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 January 5, 2024

To: Memorandum To File

From: Michael Barron, Deepwater Horizon Gulf Restoration Office

Subject: No Additional Consultation Required for Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers

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 will have no effect on ESA-listed species or designated critical habitat, then the Federal agency is not required to consult with the US Fish and Wildlife Service (USFWS) for purposes of ESA. This memo does not include any information or effects determinations for protected species under the jurisdiction of the National Marine Fisheries Service.

Based on our review of the revised project materials (Attachments 1 and 2) provided by the Deepwater Horizon Natural Resources Damage Assessment Florida Trustee Implementation Group, the USFWS Gulf Restoration Office has determined that the proposed changes (Attachment 2) to the project: Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers do not require additional consultation. These proposed changes are still within the original area evaluated and no additional threatened or endangered species or their habitats will be impacted. As all conservation measures that were approved in the original consultation (Attachment 3) and detailed in the revised Biological Evaluation form (BE) (Attachment 1) are not changed from the original BE, they must still be followed. Should the project be modified in a way that could adversely impact ESA-listed species or habitats, this determination will be reevaluated as appropriate.

We have reviewed the proposed projects for impacts to bald eagles (*Haliaeetus leucocephalus*) in accordance with the Bald and Golden Eagle Protection Act of 1940 as amended (16 U.S.C. §§668-668d) and impacts to migratory birds in accordance with the Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. §§703–712 and determined that take would be avoided, and best management practices will be followed. In accordance with the Marine Mammal Protection Act of 1972 as amended (16 U.S.C. §§1361-1383b, 1401-1406, 1411-1421h), no marine mammals will be impacted.

We have reviewed the project in accordance with the Coastal Barrier Resources Act of 1982 (16 U.S.C. §§3501-3510) and determined that the project is not within in any system units.

If you have questions or concerns regarding this action, please contact Michael Barron, Fish and Wildlife Biologist, at 251-421-7030 or michael_barron@fws.gov.

Attachments (3)

Attachment 1: Revised Biological Evaluation Form

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: Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers

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: None

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
Levy County, Florida

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 location: 29.146382 °N, -83.070940 °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: Click or tap here to enter text

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 is included in the Florida Trustee Implementation Group's (TIG) Restoration Plan #2 and Environmental Assessment.

Permits would need to be obtained from U.S. Army Corps of Engineers (USACE) and Florida Department of Environmental Protection (FDEP) prior to construction.

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

Name of Person Completing this Form: Nadia Martin, IEc and Gareth Leonard, FWC
Name of Project Lead: Gareth Leonard, FWC
Date Form Completed: September 21, 2020

Date Form Updated:
January 25, 2023

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 design and construct oyster shell rakes and breakwaters as well placing nesting habitat fill and planting emergent marsh vegetation at Gomez Key to enhance nesting and foraging habitat for American oystercatchers (*Haematopus palliatus*). Gomez Key is a small island located in the Cedar Key area of Florida's Big Bend region. Gomez Key sits in-between the Suwannee Sound and Waccasassa Bay and is considered to be part of the larger Suwannee River Watershed. Waters around Gomez Key are naturally shallow (at times only one foot deep), but natural channels as deep as 15 feet intersect the broader Cedar Key area. Gomez Key is tidally influenced, with an average diurnal range of 3.8 feet (NOAA tides and currents). Waters surrounding Gomez Key are listed as a 303d impaired waterbody for fecal coliform (FDEP 2020). Estuarine and marine wetlands are present within the project footprint (Figure 2).

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.

N/A

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.

A benthic survey of the project area, which included the proposed footprints of the breakwaters plus a 50 ft buffer as well as the anticipated barge/construction operations corridor, was completed on August 25, 2022, in accordance with the Florida Department of Environmental Protection's Guidance on Surveys for Potential Impacts to Submerged Aquatic Vegetation. Prior to mobilizing for the field survey, biologists reviewed available marine-resource GIS data to inform the design of the survey and determine the likelihood of resources in the project area and the proposed navigational pathway for barges/construction equipment and materials. Once the positions of transects were determined (relative to the shoreline and project elements), transect locations were saved in the dGPS unit. A kayaker accompanied another biologist who snorkeled the transect while observing the benthic surface for presence of resources. No SAV (i.e., neither seagrasses nor attached macroalgae) or hardbottom habitats were observed in the project area. Subtidal sediments in the project area range from fine sand with organics to coarse sand will shell. Some SAV (Gracilaria sp.— attached macroalgae) was detected outside the project area on the east of the island that was apparent at low tide; it was not quantified, but the extent was conservatively mapped (Figure 3) and that area will be avoided during construction The intertidal zone, which is considered EFH, extends into the area proposed for the installation of the breakwaters; therefore, the breakwaters southwest of the island, as depicted in Figure 4, will be shifted waterward into the subtidal zone to avoid any EFH. See Attachment 1 for more information.

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.

The environmental baseline survey report that was prepared by the engineering and design firm indicates that mangroves dominate the entire length of Gomez Key and along its west side. The report indicates that red mangroves (*Rhizophora mangle*), are present on the south end of the Key and absent from the north end, while black mangroves (*Avicennia germinans*) characterized the north end of the Key where red mangroves were absent. It also indicates that overwash has killed many of the black mangroves and if the loss continues red mangroves may become established further north along the west side of the Key. The extent of the vegetation is approximately 0.7 acres, which is approximately 30,000 square feet and would be no more than 1,126 linear feet of shoreline. (See Figure 5). See Attachment 1 for more information.

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.).

The uplands portion of Gomez Key is undeveloped emergent herbaceous wetlands (U.S. Geological Survey National Land Cover Database 2016). This area is dominated by woody, scrub-shrub vegetation with persistent broad-leaved evergreens such as red and black mangrove. Uplands at Gomez Key are subject to tidal flooding and exposure and are frequently over-washed and overtopped during the normal tidal cycle.

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

The Waccasassa Bay/Withlacoochee Bay/Crystal Bay stock and the Gulf of Mexico Eastern Coastal stock of bottlenose dolphins (*Tursiops truncatus*) could be present within the project area (NMFS 2020). West Indian manatee (*Trichechus manatus*) could also be present in the project area.

h. Soils and Sediments

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

Based on U.S. Department of Agriculture's Natural Resource Conservation Service (2020), no upland soils and sediments exist within the project area. The project area is classified as Waters of the Gulf of Mexico (Figure 6). Submerged sediments in the Gomez Key area are primarily unconsolidated. Benthic surveys would be conducted in the project area to identify sediment type and confirm suitability for oyster reef and breakwater placement.

i. Land Use

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

Gomez Key is a currently undeveloped sand/shell island and serves as an important nesting and foraging area for American oystercatchers. This project would enhance existing oyster reef by deploying reef structure material and installing native rock breakwaters to reduce island erosion. No change in land use is expected.

j. Essential Fish Habitat

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

Designated EFH for coastal migratory pelagics, red drum (*Sciaenops ocellatus*), reef fish, stone crabs (*Menippe mercenaria*), and shrimp overlaps with the project area (Figure 7).

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.*

This project would be implemented by FWC. The goal of the project is to restore and enhance American oystercatcher nesting and foraging habitat at Gomez Key and to prevent further erosion and habitat loss. Specifically, project activities include:

- Providing durable structure and surface area (i.e. oyster bags and jute-reinforced calcium sulfoaluminate (jr-csa) panels of approximately one and half acres for oyster reef expansion and recolonization in the intertidal zone); and expand potential nesting habitat by approximately .50 to .75 acres above the mean high-water line through the placement of nesting habitat fill and planting of emergent marsh vegetation as well as the improved accretion/development of intertidal flats that will occur as a result of the installation of the breakwaters; and
- Installing native rock (e.g., limestone and shell) breakwaters of approximately 2,600 linear feet along the waveward side of the island in the subtidal zone to dissipate wave energy and increase sediment deposition on the island. The top of the breakwaters will be approximately 2 – 4 feet above the mean high-high-water level.

Project activities include planning, engineering, design, permitting, placement of oyster bags and jr-csa panels, installation of breakwaters, placement of nesting habitat fill (i.e., sand/shell and fill/shell cultch), planting of emergent marsh vegetation, and monitoring. It is anticipated that oyster recruitment would naturally follow the placement of oyster bags and jr-csa panels due to high spat abundance in the area.

Engineering and design of the oyster reefs and breakwaters as well as the enhanced habitat improvements, including configuration and construction methods, are included as part of the

project and are considering hydrologic regime, sediment transport, water quality, and environmental impacts as part of design criteria. Breakwater installation and placement of the nesting habitat fill would involve using barge and excavators to deposit limestone rip rap and sand/shell and fill/shell cultch, which are clean and free of contaminants, in the subtidal zone (breakwater) and above the mean highwater line (nesting habitat fill). The breakwater(s) would be a detached multiple configuration and be oriented to buffer the island from dominant wind/wave energy. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Approximately 14,000 cubic yards of limestone rip rap with cultch are expected to be deposited in the subtidal zone as part of this project and approximately 4,775 tons of nesting habitat fill would be placed above the mean high-water line. The oyster reef expansion and planting of emergent marsh would involve the use of skiffs to deposit oyster bags and jr-csa panels and hand plant the emergent marsh vegetation, which are also clean and free of contaminants, in the intertidal zone (oyster reef expansion) and above the mean high-water line (marsh vegetation). The jr-csa panels are natural fibers (i.e., jute) that are woven into panels and then coated in cement. See Figure 8. Once dried, these panels will be laid out side by side and secured to the bottom with wooden stakes. These panels along with the oyster bags will then provide suitable habitat for oyster spat to settle and grow. Approximately 758 jr-csa panels and approximately 1,938 tons of oyster bags would be placed in the intertidal zone and 1,485 individual emergent vegetation plants would be planted above the mean high-water line. See Figure 4.

Spill prevention/response plans are individualized and would be developed by the winning contractor. Bid specifications state that "The contractor is responsible for adhering to all applicable federal/ state/local/safety and pollution requirements." Once bid is awarded, at pre-construction meeting the contractor would be provided a list of agencies requiring notifications/hotline numbers and additional instructions such as; If a spill occurs onsite, response efforts and outcome would be reported to the National Marine Fisheries Service (NMFS) along with as built drawings and photos at the completion of the project. Additionally, any interactions with, or sightings of stranded, entangled, dead or injured sea turtles, Gulf sturgeon (*Acipenser oxyrhynchus desotoi*), smalltooth sawfish (*Pristis pectinata*), or marine mammals would be immediately reported to NMFS per the project design criteria (PDC) requirements.

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

The project is anticipated to be completed in five years. Planning and design would occur in the first year. Permitting and pre-restoration monitoring would occur in the second year. Construction would occur over a maximum of eight months, but ideally five months to avoid stopping during American oystercatcher nesting season (Year 3 and 4). Construction would be restricted to non-breeding season as feasible (August-February), but construction could stop if it overlaps American oystercatcher breeding season to re-consult on possible impacts as needed. Post-construction monitoring would occur in Year 5. If birds are present during construction activities, construction would pause until the birds moved from the area, as needed, to avoid noise and disturbance.

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

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☒

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)?*

Engineering and design of the oyster reefs and breakwaters as well as the enhanced habitat improvements (including configuration and construction methods) are included as part of the project and are considering hydrologic regime, sediment transport, water quality, and environmental impacts as part of design criteria. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Breakwater installation and placement of the nesting habitat fill would involve using barge and excavators to deposit limestone rip rap and sand/shell and fill/shell cultch, which are clean and free of contaminants, in the subtidal zone (breakwater) and above the mean high-water line (nesting habitat fill). The breakwater(s) would be a detached multiple configuration and be oriented to buffer the island from dominant wind/wave energy. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Approximately 14,000 cubic yards of limestone rip rap with cultch are expected to be deposited in the subtidal zone as part of this project and approximately 4,775 tons of nesting habitat fill would be placed above the mean high-water line. The oyster reef expansion and planting of emergent marsh would involve the use of skiffs to deposit oyster bags and jr-csa

panels and hand plant the emergent marsh vegetation, which are also clean and free of contaminants, in the intertidal zone (oyster reef expansion) and above the mean high-water line (marsh vegetation). The jr-csa panels are natural fibers (i.e., jute) that are woven into panels and then coated in cement. See Figure 8. Once dried, these panels will be laid out side by side and secured to the bottom with wooden stakes. These panels along with the oyster bags will then provide suitable habitat for oyster spat to settle and grow. Approximately 758 jr-csa panels and approximately 1,938 tons of oyster bags would be placed in the intertidal zone and 1,485 individual emergent vegetation plants would be planted above the mean high-water line. See Figure 4.

