APPENDIX D: COORDINATION LETTERS

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
Phone: (337) 291-3100 Fax: (337) 291-3139

In Reply Refer To: April 13, 2021
Consultation Code: 04EL1000-2021-SLI-1214
Event Code: 04EL1000-2021-E-03404
Project Name: Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

***Due to the Louisiana Governor's mandatory quarantine order for the coronavirus (COVID-19), and in order to keep our staff and the public safe, we are unable to accept or respond in a timely manner to consultation request or project review/concurrence that we receive through the U.S. Mail. Please submit your request electronically to lafayette@fws.gov or call 337-291-3100.**

The enclosed species list identifies threatened, endangered and candidate species, as well as designated and proposed critical habitat that may occur within the boundary of your proposed project and may be affected by your proposed project. The Fish and Wildlife Service (Service) is providing this list under section 7 (c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Changes in this species list may occur due to new information from updated surveys, changes in species habitat, new listed species and other factors. Because of these possible changes, feel free to contact our office (337/291-3126) for more information or assistance regarding impacts to federally listed species. The Service recommends visiting the ECOS-IPaC site or the Louisiana Ecological Services website (www.fws.gov/lafayette) at regular intervals during project planning and implementation for updated species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect Federally listed species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected (e.g. adverse, beneficial, insignificant or discountable) by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF or by contacting our office at the number above.

Bald eagles have recovered and were removed from the List of Endangered and Threatened Species as of August 8, 2007. Although no longer listed, please be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 *et seq.*). The Service developed the National Bald Eagle Management (NBEM) Guidelines to provide landowners, land managers, and others with information and recommendations to minimize potential project impacts to bald eagles, particularly where such impacts may constitute "disturbance," which is prohibited by the BGEPA. A copy of the NBEM Guidelines is available at: http://www.fws.gov/southeast/es/baldeagle/NationalBaldEagleManagementGuidelines.pdf. Those guidelines recommend: (1) maintaining a specified distance between the activity and the nest (buffer area); (2) maintaining natural areas (preferably forested) between the activity and nest trees (landscape buffers); and (3) avoiding certain activities during the breeding season. On-site personnel should be informed of the possible presence of nesting bald eagles within the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest occurs or is discovered within or adjacent to the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at: http://www.fws.gov/southeast/es/baldeagle. Following completion of the evaluation, that website will provide a determination of whether additional consultation is necessary. The Division of Migratory Birds for the Southeast Region of the Service (phone: 404/679-7051, e-mail: SEmigratorybirds@fws.gov) has the lead role in conducting any necessary consultation. Should you need further assistance interpreting the guidelines or performing an on-line project evaluation, please contact this office.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g. cellular, digital television, radio and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm ; http://www.towerkill.com; and http://fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

Activities that involve State-designated scenic streams and/or wetlands are regulated by the Louisiana Department of Wildlife and Fisheries and the U.S. Army Corps of Engineers, respectively. We, therefore, recommend that you contact those agencies to determine their interest in proposed projects in these areas.

Activities that would be located within a National Wildlife Refuge are regulated by the refuge staff. We, therefore, recommend that you contact them to determine their interest in proposed projects in these areas.

Additional information on Federal trust species in Louisiana can be obtained from the Louisiana Ecological Services website at: www.fws.gov/lafayette or by calling 337/291-3100.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
(337) 291-3100

Project Summary

Consultation Code: 04EL1000-2021-SLI-1214
Event Code: 04EL1000-2021-E-03404
Project Name: Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee
Project Type: DREDGE / EXCAVATION
Project Description: The proposed project, Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee, is located in Terrebonne Parish, off Highway 55 (Montegut Road) by way of Exxon Company Road, and involves construction of an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The proposed preload levee would tie-in to the existing Morganza to the Gulf of Mexico flood protection levees. Borrow material for the proposed preload levee would be obtained from government-furnished off-site borrow source adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. Additional features include a road extension from the Hilcorp Energy facility to Pointe Barre Road and clearing roadside right-of-way and a +4.0 ft NAVD88 elevated section of Point Barre Road. To support hydrologic connectivity for adjacent wetlands, culverts will be considered in the design of the proposed road extension.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@29.4309449,-90.56148930722912,14z

Counties: Terrebonne County, Louisiana

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
West Indian Manatee *Trichechus manatus*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.
Species profile: https://ecos.fws.gov/ecp/species/4469

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
200 Dulles Drive
Lafayette, Louisiana 70506

May 24, 2021

Colonel Stephen Murphy
District Commander
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, LA 701118-3651

Dear Colonel Murphy:

The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division, Regional Planning and Environmental Division South, has prepared Environmental Assessment #583 for New Orleans District (CEMVN) to evaluate the impacts of constructing an initial, or preload levee, to prepare the site for the future construction of the Humble Canal Floodgate which is a feature of the Morganza to the Gulf project.

The Morganza to the Gulf project was re-authorized by Section 7002(3)5 of the Water Resource Development Act 2014, PL 113-121, as follows: "SEC. 7002. AUTHORIZATION OF FINAL FEASIBILITY STUDIES. The following final feasibility studies for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the plan, and subject to the conditions, described in the respective reports designated in this section: (3) HURRICANE AND STORM DAMAGE RISK REDUCTION."

This draft report from the Fish and Wildlife Service's (Service) Louisiana Ecological Services Office does not constitute the final report of the Secretary of the Interior on this project, as required by Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This draft report has been provided to the Louisiana Department of Wildlife and Fisheries (LDWF) and National Marine Fisheries Service (NMFS) for comments. Their comments will be incorporated into our final report.

INTRODUCTION

This draft report addresses project-associated impacts that would result from the proposed action which consists of clearing and filling a total of approximately 9.0 acres of marsh wetland habitat and 0.48-acre of bottomland hardwood (BLH) habitat.

The intent of the proposed action is to construct a preload levee, to prepare the site for the future construction of the Humble Canal floodgate. The preload levee will provide a base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee will tie-in to existing flood protection levees that will eventually connect to the Morganza to the Gulf levee system.

STUDY AREA

The main project site is approximately 3 miles south of the town of Montegut, LA, and 2 miles east of Chauvin, LA, in Terrebonne Parish. It is located on Humble Canal approximately ⅓-mile east of the Bayou Terrebonne/Humble Canal intersection. A portion of the project site extends into the Pointe-aux-Chenes Wildlife Management Area.

The preload levee will consist of north and south alignments on each side of the Humble Canal channel. The south alignment will extend from the channel approximately 500 linear feet and tie-in to existing Reach "I-3" Levee. The north alignment will extend from the channel approximately 1,150 linear feet and tie-in to the existing Reach "J-2" Levee. Approximately 150,000 cubic yards of fill will be required. The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District's off-site borrow source ("J-1 borrow site") adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. It is approximately 5 miles north of the main project site. The main project site is located off LA Highway 55 (Montegut Road) by way of Exxon Company Road on the south side and an unnamed local access road on the north side.

Figure 1. Humble Canal (preload footprint and borrow site).

EXISTING FISH AND WILDLIFE RESOURCES

Description of Habitats

Habitat types in the project area include forested wetlands [i.e., bottomland hardwoods (BLH)], fresh marsh, and brackish marsh.

Project area BLH is located northeast of Humble Canal in the Montegut forced drainage system. Historically, this area was tidal marsh, but after being leveed and pumped, trees have colonized a portion of the area adjacent to Humble Canal. Trees include black willow, Chinese tallow, sugarberry, water oak, and live oak.

Project area fresh marsh is located northeast of Humble Canal and within the community of Montegut's forced drainage area. The area was once tidal, low-salinity marsh prior to being leveed and force-drained. Pumping and elimination of saltwater inputs has promoted conversion of this marsh to a thickly vegetated fresh marsh. Vegetation is dominated by leafy three square, California bullwhip, cattail, and Roseau cane.

Project area brackish marsh is located southwest of Humble Canal. The extreme northwestern corner of the tidal marsh impact area includes some intermediate marsh plant species which very quickly transition into species typical of brackish and saline marsh. Plants include cattail, bacopa, spike rushes, iris, seashore paspalum, salt meadow cordgrass, roseau cane, and smooth cordgrass.

Fish and Wildlife Resources

In addition to providing nesting habitat for numerous bird species, BLH found within the project area are very important stopover habitat for trans-Gulf migrating songbirds. The adjacent fresh marshes may also be used by those bird species. Rails, migratory waterfowl, swamp rabbit, and other non-migratory birds can be expected to use the BLH and fresh marsh areas.

Project area tidally influenced brackish marsh provides habitat for migratory waterfowl, wading birds, rails, osprey, nutria, rabbits, alligators, and other wildlife species. Those marshes also provide important nursery habitat for juvenile estuarine-dependent species such as blue crab, white shrimp, brown shrimp, Atlantic croaker, red drum, spotted seatrout, southern flounder, Gulf menhaden, striped mullet, and other species.

