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 March 31, 2022

To: Memorandum to File

From: Michael Barron, Deepwater Horizon Gulf Restoration Office

Subject: Regulatory Compliance Determinations for Restoration Projects Proposed in the Texas Trustee Implementation Group's Restoration Plan #2: Wetland, Coastal and Nearshore Habitats, Living Coastal and Marine Resources, and Water Quality

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 project materials provided, the compliance determinations of four projects proposed for implementation in the *Texas Trustee Implementation Group Draft Restoration Plan and Environmental Assessment #2: Wetland, Coastal and Nearshore Habitats, Living Coastal and Marine Resources, and Water Quality* are indicated below. These projects either have No Effect on listed species or are covered by existing consultations.

Project Title	ESA (USFWS)	MMPA (USFWS)	BGEPA (USFWS)	MBTA (USFWS)
Petronila Creek Constructed Wetlands Planning	NE	NE	NT	NT
Petronila Creek Watershed Nutrient Reduction Initiative	NE	NE	NT	NT
San Antonio Bay Bird Island	C	C	C	C
Upper Texas Gulf Coast Sea Turtle Rehabilitation Facility	C	C	C	C

NT – No Take; NE – No Effect; C- Covered by Existing Consultation

Should any project be modified in a way that could adversely impact species or habitats, this determination will be reevaluated as appropriate.

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 (4)

Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

For assistance, please contact the compliance liaisons
USFWS: Michael Barron at michael_barron@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS ☒ NOAA ☐ EPA ☐ USDA ☐

Implementing Trustee(s): Texas General Land Office (GLO)

Contact Name: Allison Fischer Phone: 512-463-5271 Email: Allison.fischer@glo.texas.gov

Project Name: Petronila Creek Constructed Wetlands Planning

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

B. Project Phase and Supporting Documentation

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

Planning/Conceptual ☒ Construction/Implementation ☐ Engineering & Design ☐

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

Click here to enter text.

Supporting Documentation

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

- Plan view of design drawings
- Aerial images of project action area and surrounding area
- Map of project area with elements proposed (polygons showing proposed construction elements)
- Map of action area with critical habitat units or sensitive habitats overlayed

The Aguanita Project (Attachment A)

Figure 1. Proposed project location

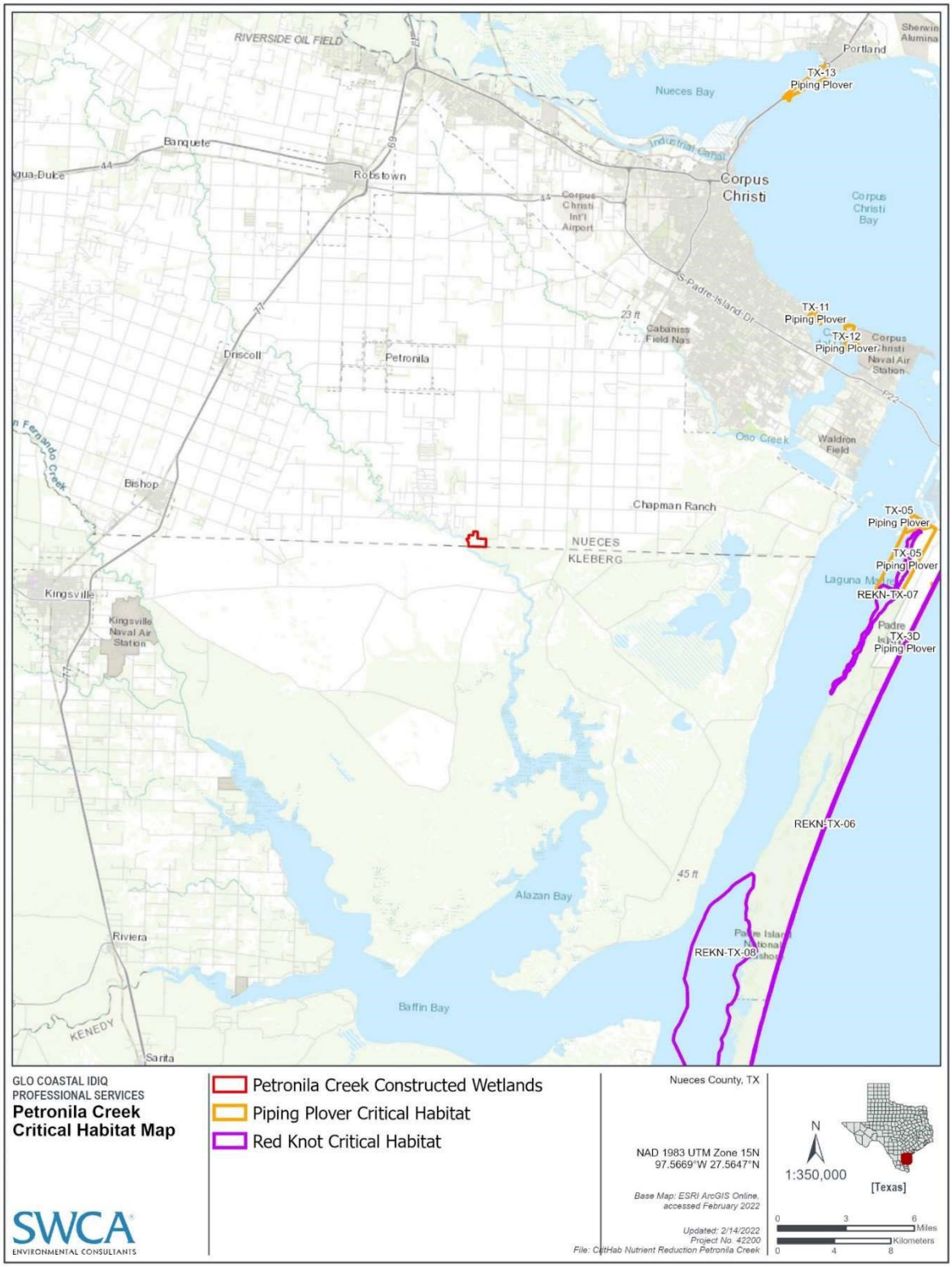

Figure 2. Critical habitat for piping plover and proposed critical habitat for red knot in the vicinity of the action area.

C. Project Location

I. State and County/Parish of action area
Nueces County, Texas

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] 27°33'43.68"N, 97°34'0.12"W WGS84

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☒

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. Click here to enter text.

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

Name of Person Completing this Form: Meggan Dugan
Name of Project Lead: Allison Fischer
Date Form Completed: 11/1/2021
Date Form Updated: Click here to enter text.

E. Description of Action Area

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

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

The proposed project is located in Nueces County, adjacent to Petronila Creek (approximately 17 river miles upstream of Baffin Bay) and downstream of more than 200,000 acres of cultivated land in a heavily farmed watershed. The action area is located across a Tier 1/Tier 2 watershed boundary and is positioned just downstream of all Tier 1 watersheds. The action area is relatively flat, with less than 3 feet of elevation difference exhibited, and is comprised of uplands and freshwater stream habitat. A historical stream channel flows from the northwest and through the center of the proposed project site to the south. During heavy rainfall events excess sheet flow from adjacent properties is expected to spill over into the action area.

Land use in the action area is predominantly cultivated crops, with scattered remnant riparian areas, human-made ponds, and stock tanks, as well as oxbow wetlands along Petronila Creek. Adjacent to the proposed project site is Chapman Lake, a reservoir created in the 1970s from a dammed former stream channel. Chapman Lake, the scattered ponds, and creek oxbows remain wet throughout the year. The proposed project area is currently in agricultural production. North of the proposed project area is a utility-scale wind energy facility, and oil and gas development is common in the region. The proposed project site is not located within critical habitat of any federally listed species. Designated critical habitat for piping plover (Charadrius melodus) is located approximately 16 miles east of the proposed project site on Padre Island (USFWS 2021) (Figure 2).

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.

Petronila Creek is a 44-mile freshwater stream spanning Kleberg and Nueces Counties, located within the Nueces-Rio Grande Coastal Basin. The Nueces-Rio Grande Coastal Basin has a drainage area of approximately 10,442 square miles. Petronila Creek drains approximately 543 square miles of this basin and is part of the Baffin Bay watershed. It is formed by the confluence of Agua Dulce and Banquete Creeks, 1 mile southeast of the town of Banquete in western Nueces County, and is located southwest of the city of Corpus Christi, Texas. Petronila Creek is fed by several tributaries that serve as drainage ditches for agricultural cropland. Petronila Creek is one of the three major tributaries to Baffin Bay.

Petronila Creek (Above Tidal [Segment 2204]) has been listed as impaired for chloride, sulfates, and total dissolved solids (TDS) since 1999 (TCEQ 2010). Total maximum daily loads (TMDLs) under the Clean Water Act establish the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality. TMDLs for chloride, sulfate, and TDS (which is inclusive of nutrient loads) for Petronila Creek were approved in 2007 (TCEQ 2007). In 2008, a Railroad Commission of Texas (RRC) report concluded that oil and gas wasteland fields and other unknown sources were contributing chlorides to Petronila Creek through groundwater (RRC 2008). As a result of the TMDL implementation plan to reduce the chloride impairment, soils of high chloride content were identified and removed, a continuous water quality monitoring station was installed and is still being monitored, and groundwater-to-surface-water interactions were studied (TCEQ 2014). In

addition, Petronila Creek (Tidal [Segment 2203]) has been listed as impaired for bacteria (not supporting primary contact recreation use) since 2010. The segment also has screening level concerns for pH, total phosphorus, and chlorophyll-a (TCEQ 2010).

Studies of Baffin Bay also indicate periodic poor water quality, including high algal activity and periods of harmful algal blooms (brown tide) that occur as a result of both natural geometry factors (depth, inflows, tides) and high nutrient levels (CBBEP 2020).

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.
Approximately 4 river miles downstream of the proposed project area, Petronila Creek transitions to being tidally influenced. The tidal segment ends approximately 5 miles farther south at the confluence with Alazan Bay, which is connected with Baffin Bay and ultimately the Gulf of Mexico.

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.

The action area is largely comprised of agricultural lands, but an existing transmission line follows the northern and eastern boundaries of the proposed project area, and a ranch house and associated accessory structures are located approximately 0.1-mile northwest of the proposed project area. Utility-scale wind turbines and oil and gas infrastructure is located north of the proposed project area.

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.

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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 action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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.

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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.).