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.*

Engineering and design of the oyster reefs and breakwaters (including configuration and construction methods) are included as part of the project and are considering hydrologic regime,

sediment transport, water quality, and environmental impacts as part of design criteria. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Breakwater installation would involve using barge and excavators to deposit limestone rip rap, which is clean and free of contaminants, in the subtidal zone. The breakwater(s) would be a detached multiple configuration and be oriented to buffer the island from dominant wind/wave energy. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Approximately 14,000 cubic yards of limestone rip rap with cultch are expected to be deposited in the subtidal zone as part of this project. Total breakwater length would be between approximately 2,600 linear feet. The oyster reef expansion would involve the use of skiffs to deposit oyster bags and jr-csa panels, which are also clean and free of contaminants, in the intertidal zone. The jr-csa panels are natural fibers (i.e. jute) that are woven into panels and then coated in cement. See Figure 8. Once dried, these panels will be laid out side by side and secured to the bottom with wooden stakes. These panels along with the oyster bags will then provide suitable habitat for oyster spat to settle and grow. Approximately 758 jr-csa panels and approximately 1,938 tons of oyster bags would be placed in the intertidal zone. Total acreage of the oyster reef expansion would be approximately 1.55 acres. See Figure 4.

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.*

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.*

Habitat loss in the intertidal waters around Cedar Key is the biggest threat facing the breeding population of American oystercatchers in the southern half of the Big Bend region, an area that extends from the Apalachicola River to just north of Tampa Bay on Florida's Gulf coast. Many small, but critically important, nesting sites are already threatened by overwash and erosion during the normal tidal cycle. The American oystercatcher feeds primarily on marine bivalves and depends on coastal areas that support intertidal shellfish beds. The small sand/shell islands of Cedar Key have historically supported more than seven percent of the statewide population.

Reproductive potential and effort are high but reproductive success is low due to frequency of nest overwash. Islands used for nesting by American oystercatchers near Cedar Key have decreased in total area by 39 percent from 1974 -2016 and losses are correlated with the timing of oyster reef declines.

The goal of this project is to restore/enhance American oystercatcher nesting and foraging locations located on Gomez Key, to prevent further erosion and habitat loss of this critical nesting and foraging location and to increase reproductive success at the nesting site. Gomez Key experienced a 60 percent loss in area between 1974 and 2016. The project would restore and enhance American oystercatcher habitat through the design and construction of oyster shell rakes and breakwaters as well as placing nesting habitat fill and planting emergent marsh vegetation.

This project would include placement of durable structure and surface area for oyster reef expansion and recolonization in the intertidal zone; and expand nesting habitat above the mean high-water-line through the placement of nesting habitat fill and the planting of emergent marsh vegetation. Additionally, a native rock (e.g., limestone and shell) breakwater would be installed in the subtidal zone on the wave-ward side of the island to reduce erosion.

Engineering and design of the oyster reefs and breakwaters (including configuration and construction methods) are included as part of the project and are considering hydrologic regime, sediment transport, water quality, and environmental impacts as part of design criteria. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Breakwater installation would involve using barge and excavators to deposit limestone rip rap, which is clean and free of contaminants, in the subtidal zone. The breakwater(s) would be a detached multiple configuration and be oriented to buffer the island from dominant wind/wave energy. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Approximately 14,000 cubic yards of limestone rip rap with cultch are expected to be deposited in the subtidal zone as part of this project. Total breakwater length would be between approximately 2,600 linear feet. The oyster reef expansion would involve the use of skiffs to deposit oyster bags and jr-csa panels which are also clean and free of contaminants in the intertidal zone. The jr-csa panels are natural fibers (i.e., jute) that are woven into panels and then coated in cement. See Figure 8. Once dried, these panels will be laid out side by side and secured to the bottom with wooden stakes. These panels along with the oyster bags will then provide suitable habitat for oyster spat to settle and grow. Approximately 758 jr-csa panels and approximately 1,938 tons of oyster bags would be placed in the intertidal zone. Total acreage of the oyster reef expansion would be approximately 1.55 acres. See Figure 4.

Although impacts are not anticipated to vessel traffic, the project would follow all applicable guidelines regarding reef depth profiles, overhead clearance, and clear marking for vessels. In particular, if hazard markers are required, any inwater lines (rope, chain, or cable) will be stiff, taut, and/or non-looping. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, will be enclosed in a plastic or rubber sleeve/tube to add rigidity and to prevent the line from looping or tangling. No excess line will be allowed to drift freely in the water. Short- and long-term maintenance activities are not anticipated but may be identified at a later date. Maintenance may be required following severe weather events.

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.**
Green Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Leatherback Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Hawksbill Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Kemp's Ridley Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Gulf Sturgeon (T)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Smalltooth Sawfish (E)		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.

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 selec justification.**
West Indian Manatee		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Red Knot		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Gopher Tortoise		Choose an item.	No Effect	No suitable habitat in action area
Florida Salt Marsh Vole		Choose an item.	No Effect	Species does not occur withi action area
Eastern Black Rail		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Wood Stork		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Eastern Indigo Snake		Choose an item.	No Effect	No suitable habitat in action area

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.

The construction of the oyster reef and breakwater structures as well as the enhanced habitat improvements would result in short-term disturbances to protected species. Temporary disturbances would result from an increase in water turbidity, increased underwater noise, and human activity during construction and monitoring, which could contribute to temporary disturbance or displacement of marine and estuarine fauna. Potential impacts could include injury or mortality of less mobile benthic species during cultch deployment. However, the affected protected species are mobile and would likely avoid the area for the duration of in-water work, avoiding injury or mortality. Following construction, turbidity and noise would return to baseline levels. The project would result in long-term benefits to protected species because oyster reefs provide habitat for epibenthic fauna, mobile invertebrates, and fish. Increased oyster production and connectivity would also benefit higher trophic species.

Loggerhead turtle (*Caretta caretta*), green turtle (*Chelonia mydas*), leatherback turtle

(*Dermochelys coriacea*), hawksbill turtle (*Eretmochelys imbricata*), and Kemp's ridley turtle (*Lepidochelys kempii*) have been observed swimming or feeding on seagrasses within the Cedar Key area. Sea turtle nesting does not occur on Gomez Key where project activities would occur. There is potential for sea turtle encounters during construction; however, with the implementation of best management practices (BMPs) such as designing gaps in the breakwater, it is anticipated that the proposed action may affect, but is not likely to adversely affect, sea turtle species.

West Indian manatee. The West Indian manatee 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. The project location does not intersect with any identified critical habitat for the West Indian manatee, but they could potentially be present in the project area. Marine mammals are affected by vibrations and noise resulting from
construction activities (e.g., generators, pile drivers). This project requires in-water work for the installation of a native rock breakwater and reef material deployment. If a West Indian manatee is encountered, construction activities would cease until the animal had moved out of the area. Additionally, the breakwater would be design with appropriate gaps to reduce entrapment risk. For these reasons, this project may affect but is not likely to adversely affect West Indian manatee.

Gulf sturgeon and smalltooth sawfish may be affected by the part of this project that occurs in the intertidal zone of Gomez Key. Due, however, to the fact that 1) the water where construction activities occur is relatively shallow (less than 6 feet deep) and close to shore (within approximately 30 feet), 2) gulf sturgeon and smalltooth sawfish could avoid any disturbances in that area by swimming away, 3) any increase in turbidity caused by in-water project work would be relatively low compared to the naturally high levels caused by wave actions in this area, and 4) all the required minimization measures (i.e., BMPs) will be employed during the project, this project may affect but is not likely to adversely affect Gulf sturgeon or smalltooth sawfish.

Eastern black rail (*Laterallus jamaicensis*) inhabits dense vegetation in wetland habitats and have been documented in the Cedar Key area. As such, they may be present around the action area. Construction may need to occur in months where this species could be present, and these activities could generate noise and overall human disturbance to resting and foraging birds, should they be present on the site. However, all construction would occur by water and no direct impacts to uplands on Gomez Key are anticipated. Based on the short duration of construction activities, this project may affect, but is not likely to adversely affect, this species.

Red knot (*Calidris canutus*) prefers open coastal areas and shorelines including sandy beaches and tidal and mud flats. As such, they may be present around the action area, but are unlikely to be foraging in the action area. If construction occurs during the summer months (approximately May to August), the species is not generally present along the Gulf coast. However, construction may need to occur in other months which could generate construction noise and disturbance to resting and foraging birds, should they be present on the site. However, all construction would occur by water and no direct impacts to uplands on Gomez Key are anticipated. Red knot are unlikely to

occur in the area, but may occur in low numbers; as such, this project may affect, but is not likely to adversely affect, this species.

Wood stork (*Mycteria americana*) prefers to nest and forage in cypress swamps and marshes. While the wood stork is not known to inhabit the site, it could rest and forage in swamp or wooded areas at or nearby the project location. Because this species is highly mobile, any construction activities that may disturb this species would result in the wood stork leaving the area and moving to adjacent suitable habitat. Additionally, all construction would occur by water and no direct impacts to uplands on Gomez Key are anticipated. As such, this project may affect but is not likely to adversely affect wood storks.

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.*

Specific conservation measures would be implemented during the finalization of engineering and design plans and construction to minimize erosion, habitat fragmentation, runoff, protected species impacts, and overall habitat impacts.
Existing trees and habitat areas would be avoided above the mean high-water-line where possible and feasible.
Conservation measures, for any listed species, would be incorporated into final project design and implementation to avoid or minimize any potential impacts to protected species. These could include following established BMPs for construction activities such as the implementation of an erosion control and stormwater management plan, the installation of sediment traps prior to commencement of construction activities, and ongoing construction monitoring to ensure compliance.

All construction would be restricted to bird non-breeding season (August-February) to mitigate potential impacts on species present in the action area. As described in Section F.II, construction would only occur during non-breeding seasons. If construction is not completed prior to bird breeding season, construction would stop temporarily, and begin again after breeding season has ended. Additionally, the following measures are proposed for implementation before construction activities to reduce or eliminate potential impacts on protected species from the proposed activity.

1. Conduct construction activities in accordance with Standard Manatee Construction Conditions for In-Water Work (USFWS 2011), which include, but are not limited to the following BMPs: Use siltation barriers made of material that would not entrap/entangle West Indian manatee and would not impede their movement. Barriers would be properly secured and routinely monitored to ensure they are not entangled. Water vessels associated with construction would operate at “no wake/idle” speeds at all times in the construction area, and in water depths where the draft of the vessel provides less than a four-foot clearance from the sediment. Restrict

in-water construction activities to the winter months when they are least likely to be in the project vicinity.

2. Conduct construction activities in accordance with Sea Turtle and Smalltooth Sawfish Construction Conditions (NFWS 2006) which include, but are not limited to, the following BMPs: Use siltation barriers made of material that would not entrap/entangle sea turtles and do not restrict sea turtle access to critical habitat. Barriers would be properly secured and routinely monitored to ensure turtles are not entangled. Water vessels associated with construction will operate at "no wake/idle" speeds at all times in the construction area, and in water depths where the draft of the vessel provides less than a four-foot clearance from the sediment. Restrict construction activities to the winter months when turtles are not likely to be nesting and hatchlings not likely to be leaving the nest.