ENDANGERED AND THREATENED SPECIES

The federally-listed threatened West Indian manatee (*Trichechus manatus*) could be encountered in the project area. The USACE should consult with the NMFS regarding sea turtles.
For additional information and guidance on best management practices refer to the appendices for additional information (see Appendix A).

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.) and the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) offer protection to many bird species within the project area including colonial nesting birds, osprey, and the bald eagle (*Haliaeetus leucocephalus*). We continue to recommend that a qualified biologist inspect proposed work sites for the presence of undocumented colonial nesting colonies during the nesting season (e.g., February through September depending on the species). If colonies exist, work should not be conducted within 1,000 feet of the colony during the nesting season.

On-site personnel should also be informed of the possible presence of nesting bald eagles and ospreys within the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest is located within 660 feet of the proposed activities, the

Corps should complete an on-line evaluation at http://www.fws.gov/southeast/birds/Eagle/tamain.html to determine potential disturbance to nesting bald eagles and any protective measures necessary. A copy of that evaluation should be provided to this office. If assistance is needed in completing the evaluation please contact this office.

AT-RISK SPECIES

Saltmarsh Topminnow

The saltmarsh topminnow (*Fundulus jenkinsi*) is a species at-risk for federal listing as threatened or endangered. At-risk species are those taxa for which the Service has defined as at-risk and have either been proposed for listing, are candidates for listing, or have been petitioned for listing. The saltmarsh topminnow is a small, approximately 2 inch coastal fish within the Funduludae family. It is considered a resident species of coastal marsh and closely related to other killifish species such as the Gulf killifish (*Fundulus grandis*).

Typically found in coastal marsh habitats characterized by smooth cordgrass (*Spartina alterniflora*), big cordgrass (*Spartina cynosuroides),* and black rush (*Juncus roemerianus*), the topminnow also occurs in the Atchafalaya River Delta and has been documented within portions of Terrebonne Parish. The topminnow prefers high-elevation marshes and uses small tidal creeks during low-water periods. The saltmarsh topminnow is a species of concern that could use the study area's tidal marshes and potentially be impacted by the proposed project.

ESSENTIAL FISH HABITAT

The project is located within an area identified as Essential Fish Habitat (EFH) by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA, Magnuson-Stevens Act; P.L. 104-297). The updated and revised 2006 generic amendment of the Fishery Management Plans for the Gulf of Mexico, prepared by the Gulf of Mexico Fishery Management Council, identifies EFH in the project area to be estuarine emergent wetlands, submerged aquatic vegetation, soft bottom, sand, shell, oyster reef, and hard bottom substrates, and estuarine water column. Under the MSFCMA, wetlands and associated estuarine waters in the project area are identified as EFH for various federally managed species including larvae/postlarvae and juvenile brown and white shrimp; eggs, larvae/postlarvae, juvenile, and adult red drum; larvae and juvenile lane snapper; juvenile and adult gray snapper. The 2017 Amendment 10 to the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan should be consulted for additional information on habitats identified as shark EFH (https://www.federalregister.gov/documents/2017/09/07/2017-18961/atlantic-highly-migratory-species-essential-fish-habitat).

In addition to being designated as EFH for these species, water bodies and wetlands in the project area provide nursery and foraging habitats supportive of a variety of economically important marine fishery species, such as striped mullet, Eastern oyster, pinfish, spot, Gulf killifish, bay anchovy, Atlantic croaker, Gulf menhaden, spotted seatrout, sand seatrout, southern flounder, black drum, white and brown shrimp, and blue crab. Some of these species also serve as prey for other fish species managed under the Magnuson-Stevens Act by the GMFMC (i.e., mackerels, snappers, and groupers) and highly migratory species managed by NMFS (i.e., billfishes and sharks).

EVALUATION METHODS FOR SELECTED PLAN AND ALTERNATIVES

Wetland Value Assessment (WVA)

Evaluations of fish and wildlife resource impacts were conducted using the WVA methodology. Implementation of the WVA requires that habitat quality and quantity (acreage) are measured for baseline conditions, and predicted for future without-project and future with-project conditions. Each WVA model utilizes an assemblage of variables considered important to the suitability of that habitat type to support a diversity of fish and wildlife species. The WVA provides a quantitative estimate of project-related impacts to fish and wildlife resources. Although the WVA may not include every environmental or behavioral variable that could affect fish and wildlife habitat usage, it is widely acknowledged to provide a cost-effective means of assessing restoration measures in coastal wetland communities.

The WVA models operate under the assumption that optimal conditions for fish and wildlife habitat within a given coastal wetland type can be characterized, and that existing or predicted conditions can be compared to that optimum to provide an index of habitat quality. Habitat quality is estimated and expressed through the use of a mathematical model developed specifically for each wetland type. Each model consists of: (1) a list of variables that are considered important in characterizing community-level fish and wildlife habitat values; (2) a Suitability Index graph for each variable, which defines the assumed relationship between habitat quality (Suitability Index) and different variable values; and, (3) a mathematical formula that combines the Suitability Indices for each variable into a single value for wetland habitat quality, termed the Habitat Suitability Index (HSI).

The product of an HSI value and the acreage of available habitat for a given target year is known as the Habitat Unit (HU) and is the basic unit for measuring project effects on fish and wildlife habitat. HUs are annualized over the project life to determine the Average Annual Habitat Units (AAHUs) available for each habitat type. The change (increase or decrease) in AAHUs for each future with-project scenario, compared to future without-project conditions, provides a measure of anticipated impacts. A net gain in AAHUs indicates that the project is beneficial to the fish and wildlife community within that habitat type; a net loss of AAHUs indicates that the project would adversely impact fish and wildlife resources.

The USACE-certified Coastal Marsh (Fresh-Intermediate) and (Brackish) WVA Model (version 2.0) and BLH WVA Model (version 1.2) were used in the impact assessment analysis. Target years (TY) were adjusted to represent time intervals when environmental changes are expected to occur. Any proposed change in impacts or plans should be coordinated in advance with the Service, NMFS, and LDWF.

IMPACTS OF SELECTED PLAN AND ALTERNATIVES

Project implementation would result in the direct loss of approximately 0.48-acre (-0.18 AAHUs) of BLH habitat, 4.4 acres of fresh marsh habitat (-1.77 AAHUs), and 4.6 acres of brackish marsh habitat (-0.58 AAHUs). These impacts should be avoided to the maximum extent practicable but will be unavoidable in some locations.

For more details on the WVAs refer to the Project Information Sheet (PIS) found in Appendix B.

Table 1. Project Impact Summary.

Site	Net Change (FWP - FWOP) = AAHUs
BLH habitat	**-0.18**
Fresh Marsh	**-1.77**
Brackish Marsh (Low SLR)	**-0.67**
Brackish Marsh (Int.SLR)	**-0.58**
Brackish Marsh (High SLR)	**-0.43**

SERVICE POSITION AND RECOMMENDATIONS

The President's Council on Environmental Quality regulations for implementing the National Environmental Policy Act define mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Through this process, the Service strives to make the project's goals co-equal to fish and wildlife resource conservation.

The Service's Mitigation Policy (Federal Register, Vol. 46, pp. 7644-7663, January 23, 1981) has designated four resource categories which are used to ensure that the level of mitigation recommended will be consistent with the fish and wildlife resources involved. The mitigation planning goals and associated Service recommendations should be based on those four categories, as follows:

> Resource Category 1 - Habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion section. The mitigation goal for this Resource Category is that there should be no loss of existing habitat value.
>
> Resource Category 2 - Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section. The mitigation goal for habitat placed in this category is that there should be no net loss of in-kind habitat value.
>
> Resource Category 3 - Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis. The Service's mitigation goal here is that there be no net loss of habitat value while minimizing loss of in-kind habitat value.
>
> Resource Category 4 - Habitat to be impacted is of medium to low value for evaluation species. The mitigation goal is to minimize loss of habitat value.

Habitats associated with the proposed project are designated as Resource Category 2, the mitigation goal for which is no net loss of in-kind habitat value.

To achieve fish and wildlife resource conservation, the Service recommends the following:

1. Forest clearing associated with project features should be conducted during the fall and winter to minimize impacts to nesting migratory songbirds.

2. Important fish and wildlife habitat (emergent wetlands, forested wetlands, and non-wetland forest) should be conserved by avoiding and minimizing the acreage of those habitats directly and indirectly impacted by project features.

3. Avoid impacts to threatened and endangered species, at-risk species, and species of concern such as the bald eagle, and wading bird nesting colonies.

4. West Indian manatee conservation measures should be included in all contracts, plans, and specifications for in-water work in areas where the manatee may occur.

5. A survey should be conducted to determine if a bald eagle nest is present within or adjacent to the project area. If a bald eagle nest occurs within 660 feet of the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at http://www.fws.gov/southeast/birds/Eagle/tamain.html.

   The Service developed the National Bald Eagle Management Guidelines to provide landowners, land managers, and others with information and recommendations to minimize potential project impacts to bald eagles. A copy of the guidelines is available at: https://ecos.fws.gov/ServCat/DownloadFile/36458?Reference=36436

6. Any impacts to Essential Fishery Habitat should be discussed with the NMFS to determine if the project complies with the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA, Magnuson-Stevens Act, P.L. 104-297, as amended) and its implementing regulations.