Upland habitat in the action area is predominantly cultivated crops, with scattered remnant riparian areas, humanmade ponds, and stock tanks, and oxbow wetlands along Petronila Creek.

g. Marine Mammals

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

Dolphins YES☐ NO☒

Whales YES☐ NO☒

Manatees YES☐ NO☒

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

N/A

h. Soils and Sediments

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

The action area is comprised of mainly Victoria clay and Orelia fine sandy loam soils. The portion of Nueces County within which the action area is located is made up of heavy, blackland clayey soils once covered with coastal prairie and wooded floodplain corridors along various stream and river channels (Attachment A).

i. Land Use

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

The proposed project area is currently in agricultural production. North of the proposed project area is a utility-scale wind energy facility, and oil and gas development is common in the region. Other land uses include residential development and ranching. j. Essential Fish Habitat

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

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek, which contains the nearest mapped Essential Fish Habitat (NOAA 2021).

F. Project Description

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

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

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

The proposed project would include a feasibility study and, if determined to be feasible, development of 30% engineering and design (E&D) components and completion of the planning stages necessary to convert a 240-acre agricultural tract to constructed wetlands through which Petronila Creek would be diverted. The site is ideally suited to intercept and treat nutrient-rich agricultural runoff, thereby reducing water quality impacts to Baffin Bay. Water would be drawn from Petronila Creek and passed through the wetlands for water quality improvements before being returned to the creek. The goal of the alternative would be to treat up to 15,000 acre-feet of water per year.

Petronila Creek was identified as having the greatest opportunity for implementing nonpoint source nutrient reduction strategies because modeling of nutrient loads confirmed that nonpoint sources associated with pasture/grassland and cropland (e.g., land application of livestock manure and/or commercial fertilizer, wildlife populations, feral hog populations, livestock grazing, hunting camps) in the Petronila Creek watershed are the primary contributor to nutrient loads (Parsons 2019). Studies of Baffin Bay also indicate periodic poor water quality, including high algal activity and periods of harmful algal blooms (brown tide) that occur as a result of both natural geometry factors (depth, inflows, tides) and high nutrient levels (CBBEP 2020).

Before conducting E&D, an engineering firm would evaluate project feasibility for nutrient reduction potential and efficacy and verify the estimated costs of the proposal, including:

- modeling to assess the efficacy of nutrient reduction and other water quality improvements from implementation of the project;
- determine the feasibility of obtaining permits, including the need and potential for obtaining a water use permit;
- evaluation of the cost of the estimates in the proposal;
- appropriate environmental compliance reviews
- a long-term management plan, including a conservation easement and long-term stewardship strategy to ensure perpetual maintenance
- a conceptual postconstruction monitoring and adaptive management plan to quantify impacts to nutrient and sediment loads and water quality health of Petronila Creek

If the Texas TIG determines the proposal feasible based on the items listed above, the engineering firm would then prepare a 30% design, including drawings, specifications, construction schedule, and an opinion of probable construction costs, and submit permit applications.

The proposed project would include design of a series of wetlands and wet ponds as a comprehensive ecosystem design. Design would take into consideration forebays and sediment traps, as well as deeper pools for sediment accumulation, to reduce maintenance and volume loss over time. A secondary benefit of the proposed project includes preservation of existing riparian habitats. Due to variable salinity levels in Petronila Creek, a range of natural wetland areas could be incorporated into the design, including tidal salt marsh, brackish and intermediate marsh, and non-tidal freshwater marsh. The design could also address whether soils from the constructed channels, wetlands, and pond excavations may remain on-site and be used to create higher ground to further modify the site and retain water. The design would incorporate biomimicry; human-made replications of natural processes; and natural processes involving wetland vegetation, soils, and their associated microbial assemblages to decrease nitrogen, phosphorus, and sediment pollutant loads to Petronila Creek and the Baffin Bay watershed. Results of this proposed project would be used to determine feasibility of potential future construction actions. A future project may be

proposed and considered for funding in a future restoration plan.

II. Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.) The proposed project includes E&D; no construction would occur.

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)?

N/A

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

1. Method of pile installation	
2. Material type of piles used	
3. Size (width) of piles/sheets	
4. Total number of piles/sheets	
5. Number of strikes for each single pile	
6. Number of strikes per hour (for a single pile)	
7. Expected number of piles to be driven each day	

8. Expected amount of time needed to drive each pile (minutes of driving activities)	
9. Expected number of sequential days spent pile driving	
10. Whether pile driving occurring in-water or on land	
11. Depth of water where piles will be driven	

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

N/A

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

N/A

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

N/A

f. Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft2) to be dredged, volume of material (yd3) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods. If using devices/methods/turtle relocation dredging to relocate sea turtles, then describe the methods here.

N/A

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

N/A

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

N/A

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

N/A

G. NOAA Species & Critical Habitat and Effects Determination Requested

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

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

☐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).

Determination Definitions

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

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

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

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

H. USFWS Species & Critical Habitat and Effects Determination Requested

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

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

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

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

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

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

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For “No Effect”, please select justification.
Green Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
Loggerhead Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
Leatherback Sea Turtle		Terrestrial	No Effect	No suitable habitat action area

Kemp's Ridley		Terrestrial	No Effect	No suitable habitat action area
Hawksbill Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
West Indian Manatee			No Effect	No suitable habitat action area
Red Knot			No Effect	
Piping Plover			No Effect	
Ocelot			No Effect	Species does not occur within action area
Gulf Coast Jaguarundi			No Effect	Species does not occur within action area
Eastern Black Rail			No Effect	No suitable habitat action area
Northern Aplomado Falcon			No Effect	
Whooping Crane			No Effect	
Black Lace Cactus			No Effect	No suitable habitat action area
Slender Rush-Pea			No Effect	No suitable habitat action area
South Texas Ambrosia			No Effect	No suitable habitat action area
Monarch Butterfly			No Effect	No suitable habitat 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.

Click here to enter text.

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.

Red Knot

The red knot (Calidris canutus rufa) is an uncommon migrant along the Gulf Coast, especially along the upper coast, (Lockwood and Freeman 2014) during its nonbreeding period and has been observed within all five counties in which the proposed project may take place (eBird 2021; iNaturalist 2021). This species may occur as a migrant from late March to late May during spring migration and from August to early November for fall migration (Lockwood and Freeman 2014). These birds generally use sandy beaches in Texas (Baker et al. 2020) along shorelines of bays and barrier islands. This species may be present in the action area while traveling between areas of suitable habitat. However, as the proposed project would include only E&D and permitting for a future constructed wetlands project and would not result in any physical disturbance or changes to existing conditions within the action area, the proposed project would have no effect on red knot. Potential effects from project construction would be analyzed in a future analysis.

Piping Plover

The piping plover occurs along the Texas Gulf Coast as a nonbreeding resident and migrant This species uses beaches, mudflats, and sandflats along the Gulf of Mexico and its bays and estuaries.;(Elliott-Smith and Haig 2020). This species may be present in the action area while traveling between areas of suitable habitat. However, as the proposed project would include only E&D and permitting for a future constructed wetlands project and would not result in any physical disturbance or changes to existing conditions within the action area, the proposed project would have no effect on piping plover. Potential effects from project construction would be analyzed in a future analysis.

Eastern Black Rail:
The eastern black rail (Laterallus jamaicensis jamaicensis) occurs in a variety of wetland habitats, including, salt, brackish, and freshwater marshes; pond borders; wet meadows; and grassy swamps (NatureServe 2021). Suitable habitat typically contains moist soils with dense overhead cover of emergent vegetation. Breeding habitat usually contains fine-stemmed emergent plants, such as grasses, reeds, or cordgrass. This species uses similar habitats year-round for breeding, migration, and overwintering (Eddleman et al. 2020). While this species has not been observed within the action area (iNaturalist 2021), appropriate habitat is present within the action area, and this species may occur. As proposed project activities would be located on agricultural lands adjacent to suitable habitat, this species may be affected by future project implementation. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the eastern black rail.

Northern Aplomado Falcon

The northern aplomado falcon (Falco femoralis) was extirpated in Texas in the 1950s (Lockwood and Freeman 2014). However, The Peregrine Fund, Inc. has successfully reintroduced this species that now occurs as a rare resident (nesting, foraging) from western Matagorda County south to Cameron County (Lockwood and Freeman 2014). The northern aplomado falcon utilizes coastal prairies in these areas (Keddy-Hector et al. 2020). This species may be present in the action area while traveling between areas of suitable habitat. However, as the proposed project would include only E&D and permitting for a future constructed wetlands project and would not result in any physical disturbance or changes to existing conditions within the action area, the proposed project would have no effect on northern aplomado falcon. Potential effects from project construction would be analyzed in a future analysis.

Whooping Crane

Whooping crane (Grus americana) winter habitat extends along the Texas Gulf coast from San Jose Island and the Lamar Peninsula on the south to Welder Point and Matagorda Island on the north and consists of estuarine marshes, shallow bays, and tidal flats (Canadian Wildlife Service and U.S. Fish and Wildlife Service 2007). The species currently winters primarily on the Aransas National Wildlife Refuge (Texas), where critical habitat exists, and adjacent areas of Aransas, Calhoun, and Refugio Counties. In recent years, Whooping cranes from the Louisiana experimental population have been documented during breeding and non-breeding seasons in some coastal counties on the upper Texas coast as the flock has expanded in size. Foods utilized during migration are poorly documented but include frogs, fish, plant tubers, crayfish, insects, and agricultural grains; the greatest amount of observed foraging time is spent feeding in harvested grain fields (Canadian Wildlife Service and U.S. Fish and Wildlife Service 2007). Whooping cranes have

been observed in agricultural fields approximately 9 miles southwest of the action area in similar habitats as those present in the action area (iNaturalist 2021). As the proposed project site is comprised of agricultural lands that may provide suitable foraging habitat, this species may be present within the action area. However, as the proposed project would include only E&D and permitting for a future constructed wetlands project and would not result in any physical disturbance or changes to existing conditions within the action area, the proposed project would have no effect on whooping crane. Potential effects from project construction would be analyzed in a future analysis.

Slender Rush-Pea and South Texas Ambrosia

Slender rush-pea (Hoffmannseggia tenella) and South Texas ambrosia (Ambrosia cheiranthifolia) are both perennial herbaceous species growing in historically fire-dependent prairie habitat in two counties (Nueces and Kleberg) in South Texas, sometimes co-occurring at the same location. Both species are restricted to open grasslands on fine, calcareous clays associated with Pleistocene deltas (USFWS 2018). Known slender rush-pea sites are found within the Petronila, Oso, Chilitipin Creek-San Fernando, and Alazan Bay-Baffin Bay creek basins; South Texas ambrosia is found within the Oso, Chilitipin Creek-San Fernando, Alazan Bay-Baffin Bay, and Santa Gertrudis Creek basins. Most populations tend to be localized in remnant areas of shortgrass prairie within these drainage systems. One known population of slender rush-pea is located within the action area, within relatively undisturbed lands near Petronila Creek. Historically, South Texas ambrosia has been recorded in the same location but has not been relocated (USFWS 2018). As proposed project activities would be located on agricultural lands adjacent to suitable habitat, these species may be affected by future project implementation. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the slender rush-pea and South Texas ambrosia.