Frequently Recommended BMPs: 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**[1]
☒	**NMFS Measures for Reducing the Entrapment Risk to Protected Species**[1]
☒	**NFMS Vessel Strike Avoidance Measures and Reporting for Mariners**[1]

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)

Best practices from Chapter 6 of the Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement for birds (bald eagles [*Haliaeetus leucocephalus*], migratory birds, red knot), marine mammals (manatees, bottlenose dolphin), reptiles and amphibians (Eastern indigo snake [*Drymarchon couperi*]), tortoises/turtles (gopher tortoise [*Gopherus Polyphemus*], sea turtles—in water), fish (Gulf sturgeon), invasive species, and general construction measures will be adhered to, 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.

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

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
☒	☐	*a) Use of active acoustic equipment (e.g., echosounder) producing sound below 200 kHz*
☐	☒	*b) In-water construction or demolition*
☒	☐	*c) Temporary or fixed use of active or passive sampling gear (e.g., nets, lines, traps; turtle relocation trawls)*

☒	☐	*d) In-water Explosive detonation*
☒	☐	*e) Aquaculture*
☒	☐	*f) Restoration of barrier islands, levee construction or similar projects*
☒	☐	*g) Fresh-water river diversions*
☒	☐	*h) Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☐	☒	*i) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters ar living shorelines, etc.*
☒	☐	*j) Conducting driving of sheet piles or pilings*
☒	☐	*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

Please see Section F for more information regarding in-water construction.

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:*

☐	NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines[2]
☒	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[3]
☒	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]

lf not listed above, please describe any additional BMPs or conservation measures that may be be implemented for marine mammals. 1. Conduct construction activities in accordance with Standard Manatee Construction Conditions for In-Water Work (USFWS 2011), which include, but are not limited to the following BMPs.

- Use siltation barriers made of material that would not entrap/entangle West Indian manatees and would not impede their movement. Barriers will be properly secured and routinely monitored to ensure West Indian manatees are not entangled.
- Water vessels associated with construction would operate at "no wake/idle" speeds at all times in the construction area, and in water depths where the draft of the vessel provides less

[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

than a four-foot clearance from the sediment. 2. Restrict in-water construction activities to the winter months, when West Indian manatees are least likely to be in the project vicinity.
3. Keep construction noise low (in air and in water) to the greatest extent possible.
4. Instruct all personnel associated with the construction and operational phases of the project in the potential presence of manatees in the water. Furthermore, advise construction site personnel associated with operating the ferry of the civil and criminal penalties for harming, harassing, or killing species that are protected under the Marine Mammal Protection Act, the ESA, and the Florida Manatee Sanctuary Act.
5. Maintain spill response kits on board during construction.

---

6. If a West Indian manatee comes within 50 feet of the construction area or barrier, activities would cease until the animal has moved on its own volition beyond the 50-foot radius of the project operation. The animals would not be herded away or harassed into leaving.
7. In the event of a collision with a manatee, the on-site construction manager or ferry operations manager would immediately notify NMFS and the FWC.
8. Temporary signs (FWC-approved) concerning manatees would be posted before and during in-water project construction activities. For example, the sign depicted in this document would be 8.5 inches high by 11 inches wide, on laminated paper or metal.

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

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
☐	☒	**Oyster Reef Creation and Enhancement**
☒	☐	**Marine Debris Removal**
☐	☒	**Construction of Living Shorelines**
☐	☒	**Marsh Creation and Enhancement**
☒	☐	**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

References and Data Sources:

Deepwater Horizon (DWH) Natural Resource Damage Assessment 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. <http://response.restoration.noaa.gov/erma/.>

Federal Emergency Management Agency (FEMA). 2020. FEMA Flood Map. Available at: https://msc.fema.gov/portal/search?kbid=62548#searchresultsanchor.

Florida Department of Environmental Protection (DEP). Updated April 30, 2020, "Statewide Comprehensive Verified List of Impaired Waters". https://floridadep.gov/dear/watershed-assessment-section/documents/comprehensiveverified-list.

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). 2010. Essential Fish Habitat: A Marine Fish Habitat Conservation Mandate for Federal Agencies, Gulf of Mexico Region. Habitat Conservation Division, Southeast Regional Office. Available at: https://www.nrc.gov/docs/ML1224/ML12240A274.pdf.

National Oceanic and Atmospheric Administration (NOAA). 2018. Essential Fish Habitat – Gulf of Mexico. Silver Spring, MD:
National Oceanic and Atmospheric Administration. Available at: https://www.habitat.noaa.gov/application/efhinventory/index.html.

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: https://www.fws.gov/wetlands/data/Mapper.html.

U.S. Geological Survey (USGS). 2016. National Land Cover Database. Available at: https://www.usgs.gov/centers/eros/science/national-land-cover-database?qt-science_center_objects=0#qtscience_center_objects.

Attachment:

1. Attachment 1: Environmental Characterization Baseline for Gomez Key

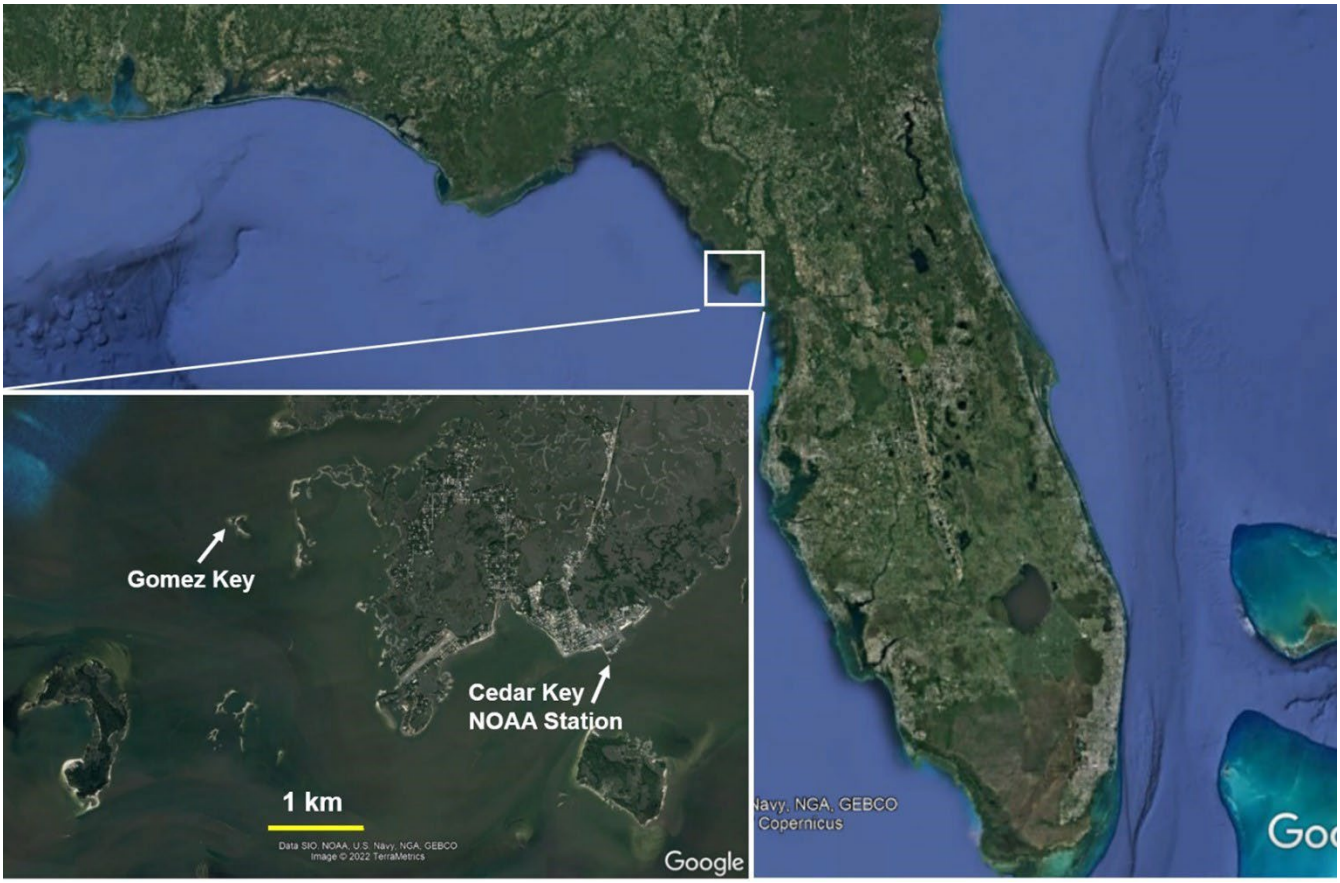
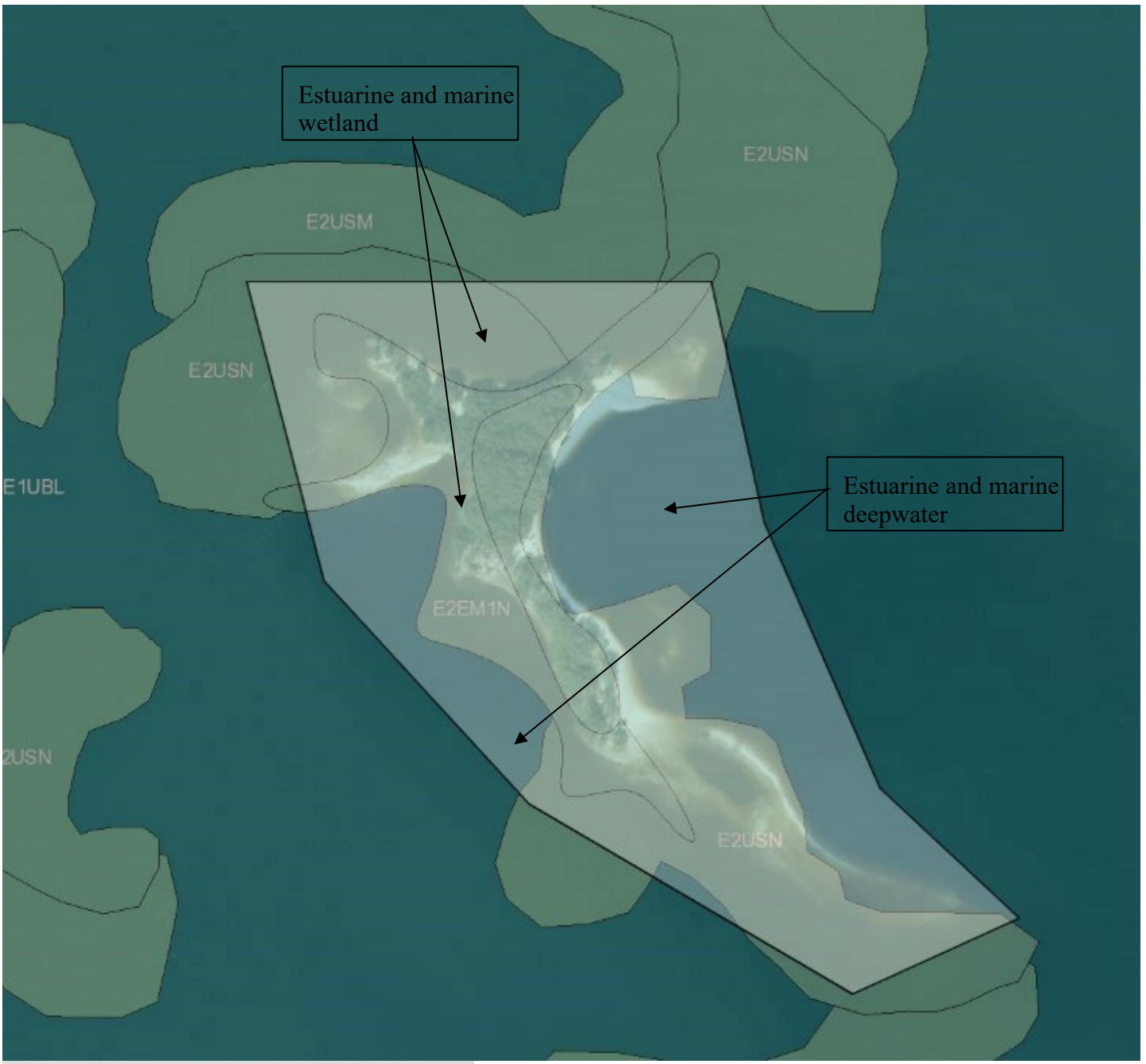


Figure 1. Gomez Key Oyster Reef Expansion and Breakwaters for American oystercatchers project location.