7. Compensation should be provided for any unavoidable losses of BLH and marsh habitat, caused (directly or indirectly) by project features. All mitigation should be developed/coordinated with the Service, LDWF, and other natural resource agencies.

8. Any proposed change in project features or plans should be coordinated in advance with the Service, LDWF, NMFS and other resource agencies.

9. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly; 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in your consultation should occur before changes are made and or finalized.

We will continue to work closely with your staff to ensure that fish and wildlife resources are conserved. If you require further assistance in this matter, please contact Hannah Sprinkle (337-291-3121) of this office.

Sincerely,

Brigette D. Firmin
Acting Field Supervisor
Louisiana Ecological Services Office

cc: LDWF, Baton Rouge, LA
NMFS, Baton Rouge, LA

Appendix A

West Indian Manatee

The threatened West Indian manatee (*Trichechus manatus*) is known to regularly occur in Lakes Pontchartrain and Maurepas and their associated coastal waters and streams. It also can be found less regularly in other Louisiana coastal areas, most likely while the average water temperature is warm. Based on data maintained by the Louisiana Natural Heritage Program (LNHP), over 80 percent of reported manatee sightings (1999-2011) in Louisiana have occurred from the months of June through December. Manatee occurrences in Louisiana appear to be increasing and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of southeastern Louisiana. Manatees may also infrequently be observed in the Mississippi River and coastal areas of southwestern Louisiana. Cold weather and outbreaks of red tide may adversely affect these animals. However, human activity is the primary cause for declines in species number due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution.

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

- All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at “no wake/idle” speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all

employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: “CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT”. A second temporary sign measuring 8½ " X 11” should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: “CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION”.

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service’s Louisiana Ecological Services Office (337-291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225-765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

- To ensure manatees are not trapped due to construction of containment or water control structures, we recommend that the project area be surveyed prior to commencement of work activities. Should a manatee be observed within those areas, the contractor should immediately contact the Service’s Louisiana Ecological Services Office (337-291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225-765-2821).

Should a proposed action directly or indirectly affect the West Indian manatee, further consultation with this office will be necessary.

Appendix B

U.S. Fish and Wildlife Service, Ecological Services
200 Dulles Drive, Lafayette, LA 70506
(337) 291-3100, FAX (337) 291-3139

MEMORANDUM

DATE: May 18, 2021

TO: U.S. Army Corps of Engineers (NOD)

FROM: U.S. Fish and Wildlife Service (Service)

SUBJECT: Project Information Sheet for the Wetland Value Assessment (WVA) for the proposed Humble Canal Preload Project- Brackish Marsh Impacts

The objective of this project is to construct an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee will provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee will tie-in to existing flood protection levees. The USACE-certified Coastal Marsh (Brackish WVA Model (version 2.0) was used for the marsh creation analysis.

Habitat Assessment Method
The WVA operates under the assumption that optimal conditions for general fish and wildlife habitat within a given coastal wetland type can be characterized, and that existing or predicted conditions can be compared to that optimum to provide an index of habitat quality. Habitat quality is estimated or expressed through the use of a mathematical model developed specifically for each wetland type. Each model consists of 1) a list of variables that are considered important in characterizing fish and wildlife habitat, 2) a Suitability Index graph for each variable, which defines the assumed relationship between habitat quality (Suitability Index) and different variable values, and 3) a mathematical formula that combines Suitability Index (SI) for each variable into a single value for wetland habitat quality; that single value is referred to as the Habitat Suitability Index, or HSI.

Land Loss/ Sea Level Rise Effects
Land loss rates estimated by the Service were adjusted to project the effects of the low, intermediate and high relative sea level rise (RSLR) scenario for these analyses. The land loss rate for the Wonder Lake-Terrebone Basin was used (-1.67% per year for the period 1985-2016) based on USGS data for the area. An average accretion rate of 6.70 mm/year was used for this site (SE Madison Bay). An estimated subsidence rate of 4.6 mm/yr was used in the Bayou Petit Caillou at Cocodrie (gauge 76305). Targets years (TY) were adjusted for each SLR scenario to represent the year when marsh acreage reaches zero.

Figure 1. Map of Preload footprint and brackish marsh impact areas.

Variable V_1 – Percent of Wetland area covered by emergent vegetation

Persistent emergent vegetation (i.e., emergent marsh) plays an important role in coastal wetlands by providing foraging, resting, and breeding habitat for a variety of fish and wildlife species; and by providing a source of detritus and energy for lower trophic organisms that form the basis of the food chain. An area with no emergent vegetation (i.e., shallow open water) is assumed to have minimal habitat suitability in terms of this variable and is assigned an SI of 0.1. Optimal vegetative coverage (i.e., percent marsh) is assumed to occur at 60-80 percent (SI=1.0).

FWOP – a predetermined land loss rate of -1.67% was applied to the existing marsh acreage for lifespan of the project. In each coastal marsh model, this variable is weighted the highest and thus influences project impacts the most (calculations were made using the MIMS 3.10 marsh model).

Table 1. FWOP % Emergent Vegetation by site, TY and SLR scenario.

Site (Brackish)	TY0	TY1	TY24	TY50
Low-SLR	67	64	0.00	0.00

Site (Brackish)	TY0	TY1	TY19	TY50
Int-SLR	62	59	0.00	0.00

Site (Brackish)	TY0	TY1	TY11	TY50
High-SLR	47	43	0.00	0.00

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_2 – Percent of open water covered by aquatic vegetation

FWOP A site visit was conducted on April 22, 2021, no aquatic vegetation was observed. Conditions are expected to remain constant through all target years and SLR scenarios.

Table 3. FWOP % Submerged Aquatic Vegetation

Brackish (all SLR scenarios)	
	% SAV
TY0	0
TY1	0
TY11	0
TY19	0
TY24	0
TY50	0

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_3 – Marsh edge and interspersion

This variable takes into account the relative juxtaposition of marsh and open water for a given marsh**:**water ratio.

FWOP- Interspersion classes were determined utilizing aerial imagery and site data collected during the field trip.

Table 5. Interspersion Class and % Cover

Brackish (Low-SLR)		
	Class	%
TY0	1 3	63 37
TY1	1 3	60 40
TY24	5	100
TY50	5	100

Brackish (Int-SLR)		
	Class	%
TY0	1 3	55 45
TY1	1 3	52 48
TY19	5	100
TY50	5	100

Brackish (High-SLR)		
	Class	%
TY0	1 3	38 62
TY1	1 3	34 66
TY11	5	100
TY50	5	100

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_4 – Percent of open water ≤ 1.5 feet deep, in relation to marsh surface

FWOP- Shallow water areas are assumed to be more biologically productive than deeper water due to a general reduction in sunlight, oxygen, and temperature as water depth increases. Field site visits were conducted on 22 April 2021. Existing conditions are expected to gradually degrade as sea level rise rates and marsh loss increases across the project area.

Table 7. % SOW ≤ 1.5 feet

Brackish (Low-SLR)	
	Water ≤ 1.5ft (%)
TY0	100
TY1	100
TY24	0
TY50	0

Brackish (Int-SLR)	
	Water ≤ 1.5ft (%)
TY0	100
TY1	100
TY19	0
TY50	0

Brackish (High-SLR)	
	Water ≤ 1.5ft (%)
TY0	100
TY1	95
TY11	0
TY50	0

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_5 – Salinity

Brackish Marsh

An estimate for area salinity was calculated from data recorded at CRMS0385 and CRMS0315 (CRMS 2020) which are in the vicinity of the project area. An average of the two sites was used to account for seasonal freshwater input.

The mean salinity recorded at:

CRMS0385 was approximately 3.65 ppt.
CRMS0315 was approximately 8.72 ppt.
Average: 6.19 ppt

The FISS spreadsheet 1.0 was used to predict future salinity averages. It takes into account both the effects of local subsidence and SLR to the area. A third CRMS location (CRMS3296) was chosen to aid in these calculations. CRMS3296 is a more saline environment and represent future conditions if subsidence and SLR continue to increase.

The mean salinity recorded at:

CRMS3296 was approximately 12.67 ppt.

FWOP– With time, existing salinities are expected to gradually increase through the life of the project.

Salinity FWOP:

Brackish			
TYs	(Low-SLR)	(Int-SLR)	(High-SLR)
TY0	6.20 ppt	6.20 ppt	6.20 ppt
TY1	6.20 ppt	6.20 ppt	6.81 ppt
TY 11	-	-	7.17 ppt
TY19	-	7.17 ppt	-
TY24	7.17 ppt	-	-
TY50	7.26 ppt	7.28 ppt	7.32 ppt

Salinities will gradually increase.

FWP – The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_6 – Aquatic Organisms (% wetland accessible & type of access)

FWOP – The proposed preload site is not currently impounded or hydrologically controlled by any structures. However, there is limited access for aquatic organisms. Two bridge access points exist but may limit aquatic organism access and deter entrance therefore a structure rating of 0.5 (SI unit 0.5) was given to the site.