Monarch butterfly

Monarch butterfly may occur in the action area while migrating between principal breeding grounds in the eastern United State and southern Canada and overwintering grounds in Mexico. One of two known migratory flyways through Texas is situated along the Texas coast and is utilized largely during the fall migration, from the third week of October to the middle of November (USFWS 2020). Spring migrations within Texas generally occur more inland and may occur in the vicinity of the action area. Adult monarch butterflies during migration require roosting sites and a diversity of blooming nectar resources with suitable phenology, such that the nectar resources are available while migrating adults are in the vicinity. In addition to roosting and nectaring habitat, breeding monarchs during the spring migration also require milkweed (Asclepias sp.) plants for egg-laying and larval consumption (USFWS 2020). Suitable roosting and nectaring habitat may be present within the action area. The nearest documented occurrences of monarch butterfly are generally located east of the project area within the developed areas of the Corpus Christi metropolitan area (iNaturalist 2022); however, suitable habitat for all life stages of the monarch butterfly may be present within the project area. As the proposed project would include only E&D and permitting for a future constructed wetlands project and would not result in any physical disturbance or changes to existing conditions within the action area, the proposed project would have no effect on monarch butterfly. Potential effects from project construction would be analyzed in a future analysis.

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)

Prior to commencement of project field activities, implementing trustee should coordinate with USFWS to include any new or modified practices or measures.

J. Effects to critical habitats and actions to reduce impacts

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

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

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

The action area is not located within any designated critical habitat. See Figure 2.

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

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

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 and 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

N/A

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

☐	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]

[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

☐	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners[3]
☐	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[3]

If not listed above, please describe any additional BMPs or conservation measures that may be be implemented for marine mammals. Click here to enter text.

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
Michael Barron, Department of the Interior
Email: michael_barron@fws.gov
Phone: 251-421-7030

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Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

For assistance, please contact the compliance liaisons
USFWS: Michael Barron at michael_barron@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS ☒ NOAA ☐ EPA ☐ USDA ☐

Implementing Trustee(s): United States Department of Agriculture

Contact Name: Ronald Howard Phone: 601-790-3754 Email: ron.howard@ms.usda.gov

Project Name: 3.3.2 Petronila Creek Watershed Nutrient Reduction Initiative

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

B. Project Phase and Supporting Documentation

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

Planning/Conceptual ☒ Construction/Implementation ☐ Engineering & Design ☒

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

Click here to enter text.

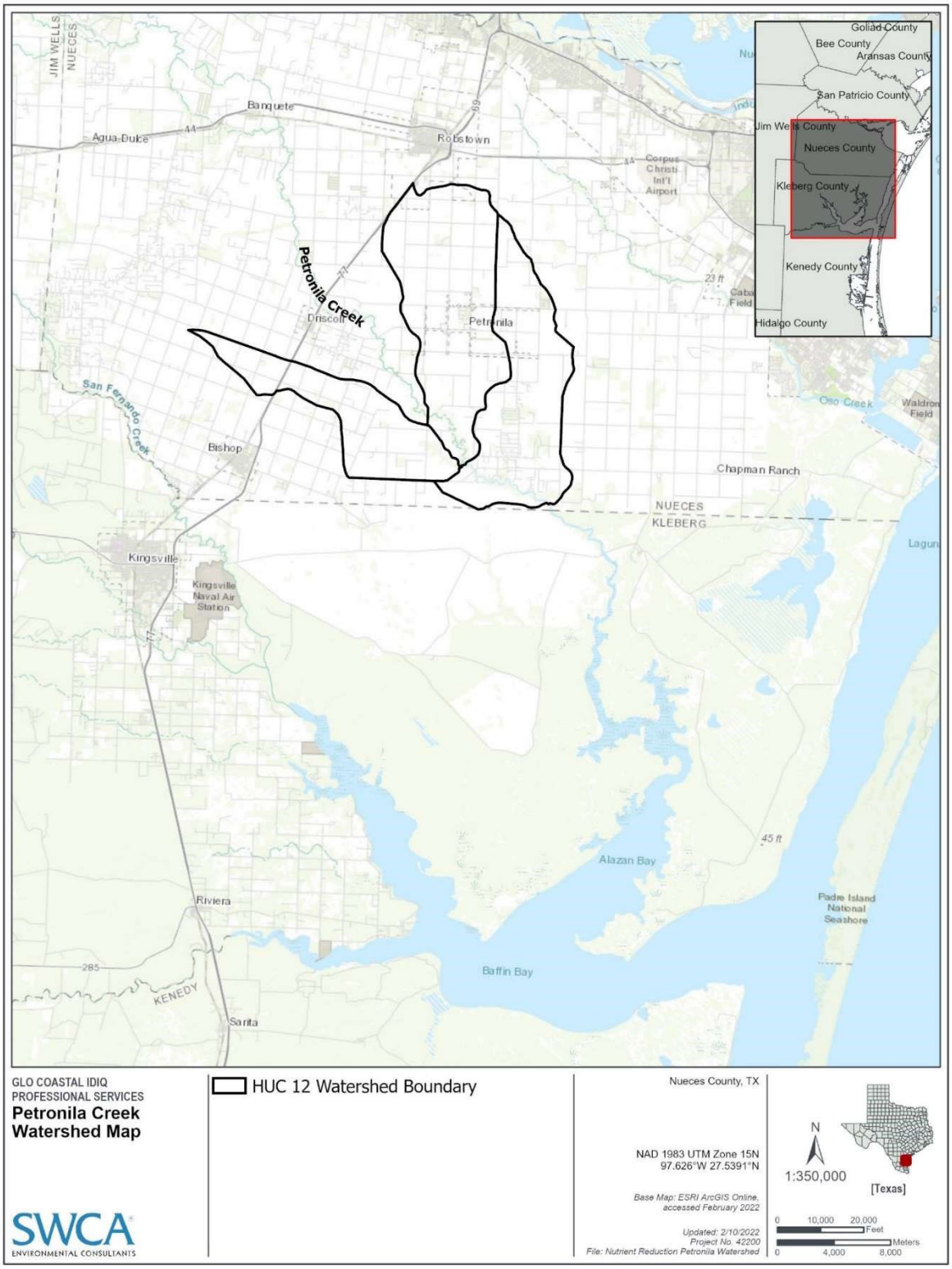

Figure 1. Proposed project location

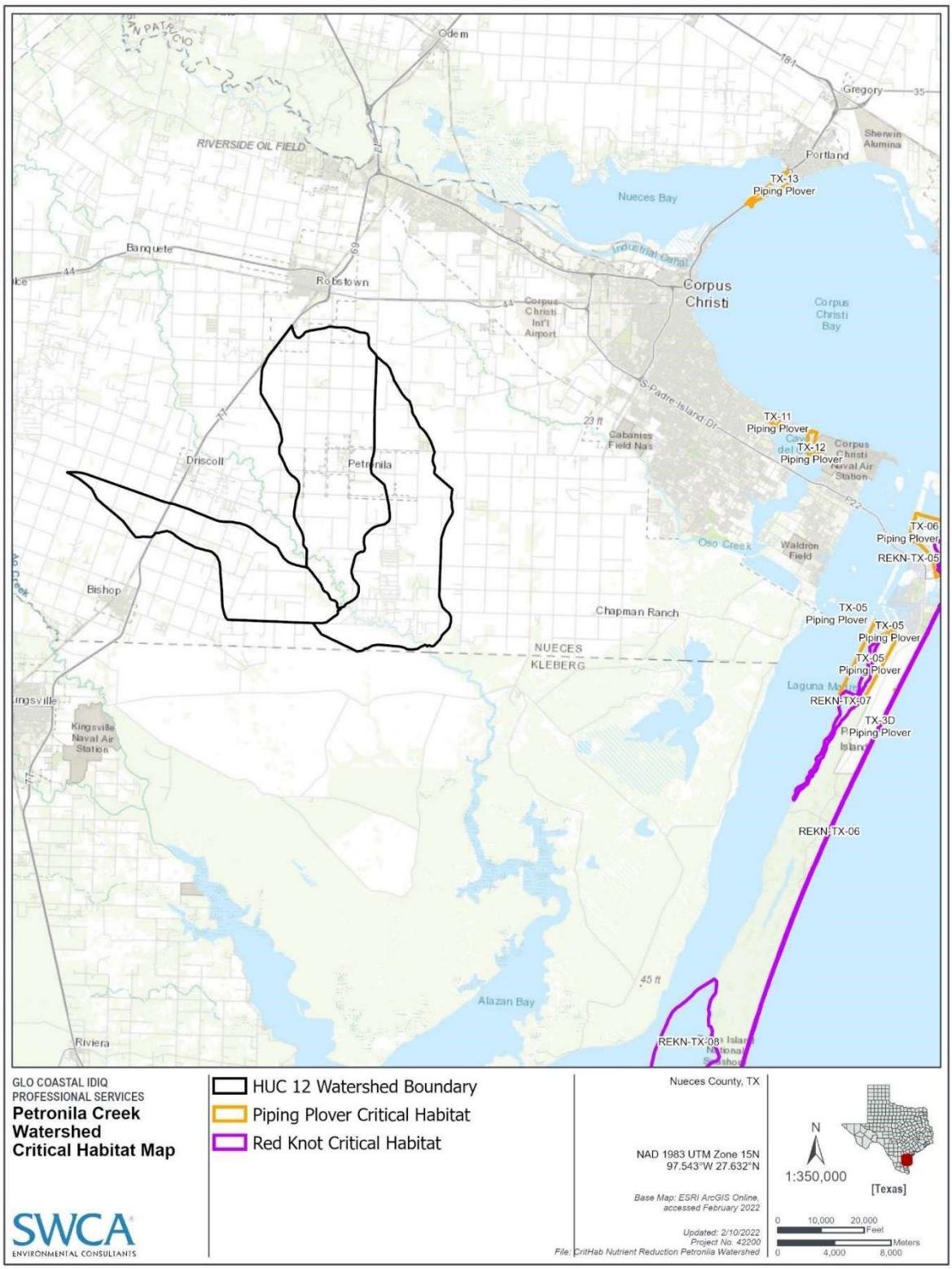

Figure 2. Critical habitat for piping plover and proposed critical habitat for red knot in the vicinity of the action area.

C. Project Location

I. State and County/Parish of action area
Nueces County, Texas

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]
This project may occur in various locations throughout the three watersheds (City of Concordia-Petronila Creek, Gertrude Lubby Lake-Petronila Creek, and Chapman Ranch Lake-Petronila Creek). Exact coordinates for an action area(s) are not available at this time.