National Wetlands Inventory (USFWS) (NWI)(Zoom Dependent)

National Wetlands Inventory (USFWS) (NWI)(Zoom Dependent)

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Figure 2. Estuarine and marine wetlands and deepwater present in the project area.

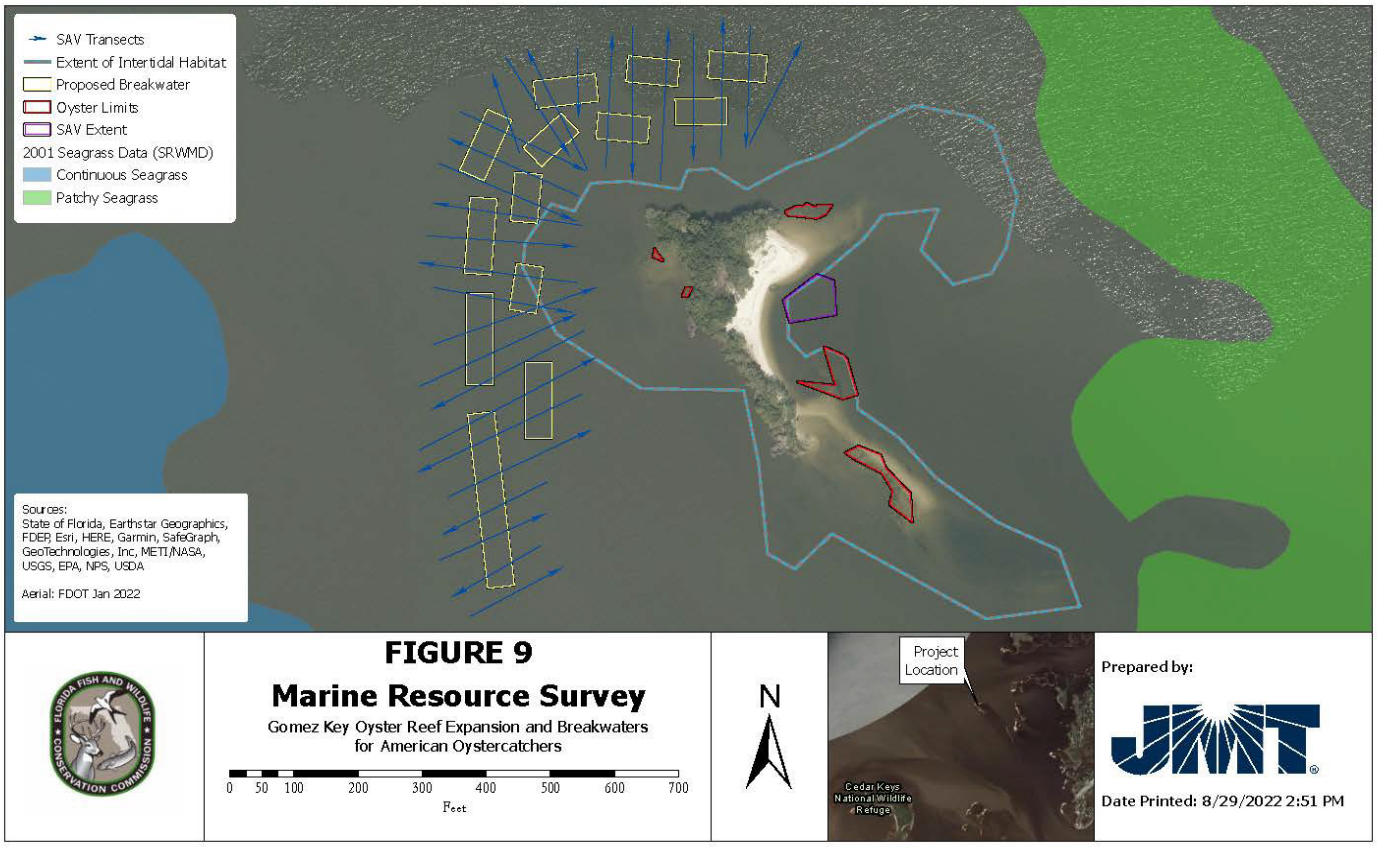


Figure 3. Marine Resource Survey map of Gomez Key.

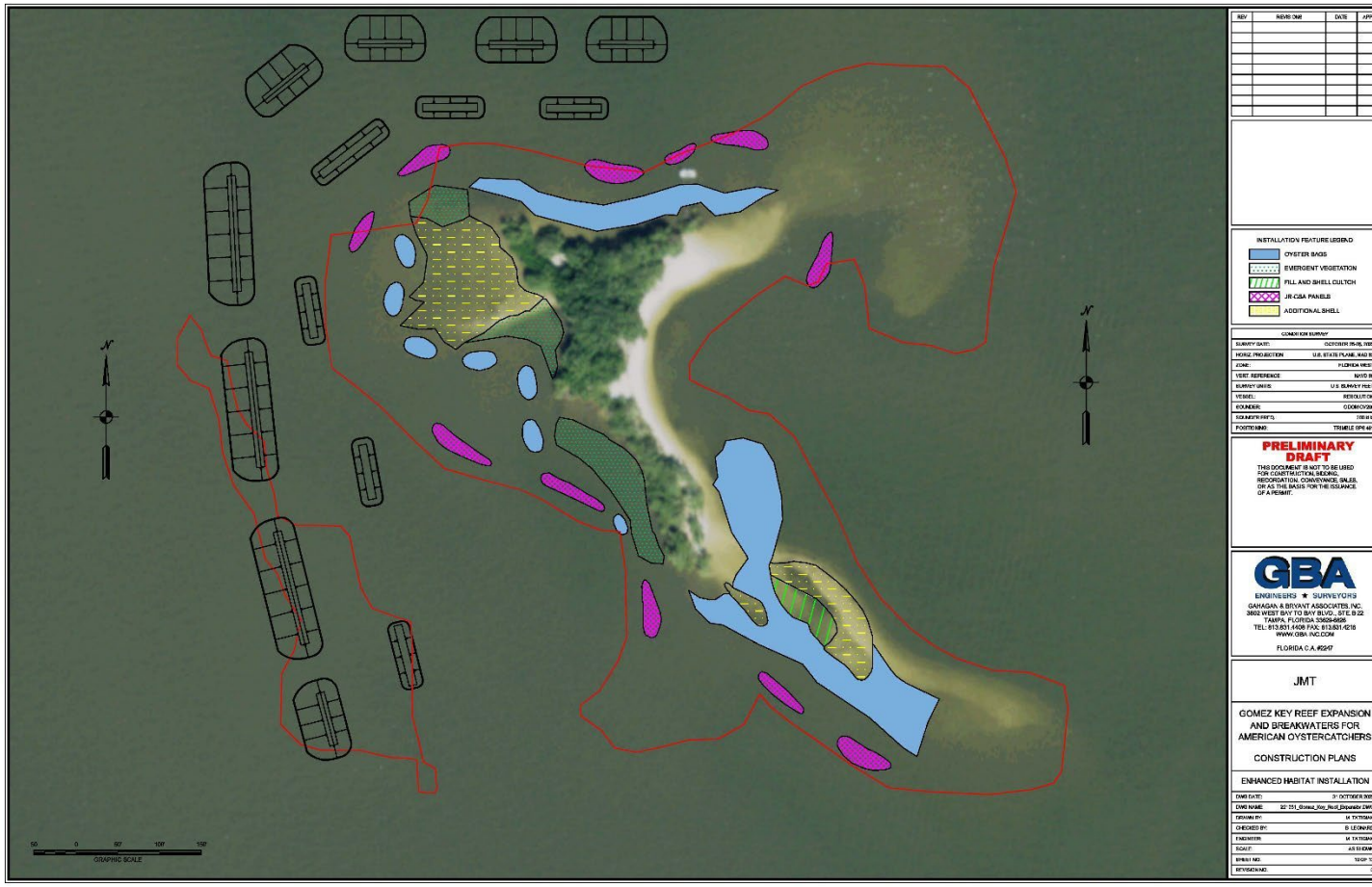


Figure 4. Map of island with intertidal zone delineated in red and project elements depicted. Note: design is going to change slightly by shifting the breakwaters southwest of the island waterward into the subtidal zone to avoid any potential impacts to EFH.

