels and beach parameters.
 - **Schedule:** Orientation assays would be conducted from June through August in 2021, 2022, 2023, and 2024. Arena assays would be conducted on the field from July to September 2022, 2023, 2024.

References:

- DWH NRDA Trustees. 2016. *Deepwater Horizon* Oil Spill: Final Programmatic Damage Assessment and Restoration Plan (PDARP) and Final Programmatic Environmental Impact Statement (PEIS).
- DWH NRDA Trustees. 2017. *Deepwater Horizon* Oil Spill Natural Resource Damage Assessment: Strategic Framework for Oyster Restoration Activities.
- FWC. 2016. Florida Fish and Wildlife Conservation Commission (FWC) Marine Turtle Conservation Handbook. 170 pp.
- Hirama S. Evaluation of the impact of artificial lighting on sea turtle hatchling orientation. 2018. Dissertation, University of Florida.
- Mrosovsky N., and Shettleworth S.J. 1968. Wavelength preferences and brightness cues in water finding behaviour of sea turtles. *Behaviour* 32:211-257.

Salmon M., and Witherington B.E. 1995. Artificial lighting and sea finding by loggerhead hatchlings: Evidence for lunar modulation. *Copeia* 1995:931-938.

Salmon M., Wyneken J., Fritz E., and Lucas M. 1992. Seafinding by hatchling sea turtles: role of brightness, silhouette and beach slope as orientation cues. *Behaviour* 122:56-77.

USFWS and FWC. 2018. 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.

Witherington B.E. 1992. Sea-finding behavior and the use of photic orientation cues by hatchling sea turtles. Dissertation, University of Florida.

Witherington, B.E., and K.A. Bjorndal. 1991. Influences of Wavelength and Intensity on Hatchling Sea Turtle Phototaxis: Implications for Sea-Finding Behavior. *Copia* 4:1060-1069.

Witherington B.E., and Bjorndal K., and Bolten A. 1994. An evaluation of the use of dune structure to reduce effects of artificial lighting on hatchling sea turtle sea-finding and offshore orientation. Final Report to U. S. Air Force, Cape Canaveral Air Force Station and Florida Cooperative Fish and Wildlife Research Unit University of Florida, Research Work Order 75.

Witherington B.E., Martin R.E., and Trindell R.N. 2014. Understanding, assessing and resolving light-pollution problems on sea turtle nesting beaches, revised. Florida Fish and Wildlife Research Institute Technical Report TR-2, vii+83pp.

II. *Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.)*

The proposed work will be implemented from July 2021 through the end of turtle nesting season in 2024. See project description above for more detail on the schedule for the various tasks.

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

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

<i>Does this project include in-water work?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<i>Does this project include terrestrial construction?</i>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<i>Does this project include construction of an overwater structure?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<i>Will fishing be allowed from this overwater structure?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<i>Will wildlife observation be allowed from this overwater structure?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<i>Will boat docking be allowed from this overwater structure?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<i>Will fishing be allowed from this overwater structure?</i>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

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/guidance_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)?

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, 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.

Potential field activities could include minor physical modifications of the beach surface, such as silt screen or artificial plant installation. Specific methodologies for these actions will be site dependent. These activities are expected to be exempt from FDEP CCCL permit requirements, as small, temporary activities that do not involve significant modifications of the beach surface typically do not require a state permit.

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.

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.

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.
Green Sea Turtle		Terrestrial	May Affect, Likely to Adversely Affect	Select Most Appropriate
Loggerhead Sea Turtle		Terrestrial	May Affect, Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle CH	LOGG-N-14 through LOGG-N-33	Terrestrial	No Effect	Choose an item.
Leatherback Sea Turtle		Terrestrial	May Affect, Likely to Adversely Affect	Choose an item.
Hawksbill Sea Turtle		Terrestrial	May Affect, Likely to Adversely Affect	Choose an item.
Kemp's Ridley		Terrestrial	May Affect, Likely to Adversely Affect	Choose an item.
Red Knot		Choose an item.	No Effect	Choose an item.
Piping Plover		Choose an item.	No Effect	Choose an item.
Piping Plover CH	FL 1-36	Choose an item.	No Effect	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.

I. 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.

Species or habitats protected under the ESA under the jurisdiction of National Marine Fisheries Service would not be affected by this project; therefore, no ESA consultation with NMFS is necessary.

Impacts to species or habitats protected under the ESA under the jurisdiction of the U.S. Fish and Wildlife Service have been identified and analyzed in DOI's consultation that was performed for the 2018 *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*.

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 reinstate this consultation.

N/A

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

- | | |
|--------------------------|--|
| <input type="checkbox"/> | USFWS Standard Manatee In Water Conditions |
| <input type="checkbox"/> | NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions¹ |
| <input type="checkbox"/> | NMFS Measures for Reducing the Entrapment Risk to Protected Species¹ |
| <input type="checkbox"/> | NMFS Vessel Strike Avoidance Measures and Reporting for Mariners¹ |

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)

N/A

J. Effects to critical habitats and actions to reduce impacts

¹ Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

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.

N/A

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.

N/A

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? NO YES

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? NO YES

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

NO	YES	ACTIVITY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a) Use of active acoustic equipment (e.g., echosounder) producing sound below 200 kHz
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b) In-water construction or demolition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c) Temporary or fixed use of active or passive sampling gear (e.g., nets, lines, traps; turtle relocation trawls)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d) In-water Explosive detonation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e) Aquaculture
<input checked="" type="checkbox"/>	<input type="checkbox"/>	f) Restoration of barrier islands, levee construction or similar projects
<input checked="" type="checkbox"/>	<input type="checkbox"/>	g) Fresh-water river diversions
<input checked="" type="checkbox"/>	<input type="checkbox"/>	h) Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	i) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	j) Conducting driving of sheet piles or pilings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	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. *Frequently Recommended BMPs for marine mammals (manatees are covered in Section I above): This checklist provides standard BMPs recommended by NOAA. Please select any BMPs that will be implemented:*

<input type="checkbox"/>	NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines ²
<input type="checkbox"/>	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions ³
<input type="checkbox"/>	NMFS Measures for Reducing the Entrapment Risk to Protected Species ³
<input type="checkbox"/>	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners ³
<input type="checkbox"/>	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 implemented for marine mammals.
N/A

L. Bald Eagles

Are bald eagles present in the action area? NO 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? 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

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

³ Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oyster Reef Creation and Enhancement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Marine Debris Removal
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Construction of Living Shorelines
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Marsh Creation and Enhancement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	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

Michael Barron, Department of the Interior

Email: michael_barron@fws.gov

Phone: 251-421-7030

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"), Article IV, Section 9 of the Florida Constitution, and Chapter 68A-27 of the Florida Administrative 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 18, 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



United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345



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,

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