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☒

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. Click here to enter text.

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

Name of Person Completing this Form: Meggan Dugan

Name of Project Lead: Ronald Howard
Date Form Completed: 11/1/2021
Date Form Updated: Click here to enter text.

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action.
If CH is not designated in the area, then describe any suitable habitat in the area

The proposed project would be located in Nueces and Kleberg Counties, within three Petronila Creek watersheds (City of
Concordia-Petronila Creek, Gertrude Lubby Lake-Petronila Creek, and Chapman Ranch Lake-Petronila Creek), approximately 17 river miles upstream of Baffin Bay. Within the watersheds, cropland is the primary land use, representing 95% of the total watershed areas. The terrain within the action area varies from flat, with local shallow depressions, to some rolling areas. Land cover in the action area is predominantly cultivated crops, with scattered remnant riparian areas, human-made ponds, and stock tanks, and Petronila Creek. Land use consists of agriculture, energy generation, and residential and commercial development.

The proposed project site is not located within critical habitat of any federally listed species. Designated critical habitat for piping plover (Charadrius melodus) is located approximately 14 miles east of the proposed project site in Corpus Christi, Texas (USFWS 2021) (Figure 2).

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.

Petronila Creek is a 44-mile freshwater stream spanning Kleberg and Nueces Counties, located within the Nueces-Rio Grande Coastal Basin. The Nueces-Rio Grande Coastal Basin has a drainage area of approximately 10,442 square miles. Petronila Creek drains approximately 543 square miles of this basin and is part of the Baffin Bay watershed. It is formed by the confluence of Agua Dulce and Banquete Creeks, 1 mile southeast of the town of Banquete in western Nueces County, and is located southwest of the city of Corpus Christi, Texas. Petronila Creek is fed by several tributaries that serve as drainage ditches for agricultural cropland. Petronila Creek is one of the three major tributaries to Baffin Bay.

Petronila Creek (Above Tidal [Segment 2204]) has been listed as impaired for chloride, sulfates, and total dissolved solids (TDS) since 1999 (TCEQ 2010). Total maximum daily loads (TMDLs) under the Clean Water Act establish the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality. TMDLs for chloride, sulfate, and TDS (which is inclusive of nutrient loads) for Petronila Creek were approved in 2007 (TCEQ 2007). In 2008, a Railroad Commission of Texas (RRC) report concluded that oil and gas wasteland fields and other unknown sources were contributing chlorides to Petronila Creek through groundwater (RRC 2008). As a result of the TMDL implementation plan to reduce the chloride impairment, soils of high chloride

content were identified and removed, a continuous water quality monitoring station was installed and is still being monitored, and groundwater-to-surface-water interactions were studied (TCEQ 2014). In addition, Petronila Creek (Tidal [Segment 2203]) has been listed as impaired for bacteria (not supporting primary contact recreation use) since 2010. The segment also has screening level concerns for pH, total phosphorus, and chlorophyll-a (TCEQ 2010).

Studies of Baffin Bay also indicate periodic poor water quality, including high algal activity and periods of harmful algal blooms (brown tide) that occur as a result of both natural geometry factors (depth, inflows, tides) and high nutrient levels (CBBEP 2020).

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.

Approximately 4 river miles downstream of the action area, Petronila Creek transitions to being tidally influenced. The tidal segment ends approximately 5 miles farther south at the confluence with Alazan Bay, which is connected with Baffin Bay and ultimately the Gulf of Mexico.

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.

The proposed project does not propose project activities at specific locations. Sites would be selected during implementation of the proposed project; therefore, presence of structures is unknown.

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.

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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 action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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.

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek.

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.).

Upland habitat in the action area is predominantly cultivated crops, with scattered remnant prairie and riparian areas, man-made ponds and stock tanks, and Petronila Creek.

g. Marine Mammals

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

Dolphins YES☐ NO☒

Whales YES☐ NO☒

Manatees YES☐ NO☒

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

N/A

h. Soils and Sediments

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

Soils within the action area include clay and sandy loams.

i. Land Use

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

The action area is comprised of 95% cropland, while other land uses include energy generation and extraction, residential and commercial development, and grazing.

j. Essential Fish Habitat

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

The action area is located primarily in upland habitats and more than 4 miles north of the tidal segment of Petronila Creek, which contains the nearest mapped Essential Fish Habitat (NOAA 2021a).

F. Project Description

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

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

**If construction involves overwater structures, pilings and sheetpiles, boat slips, boat ramps, shoreline armoring,

dredging, blasting, artificial reefs or fishery activities, list the method here, but complete the next section(s) in detail.

The proposed project would focus on cropland within the highest priority of the Petronila Creek watershed hydrologic unit codes (HUCs) (Tier 1 watershed) (Parsons 2019): City of Concordia-Petronila Creek, Gertrude Lubby Lake-Petronila Creek, and Chapman Ranch Lake-Petronila Creek. The project proposes to implement conservation practices on agricultural lands within 12-digit HUC watersheds to improve water quality conditions at the watershed level. Outreach and financial and technical assistance would be provided to voluntary participants to develop and implement conservation practices on agricultural land that is vulnerable to nutrient and sediment runoff.

Within the Petronila Creek watershed HUC, cropland is the primary land use, representing 95% of the total watershed areas. Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat loss, and fish kills (NOAA 2021b). Nutrient runoff from agricultural lands can adversely affect the health of coastal waters. This proposed project would restore and enhance the ecological and hydrological integrity of water resources within immediate tributaries and receiving waterbodies by implementing conservation practices to reduce nutrient and sediment runoff from agricultural lands within the Baffin BayPetronila Creek watershed. Although agricultural lands are not the sole contributors of nutrients to coastal waters, they are a major contributor. Reducing nutrient and sediment loads to the system would improve the functionality of in-stream habitats used by aquatic organisms to fulfill critical life history cycles.

Conservation practices would be designed to reduce erosion, slow runoff velocities, and increase hydraulic residence time within the field or tract and/or edge of the field, all which are imperative to the physical, chemical, and biological processes that decrease nutrient and sediment loadings (Barlow and Kröger 2014). These conservation practices would be targeted into small watershed areas to produce measurable decreases in nutrients and sediments from the field itself as well as within the downstream receiving waterbody.

This project would consist of 1) landowner outreach and education, 2) conservation planning, 3) engineering and design (E&D) and environmental compliance, and 4) conservation practice implementation. Participating landowners would be responsible for maintenance and operation of structural measures and application of non-structural measures.

Initial steps would include landowner outreach and education. Landowners within the watersheds would be engaged to solicit nutrient reduction opportunities on private lands. Outreach and technical assistance would be provided to voluntary participants on agricultural lands that are most vulnerable to nutrient and sediment runoff. This includes providing financial assistance to landowners to acquire soil samples, site-specific analyses, and nutrient application methods. Site-specific environmental evaluations would be conducted and documented. A site-specific conservation plan would be developed in cooperation with individual landowners. Implementation of conservation practices would include implementation of structural practices (e.g., earth moving) and non-structural practices (e.g., nutrient management). Engineering plans and designs for structural practices included in the conservation plans and funding would help landowners acquire all local, state, and federal permits required to implement the conservation practice(s). Landowners would receive financial and technical assistance to implement the conservation practices.

Contracts with landowners would serve as an agreement to implement the conservation practices on their properties as outlined in a conservation plan developed according to appropriate standards and specifications (including any required property access agreement and activities related to project monitoring). Although the landowner would typically implement the conservation practices, if the landowner is not capable of carrying out the work, a third party could be hired implement them. Operation and maintenance (O&M) would be evaluated as specified in the conservation plan and may include, but

would not be limited to, addressing soil erosion or vegetation establishment issues due to weather-related events. O&M activities would be identified in the conservation plan based on site evaluations and performance monitoring data and reports.

II. Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.) The proposed project includes outreach, planning, E&D and environmental compliance, and implementation. Implementation of conservation measures may vary in method would be subject to site-specific environmental and permitting review.

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)?

Construction methods would be determined on a case-by-case basis and would be subject to site-specific environmental review and permitting.

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	
2. Material type of piles used	
3. Size (width) of piles/sheets	
4. Total number of piles/sheets	

5. Number of strikes for each single pile	
6. Number of strikes per hour (for a single pile)	
7. Expected number of piles to be driven each day	
8. Expected amount of time needed to drive each pile (minutes of driving activities)	
9. Expected number of sequential days spent pile driving	
10. Whether pile driving occurring in-water or on land	
11. Depth of water where piles will be driven	

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

N/A

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

N/A

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

N/A

f. Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft2) to be dredged, volume of material (yd3) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods. If using devices/methods/turtle relocation dredging to relocate sea turtles, then describe the methods here.

Construction methods would be determined on a case-by-case basis and would be subject to site-specific environmental review and permitting.

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

N/A

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

detailed guidance on artificial reefs, please refer to the artificial reef program websites for the particular state the project will occur in.

N/A

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

N/A

G. NOAA Species & Critical Habitat and Effects Determination Requested

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

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

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

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

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

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

Determination Definitions

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

NLAA = may affect, not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response requested is concurrence with the not likely to affect determination. This conclusion is appropriate when effects to the species or critical habitat will be wholly beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or

habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

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

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

H. USFWS Species & Critical Habitat and Effects Determination Requested

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

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

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

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

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

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

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For "No Effect", please select justification.
Green Sea Turtle		Terrestrial	No Effect	No suitable habitat action area

Loggerhead Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
Leatherback Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
Kemp's Ridley		Terrestrial	No Effect	No suitable habitat action area
Hawksbill Sea Turtle		Terrestrial	No Effect	No suitable habitat action area
West Indian Manatee			No Effect	No suitable habitat action area
Red Knot			No Effect	
Piping Plover			No Effect	
Ocelot			No Effect	Species does not occur within action area
Gulf Coast Jaguarundi			No Effect	Species does not occur within action area
Eastern Black Rail			No Effect	
Northern Aplomado Falcon			No Effect	
Whooping Crane			No Effect	
Black Lace Cactus			No Effect	Species does not occur within action area
Slender Rush-Pea			No Effect	
South Texas Ambrosia			No Effect	
Monarch Butterfly			No Effect	

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.

Click here to enter text.

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.

Red Knot

The red knot (Calidris canutus rufa) is an uncommon migrant along the Gulf Coast, especially along the upper coast (Lockwood and Freeman 2014) during its nonbreeding period, and has been observed within all five counties in which the proposed project may take place (eBird 2021; iNaturalist 2021). This species may occur as a migrant from late March to late May during spring migration and from August to early

November for fall migration (Lockwood and Freeman 2014). These birds generally use sandy beaches in Texas (Baker et al. 2020) along shorelines of bays and barrier islands. This species may be present in the action area while traveling between areas of suitable habitat. However, as potential project activities would be limited to agricultural lands within the action area that would be unlikely to provide suitable nesting or foraging habitat for this species and any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the red knot.