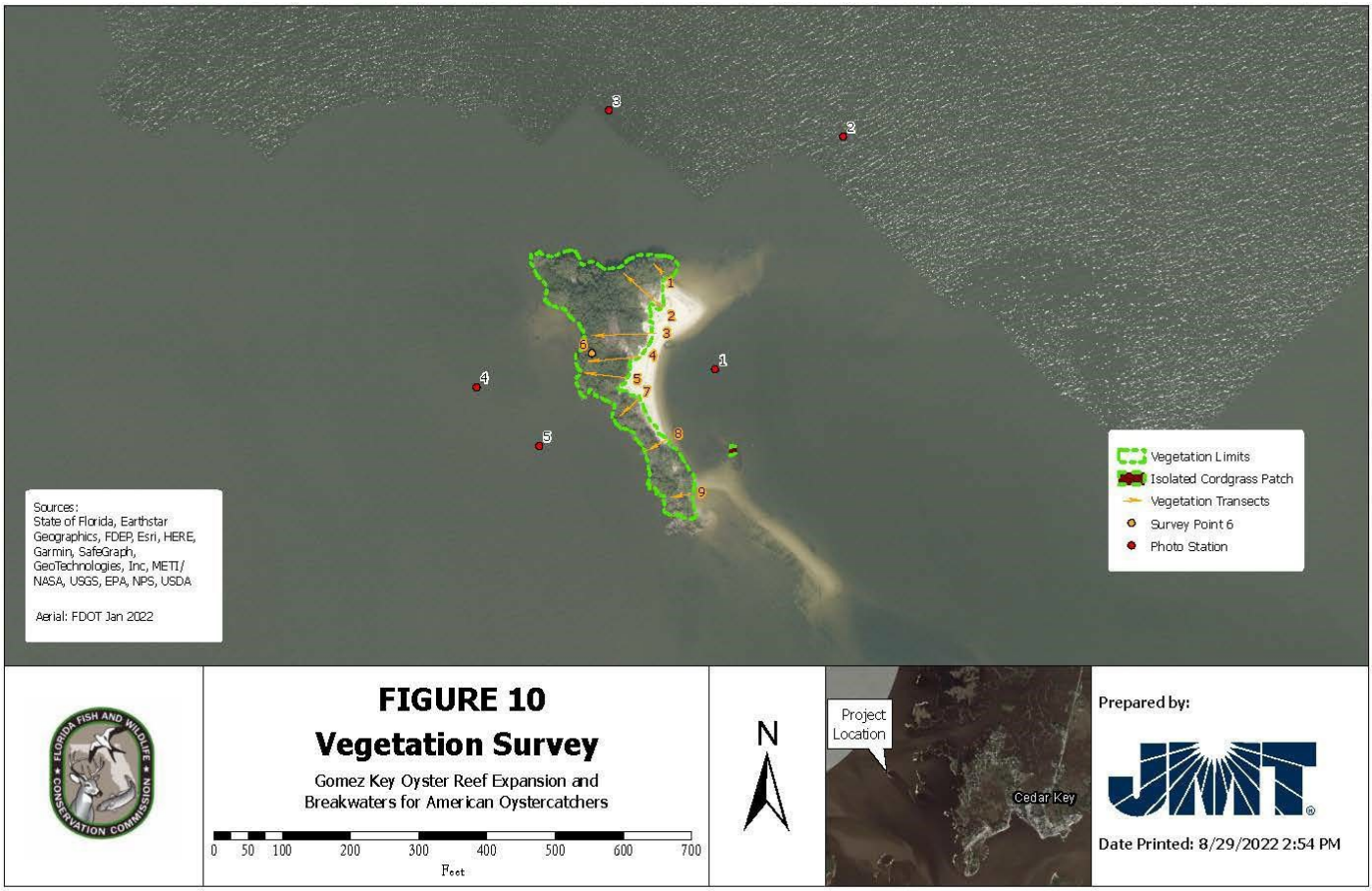
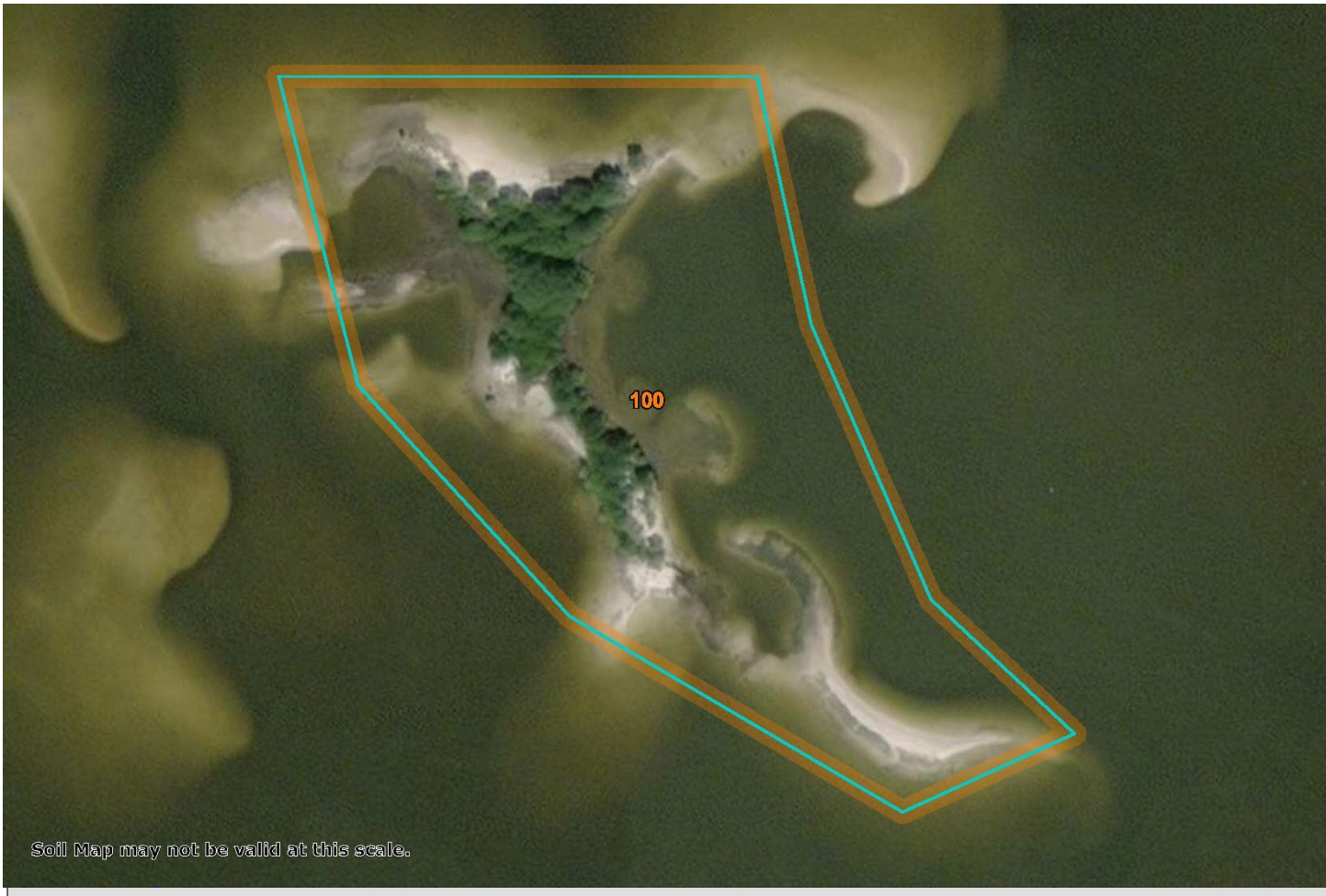


Figure 5. Vegetation Survey map of Gomez Key.

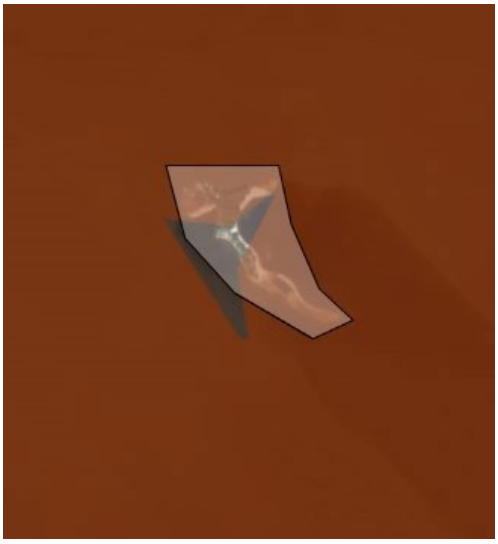


Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
100	Waters of the Gulf of Mexico	7.7	100.0%
Totals for Area of Interest		**7.7**	**100.0%**

Figure 6. USDA NRCS output for Gomez Key project area.

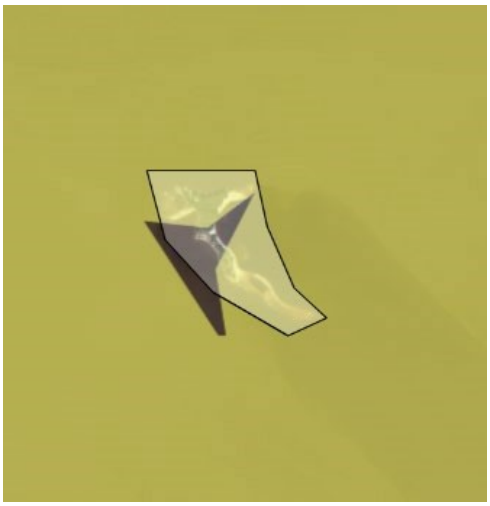
B

C D



A

E



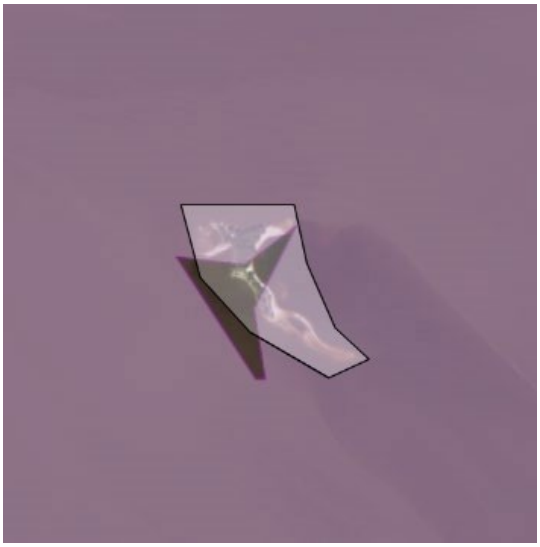


Figure 7. EFH for coastal migratory pelagics (A), red drum (B), reef fish (C), shrimp (D), and stone crab (E) at Gomez Key (information gathered from ERMA).

Figure 8. Photos of clean jr-csa panel (left) and jr-csa panel with recruited marine life (right).

Attachment 2: Project Change Resolution

RESTORATION IN FLORIDA TRUSTEE IMPLEMENTATION GROUP
of the
DEEPWATER HORIZON TRUSTEE COUNCIL

In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico on April 20, 2010,
Civil Action Nos. 10-4536; 10-04182; 10-03059; 13-4677; 13-158; 13-00123 (ED. La.)
MDL No. 2179

Resolution # FL-2023-004

Resolution of the Restoration in Florida Trustee Implementation Group

Approval for Allocation of Additional Funds to the Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers Project

1. In accordance with the Oil Pollution Act of 1990 (OPA), the National Environmental Policy Act (NEPA), the *Deepwater Horizon* (DWH) Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (Final PDARP/PEIS), and the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the DWH Oil Spill, revised August 2, 2021 (TC SOPs), the undersigned representatives of the Florida Trustee Implementation Group (FL TIG) hereby approve the actions set forth below to continue the restoration of natural resources and services injured or lost as a result of the DWH oil spill, which occurred on or about April 20, 2010, in the Gulf of Mexico.

2. The Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers Project (Project) (Project ID # 275) was a preferred alternative identified and selected in the *Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan 2 and Environmental Assessment: Habitat Projects on Federally Managed Lands; Sea Turtles; Marine Mammals; Birds; and Provide and Enhance Recreational Opportunities* (Final RP2/EA), which was approved by the FL TIG in June of 2021. The Florida Fish and Wildlife Conservation Commission (FWC), as Implementing Trustee, was originally allocated $1,748,639 which was disbursed from the DOI Restoration Account pursuant to FL TIG Resolution FL-2021-014.

3. The objective of the Project is to restore and enhance critical nesting and foraging habitat for American Oystercatchers at Gomez Key and to prevent further erosion and habitat loss. These improvements will include providing durable structure and surface area through cultch placement for oyster reef expansion and reef recolonization in the intertidal zone, expanding potential American oystercatcher nesting habitat above the mean high-water

line, and installing native rock breakwaters along the wave-ward side of the island to dissipate wave energy and increase sediment deposition on the island.

4. The Project is consistent with the restoration goals identified in the Final PDARP/PEIS and the Record of Decision that provides and explains the Trustees' selection of the Preferred Alternative (Alternative A) for the Final PDARP/PEIS. The Project is also consistent with the Consent Decree resolving the civil actions referenced above.
5. FWC has completed 60% engineering and design for this Project. It has been determined that additional funding is needed to complete the Project. The need for additional funding is due to a combination of factors, most notably, the need to increase the size and length of the breakwaters, so the Project can prevent further erosion of the island. Additionally, the unprecedented increase in costs for materials, fuel, and labor since the Project was selected for funding and implementation has attributed to the cost increase.

6. FWC estimates that the total additional funds needed to fully complete the Project is $3,325,265 resulting in a new total estimated cost of $5,073,904. This amount includes planning, design, permitting, implementation, monitoring, oversight, indirect costs, and contingency.

7. The FL TIG concludes, after review of the attached *Evaluation of Changes to the Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers Project* (Change Memo), that the change to the size and length of the breakwaters and the budget increase does not affect the selection of this Project under OPA, and the Project is still consistent with the environmental review conducted for the Final RP2/EA. The increased costs to complete the Project are considered reasonable and appropriate to achieve the project goal of restoring and enhancing critical nesting and foraging habitat for American Oystercatchers by providing durable structure and surface area through cultch placement for oyster reef expansion and reef recolonization in the intertidal zone, expanding nesting habitat above the mean high water line, and installing native rock breakwaters along the wave-ward side of the island to dissipate wave energy and increase sediment deposition on the island, helping to offset adverse impacts from the *Deepwater Horizon* oil spill.

8. Through this Resolution and the associated *Deepwater Horizon* Trustee Withdrawal Form(s), the FL TIG requests disbursement in the amount of $3,325,265 in Birds Restoration Type funding from the DOI Restoration Fund for the Project. Disbursement will be effected through one or more *Deepwater Horizon* Trustee Withdrawal Forms to be submitted following execution of this Resolution. This Resolution authorizes commitment and disbursement of funds to the Implementing Trustees as listed in the table below.