Table 9. Aquatic Organism Access

Brackish (all SLR scenarios)	
	Access
TY0	0.5
TY1	0.5
TY11	0.5
TY19	0.5
TY24	0.5
TY50	0.5

FWP – Following construction (TY1), aquatic organisms will have no access to the created preload platform.

PROJECT IMPACTS

Based on the above assumptions, the Humble Canal Preload Project would result in a combined direct and indirect impact to brackish marsh of 0.67 (Low SLR), 0.58 (Int. SLR) and 0.43 (High SLR) Average Annual Habitat Units (AAHUs).

Brackish Marsh- Low SLR

TOTAL BENEFITS IN AAHUs DUE TO PROJECT

A. Emergent Marsh Habitat Net AAHUs =	-0.52
B. Open Water Habitat Net AAHUs =	-1.06
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	**-0.67**

Brackish Marsh- Int. SLR

TOTAL BENEFITS IN AAHUs DUE TO PROJECT

A. Emergent Marsh Habitat Net AAHUs =	-0.38
B. Open Water Habitat Net AAHUs =	-1.11
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	**-0.58**

Brackish Marsh- High SLR

TOTAL BENEFITS IN AAHUs DUE TO PROJECT

A. Emergent Marsh Habitat Net AAHUs =	-0.14
B. Open Water Habitat Net AAHUs =	-1.17
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	**-0.43**

Literature Cited

Coastal Protection and Restoration Authority of Louisiana. 2017. Louisiana's Comprehensive Master Plan for a Sustainable Coast. Coastal Protection and Restoration Authority of Louisiana. Baton Rouge, LA.

Louisiana Office of Coastal Protection and Restoration. 2019. Coastwide Reference Monitoring System-Wetlands Monitoring Data. Retrieved from Coastal Information Management System (CIMS) database. http://cims.coastal.louisiana.gov. Accessed March 2021.

U.S. Fish and Wildlife Service, Ecological Services
200 Dulles Drive, Lafayette, LA 70506
(337) 291-3100, FAX (337) 291-3139

MEMORANDUM
DATE: May 18, 2021

TO: U.S. Army Corps of Engineers (NOD)

FROM: U.S. Fish and Wildlife Service (Service)

SUBJECT: Project Information Sheet for the Wetland Value Assessment (WVA) for the proposed Humble Canal Preload Project – Fresh Marsh Impacts.

The objective of this project is to construct an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee will provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee will tie-in to existing flood protection levees. The USACE-certified Coastal Marsh (Fresh-Intermediate WVA Model (version 2.0) was used for the marsh creation analysis. Target Years (TY) were set as follow: 0, 1, and 50.

Habitat Assessment Method
The WVA operates under the assumption that optimal conditions for general fish and wildlife habitat within a given coastal wetland type can be characterized, and that existing or predicted conditions can be compared to that optimum to provide an index of habitat quality. Habitat quality is estimated or expressed through the use of a mathematical model developed specifically for each wetland type. Each model consists of 1) a list of variables that are considered important in characterizing fish and wildlife habitat, 2) a Suitability Index graph for each variable, which defines the assumed relationship between habitat quality (Suitability Index) and different variable values, and 3) a mathematical formula that combines Suitability Index (SI) for each variable into a single value for wetland habitat quality; that single value is referred to as the Habitat Suitability Index, or HSI.

Land Loss/ Sea Level Rise Effects

The project area is located northeast of Humble Canal and within the community of Montegut forced drainage area. The area was once tidal low-salinity marsh prior to being leveed and forced drained. Pumping and elimination of saltwater inputs has promoted conversion to a fresh marsh. The area is impounded and receives no tidal input. Results will remain constant for all sea level rise (SLR) scenarios.

Figure 1. Map of Preload footprint and fresh marsh impact areas.

Variable V_1 – Percent of Wetland area covered by emergent vegetation

Persistent emergent vegetation (i.e., emergent marsh) plays an important role in coastal wetlands by providing foraging, resting, and breeding habitat for a variety of fish and wildlife species; and by providing a source of detritus and energy for lower trophic organisms that form the basis of the food chain. An area with no emergent vegetation (i.e., shallow open water) is assumed to have minimal habitat suitability in terms of this variable, and is assigned an SI of 0.1. Optimal vegetative coverage (i.e., percent marsh) is assumed to occur at 60-80 percent (SI=1.0).

FWOP – due the impounded and forced drained conditions of the site, a land loss rate was not applied to the existing marsh. Emergent vegetation is expected to remain constant through all target years.

Table 1. FWOP % Emergent Vegetation by site and TY.

Site	TY0	TY1	TY50
Fresh	100	100	100

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_2 – Percent of open water covered by aquatic vegetation

FWOP- A site visit was conducted on April 22, 2021, no aquatic vegetation was observed. Conditions are expected to remain constant through all target years.

Table 3. FWOP % Submerged Aquatic Vegetation

Fresh	
	% SAV
TY0	0
TY1	0
TY50	0

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_3 – Marsh edge and interspersion

This variable takes into account the relative juxtaposition of marsh and open water for a given marsh**:**water ratio.

FWOP- Interspersion classes were determined utilizing aerial imagery and site data collected during the field trip. Based on imagery and field observations, the area is considered a "carpet marsh."

Table 5. Interspersion Class and % Cover

Fresh		
	Class	%
TY0	3	100
TY1	3	100
TY50	3	100

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_4 – Percent of open water ≤ 1.5 feet deep, in relation to marsh surface

FWOP- Shallow water areas are assumed to be more biologically productive than deeper water due to a general reduction in sunlight, oxygen, and temperature as water depth increases. Field site visits were conducted on 22 April 2021. No shallow open was observed. Existing conditions are not expected to change.

Table 7. % SOW ≤ 1.5 feet

Fresh	
	Water ≤ 1.5ft (%)
TY0	0
TY1	0
TY50	0

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Variable V_5 – Salinity

The proposed site is currently impounded and receives no tidal input (0.05ppt was used to represent the lowest salinity).

Fresh Marsh

FWOP- Existing conditions are expected to remain static through all TYs.

TYs	Fresh
TY0	0.05 ppt
TY1	0.05 ppt
TY50	0.05 ppt

FWP- The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

TYs	Fresh
TY0	0.00 ppt
TY1	0.00 ppt
TY50	0.00 ppt

Variable V_6 – Aquatic Organisms (% wetland accessible & type of access)

FWOP – The proposed site is currently leveed and under forced drainage. It is assumed that aquatic organisms have no access to the site.

Table 9. Aquatic Organism Access

Fresh	
	Access
TY0	0.00
TY1	0.00
TY50	0.00

FWP – The preload footprint will be cleared and converted to a pre-levee. No habitat will remain.

Project Impacts

Based on the above assumptions, the Humble Canal Preload Project would result in a combined direct and indirect impact fresh marsh of 1.77 Average Annual Habitat Units (AAHUs). Results will remain constant for all SLR scenarios.

TOTAL BENEFITS IN AAHUs DUE TO PROJECT
(Low SLR scenario)

A. Emergent Marsh Habitat Net AAHUs =	-2.62
B. Open Water Habitat Net AAHUs =	0.00
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1 =	**-1.77**

TOTAL BENEFITS IN AAHUs DUE TO PROJECT
(Int. SLR scenario)

A. Emergent Marsh Habitat Net AAHUs =	-2.62
B. Open Water Habitat Net AAHUs =	0.00
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1 =	**-1.77**

TOTAL BENEFITS IN AAHUs DUE TO PROJECT
(High SLR scenario)

A. Emergent Marsh Habitat Net AAHUs =	-2.62
B. Open Water Habitat Net AAHUs =	0.00
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1 =	**-1.77**

Literature Cited

Coastal Protection and Restoration Authority of Louisiana. 2017. Louisiana's Comprehensive Master Plan for a Sustainable Coast. Coastal Protection and Restoration Authority of Louisiana. Baton Rouge, LA.

Louisiana Office of Coastal Protection and Restoration. 2019. Coastwide Reference Monitoring System-Wetlands Monitoring Data. Retrieved from Coastal Information Management System (CIMS) database. http://cims.coastal.louisiana.gov. Accessed March 2021.

Humble Canal Preload Project
Bottomland Hardwood Forest Impacts
Project Information Sheet
3-May 2021

Direct and Indirect Impacts: The red polygon in Figure 1 shows the portion of the preload footprint that would impact bottomland hardwood habitat (BLH), identified in the green polygon. In addition to direct impacts from construction activities, BLH and fresh-intermediate marsh would be indirectly impacted via impoundment between the preload site and the existing levee. The combined BLH impact direct and indirect impact zone is 0.48 acres (see Figure 1 green polygon).

With construction of the new levee and sector gate along Humble Canal, the old levee could be degraded to unimpound these wetlands. However, construction funding availability and scheduling are unknown. Rather than attempt to predict when unimpoundment might occur, it is assumed that the impounded wetlands (indirect impact) will be impacted concurrently with direct impacts from the constructed preload footprint.