Piping Plover

The piping plover occurs along the Texas Gulf Coast as a nonbreeding resident and migrant. This species uses beaches, mudflats, and sandflats along the Gulf of Mexico and its bays and estuaries.;(Elliott-Smith and Haig 2020). This species may be present in the action area while traveling between areas of suitable habitat. However, as potential project activities would be limited to agricultural lands within the action area that would be unlikely to provide suitable nesting or foraging habitat for this species and any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the piping plover.

Eastern Black Rail:
The eastern black rail (Laterallus jamaicensis jamaicensis) occurs in a variety of wetland habitats, including, salt, brackish, and freshwater marshes; pond borders; wet meadows; and grassy swamps (NatureServe 2021). Suitable habitat typically contains moist soils with dense overhead cover of emergent vegetation. Breeding habitat usually contains fine-stemmed emergent plants, such as grasses, reeds, or cordgrass. This species uses similar habitats year-round for breeding, migration, and overwintering (Eddleman et al. 2020). While this species has not been observed within the action area (iNaturalist 2021), appropriate habitat is present within the action area, and this species may occur. As proposed project activities would be located on agricultural lands adjacent to suitable habitat, this species may be affected by future project implementation. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the eastern black rail.

Northern Aplomado Falcon

The aplomado falcon (Falco femoralis) was extirpated in Texas in the 1950s (Lockwood and Freeman 2014). However, The Peregrine Fund, Inc. has successfully reintroduced this species that now occurs as a rare resident (nesting, foraging) from western Matagorda County south to Cameron County (Lockwood and Freeman 2014). The aplomado falcon utilizes coastal prairies in these areas (Keddy-Hector et al. 2020). This species may be present in the action area while traveling between areas of suitable habitat. However, as potential project activities would be limited to agricultural lands within the action area that would be unlikely to provide suitable nesting or foraging habitat for this species and any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the aplomado falcon.

Whooping Crane

Whooping crane (Grus americana) winter habitat extends along the Texas Gulf coast from San Jose Island and Lamar Peninsula on the south to Welder Point and Matagorda Island on the north and consists of estuarine marshes, shallow bays, and tidal flats (Canadian Wildlife Service and U.S. Fish and Wildlife

Service 2007). The species currently winters primarily on the Aransas National Wildlife Refuge (Texas), where critical habitat exists, and adjacent areas of Aransas, Calhoun, and Refugio Counties. In recent years, Whooping cranes from the Louisiana experimental population have been documented during breeding and non-breeding seasons in some coastal counties on the upper Texas coast as the flock has expanded in size. Foods utilized during migration are poorly documented but include frogs, fish, plant tubers, crayfish, insects, and agricultural grains; the greatest amount of observed foraging time is spent feeding in harvested grain fields (Canadian Wildlife Service and U.S. Fish and Wildlife Service 2007). Whooping crane have been observed in agricultural fields approximately 9 miles southwest of the action area in similar habitats as those present in the action area (iNaturalist 2021). As proposed project activities would be located on agricultural lands that may provide suitable foraging habitat, this species may be present within the action area. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the whooping crane.

Slender Rush-Pea and South Texas Ambrosia

Slender rush-pea (Hoffmannseggia tenella) and South Texas ambrosia (Ambrosia cheiranthifolia) are both perennial herbaceous species growing in historically fire-dependent prairie habitat in two counties (Nueces and Kleberg) in South Texas, sometimes co-occurring at the same location. Both species are restricted to open grasslands on fine, calcareous clays associated with Pleistocene deltas (USFWS 2018). Known slender rush-pea sites are found within the Petronila, Oso, Chilitipin Creek-San Fernando, and Alazan Bay-Baffin Bay creek basins; South Texas ambrosia is found within the Oso, Chilitipin Creek-San Fernando, Alazan Bay-Baffin Bay, and Santa Gertrudis Creek basins. Most populations tend to be localized in remnant areas of shortgrass prairie within these drainage systems. One known population of slender rush-pea is located within the action area, within relatively undisturbed lands near Petronila Creek. Historically, South Texas ambrosia has been recorded in the same location but has not been relocated (USFWS 2018). As proposed project activities would be located on agricultural lands adjacent to suitable habitat, these species may be affected by future project implementation. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would have no effect on the slender rush-pea and South Texas ambrosia.

Monarch butterfly

Monarch butterfly may occur in the action area while migrating between principal breeding grounds in the eastern United State and southern Canada and overwintering grounds in Mexico. One of two known migratory flyways through Texas is situated along the Texas coast and is utilized largely during the fall migration, from the third week of October to the middle of November (USFWS 2020). Spring migrations within Texas generally occur more inland and may occur in the vicinity of the action area. Adult monarch butterflies during migration require roosting sites and a diversity of blooming nectar resources with suitable phenology, such that the nectar resources are available while migrating adults are in the vicinity. In addition to roosting and nectaring habitat, breeding monarchs during the spring migration also require milkweed (Asclepias sp.) plants for egg-laying and larval consumption (USFWS 2020). Suitable roosting and nectaring habitat may be present within the action area. The nearest documented occurrences of monarch butterfly are generally located within the developed areas of the action area (iNaturalist 2022); however, suitable habitat for all life stages of the monarch butterfly are likely to be present across the action area. As proposed project activities would be located on agricultural lands within suitable habitat, these species may be affected by future project implementation. However, as any site-specific potential effects from project construction would be analyzed in a future analysis, project activities analyzed in this evaluation would

have no effect on the monarch butterfly.

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[4]
- ☐ 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)

Prior to commencement of project field activities, implementing trustee should coordinate with USFWS to include any new or modified practices or measures.

J. Effects to critical habitats and actions to reduce impacts

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

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

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

The action area is not located within any designated critical habitat. See Figure 2.

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.

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

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 and 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

N/A

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

☐	NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines[5]
☐	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[6]
☐	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. Click here to enter text.

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

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

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
Michael Barron, Department of the Interior
Email: michael_barron@fws.gov
Phone: 251-421-7030

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Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

For assistance, please contact the compliance liaisons
USFWS: Michael Barron at michael_barron@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS ☒ NOAA ☒ EPA ☐ USDA ☐

Implementing Trustee(s): Texas General Land Office (GLO), Texas Parks and Wildlife Department, Texas Commission on

Environmental Quality, Coastal Bend Bays and Estuaries Program (CBBEP)

Contact Name: Angela Sunley Phone: 512-463-9309 Email: angela.sunley@glo.texas.gov

Project Name: San Antonio Bay Bird Island

DIVER ID# Click to enter text TIG: Texas 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:

The final design would be completed under this phase. A 30% engineering design was completed under a previous phase of this project (Attachment B). This is the same project that was selected in the Regionwide TIG Restoration Plan #1.

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

Mid-Coast Bird Rookery Island, Alternatives Analysis (Attachment A)
Mid-Coast Bird Rookery Island Design Plans (Attachment B)
USACE NWP-27 Verification Letter
(Attachment C) SHPO Concurrence
Letter, 2018 (Attachment D)

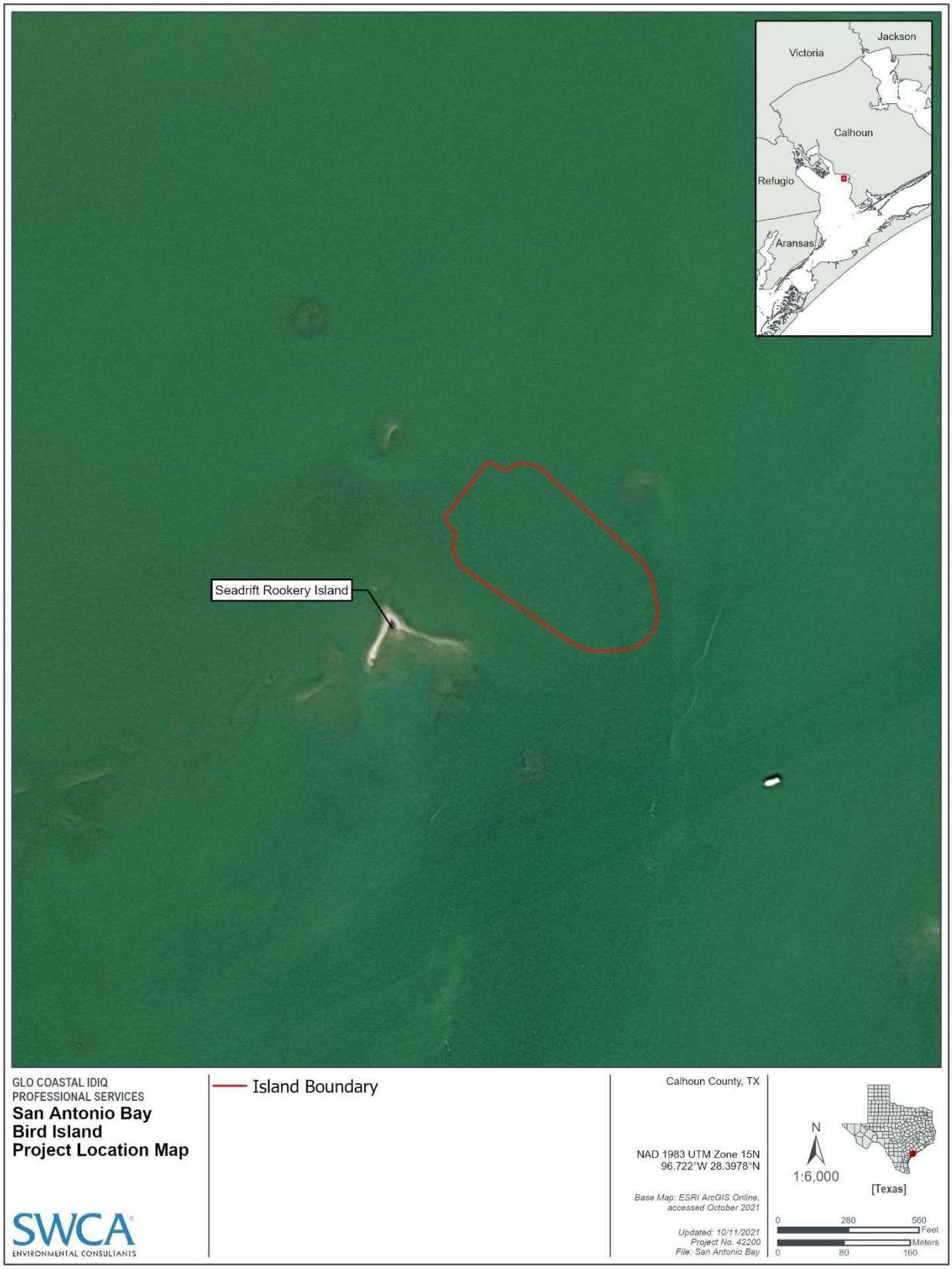

Figure 1. Proposed project location.