Restoration Type	Implementing Trustee	Project Name	Portal ID#	Current Authorized Project Budget	Additional Funds Authorized for Disbursement	New Authorized Project Budget

Birds	FWC	Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers	275	$1,748,639	$3,325,265	$5,073,904

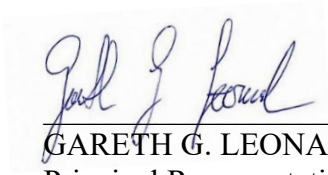
9. Funds committed and allocated by this Resolution to this Project may be used only for the activities authorized by the Final RP2/EA. Any other use of funds committed pursuant to this Resolution is prohibited. Any non-authorized use of committed funds must be reported to the full FL TIG immediately upon discovery of unauthorized use.

10. The Implementing Trustee, FWC, will ensure that all applicable regulatory compliance activities are completed prior to implementation of the Project, and that the terms and conditions of all applicable federal and state permits will be complied with while implementing the Project.

11. It is resolved that after a review of the attached Change Memo the duly authorized officials for the FL TIG approve and authorize the commitment and allocation of the funds as specified in Paragraph 8. This resolution may be authorized in counterparts. The effective date of this resolution is the date of the last signature.

RESTORATION IN FLORIDA TRUSTEE IMPLEMENTATION GROUP

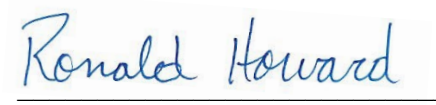
SARAH KETRON
Alternative Representative, Florida Department of Environmental Protection



GARETH G. LEONARD
Principal Representative, Florida Fish and Wildlife Conservation Commission

CHRISTOPHER D. DOLEY
Principal Representative, National Oceanic and Atmospheric Administration

MARY JOSIE BLANCHARD
Principal Representative, Department of the Interior



RONALD HOWARD
Alternate to Principal Representative, U.S. Department of Agriculture

MARY KAY LYNCH
Alternate to Principal Representative, U.S. Environmental Protection Agency

DATE OF LAST SIGNATURE: April 7, 2023

Evaluation of Changes to the Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers Project

I. Introduction

Section 9.4.9 of the *Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the* Deepwater Horizon *(DWH) Oil Spill* (TC SOPs), states that if changes are made to any selected project, those changes may require a reevaluation of determinations made in existing environmental compliance documents. Section 9.5.2 further states that Implementing Trustee(s) will notify the Trustee Implementation Group (TIG) of project changes during design or construction before taking further action on a project. Trustees must determine whether additional restoration planning and environmental review—including opportunity for public comment—are necessary. Section 9.5.2 provides several factors upon which, in the event of a project change, the TIG would conduct a project review:

(1) The TIG will determine whether any change to the project is consistent with the environmental review in the respective restoration plan/NEPA analysis, or where there are substantial changes that are relevant to environmental concerns.
(2) The TIG will assess whether there are significant new circumstances or information relevant to environmental concerns not addressed in the impact analysis of the respective restoration plan/NEPA analysis [40 CFR § 1502.9 (c)].
(3) The TIG will evaluate whether project changes affect their selection under OPA.

FWC, as Implementing Trustee, determined that an increase to the Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers project (Project; Portal ID #275) budget was necessary, notified the FL TIG of the Project change, and prepared this document that evaluates the change in accordance with the above factors. The Project's original total estimated cost was **$1,748,639**. Due to the reasons described in Section III, the budget for the Project has increased to **$5,073,904**. This equates to an additional **$3,325,265** in requested funding from the FL TIG Birds Restoration Type allocation.

II. Project Background and Original Project Scope

Background

The Project was analyzed in the June 2021 *Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan 2 and Environmental Assessment: Habitat Projects on Federally Managed Lands; Sea Turtles; Marine Mammals; Birds; and Provide and Enhance Recreational Opportunities*[4] (RP2/EA) and selected by the Florida TIG for implementation. Based on the NEPA analysis, a finding of no significant impact (FONSI) was prepared. Furthermore, the RP2/EA is consistent with and tiered to the 2016 *DWH NRDA Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement*[5] (PDARP/PEIS), which was prepared by the Trustees to programmatically fund and implement restoration projects across the Gulf.

At least 93 species of birds, including both resident and migratory species across all five Gulf Coast states, were exposed to DWH oil in multiple northern Gulf habitats, including open water, islands, beaches, bays, and marshes. The Trustees estimated that between 51,600 and 84,500 birds died because of the DWH oil spill. Of those quantified dead birds, breeding-age adults would have produced an estimated 4,600 to 17,900 fledglings. The Trustees recognize that additional injury occurred that is unquantified; true bird mortality is likely closer to the upper ranges than the lower (PDARP/PEIS, Section 4.7.5). Although the precise number of birds injured and killed in the Florida Restoration Area was difficult to quantify during the assessment, impacts did occur as a result of exposure to oil and from the effects of response activities. The purpose of the RP2/EA bird restoration type alternatives is to partially address DWH bird injury in the Florida Restoration Area.

This Project would restore and enhance critical nesting and foraging habitat for American oystercatchers on a small island, Gomez Key, by integrating a combination of habitat restoration strategies to prevent erosion, increase sedimentation, promote oyster recolonization, and expand and elevate potential American oystercatcher nesting habitat. This Project would support and expand the nesting population of oystercatchers in the Southern Big Bend and would help compensate for injuries from the DWH oil spill.

Original Project Scope and Location

As summarized in Sections 2.5.4 of the Final RP2/EA, the original Project would:

[4] www.gulfspillrestoration.noaa.gov/sites/default/files/2021-06%20FL%20Final_FL%20TIG_RP2_EA_1.pdf.

[5] www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan/.

- Provide durable structure and surface area through cultch placement for oyster reef expansion and recolonization in the intertidal zone; and expand potential American oystercatcher nesting habitat above the Mean-High-Water line; and
- Install native rock breakwaters along the wave-ward side of the island to dissipate wave energy and increase sediment deposition on the island.

The full Project description and analyses can be found in Sections 2.5.4, 3.5 (OPA), and 4.8.1 (NEPA) of the RP2/EA.

Figure 1: Project location.

III. Description of Project Change

The following changes to the Project are needed:

- Increase the size and length of the breakwaters; and
- Increase the Project budget to **$5,073,904.** This equates to an additional **$3,325,265** in funding from the FL TIG Birds Restoration Type allocation.

The Project originally proposed that the breakwaters be constructed with approximately 844.71689.4 cubic yards of limestone rip rap with cultch and span over approximately 820-1805 linear feet. The Project is currently in engineering and design, and the modeling results have indicated that the original estimated size of the breakwaters, which was developed using FWC's best professional judgement and experience with bird island restoration projects, is insufficient to protect the island from further erosion. The modeling shows that the breakwaters need to be constructed using approximately 14,000 cubic yards of limestone rip rap with cultch and span over approximately 2,600 linear feet to effectively prevent further erosion of the island. This increase in the size and span of the breakwaters, along with the unprecedented rise in construction, materials, labor, and fuel costs, has significantly increased the amount of funding needed to successfully implement this Project.

IV. Determination of Need for Additional NEPA Analysis

DOI, as Lead Federal Trustee for RP2/EA, and FWC, as the Implementing Trustee, conducted a NEPA review comparing the impacts of the original Project scope to the currently proposed changes (increasing the size of the breakwaters and budget increase). Only the breakwater change is considered in this section as budget changes do not affect environmental consequences.

The FONSI, found in Appendix F of the Final RP2/EA, provides the reasons why the projects selected for implementation in the Final RP2/EA would not have a significant impact on the human environment and that the cumulative effects of the actions on the quality of the human environment are not expected to be regionally or locally significant (40 C.F.R. 1508.13). The NEPA analysis notes minor, short-term adverse effects to physical, biological, and socioeconomic resources are anticipated from implementation of the Project, and long-term beneficial impacts are expected.

Table 1 below compares the impacts of the Project's original scope to expected impacts from the Project with the proposed change (breakwater change). Only resources with the potential to be impacted from the Project change are discussed. When taken in the context of the project area and the surrounding area, the intensity of the impacts from the Project change to affected

resources is not substantial and requires no additional NEPA analysis.

Table 1: Summary of comparison of environmental consequences – original scope and proposed change.

Impacts to Physical Resources – original scope	**Impacts to Physical Resources including breakwater change**
The original scope had approximately 820-1,805 linear feet of native rock breakwaters being constructed with 844.7-1,689.4 cubic yards of limestone rip rap with cultch along the wave-ward side of the island. In summary, this Project is anticipated to result in shortterm, minor, localized adverse impacts and long-term benefits to physical resources. See Final RP2/EA Sections 4.8 and 4.8.1.3.	The revised scope would include approximately 2,600 linear feet and 14,000 cubic yards of limestone riprap with cultch, which would be an increase of approximately 800 linear feet of breakwater and an additional 12,300 cubic yards of riprap. This increase in size and length would not substantially change the anticipated environmental consequences to physical resources.
Impacts to Biological Resources – original scope	**Impacts to Biological Resources including breakwater change**
In summary, this Project is anticipated to result in short-term, minor adverse impacts on biological resources, and long-term benefits to biological resources.	The impacts from the increased size and length of the breakwaters are anticipated to be consistent with the level of impacts to biological resources described for the original scope. The breakwaters would be constructed using NOAA's NMFS applicable Project Design Criteria (PDC) and
	would be placed in areas that don't have any seagrass.

V. Determination of Need for Additional OPA Restoration Planning

The Project change does not affect the selection of the Project under OPA. The Project would restore bird populations injured by the DWH oil spill (specifically American oystercatchers) by restoring and enhancing bird nesting and foraging habitat. This Project builds off successful NFWF-GEBF oyster restoration work in Florida's Big Bend region. Thus, the FL TIG anticipates this Project will be implemented successfully with minimal collateral impacts or impacts to human health and safety. This Project is likely to provide ancillary benefits to oyster reef habitats and other shorebirds and seabirds.

The Project is consistent with the analysis in the RP2/EA found in Section 3.5, specifically Table

3-4 Evaluation of OPA criteria for the Birds alternatives. The Project change is within the scope of the original restoration approach, "Restore and conserve bird nesting and foraging habitat" (PDARP/PEIS Section 5.5.12.2; Appendix 5.D.6.1) and is therefore consistent with the OPA NRDA analysis in the PDARP/PEIS.

The Project change described in Section III would not decrease the benefits of this Project and would ensure project success. The Project's original OPA NRDA evaluation is found in the RP2/EA, Chapter 3, Table 3-4 and is used for comparison with the project change. Of the six OPA NRDA evaluation standards on which the original evaluation is based, Trustee Goals and Objectives, Avoid Collateral Injury, Benefits, and Health and Safety would not change. Cost Effectiveness and Likelihood of Success are discussed in Table 2.

Table 2: OPA NRDA evaluation comparing original project scope to project change for cost-effectiveness and likelihood of success.

OPA NRDA evaluation original scope	OPA NRDA evaluation with project changes
Cost-effectiveness: The total estimated cost of $1,748,639 includes planning and design, permitting, construction, monitoring, indirect costs, and contingency funds. The costs to carry out this alternative are based on similar projects and FWC's experience, and, in the judgement of the FL TIG, are reasonable and appropriate.	Engineering and design have revealed that the original estimated size of the breakwater was underestimated. Therefore, additional funds are needed to build the breakwaters as currently designed. For the Project to be successful, the breakwaters need to be able to prevent further erosion and therefore need to be increased in size and length. The Trustees find the additional cost to implement the project with the recommended additional breakwater length and required rip rap is still reasonable and appropriate.
Likelihood of Success: This Project utilizes reliable methods to enhance oyster reefs and install breakwaters to provide bird nesting and foraging habitat. Based on similar successful efforts, such as the NFWF-GEBF Recovery and Resilience of Oyster Reefs in the Big Bend of Florida project, the FL TIG anticipates this Project would have a high likelihood of success.	The redesigned breakwaters would not decrease the success of this Project, but rather would increase the success of the Project by providing the necessary level of protection needed to prevent further erosion of the island and the associated nesting and foraging habitat. The FL TIG anticipates that with the increased funding this Project would have a high likelihood of success as the Project change represents application of adaptive management after engineering and design determined that the original scope of the breakwater design was inadequate.