Figure 1. Map of Preload footprint and BLH direct and indirect impact areas.

BLH Variable # 1: Tree Species Composition

Within an observation area approximately 0.10 acre, the following trees were observed on 22-Apr-2021.

Table 1. Observed trees and estimated diameter at breast height (dbh) . Seedlings not included.

Tree species	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)	Dbh (in)
Water oak	14								
Chinese tallow	14	5	4	3	3	4	5	3	10
Black willow	16	4	10						
Honey locust	6								

The canopy coverage was approximately 25%, midstory was 25%, and herbaceous cover 100%. A number of small black willow were observed in other portions of the area as were a number of very small water oak seedlings. Based on early aerial imagery of this BLH area, it appears that the woody vegetation has replaced what was previously tidal marsh, growing larger canopies as a result of forced drainage from the levee. Sugarberry and a few small live oaks were also observed beyond the 0.10 acre observation area. Given the presence of several water oak seedlings and live oaks nearby, it is assumed that hard mast producers will increase over time. Table 2 provides V1 values used in the wetland value assessment (WVA) for BLH.

Table 2. Variable 1 values used.

TY	FWOP	FWP
0	Class 1	Class 1
1	Class 1	Class 1
25	Class 1	Class 1
50	Class 2	Class 1

Variable 2: Stand Maturity

The in-growth spreadsheet was used to calculate diameter at breast height (dbh) change over time. Given the diversity of trees and the presence of slower growing varieties (compared to black willow and Chinese tallow), the dbh growth rate associated with the "cedar elm, winged elm, black tupelo, hickories, or sugarberry dominated stands" was selected for use in the in-growth spreadsheet. This spreadsheet's mortality function was zeroed out. Instead, windthrow mortality is assumed to occur during tropical storms which would occur once every 8 years and would affect only trees >= 20 inches dbh. The Microsoft Excel random number function was used to generate random numbers for each storm event target year (TY). It was assumed that two >20in dbh trees would be thrown down if

random# < 0.33, one > 20in dbh tree would be thrown down if random# between 0.33 and 0.66, and no trees down if random# > 0.66. The random number results are shown in Table 3. The loss of trees due to windthrow within the spreadsheet was done manually as the in-growth spreadsheet is not set up to do this. Additionally, the < 6in dbh trees (including seedlings) were entered into the in-growth spreadsheet in order to capture recruitment into the >6inch dbh class used in the WVA.

Table 3. Windthrow tree mortality using random numbers.

Storm Event Tys	<0.33 0.33 to 0.66 >0.66 **Rand #**	two trees > 20 in dbh down one tree > 20 in dbh down no trees down **Outcome**
0	**0.385**	no trees > 20 in dbh
8	**0.396**	no trees > 20 in dbh
16	**0.739**	no trees > 20 in dbh
24	**0.040**	only one > 20 in - 1 down
32	**0.660**	1 tree down (largest)
40	**0.508**	1 tree down (largest)
48	**0.023**	2 trees down (largest)

As described above, the in-growth spreadsheet results factor in both mortality and recruitment, which are very important drivers of dbh and basal area change over a 50 year time period. V2 values used in the WVA are provided in Table 4.

Table 4. Variable 2 values used.

TY	FWOP	FWP
0	11.7 in	11.7 in
1	11.9 in	0 in
25	9.6 in	0 in
50	13.0 in	0 in

Variable 3: Understory and Midstory

Over time as the canopy matures and closes, it is assumed that the midstory will gradually decrease. Likewise, it is assumed that the herbaceous understory will also gradually decrease. Table 5 lists the V3 values used.

Table 5. Variable 3 values used.

TY	FWOP Understory	FWOP Midstory	FWP Understory	FWP Midstory
0	100%	25%	100%	25%
1	100%	25%	0%	0%
25	85%	20%	0%	0%
50	75%	18%	0%	0%

Variable 4: Hydrology:

Because the BLH site is located within a forced drainage area and is likely on a higher elevation site than the adjoining marshes, it is assumed that there is no water exchange and flooding is temporary if ever it occurs. Table 6 provides V4 values used.

Table 6. Variable 4 values used.

TY	FWOP Exchange	FWOP Duration	FWP Exchange	FWP Duration
0	None	Temporary	None	Temporary
1	None	Temporary	None	Temporary
25	None	Temporary	None	Temporary
50	None	Temporary	None	Temporary

Variable 5: Size of Continguous Forest

There is no forest adjoining the project area BLH. Therefore, V5 is a Class 1 (0 to 5 acres adjoining forest) for FWOP and FWP under all TYs.

Variable 6: Suitability and Traversability of Surrounding Land Uses:

Within a 0.5 mile radius of the project area center, there is marsh, water, and developed lands. Table 7 provides percentages of each. Given the high loss rate of tidal marsh, all tidal marsh is predicted to be lost by TY19, thus, percent of water increases by TY25. V6 values are the same under FWOP and FWP.

Table 7. Land use within 0.5 mile radius of the project site (FWOP and FWP).

TY	Forest/marsh	Water	Developed
0	33%	45%	22%
1	33%	45%	22%
25	17%	61%	22%
50	17%	61%	22%

Variable 7: Disturbance

The major disturbance to project area BLH is the existing road along the base of the levee which is being used for hauling dirt to build levee reaches located to the east. Disturbance types and distances within both 50 foot and 500 foot buffers around the BLH area are provided in Table 8 and used to calculate the final weighted V7 Suitability Index (SI). The resulting value was inserted manually into the WVA spreadsheet for both FWOP and FWP.

Table 8. Calculation of V7 value for FWOP and FWP.

Distance	Disturbance Type	SI	Percent	Weighted SI
0 to 50	1	0.01	0	0
0 to 50	2	0.26	4.5	1.17
0 to 50	3	0.41	0	0
0 to 50	4	1	5.5	5.5
50 -500	1	0.26	0	0
50 -500	2	0.5	9	4.5
50 -500	3	0.65	18	11.7
50 -500	4	1	63	63
			100	85.87
		overall weighted SI =		**0.859**

Under FWP, it is assumed that the BLH site is converted entirely to a pre-levee, hence it no longer exists beginning in TY1. As long as the FWP acreages are zero (as shown in Table 9), the entries for many of the FWP variables do not matter as no habitat value will be generated in terms of Habitat Units.

Based on the above assumptions, the Humble Canal Preload Project would result in a combined direct and indirect impact to BLH of 0.18 Average Annual Habitat Units (AAHUs) for all sea level rise (SLR) scenarios.

.

Table 9. AAHU calculation worksheet and WVA results.

AAHU CALCULATION

Project: Humble Canal PreLoad - direct & indirect impacts

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	0.48	0.37	0.18	
1	0.48	0.38	0.18	0.18
25	0.48	0.31	0.15	3.98
50	0.48	0.48	0.23	4.75
Max TY=	50		Total AAHUs =	8.91
			AAHUs =	0.18

Future With Project			Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	0.48	**0.37**	0.18	
1	0		0.00	0.06
25	0		0.00	0.00
50	0		0.00	0.00
Max TY=	50		Total AAHUs =	0.06
			AAHUs =	0.00

NET CHANGE IN AAHUs DUE TO PROJECT	
A. Future Without Project AAHUs =	0.18
B. Future With Project AAHUs =	0.00
Net Change (FWP - FWOP) =	**-0.18**

USDA
United States Department of Agriculture

June 8, 2021

Daniel Meden, Biologist
U.S. Army Corps of Engineers
Regional Planning and Environment Division South
New Orleans Environmental Branch
CEMVN-PDN-UDP
7400 Leake Avenue
New Orleans, LA 70118

RE: EA #583 – Morganza to the Gulf Hurricane Protection
Preload Levee – Humble Canal Floodgate

Dear Mr. Meden:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resource Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project map and narrative submitted with your request indicates that the proposed construction area (Preload Levee) will not impact prime farmland and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Furthermore, we do not predict impacts to NRCS work in the vicinity. For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location: http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown below.

Respectfully,

Michael R. Lindsey

Dr. Michael Lindsey
State Soil Scientist

Attachment

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (844) 325-6947

Helping People Help the Land

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 5/27/21
Name Of Project Morganza to the Gulf Hurricane Protection	Federal Agency Involved U.S. Army Corps of Engineers
Proposed Land Use Preload Levee - Humble Canal Gate Site	County And State Terrebonne Parish, Louisiana
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 5/27/21

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).* Yes ☐ No ☑		Acres Irrigated	Average Farm Size
Major Crop*(s)*	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS **6/8/21**	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	0.0	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*		0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100		0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

This form was electronically produced by National Production Services Staff

Clear Form

Form AD-1006 (10-83)

USDA
United States Department of Agriculture

July 23, 2021

Daniel Meden, Biologist
U.S. Army Corps of Engineers
Regional Planning and Environment Division South
New Orleans Environmental Branch; CEMVN-PDN-UDP
7400 Leake Avenue
New Orleans, LA 70118

RE: EA #406 – Morganza to the Gulf Hurricane Protection
Levee J-1 Off-site Borrow Area and Temporary Access Road

Dear Mr. Meden:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resource Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The off-site borrow area has been accounted for in a 2005 Environmental Assessment and the road used to access the borrow pits is deemed temporary. Due to these circumstances no additional prime farmland will be impacted and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Furthermore, we do not predict impacts to NRCS work in the vicinity. For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location: http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown below.