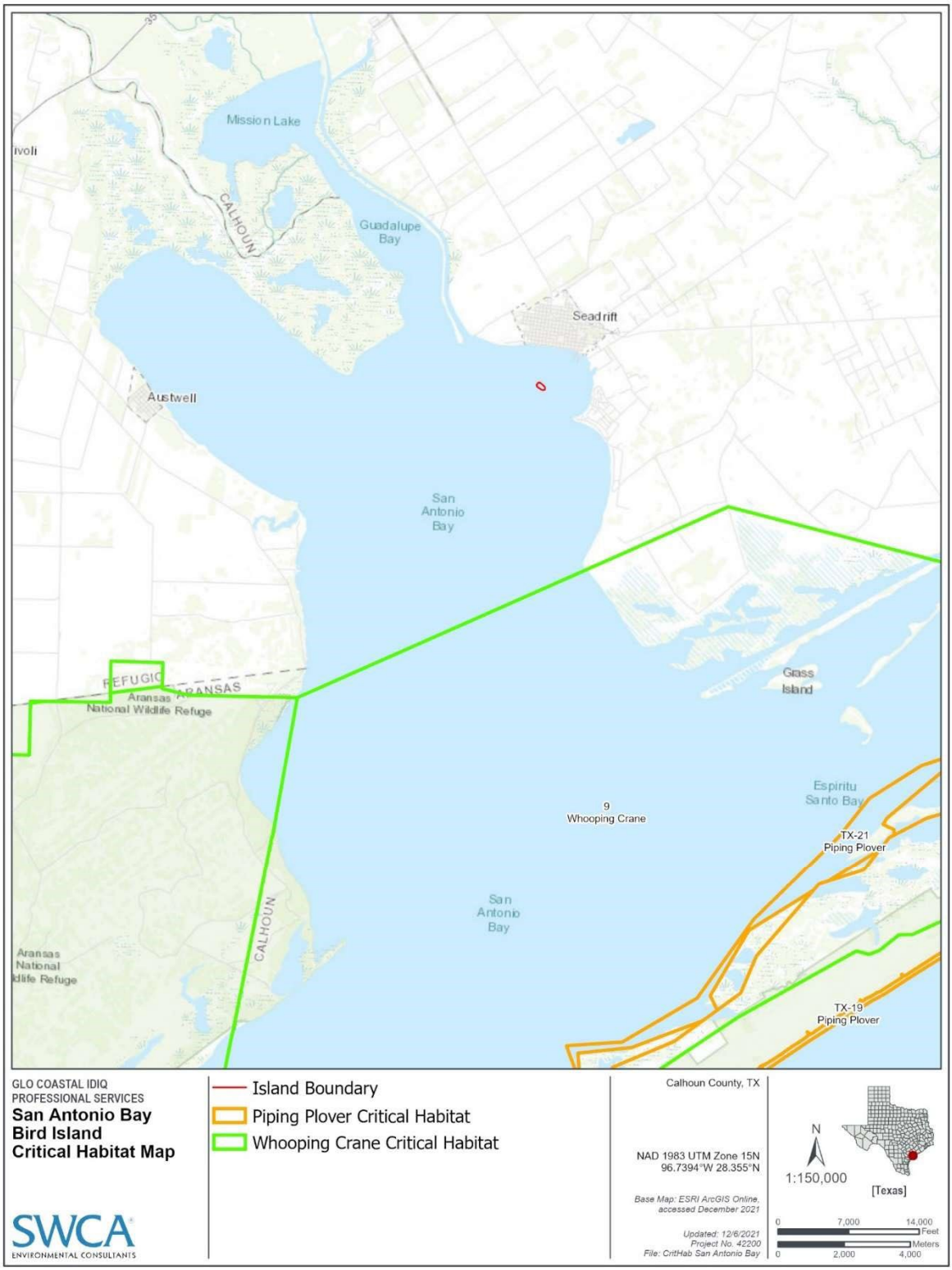

Figure 2. Critical habitat for piping plover and proposed critical habitat for red knot in the vicinity of the action area.

C. Project Location

I. State and County/Parish of action area San Antonio Bay,
Calhoun County, Texas (Figure 1)

II. Latitude/Longitude for action area (Decimal degrees and
datum [e.g., 27.71622°N, 80.25174°W NAD83)
[online conversion: https://www.fcc.gov/encyclopedia/degrees-minutes-seconds-tofrom-decimal-degrees] 28.397430° -96.721850° NAVD88

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☐

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: SWG-2017-00516

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.
2021 Regionwide TIG Final Restoration Plan/ Environmental Assessment 1: Birds, Marine Mammals, Oysters, and Sea
Turtles
USACE NWP 27 (SWG-2017-00516) (Attachment C)
The NMFS ESA consultation is in process, and was requested during development of Regionwide RP#1 (NMFS# SERO-202101987)

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

Name of Person Completing this Form: Meggan Dugan
Name of Project Lead: Ben Wilson

Date Form Completed: 11/30/2021
Date Form Updated: Click here to enter text.

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action.
If CH is not designated in the area, then describe any suitable habitat in the area

The proposed project is located in the San Antonio Bay, approximately 0.8 mile south of the town Seadrift, north of the Victoria Barge Canal and the Seadrift Boat Channel and east of the existing Seadrift Rookery Islands within shallow open water with depths ranging between -2 to -3 feet North American Vertical Datum (NAVD). These channels provide existing water access to the proposed project site. The San Antonio Bay is one of the major bay systems on the Texas coast and receives freshwater from the Guadalupe River, located 7.6 miles to the northwest. Extensive wetlands surrounding San Antonio Bay provide suitable and ample foraging habitat that would support colonial waterbird production. At one time, Seadrift Rookery Islands (located 300 feet east of the proposed project) were documented to support approximately 13% of colonial waterbirds nesting on in-bay colonies (excluding Chester Island) within the San Antonio Bay system (Stanzel and Dodson 2014). San Antonio Bay provides recreational and commercial fishing opportunities and commercial oyster harvesting is common.

The sediment within the proposed project area is comprised of primarily firm sandy lean clay with scattered oyster shell and some live oyster. There are established oyster reefs in the vicinity of the proposed project, but not within the disturbance footprint. Salinities within San Antonio Bay during the 2015 oyster sampling effort ranged between approximately 15 and 25 practical salinity units (psu) for the months of February and March and decreased below 10 psu in early April (HDR 2016). No seagrass is present within or in close proximity to the proposed project site (HDR 2016); however, mapped submerged aquatic vegetation (SAV) is present along the coast northwest of the proposed project site and in other locations within San Antonio Bay (NOAA 2021a). The Aransas National Wildlife Refuge is located across the bay, approximately 5 miles southwest of the proposed project site. The proposed project site is not located within critical habitat of any federally listed species. Designated critical habitat for whooping crane (Grus americana) is located approximately 3.5 miles southeast of the proposed project site and designated critical habitat for piping plover (Charadrius melodus) is located approximately 10.5 miles southeast of the proposed project site on Matagorda Island (USFWS 2021) (Figure 2).

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.

The project is located in open waters of San Antonio Bay with depths ranging from -2 to -3 feet NAVD. Water levels within San Antonio Bay are heavily influenced by large-scale weather events, such as winter cold fronts and tropical storms. The San Antonio Bay system exchanges water with Matagorda Bay, located to the northeast, and with Aransas - Copano Bay, located to the southwest. Marine water is exchanged between the Gulf of Mexico and the estuarine system through the Pass Cavallo tidal inlet, the Matagorda ship channel, and through Cedar Bayou. Water quality in the bay system is generally

good (Stanzel and Dodson 2014).

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.

The Gulf of Mexico is the nearest marine environment and is approximately 13 miles from the proposed project site. The site is adjacent to the Victoria Barge Canal and the Seadrift Boat Channel and the site and surrounding bay are navigable by small boats.

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.

No existing structures are on the proposed project site or in the vicinity, with the nearest structures (marinas and small boat harbors) located along the City of Seadrift waterfront approximately 1.3 miles to the east. A marine archaeology survey was conducted of the proposed project site and discovered no targets potentially eligible for the State Antiquities Landmark program or National Register of Historic Places (THC 2018).

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.

No known seagrass or other marine vegetation is present in the proposed project site or vicinity. Benthic surveys of the proposed project site were conducted in 2015 and 2016 and included seagrass, oyster, bathymetry, topography, magnetometer, side-scan sonar, and miniature clamshell dredge (HDR 2016). Mapped SAV is present along the coast northwest of the proposed project site and in other locations within San Antonio Bay (NOAA 2021a).

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.

No mangroves are present in the action area (HDR 2016; NOAA 2021a).

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.

No corals are present in the action area (HDR 2016; NOAA 2021a).

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 action area is located entirely within the marine environment.

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

Common bottlenose dolphin (Tursiops truncatus truncatus). San Antonio Bay falls within Block B50 included in the
NOAA Northern Gulf of Mexico Bay, Sound, and Estuary Stocks report (NMFS 2019) and this species has been recorded within San Antonio Bay. According to the stock report, the most recent occurrence of a common bottlenose dolphin in B55 is from 2013 (NMFS 2019); however, the most recent observation of a common bottlenose dolphin in San Antonio Bay occurred in October of 2021, and numerous observations have been reported near the Aransas Wildlife Refuge and adjacent waters (iNaturalist 2021).