OPA NRDA Evaluation Summary

The estimated additional Project cost of $3,325,265 to bring the total cost to $5,073,904 is considered reasonable and appropriate by the FL TIG to ensure success to restore and enhance critical nesting and foraging habitat for American oystercatchers on Gomez Key. The Project change does not affect the selection of the Project under OPA. The Project is consistent with the Replenish and Protect Living Coastal and Marine Resources Restoration Goal and underlying Birds Restoration and has a clear nexus to injuries from the DWH oil spill.

VI. Determination of Need for Additional Environmental Compliance

FWC, as Implementing Trustee, engaged in technical assistance with the Department of the Interior and the National Oceanic Atmospheric Administration to determine if there is a need for further consultations for the following:

- Bald and Golden Eagle Protection Act (US Fish and Wildlife Service)
- Coastal Barrier Resources Act (USFWS)
- Endangered Species Act (National Marine Fisheries Service)
- Endangered Species Act (USFWS)
- Magnuson-Stevens Fishery Conservation and Management Act/Essential Fish Habitat (NMFS)
- Marine Mammals Protection Act (NMFS)
- Marine Mammal Protection Act (USFWS)
- Migratory Bird Treaty Act (USFWS)

Both DOI and NOAA determined that the original consultations above remained valid, and no further consultations were required. Both agencies documented these decisions in Memos to the File.

The Section 106 consultation pursuant to the National Historic Preservation Act will be initiated once the appropriate surveys have been completed. No ground disturbing activities will occur until concurrence has been provided. Finally, FWC, as Implementing Trustee, is in the process of applying for the USACE permit. No construction activities will occur until the permit has been issued.

VII. Conclusions

The Trustees are required to evaluate material changes to any selected restoration project. Trustees must also determine whether additional restoration planning and environmental

review—including opportunity for public comment—is necessary. The Project change has been evaluated by the FL TIG in accordance with TC SOPs.

Outcome of evaluation of Project review factors:

1) The change to the Project is consistent with the environmental review in the RP2/EA NEPA review, and there are no substantial changes relevant to environmental concerns.
2) There are no significant new circumstances or information relevant to environmental concerns not addressed in the impact analysis of the respective restoration plan/NEPA review [40 CFR § 1502.9 (c)].
3) The FL TIG evaluated whether the Project changes affect the selection under OPA and determined it does not.
4) The FL TIG evaluated whether the Project changes affect the need for additional consultations or reviews for environmental compliance. Based on review of the Project changes, existing completed consultations remain valid, and no further consultations or review are needed for existing compliance. Both USACE permit and NHPA consultations will be completed before any construction begins.

The Project change does not impact the overall project objectives or environmental consequences. The change does not affect the selection of this Project under OPA, and the Project is consistent with the environmental review conducted for the RP2/EA. Therefore, no further analyses under the OPA NRDA regulations or NEPA are necessary. In addition, the original public comment period conducted for the RP2/EA solicited public input on the Project and comments were supportive with no controversial issues identified. No additional public comment is necessary to implement this change.

Attachment 3: Project Consultation Approval

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

U.S. Fish and Wildlife Service
Florida Ecological Service Office

FWS Log No. 04EF2000-2021-B-0020

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the Florida Ecological Service Office.

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Robert L. Carey, Division Manager, Environmental Review — 7/16/2021 Date

Memorandum

To: Field Supervisor, Vero Beach

From: Chief, Planning and Complian Office

Subject: Informal Consultation Reques proposed in the Florida Truste

Overview

Nine projects are currently being evaluated as potential restoration projects to restore natural resources in Florida that were injured as a result of the Deepwater Horizon (DWH) oil spill. We have reviewed the enclosed projects in accordance with Section 7 of the Endangered Species Act (ESA) of 1973 as amended (16 U.S.S 1531-1544). For these projects, we have made a May Affect, Not Likely to Adversely Affect determination and are requesting concurrence with our determinations. A brief description of the project and species determinations are provided in Tables 1 and 2 below. Project specific descriptions are contained in the attached biological evaluations.

Background

After the DWH oil spill, federal and state natural resource trustee agencies (Trustees) came together to assess the effects of the spill and plan for the restoration of injured natural resources. As part of the legal settlement reached with BP in 2016, the Trustees prepared a Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental

Impact Statement (Final PDARP/PEIS), to provide the framework for DWH oil spill restoration across the Gulf.

The Final PDARP/PEIS established Trustee Implementation Groups (TIGs) that develop specific plans for, developing, selecting, and implementing specific restoration actions under the Final PDARP/PEIS. The Florida TIG includes two State trustee agencies and four federal trustee agencies: the Florida Department of Environmental Protection; the Florida Fish and Wildlife Conservation Commission (FWC); the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration; the United States Department of the Interior, represented by the United States Fish and Wildlife Service (USFWS) and the National Park Service; the United States Department of Agriculture; and the United States Environmental Protection Agency.

The FL TIG has evaluated these projects under the *Florida Trustee Implementation Group Draft Restoration Plan and Environmental Assessment #2: Habitat Projects on Federally Managed Lands; Sea Turtles; Marine Mammals; Birds; and Provide and Enhance Recreational Opportunities*, which was released for public comment on February 19, 2021. If the FL TIG selects these projects, the FL TIG trustees would implement these projects. A brief description of each project is provided in Table 1 below.

These facts lead us to the conclusion that consultation under Section 7 of the ESA, is required for the proposed project and we wish to engage in such consultation. We have reviewed the proposed projects for potential impacts to listed, candidate, and proposed species, and designated and proposed critical habitats in accordance with Section 7 of the ESA. Potential effects, conservation measures, and justifications for our determination are presented in the attached Biological Evaluation (BE) forms. Our determinations are summarized in Table 2 below.

Within the BE form, we have also reviewed the proposed project for impacts to bald eagles (*Haliaeetus leucocephalus*) in accordance with the Bald and Golden Eagle Protection Act of 1940 as amended (16 U.S.C. 668-668c), impacts to migratory birds in accordance with the Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. 703-712), and impacts to West Indian manatee (*Trichechus manatus*) in accordance with the Marine Mammal Protection Act of 1972 as amended (16 U.S.C. 1361-1383b, 1401-1406, 1411-1421h) and we determined that take would be avoided.

This memo requests your concurrence with our determinations for the nine proposed projects.

To facilitate your response, should you concur with our determination, we have attached a template response letter. If you have questions or concerns regarding this request, please contact Michael Barron, Fish and Wildlife Biologist, at 251-421-7030 or michael_barron@fws.gov.

Attachments (10)

- BE form including project maps (9)
- Template response letter

Table 1. Brief description of the projects in FL TIG RP/EA #2.

Proposed Project	Brief Description
Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers	This project would be implemented by FWC. The goal of the project is to restore and enhance American oystercatcher nesting and foraging habitat at Gomez Key and to prevent further erosion and habitat loss. Specifically, project activities include: • Providing durable structure and surface area of approximately two to five acres, including the breakwater, for oyster reef expansion and recolonization in the intertidal zone and expand potential nesting habitat above the mean high-water line; and • Installing native rock (e.g., limestone and shell) breakwaters of approximately 820-1,805 linear feet along the wave-ward side of the island to dissipate wave energy and increase sediment deposition on the island. Project activities include planning, engineering, design, permitting, placement of cultch material, installation of breakwaters, and monitoring. Oyster reef expansion and breakwater installation would involve using barge and excavators to deposit limestone rip rap and Carolina Skiffs to deposit cultch material in the intertidal zone. The breakwater(s) would likely be a detached single or multiple configuration and be oriented to buffer the island from dominant wind/wave energy. Breakwaters would include gaps to allow for species movement and reduce the risk of entrapment. Where feasible, additional rock would be placed between the breakwater and the island to allow for intertidal oyster reef expansion. Approximately 844.7 to 1,689.4 cubic yards of limestone rip rap with cultch are expected to be deposited in the intertidal zone as part of this project.

Reducing Vessel-Strikes of Sea Turtles	The project would be implemented by FWC in partnership with Florida State University. The project would work to reduce the mortality of sea turtles. This project would: • Compile data on sea turtles by collating existing and/or obtaining new information, as needed, on the habitat use, behavior, and temporal distribution of sea turtles at selected passes in the Gulf of Mexico where injury by motorized watercraft is high; • Quantify vessel use and activity at the same passes; • Compile data on vessel strikes by collating existing and/or obtaining new information, as needed, to determine the overlap between sea turtles and vessels at the selected

	passes and identify areas with low, medium and high risk of a vessel-strike; • Obtain information on factors that may influence the risk of a vessel-strike for sea turtles; • Conduct surveys of boaters to assess the acceptability and perception of boaters to identified strategies to reduce vessel-strikes; • Quantify the willingness and potential motivation of boaters to change their boating practices to reduce vessel-strikes of sea turtles; • Conduct a public awareness campaign at each pass to educate the public about the presence of sea turtles around each pass and the threat of a vessel-strike for those sea turtles and to suggest strategies for boaters that would reduce vessel-strikes of sea turtles and encourage responsible boating practices.

Perdido Key Sediment Placement	This project would partially restore the natural sediment budget for the Perdido Key unit of Gulf Islands National Seashore through the placement of dredged material. The goal of the project is to: 1) improve habitat at Perdido Key that is home to a wide variety of wildlife, nesting sea turtles, a variety of shorebirds, and a wide variety of plants, and 2) increase the ability of Perdido Key to withstand the natural erosive effects of storms. Project activities would include planning and design (engineering, design, and permitting), placement of dredged material, and monitoring. Specifically, project activities would: • Re-introduce sand into the barrier island system through: ○ A) "swash zone" placement (the area extending from the +three-foot-above mean high water to mean low water); or ○ B) direct "on-beach" placement (the area extending from the + eight-foot-above mean high water [MHW] to mean low water [MLW]). The exact placement location would depend on the condition of the shoreline at the time of the next dredging cycle at Pensacola Pass.
St. Vincent National Wildlife Refuge Access and Recreational Improvements	The primary goals of this project are to (1) acquire and enhance a 10 to 15-acre parcel at Indian Pass to ensure access to St. Vincent National Wildlife Refuge (SVNWR) in perpetuity and (2) enhance recreational opportunities at the parcel. To accomplish these goals, the project would: • Acquire the 10 to 15-acre Indian Pass parcel for inclusion into SVNWR;

	• Ensure access and use of the boat dock/slip (for primary access to SVNWR); • Increase vehicle/trailed unpaved gravel parking at the existing boat ramp from approximately 14 to 31 spaces; • Install monofilament fishing line recycling bins; • Convert the campground store to a visitor contact station for SVNWR, including installing educational signage; • Construct a kayak boat launch that provides access to the shoreline but no launch structure; and, • Construct an additional 10 unpaved parking spaces. Project activities include implementation (non-construction and operation and maintenance) and monitoring. The acquisition would require a professional appraisal, a boundary survey, and a Level 1 contaminants survey.
Pensacola Maritime Park Public Fishing Marina	This project would provide and enhance recreational fishing opportunities by constructing a public fishing marina in Pensacola Bay. Specific planned amenities include: • Construction of a designed and permitted 48-vessel slip public fishing marina; • Installation educational signage/kiosks, monofilament recycling bins, and sea-turtle-friendly lights at the new marina. Project activities include construction and monitoring. Implementation of this project could include use of heavy construction equipment, such as bulldozers, trucks, backhoes, tractor trailers, cranes, small excavators, forklifts, asphalt machine, roller, small power tools, generators, small trucks, and hand tools.