Respectfully,

Michael R. Lindsey

Dr. Michael Lindsey
State Soil Scientist

Attachment

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (844) 325-6947

Helping People Help the Land

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **7/22/21**	4. Sheet 1 of _____
1. Name of Project **EA# 406 - Morganza to the Gulf Levee**	5. Federal Agency Involved **U. S. Army Corps of Engineers**	
2. Type of Project **Off-site Borrow Pit and Temporary Access Rd**	6. County and State **Terrebonne Parish, Louisiana**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **7/22/21**	2. Person Completing Form **M. Mouton**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☑		4. Acres Irrigated | Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction **Acres:** **%**	7. Amount of Farmland As Defined in FPPA **Acres:** **%**
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS **7/23/21**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	**Corridor B**	**Corridor C**	**Corridor D**
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — **Maximum Points**				
1. Area in Nonurban Use — 15				
2. Perimeter in Nonurban Use — 10				
3. Percent Of Corridor Being Farmed — 20				
4. Protection Provided By State And Local Government — 20				
5. Size of Present Farm Unit Compared To Average — 10				
6. Creation Of Nonfarmable Farmland — 25				
7. Availablility Of Farm Support Services — 5				
8. On-Farm Investments — 20				
9. Effects Of Conversion On Farm Support Services — 25				
10. Compatibility With Existing Agricultural Use — 10				
TOTAL CORRIDOR ASSESSMENT POINTS — 160	0	0	0	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)* — 260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

From: DEQ Water Quality Certifications
To: Meden, Daniel C CIV USARMY CEMVN (USA); DEQ Water Quality Certifications
Subject: [Non-DoD Source] RE: Pre-filing meeting request for Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee
Date: Monday, April 12, 2021 1:33:34 PM

Thank you for submitting the Clean Water Act (CWA), Section 401 Water Quality Certification (WQC) pre-filing meeting request for the Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee project. The pre-filling request was received April 12, 2021.

LDEQ serves as the certifying authority for the state of Louisiana for CWA Section 401 WQC. At this time we do not require a scheduled pre-filing meeting.

No sooner than 30 days after submittal of the pre-filing meeting request, application may be made to LDEQ for water quality certification. Please submit the ENG 4345 (application or equivalent) and attachments submitted for Section 404 permitting no sooner than May 12, 2021 to:

DEQ-WaterQualityCertifcations@la.gov

From: Meden, Daniel C CIV USARMY CEMVN (USA) [mailto:Daniel.C.Meden@usace.army.mil]
Sent: Friday, April 9, 2021 8:26 AM
To: DEQ Water Quality Certifications <DEQ-WaterQualityCertifications@la.gov>
Subject: Pre-filing meeting request for Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee

Regarding the Pre- Filing Meeting Request requirement, we, the US Army Corps of Engineers, New Orleans District, respectfully make this request:

The proposed project, Morganza to the Gulf, Humble Canal Gate Site Preparation and Initial Levee, is located in Terrebonne Parish, off Highway 55 (Montegut Road) by way of Exxon Company Road, and involves construction of an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The proposed preload levee would tie-in to the existing Morganza to the Gulf of Mexico flood protection levees. Borrow material for the proposed preload levee would be obtained from government-furnished off-site borrow source adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. Additional features include a road extension from the Hilcorp Energy facility to Pointe Barre Road and clearing roadside right-of-way and a +4.0 ft NAVD88 elevated section of Point Barre Road. To support hydrologic connectivity for adjacent wetlands, culverts will be considered in the design of the proposed road extension.

The Applicant is the US Army Corps of Engineers, New Orleans District

Planning, Programs and Programs and Project Management Division
CEMVN-PDN-CEP
7400 Leake Avenue
New Orleans, LA 70118
ATTN: Daniel Meden
Daniel.c.meden@usace.army.mil

504-862-1014

The Agent or Point of Contact is the same as the Applicant.

Regards,

Daniel Meden
Biologist, Coastal Environmental Planning
RPEDS, New Orleans District
Office: 504-862-1014

JOHN BEL EDWARDS
GOVERNOR

CHUCK CARR BROWN, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

AUG 0 3 2021

Mr. Daniel Meden
US Army Corps of Engineers, New Orleans District
Planning, Programs and Project Management Division
CEMVN-PDP-CEP
7400 Leake Avenue
New Orleans, Louisiana 70118

AI No.: 229067
Activity No.: CER20210001

RE: Morganza to the Gulf of Mexico – Humble Canal Floodgate Preload Levee
Water Quality Certification WQC 210601-03
St. Tammany Parish

Dear Mr. Meden:

The Louisiana Department of Environmental Quality, Water Permits Division (LDEQ), has reviewed the application to construct an initial preload levee to prepare Canal Floodgate site for future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal for the purpose of flood risk reduction near Montegut, LA, Terrebonne Parish.

The information provided in the application has been reviewed in terms of compliance with State Water Quality Standards, the approved Water Quality Management Plan and applicable state water laws, rules and regulations. LDEQ determined that the requirements for a Water Quality Certification have been met. LDEQ concludes that the discharge of fill will not violate water quality standards as provided for in LAC 33 :IX.Chapter 11. Therefore, LDEQ hereby issues US Army Corps of Engineers, New Orleans District – Humble Canal Floodgate Preload Levee Water Quality Certification, WQC 210601-03.

Should you have any questions concerning any part of this certification, please contact Elizabeth Hill at (225) 219-3225 or by email at elizabeth.hill@la.gov. Please reference Agency Interest (AI) number 229067 and Water Quality Certification 210601-03 on all future correspondence to this Department to ensure all correspondence regarding this project is properly filed into the Department's Electronic Document Management System.

Sincerely,

Elliott B. Vega
Assistant Seccreetary

c: IO-W

ec: Daniel Meden
daniel.c.meden@usace.army.mil

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0710-003
Expires October 1996

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States, the discharge of dredged of fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application or a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	***2. FIELD OFFICE CODE***	***3. DATE RECEIVED***	***4. DATE APPLICATION COMPLETED***

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME US Army Corps of Engineers, New Orleans District	*8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required)* Same as Applicant
6. APPLICANT'S ADDRESS Planning , Programs and Programs and Project Management Division CEMVN-PDN-CEP 7400 Leake Avenue New Orleans, LA 70118 ATTN: Daniel Meden	***9. AGENT'S ADDRESS***
7. APPLICANT'S PHONE NOS. W/AREA CODE	*10. AGENT'S PHONE NOS. W/AREA CODE*
a. Residence ***b. Business*** (504) 862-1014	*a. Residence* *b. Business*

11. STATEMENT OF AUTHORIZATION

HARPER.MARSHALL.KEVIN.1536114358 Digitally signed by HARPER.MARSHALL.KEVIN.1536114358 Date: 2021.06.03 16:03:46 -05'00'

APPLICANT'S SIGNATURE *DATE*

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

St. Tammany Parish, Louisiana Feasibility Study

13. NAME OF WATERBODY, IF KNOWN (if applicable) *Bayou Patassat, Mile Branch*	*14. PROJECT STREET ADDRESS (if applicable)* *Not applicable. See #16 and #17 below for project coordinates and location.*
15. LOCATION OF PROJECT *St. Tammany* *Louisiana* *COUNTY* *STATE*	

17. DIRECTIONS TO SITES:

The proposed levee and floodwall alignments are contiguous with the existing Slidell levee alignment that crosses LA Hwy 10, west of Eden Isle. See Figure 2 (attached). Land access to the Bayou Patassat channel improvement site is through Bayou Lane or the existing pump station. The Mile Branch channel improvements start at the intersection of Mile Branch and Highway 190, crossing Highway 190 Business, and end at the intersection of Mile Branch and the Tchefuncte River.

18. Nature of Activity (Description of project, include all features.)

The proposed action consists of constructing an initial, or preload levee, to prepare the Humble Canal Floodgate site ("the site," see Figure 2) for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee would provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee would tie-in to existing flood protection levees.

The main project site is approximately 3 miles south of the town of Montegut, LA and 2 miles east of Chauvin, LA in Terrebonne Parish. It is located on Humble Canal approximately 1/3 miles east of the Bayou Terrebonne/Humble Canal intersection (Lat 29 26 08.5, Lon -90 33 44.0). A portion of the project site extends into the Pointe-aux-Chenes State Wildlife Management Area.

The preload levee will consist of north and south alignments on each side of the Humble Canal channel. The south alignment will extend from the channel approximately 500 linear feet and tie-in to existing Reach "I-3" Levee. It will have a maximum elevation of +22 ft NAVD88. The north alignment will extend from the channel approximately 1150 linear feet and tie-in to existing Reach "J-2" Levee. It will have a maximum elevation of +24 ft NAVD88.