West Indian manatee (Trichechus manatus latirostris). All West Indian manatees found along the southeastern United States are associated with the Florida stock (USFWS 2014). Manatees are observed on rare occasions in Texas, with the most recent observations of manatees from the summer of 2019 when an individual manatee was observed three times in a month (July) in Corpus Christi Bay (43 miles southwest of San Antonio Bay), near South Padre Island (150 miles south of San Antonio Bay), and in Galveston Bay (140 miles northeast of San Antonio Bay) (Dawson 2019); even more recently an individual manatee was observed at the Texas City Dike (west of Galveston Bay) by a fisherman (Hennes 2021). Other observations are from 2014 in Trinity Bay in Chambers County (145 miles northeast of San Antonio Bay) and in 2007, 2009, and 2014 at Laguna Madre (120 miles south of San Antonio Bay) (Schmidly and Bradley 2016; Dawson 2019).

h. Soils and Sediments

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

The sediment within the proposed project area is comprised of primarily firm sandy lean clay with scattered oyster shell and some live oyster on a shallow bay bottom (HDR 2016).

i. Land Use

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

San Antonio Bay is an open water bay and the proposed project site is located on state-owned submerged lands which are managed by the Texas General Land Office through the State School Land Board. The Aransas National Wildlife Refuge is located approximately 5 miles southwest of the proposed project area. Use activities adjacent and surrounding the proposed project site include recreational and commercial fishing, ecotourism, and marine transportation.

j. Essential Fish Habitat

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

The proposed project site is located in the upper reaches of San Antonio Bay. Intertidal marsh habitats are associated with the shoreline with small islands, sand flats and shoals nearby. In the immediate project footprint, fisheries habitat is composed of shallow water flats, oyster shell, shell hash, shoals and unconsolidated sediments. Essential Fish Habitat (EFH) is present in San Antonio Bay and includes shrimp (all life phases), red drum (all life stages), reef fish (all life stages), coastal migratory pelagic fish (all life stages), finetooth shark (all life stages), bull shark (neonate), spinner shark (neonate), lemon shark (neonate and juvenile), scalloped hammerhead shark (neonate), blacktip shark (neonate),
Atlantic sharpnose shark (neonate and juvenile/adult), and bonnethead shark (neonate, juvenile, and adult) (NOAA 2021b). No Habitat Areas of Particular Concern (HAPC) or EFH Areas Protected from Fishing are located in the vicinity of the proposed project site (NOAA 2021).

F. Project Description

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

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

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

The proposed project site was chosen after evaluating three sites in an alternatives analyses (HDR 2016) (Attachment A). The island was designed to capture a full range of desired bird nesting and foraging habitats, and mimic habitats previously observed on Seadrift Rookery Island. The proposed island would measure approximately 920-feet long by 450-feet wide with a total footprint of approximately 8.0 acres, including 4.0 acres of habitat above the shoreline and 1.0 acre of submerged reef habitat (Attachment B). The island would be oriented northwest-southeast based on predominant wind direction from the southeast. The island will slope from +3.5 feet to +4.5 feet at the southeast end to +1.0 feet to +2.5 feet NAVD at the northwest end, where the island transitions to a shoreline and shallow lagoon for shorebird habitat.

The island would be constructed using a containment berm and rock revetment. In-situ sediment from the center of the proposed rookery island footprint would be excavated and sidecast around the proposed perimeter to create a
containment berm with a crest elevation of approximately +6.5 feet NAVD (temporarily) and a crest-width of approximately
5 feet. The containment berm would contain loose sediments and reduce potential impacts to surrounding natural resources.

Once the containment berm is constructed, the outside of the berms would be armored with revetment type shoreline protection. This shoreline protection feature would contain fill material protected with armoring of

stone, concrete or an acceptable substitute. The revetment would be constructed with a 2:1 slope, and the crest of the final containment berms would be reduced so that the top of the rock is at +6.0 feet NAVD (Attachment B). A 5-feet wide toe would be constructed at the base of the revetment. The toe would be constructed to an elevation of approximately +2.5 feet above the bay bottom. The containment berm and revetment shoreline protection will not encapsulate the island entirely. An approximately 120-foot wide shallow water beach opening would be included at the northwestern side of the island. A reef would be constructed on the northwestern side of the island at the beach opening. The reef would be constructed with graded riprap to an elevation of approximately -1.0 foot NAVD (Attachment B). The reef would reduce wave energy into the beach, provide oyster reef habitat, and provide foraging habitat for several bird species.

Fill material for placement inside the berm will be provided from an outside source. Sediments would be analyzed prior to construction and no contaminated sediments would be use. Rock material would be stone, concrete or an acceptable substitute from an outside source. Equipment, fill, and rock would be transported to the site via existing channels on barges. No new channels or dredging to access the site would be required.

Future coordination with NOAA and additional mitigation measures for EFH may be required once project sites are selected. If submerged aquatic vegetation or oyster reefs are found to be present within a selected site, an EFH Assessment would need to be prepared and consultation with NOAA required. The assessment would identify EFH in the project area, enumerate the total amount present and amount that would be impacted, and describe how those unavoidable impacts would be offset to create a no-net-loss of those resources.

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

Final engineering is anticipated to take up to 6 months to complete, and construction may occur for up to 6 months.

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)?

The proposed island would be constructed using a containment berm and rock revetment, and work would be conducted from marine barges with aquatic marsh hoes and excavators. In situ sediment from the center of the proposed island footprint would be excavated using aquatic marsh hoes and side cast around the proposed perimeter to create a containment berm. The containment berm would contain loose sediments and reduce potential fill/impacts to surrounding natural resources. Once the containment berm is constructed, the outside of the berms would be armored with revetment type shoreline protection. Shoreline protection/sediment management structures will be constructed with the use of marine barges to transport rock material and construction equipment such as excavators to place the rock material into the structure configurations.

An approximately 120-foot-wide shallow water beach opening would be included at the northwestern side of the proposed island, and a reef would be constructed at the beach opening. The reef would be constructed with graded riprap comprised of acceptable and approved materials.

Equipment, fill, and rock would be transported to the site via existing channels on barges. No new channels or dredging to access the site would be required. Fill material for placement within the berm would be obtained from an approved outside source, dredged material placement area, in-situ bay location, or from sediments sourced from a nearby navigation project. Sediment material sources would be chemically analyzed prior to ensure that no contaminants are present. The revetment would be constructed using stone, concrete, or an acceptable substitute from an outside source. The rock would be transported to the site by barge and placed with track hoes.

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

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.

The containment berm around the 8-acre proposed island would be armored with revetment type shoreline protection around the entire perimeter of the island, with the exception of a 120-foot-wide shallow water beach opening. This shoreline protection feature would contain fill material protected with armoring of stone, concrete or an acceptable substitute. The revetment would be constructed with a 2:1 ratio and final height of +6.0 feet NAVD (See Attachment B). A 5-foot-wide toe would be constructed at the base of the revetment to an elevation of approximately +2.5 feet above the bay bottom.

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.

In-situ sediment from the center of the proposed 8-acre island footprint would be excavated using aquatic marsh hoes and side cast around the proposed perimeter to create a containment berm with a crest elevation of approximately +6.5 feet NAVD (temporarily) and a crest-width of approximately 5 feet. The containment berm would contain loose sediments and reduce potential fill/impacts to surrounding natural resources (HDR 2017). Fill material for placement within the berm would be obtained from an approved outside source, dredged material placement area, in-situ bay location, or from sediments sourced from a nearby navigation project. Sediment material sources would be chemically analyzed prior to ensure that no contaminants are present. No other dredging or digging will be conducted for this project.

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.

An approximately 1-acre reef would be constructed on the northwestern side of the proposed island at the 120-foot-wide shallow water beach opening. The reef would reduce wave energy into the beach, provide oyster reef habitat, and provide foraging habitat for several bird species. The reef would be constructed with graded riprap comprised of acceptable and approved materials to an elevation of approximately -1.0 feet NAVD (See Attachment B). A meeting with local stakeholders was held during reconnaissance and alternatives development phase of the proposed project (HDR 2016).

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)).

The proposed island will not be accessible by the public by foot. Recreational fishing from local boaters could occasionally contribute to lost fishing line on the rocks, creating the potential for entanglement of aquatic species and birds. To minimize this risk, the site would be posted with signs warning of this hazard.

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. The NMFS ESA consultation is in process, and was requested during development of Regionwide RP#1 (NMFS# SERO-2021-01987)

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

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

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

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

Determination Definitions

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

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

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

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

H. USFWS Species & Critical Habitat and Effects Determination Requested

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

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

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

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

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

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

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

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.

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.

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[7]
- ☐ 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)

Additional practices and measures have not yet been identified.

J. Effects to critical habitats and actions to reduce impacts

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

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

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

The action area is not located within any designated critical habitat. See Figure 2.

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

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

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 and 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

See Sections F.I. and II. project description and construction methods sections above.

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[8]
☒	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[9]
☒	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. Additional practices and measures have not yet been identified.

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

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

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
Michael Barron, Department of the Interior
Email: michael_barron@fws.gov
Phone: 251-421-7030

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Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

For assistance, please contact the compliance liaisons
USFWS: Michael Barron at michael_barron@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS ☒ NOAA ☒ EPA ☐ USDA ☐

Implementing Trustee(s): Regionwide TIG and Texas TIG, Texas General Land Office, Texas Parks and Wildlife Department, Texas Commission on Environmental Quality

Contact Name: Angela Sunley Phone: 512-463-9309 Email: angela.sunley@glo.texas.gov

Project Name: Upper Texas Coast Sea Turtle Rehabilitation Facility

DIVER ID# Click to enter text TIG: Texas 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:

N/A

Supporting Documentation

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

- Plan view of design drawings
- Aerial images of project action area and surrounding area
- Map of project area with elements proposed (polygons showing proposed construction elements) Map of action area with critical habitat units or sensitive habitats overlayed