Baars Park and Sanders Beach Kayak Fishing Trail Access Upgrades	This project would provide and enhance recreational paddling opportunities by creating recreational amenities and water access points at two locations in Pensacola. Specific planned amenities include: • Creating recreational infrastructure at Baars Park: ○ Construct a small pier and dock with specialized kayak and accessible entry. Any lighting associated with the pier and dock would be implemented in accordance with applicable sea turtle lighting regulations; ○ Construct a small unpaved parking lot with approximately eight parking spaces; ○ Construct a picnic area/shelter; ○ Install monofilament recycling bins;

	○ Install informational/educational kiosks; • Enhancing existing infrastructure at Sanders Beach Boat Launch: ○ Convert the existing powercraft launch to an accessible kayak launch (method to be determined); ○ Install floating accessible kayak launches to the two existing docks; ○ Reconfigure, and possibly expand, the existing parking lot; ○ Install monofilament recycling bins; ○ Install informational/educational kiosks. Project activities include engineering, design, permitting, construction, and monitoring. This project is in conceptual planning and most amenities have yet to be designed. The exact locations would be determined during design but would be sited based on existing site conditions to minimize impacts to habitat. Implementation of this project could include use of heavy construction equipment, such as bulldozers, trucks, backhoes, tractor trailers, cranes, small excavators, forklifts, asphalt machine, roller, small power tools, generators, small trucks, and hand tools. Both land- and water-based construction would occur. Vehicles and staging equipment would

	utilize previously existing roads, parking areas, and disturbed areas.
Gulf Breeze Park Boating and Fishing Access Upgrades	This project would be implemented by FWC in coordination with the City of Gulf Breeze. The goal of the project is to increase recreational fishing opportunities by renovating three existing parks (Shoreline Park South, Woodlands Park, and Vista Park). The project includes construction of new amenities and enhancement of existing amenities to increase access and improve overall fishing experiences. Specifically, this project would: • Enhance Shoreline Park South (a popular destination for boat launching) by: o Demolishing the existing pier (which was damaged by recent storms) and construing an expanded fishing pier in the same location to increase foot traffic, and accommodate the mooring of fishing vessels; o Renovating the boat launches (specifically, making slope repairs above the waterline); o Constructing a new small vessel/fishing boat launch with floating dock, a fish cleaning station, and a

	refresh station for fisherman with ice, vending, and frozen bait machines;

	○ Improving/enhancing parking, utilities, and security; ○ Installing additional monofilament recycling bins, if there is determined to be a need. • Enhance Woodlands Park by: ○ Demolishing the existing dock and pier; ○ Constructing a new floating pier/gangway (eight feet wide by 60 feet long) with attached floating dock (16 feet by 26 feet) and kayak launch; ○ Constructing a new American with Disabilities Act compliant restroom facility; ○ Installing monofilament recycling bins; ○ Expanding parking and a concrete walk to connect the improvements to the existing facilities. • Enhance Vista Park by: ○ Constructing a new small vessel/fishing boat launch; ○ Installing a floating dock (16 feet by 26 feet) attached to the shoreline; ○ Installing monofilament recycling bins; ○ Constructing a new concrete walk connecting to existing park. Project activities include engineering, design, construction, and monitoring.

Lincoln Park Boat Ramp and Dock Improvements	This project would enhance recreational experiences at Lincoln Park by improving existing recreational infrastructure. The goal of the project is to enhance public fishing opportunities by improving water access sites. Specific upgrades include: • Demolish two existing single-lane boat ramps (~1,191 square feet) and construct a new re-designed two-lane boat ramp in the same location (~1500 square feet); • Incorporate sheetpile into the new boat ramp for increased resiliency and design life to reduce potential for scour at the ramp toe and siltation along the nearshore portion of the ramp; • Install approximately three concrete piles to support the waterward end of the slab (if determined to be required during design); • Demolish the existing central pier (~710 square feet) and construct two new flanking access docks (~1,072 square feet); • Repair and expand the existing unpaved parking lot (existing parking lot is a gravel lot and the project would expand it with an additional approximately 11 spaces that would be graveled as well); and • Install monofilament recycling bins.
	Equipment involved in includes front-end loaders, back hoes, skid steers, augers, pavement cutters, large jackhammers, dump trucks, concrete trucks, vehicle and material delivery trucks and trailers, light-duty work trucks, generators, port-a-johns, a construction trailer, and a variety of power tools. Staging areas would be located on existing pavement or other heavily impacted areas to the greatest extent possible.

Florida Artificial Reef Creation and Restoration - Phase 2	The project would be implemented by FWC, in coordination with Escambia County, Santa Rosa County, Okaloosa County, Walton County, Bay County, City of Mexico Beach, Gulf County, Franklin County, and Wakulla County. Building upon the interagency partnerships developed during the Early Restoration Florida Artificial Reef Creation and Restoration project (Phase 1), the project would implement the second phase of artificial reef development across Northwest Florida, creating new marine recreational fishing and diving opportunities. Specifically, the project would include: • Partnering and establishing grant agreements with local coastal governments for project implementation (planning, selection, design, permitting, construction, and as-built documentation) off Escambia, Santa Rosa, Okaloosa, Walton, and Bay counties. FWC will directly oversee these activities off Gulf, Franklin, and Wakulla counties. • Constructing artificial reefs with one or more of the following materials: 1) rock boulders, 2) prefabricated concrete, or 3) designed modules. Project activities include engineering, design, feasibility studies, permitting, construction, and monitoring. All in-water conservation measures for manatees would be followed.

Table 2. Summary of ESA determinations for proposed projects in FL TIG RP/EA #2. *(NE = No Effect, NLAA = May Affect, Not Likely to Adversely Affect)*

ESA Species Under USFWS Jurisdiction	Status	Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers	Reducing Vessel-Strikes of Sea Turtles	Perdido Key Sediment Placement	St. Vincent National Wildlife Refuge Access and Recreational Improvements	Pensacola Maritime Park Public Fishing Marina
Piping Plover (*Charadrius melodus*)	Threatened	--	No Effect	NLAA	No Effect	--
Piping Plover (CH)	Threatened	--	No Effect	--	--	--
Red Knot (*Calidris cantutus rufa*)	Threatened	NLAA	--	--	No Effect	--
Eastern Black Rail (*Laterallus jamaicensis* jamaicensis)	Threatened	NLAA	--	--	--	--
Wood Stork (*Mycteria americana*)	Threatened	NLAA	--	No Effect	No Effect	No Effect
West Indian Manatee (*Trichechus manatus*)	Threatened	NLAA	NLAA	NLAA	No Effect	NLAA
West India Manatee (CH)	Threatened	--	No Effect	--	--	--
Perdido Key Beach Mouse (*Peromyscus polionotus* trissyllepsis)	Endangered	--	--	NLAA	--	--
Perdido Key Beach Mouse (CH)	Endangered	--	--	NLAA	--	--
St. Andrew Beach Mouse (*Peromyscus polionotus peninsularis*)	Endangered	--	--	--	No Effect	--
Florida Salt Marsh Vole (*Microtus pennsylvanicus dukecampbelli*)	Endangered	No Effect	--	--	--	--
Green Sea Turtle (*Chelonia mydas*)	Threatened	--	--	NLAA	NLAA	--

Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)	Endangered	--	--	NLAA	NLAA	--
Loggerhead Sea Turtle (*Caretta caretta*)	Threatened	--	--	NLAA	NLAA	--
Loggerhead Sea Turtle (CH)	Threatened	--	--	--	NLAA	--
Leatherback Sea Turtle (*Dermochelys coriacea*)	Endangered	--	--	NLAA	NLAA	--

Table 2. (Continued)

ESA Species Under USFWS Jurisdiction	Status	Gomez Key Oyster Reef Expansion and Breakwaters for American Oystercatchers	Reducing Vessel-Strikes of Sea Turtles	Perdido Key Sediment Placement	St. Vincent National Wildlife Refuge Access and Recreational Improvements	Pensacola Maritime Park Public Fishing Marina
Gopher Tortoise (*Gopherus polyphemus*)	Candidate	No Effect	--	No Effect	No Effect	NLAA
Indigo Snake (*Drymarchon corais couperi*)	Threatened	No Effect	--	No Effect	--	NLAA
Reticulated Flatwoods Salamander (*Ambystoma bishopi*)	Endangered	--	--	--	--	No Effect
Okaloosa Darter (*Etheostoma okaloosae*)	Threatened	--	--	--	--	--
Chapman Rhododendron (*Rhododendron chapmanii*)	Endangered	--	--	--	No Effect	--
Florida Skullcap (*Scutellaria floridana*)	Threatened	--	--	--	No Effect	--
Godfrey's Butterwort (*Pinguicula ionatha*)	Threatened	--	--	--	No Effect	--
Telephus Spurge (*Euphorbia telephioides*)	Threatened	--	--	--	No Effect	--

White Birds-in-a-Nest (*Macbridea alba*)	Threatened	--	--	--	No Effect	--

Table 2. (Continued)

ESA Species Under USFWS Jurisdiction	Status	Baars Park and Sanders Beach Kayak Fishing Trail Access Upgrades	Gulf Breeze Park Boating and Fishing Access Upgrades	Lincoln Park Boat Ramp and Dock Improvements	Florida Artificial Reef Creation and Restoration – Phase 2
Piping Plover (*Charadrius melodus*)	Threatened	--	--	--	No Effect
Piping Plover (CH)	Threatened	--	--	--	--
Red Knot (*Calidris cantutus rufa*)	Threatened	--	--	--	No Effect
Eastern Black Rail (*Laterallus jamaicensis jamaicensis*)	Threatened	--	--	--	--
Wood Stork (*Mycteria americana*)	Threatened	No Effect	--	NLAA	--
West Indian Manatee (*Trichechus manatus*)	Threatened	NLAA	NLAA	NLAA	NLAA
West Indian Manatee (CH)	Threatened	--	--	--	--
Perdido Key Beach Mouse (*Peromyscus polionotus* trissyllepsis)	Endangered	--	--	--	--

Perdido Key Beach Mouse (CH)	Endangered	--	--	--	--
Florida Salt Marsh Vole (*Microtus pennsylvanicus dukecampbelli*)	Endangered	--	--	--	--
St. Andrew Beach Mouse (*Peromyscus polionotus peninsularis*)	Endangered	--	--	--	--
Green Sea Turtle (*Chelonia mydas*)	Threatened	--	--	--	--
Kemp's Ridley Sea Turtle **(***Lepidochelys kempii*)	Endangered	--	--	--	--
Loggerhead Sea Turtle (*Caretta caretta*)	Threatened	--	--	--	--

Table 2. (Continued)

ESA Species Under USFWS Jurisdiction	**Status**	**Baars Park and Sanders Beach Kayak Fishing Trail Access Upgrades**	**Gulf Breeze Park Boating and Fishing Access Upgrades**	**Lincoln Park Boat Ramp and Dock Improvements**	**Florida Artificial Reef Creation and Restoration – Phase 2**
Loggerhead Sea Turtle (CH)	Threatened	--	--	--	--
Leatherback Sea Turtle (*Dermochelys coriacea*)	Endangered	--	--	--	--

Gopher Tortoise (*Gopherus polyphemus*)	Candidate	NLAA	NLAA	NLAA	--
Indigo Snake (*Drymarchon corais couperi*)	Threatened	NLAA	--	NLAA	--
Reticulated Flatwoods Salamander (*Ambystoma bishopi*)	Endangered	--	--	--	--
Okaloosa Darter (*Etheostoma okaloosae*)	Threatened	--	--	No Effect	--
Chapman Rhododendron (*Rhododendron chapmanii*)	Endangered	--	--	--	--
Florida Skullcap (*Scutellaria floridana*)	Threatened	--	--	--	--
Godfrey's Butterwort (*Pinguicula ionatha*)	Threatened	--	--	--	--
Telephus Spurge (*Euphorbia telephioides*)	Threatened	--	--	--	--
White Birds-in-a-Nest (*Macbridea alba*)	Threatened	--	--	--	--