The preload levee will be constructed mostly of clay. Some sand and rock and will also be used. Approximately 150,000 cubic yards of fill will be required. The preload will be constructed over a wick drain foundation that will extend within and drain the upper 45 feet of clay foundation. The borrow material shall be of naturally occurring earth materials. The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District's off-site borrow source ("J-1 borrow site," see Figure 3) adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. It is about 5 miles north of the main project site.

For an estimated construction duration of 430 Days (5 day/week; 10 hr/days), the equipment that may be used in the various stages of construction of the preload levee includes, but is not limited to the following:

- Excavators, bulldozers, marsh excavators and buggies, barges, and pontoons will be used in clearing and grubbing, excavation, placement of levee and roadway fill, rock, and gravel.
- Dump trucks will be used to haul fill between the borrow pit and construction site and to haul other construction materials.
- Water or spray trucks will be used to process borrow material.
- Rollers will be used to compact levee and roadway fill.
- Excavator with mounted hollow mandrel will be used to install the vertical wick drains.
- A work boat will be used to install navigation aids in Humble Canal and oversee construction operations from the water when necessary.
- 1/2-ton and 1-ton work trucks will also be used on-site for hauling equipment.

19. Project Purpose (Describe the reason or purpose of the project, (see instruction.)

The purpose of the proposed action is to provide hurricane and storm damage risk reduction for the communities located within the levee system. The overarching goal is to reduce the risk to people and property in the vicinity of Houma, Louisiana. All project benefits are related to hurricane and storm damage risk reduction. No flood damage reduction, navigation, or ecosystem restoration benefits are quantified for this project. The project is needed because of the increasing susceptibility of coastal communities to storm surge due to wetland loss, sea level rise, and subsidence.

The proposed action is associated with the Morganza to the Gulf levee alignment (2013) and subsequent need for additional NEPA for constructible features requiring additional design and impact analysis.

See Figure 1 (attached) for the study area.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The discharge is needed for the construction of the Humble Canal preload levee.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards.

Approximately 150,000 cyd of earthen fill material for construction of the preload levee. This borrow material shall be of naturally occurring earth materials. Materials that are classified in accordance with American Society for Testing and Materials, Unified Soil Classification System (ASTM D 2487) as CL (silty clay or sandy clay) or CH (fat clay) with less than 35% naturally occurring sand content are suitable for use as levee construction material. Materials classified as ML are suitable if blended to produce a material that classifies as CL or CH according to ASTM D 2487. Allowable borrow material cannot have organic content greater than 12 percent by weight, as determined by ASTM D 2974, Method C. The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District's off-site borrow source ("J-1 borrow site") adjacent to Bayou la Cache, off Aragon Road near Montegut, LA.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

The proposed action would result in impacts to open water, fresh-intermediate and brackish marsh, and bottomland hardwood within the footprint.

23. Is Any Portion of the Work Already Complete? Yes _____ No _X___ IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list.

1. Brasseeaux, Hollie White, 207 Brashear Ave., Morgan City, LA 70380 (Physical:1609 Hwy 55)
2. Elissalde, Marcel H., Jr., PO Box 1982, Crystal Beach, TX 77650-1982 (Physical: 1555 Hwy 55)
3. Ellender, Henry J. Heirs LLC, 1537 Richland Ave., Baton Rouge, LA 70808 (Physical: 1559 Hwy 55)
4. Louisiana Department of Wildlife and Fisheries, Comission, Baton Rouge, LA 70363 (Physical: 1113 Cross St.)
5. Nettleton, Cody James
6. Nettleton, Greg Edmund Trust, 1616 Hwy 55, Montegut, LA 70377
7. Nettleton, Jerry J., Jr., 1145 Hwy 55, Montegut, LA 70377 (Physical: 1615 Hwy 55)
8. Nettleton, Kary Paul, 1613 Hwy 55, Montegut, LA 70377

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	***TYPE APPROVAL***	***IDENTIFICATION NO.***	***DATE APPLIED***	***DATE APPROVED***	***DATE DENIED***

To the best of my knowledge the proposed activity described in my permit application complies with and will be conducted in a manner that is consistent with the LA Coastal management Program.
**Would include but is not restricted to zoning, building and flood plain permits.*

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

HARPER.MARSHALL.KEVIN.1536114358 Digitally signed by HARPER.MARSHALL.KEVIN.153611 4358 Date: 2021.06.03 16:04:21 -05'00'

SIGNATURE OF APPLICANT *DATE* *SIGNATURE OF AGENT* *DATE*

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years, or both.

**U.S. :1994-520-478/82018*

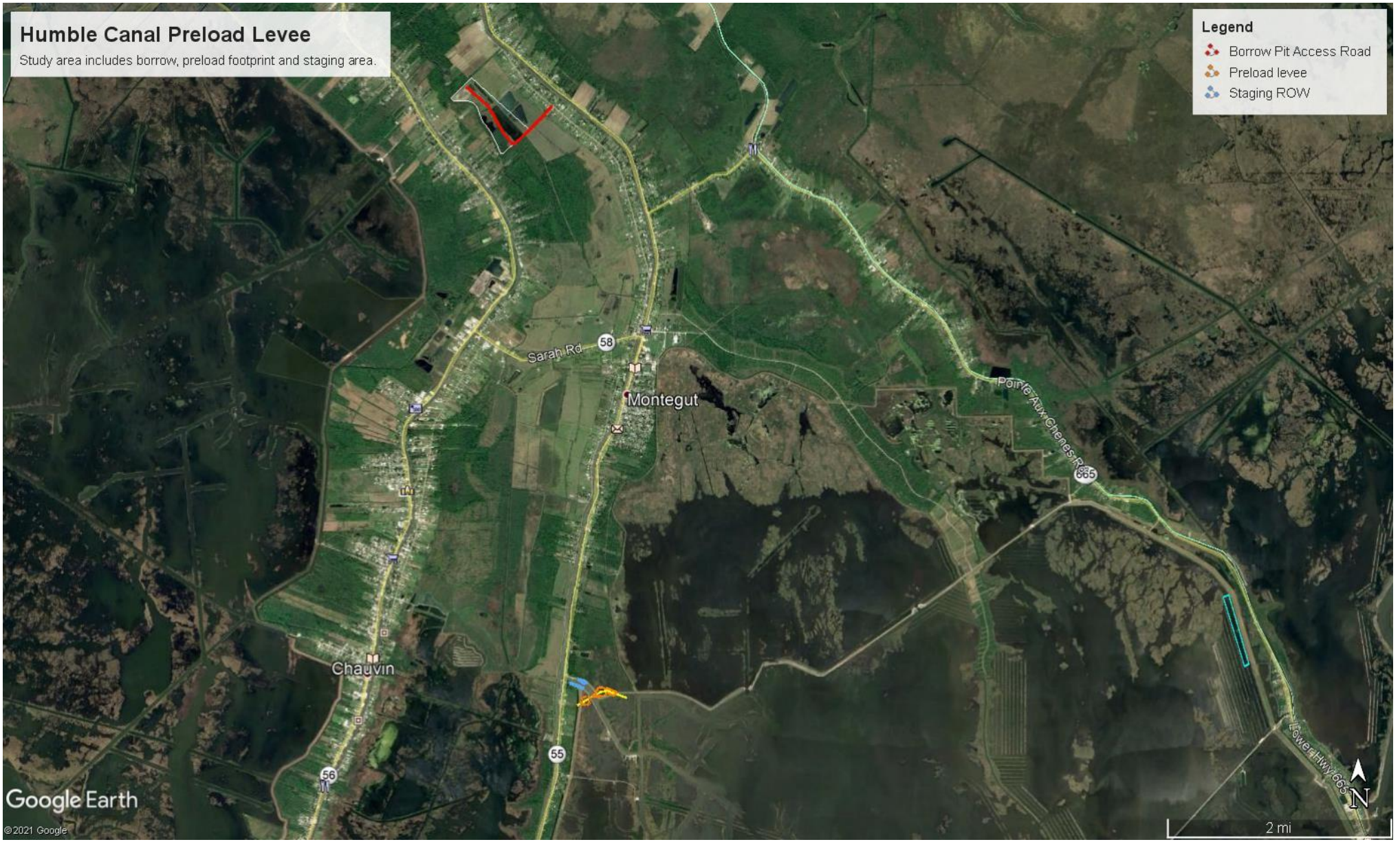
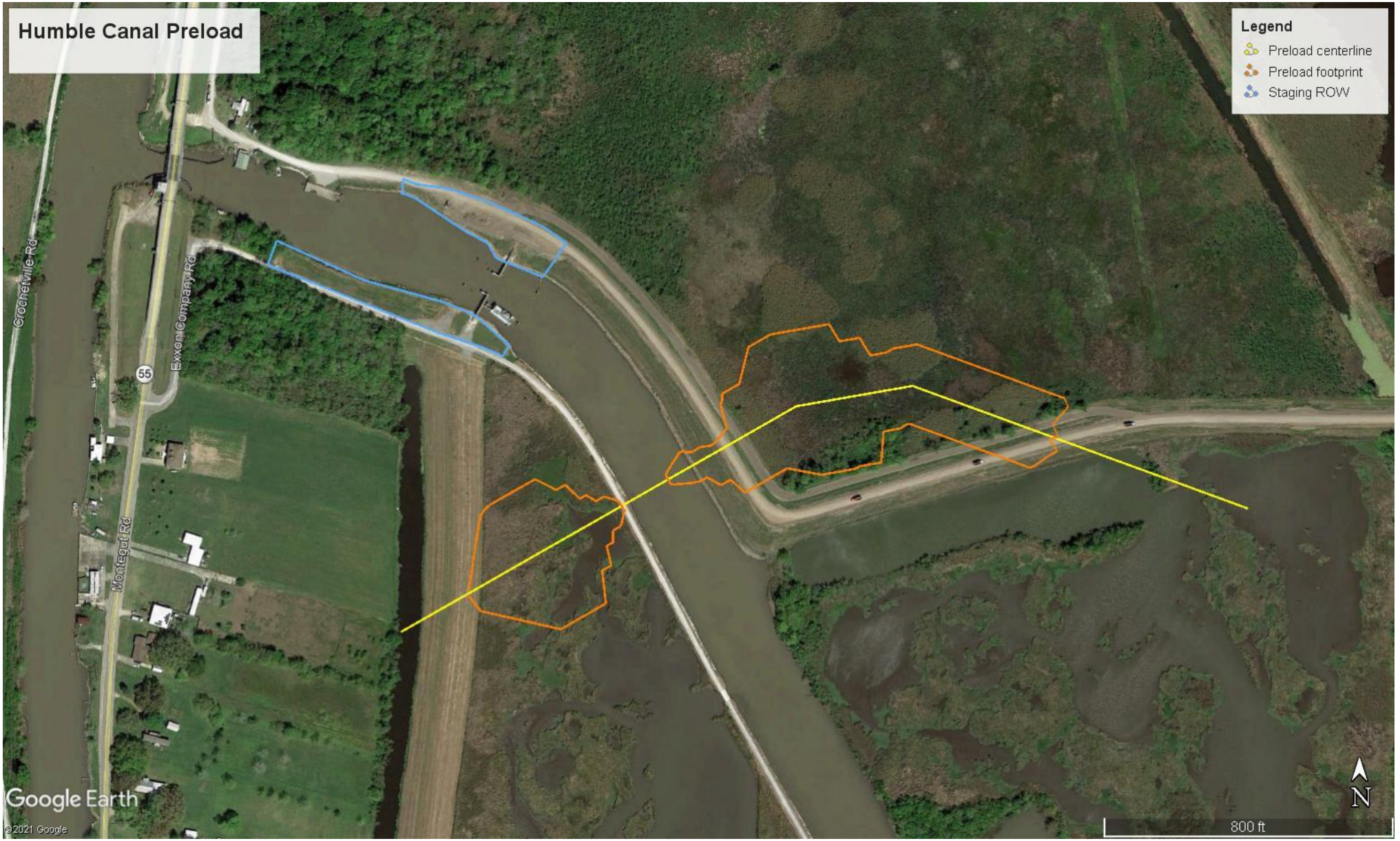