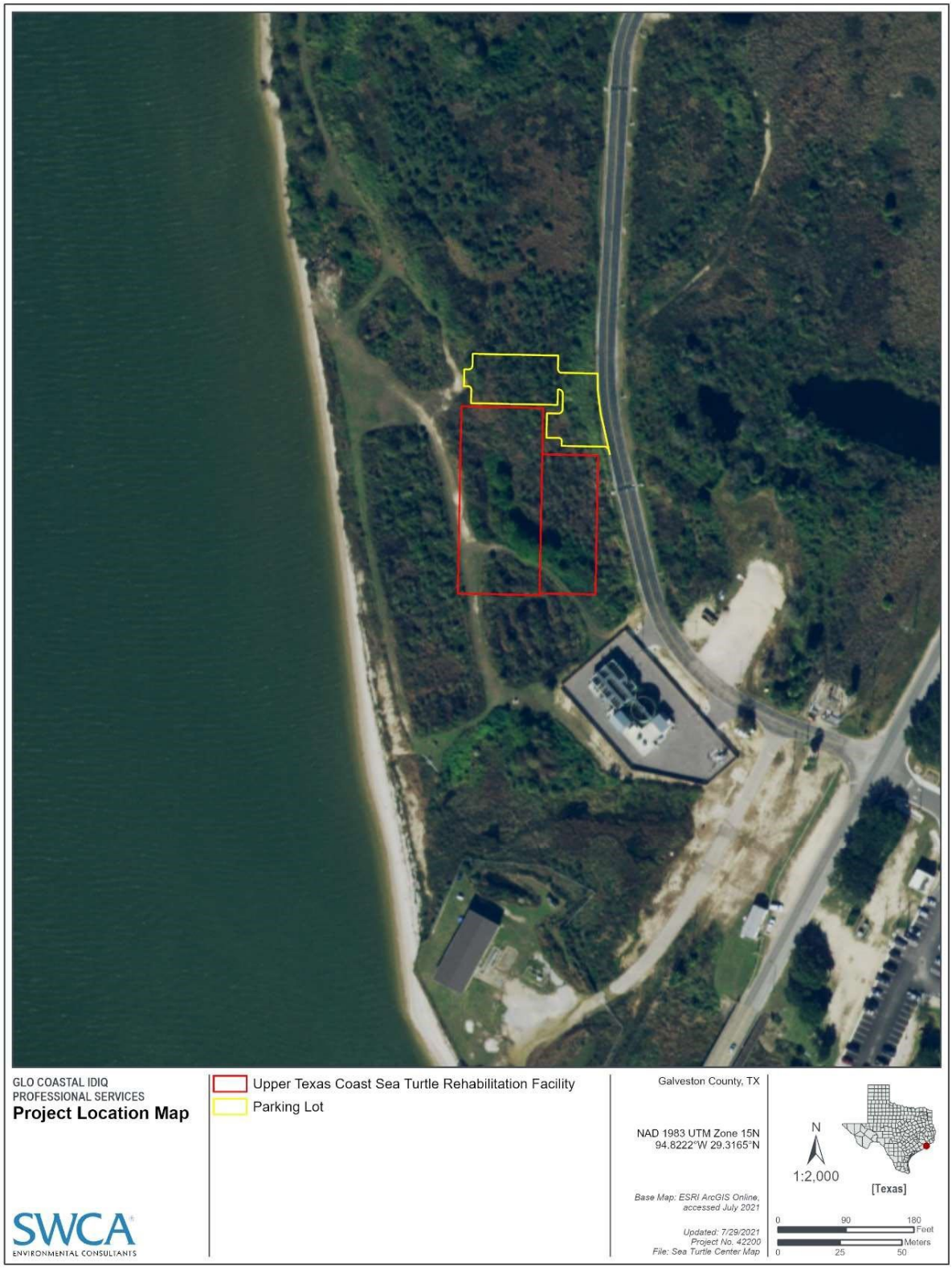

Figure 1. Proposed project location

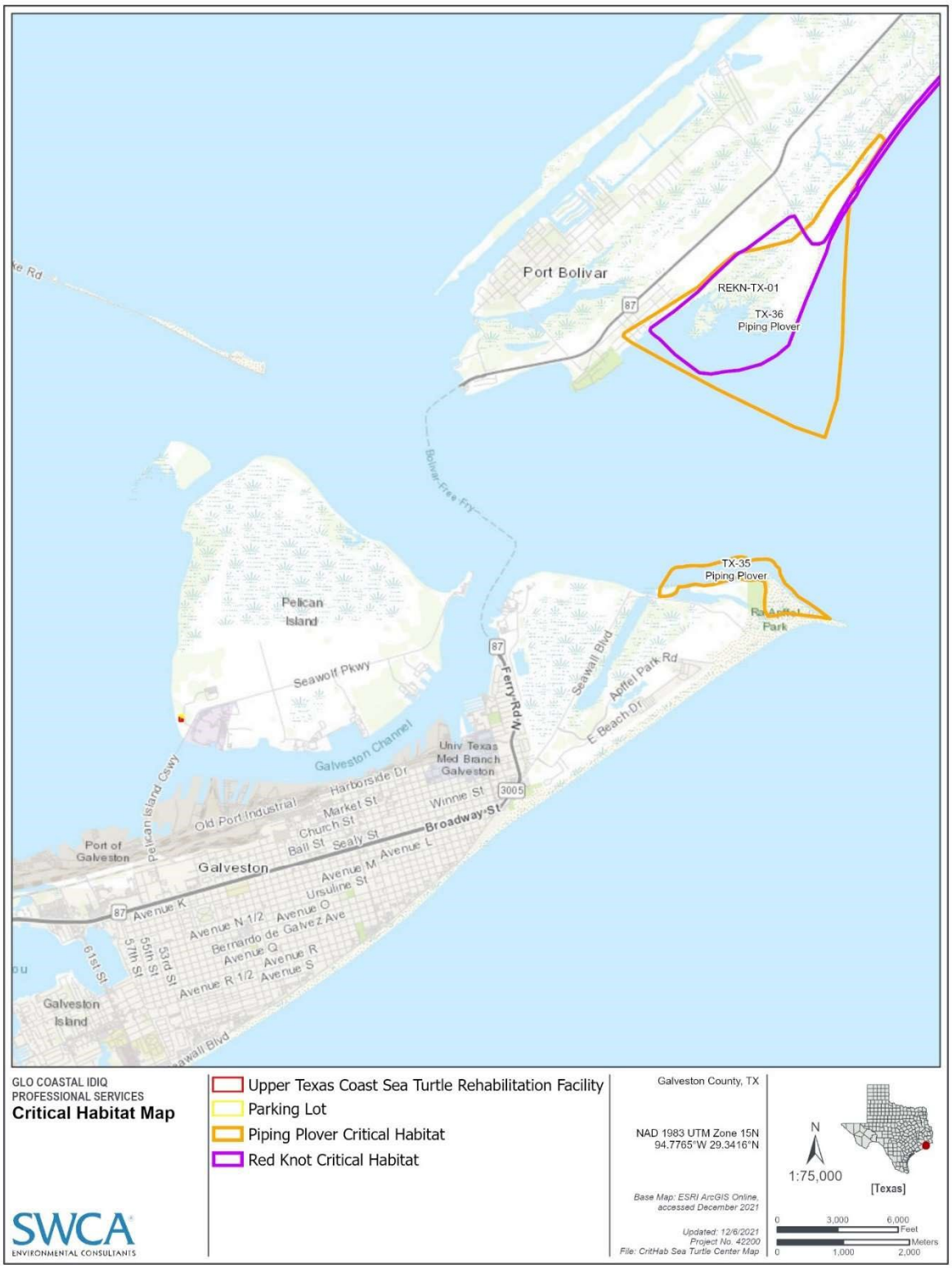

Figure 2. Critical habitat for piping plover and proposed critical habitat for red knot in the vicinity of the action area.

C. Project Location

I. State and County/Parish of action area
Galveston County, Texas
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]
29.316469 N, 94.821964 W

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☐

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.

Regionwide TIG Final Restoration Plan/ Environmental Assessment 1: Birds, Marine Mammals, Oysters, and Sea Turtles

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

Name of Person Completing this Form: Brittany Irle
Name of Project Lead: Angela Sunley
Date Form Completed: 10/18/2021
Date Form Updated: Click here to enter text.

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action.
If CH is not designated in the area, then describe any suitable habitat in the area

The proposed project is located on Pelican Island in the City of Galveston, Galveston County, Texas, on the Texas A&M University at Galveston (TAMUG) campus, west of Seawolf Parkway. The proposed project site is located on a previously disturbed area of land that was used as a dredge placement facility located directly northwest of the TAMUG Campus Wetlands Center. The area is flat (approximately 10 feet above mean sea level) with deep non-saline soils of the barrier islands consisting of Mustang-Galveston sand. The proposed project is located entirely on uplands and is not within any waterways or waterbodies; however, the shoreline of Galveston Bay is approximately 170 feet west of the proposed project site. Primitive (two-track) roads cross the proposed project site and provide motorized access to the Galveston Bay shoreline from existing paved roads east of the proposed project site.

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.

The proposed project site is located in upland environments. The closest waterbody is Galveston Bay, approximately 170 feet west of the proposed project site.

Does the project area include a river or estuary?

YES☐ NO☒

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

b. Existing Structures

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

The project area has been previously disturbed and used as a dredge placement area. The main TAMUG campus is east of Seawolf Parkway, and this rehabilitation facility will be constructed west of Seawolf Parkway adjacent to the existing TAMUG Wetland Center. No structures are present within the proposed project footprint.

c. Seagrasses & Other Marine Vegetation

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

N/A

d. Mangroves

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

N/A

e. Corals

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

N/A

f. Uplands

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

The proposed project site consists of grassland and scrub/shrub habitat types.

g. Marine Mammals

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

Dolphins YES☐ NO☒

Whales YES☐ NO☒

Manatees YES☐ NO☒

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

N/A

h. Soils and Sediments

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

The proposed project site is relatively flat and soils include deep non-saline soils of the barrier islands consisting of
Mustang-Galveston sand (U.S. Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2019).

i. Land Use

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

The proposed project site was previously used as a dredge placement facility. No currently land uses have been identified for the site.

j. Essential Fish Habitat

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

N/A

F. Project Description

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

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

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

The proposed project would consist of 1) planning, 2) construction, and 3) monitoring. Following the initial planning step, which consists of securing project funding and engineering and design, construction activities would include clearing and grading a 2-acre upland area located within the existing dredge placement area and construction of the facility, parking area, and driveways (i.e., the construction footprint). Areas outside the immediate construction footprint may be used to stage equipment and materials (e.g., fill); however, this would be temporary. The addition of impervious surfaces within the construction footprint would result in the permanent modification of approximately 2 acres of the site, although pervious materials could also be incorporated if feasible. Access to the facility would be provided by existing access roads; no additional access roads would be constructed as part of this alternative. Any areas disturbed by construction activities that are not within the construction footprint would be revegetated with native species following construction. A stormwater pollution prevention plan would be prepared according to Texas Commission on Environmental Quality standards.

II. Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.) This alternative would consist of three phases: 1) planning, 2) construction, and 3) monitoring. The schedule from implementation to completion would take approximately 10 years; 5 years to complete the planning phase (e.g., finalization funding agreements with all project partners, engineering, and design) and the construction phase (approximately 6 to 12 months), and 5 years of monitoring following construction. 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)?

The approximately 2-acre proposed project site will be cleared of vegetation and graded with large machinery such as bull dozers, bobcats, and tractors. Construction of the building will include machinery and manual labor utilizing steel, wood, fiberglass, glass, and concrete to construct the building. All work will be completed in upland areas. Any debris created during the construction of the facility will be properly managed and disposed of at a waste management facility.

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

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

N/A

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

N/A

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

N/A

f. Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft2) to be dredged, volume of material (yd3) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods. If using devices/methods/turtle relocation dredging to relocate sea turtles, then describe the methods here.

N/A

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

N/A

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

N/A

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

N/A

G. NOAA Species & Critical Habitat and Effects Determination Requested

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

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

☒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).

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).

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.

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.

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[10]
- ☐ 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)

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

N/A

J. Effects to critical habitats and actions to reduce impacts

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

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

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

No designated or proposed critical habitats are present within or in vicinity of the proposed project site (Figure 2).

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 and 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

Click here to enter text.

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[11]
☐	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[12]
☐	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. Click here to enter text.

L. Bald Eagles

Are bald eagles present in the action area? ☐NO ☒YES

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

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
Michael Barron, Department of the Interior
Email: michael_barron@fws.gov
Phone: 251-421-7030

REFERENCES

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed October 2021.