Figure 1. Humble Canal Preload Study Area



. Figure 2. Humble Canal Preload footprint and staging area right-of-way (ROW)

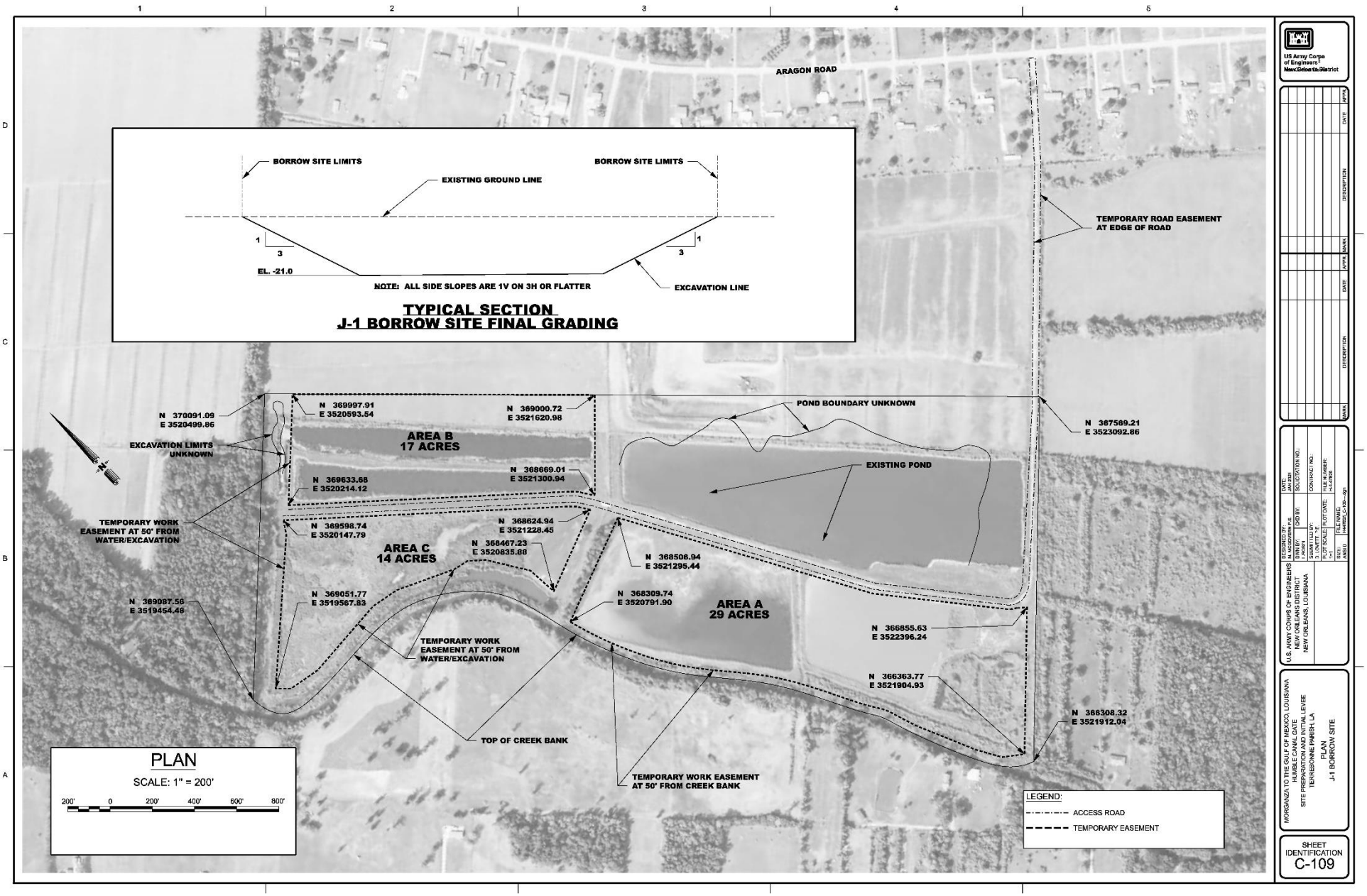


Figure 3. J-1 Borrow site for earthen fill material

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVE
NEW ORLEANS LA 70118-3651

June 10, 2021

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVN-PDS-N

Kristin Sanders, SHPO
LA State Historic Preservation Officer
P.O. Box 44247
Baton Rouge, LA 70804-4241

RE: Section 106 Review Consultation
Undertaking: Humble Canal Preload Construction: Morganza to the Gulf Project, Lafourche Parish, Louisiana (Lat. 29.436 Long. -90.563)
Determination: **No Historic Properties Affected**

Dear Ms. Sanders:

The U.S. Army Corps of Engineers (USACE), New Orleans District, proposes to ready a location for the weight required by construction and performance of a Sector Gate across the Humble Canal, by first constructing a pre-load levee to aid soil compaction. This construction is located near Bayou Terrebonne in Lafourche Parish (Lat. 29.436 Long. -90.563). This effort will also require a previously used borrow source, also near Bayou Terrebonne in Lafourche Parish (Lat. 29.512 Long. -90.577).

Description of the Undertaking

The objective of this project is to construct an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee will provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee will tie-in to existing flood protection levees.

The main project site is approximately 3 miles south of the town of Montegut, LA and 2 miles east of Chauvin, LA in Terrebonne Parish. It is accessed via Highway 55 (Montegut Road) and Exxon Company Road. It is located on Humble Canal approximately 1/3 miles east of the Bayou Terrebonne/Humble Canal intersection). A portion of the project site extends into the Pointe-aux-Chenes State Wildlife Management Area.

The preload levee will consist of north and south alignments on each side of the Humble Canal channel. The south alignment will extend from the channel approximately

500 linear feet and tie-in to existing Reach “I-3” Levee. It will have a maximum elevation of +22 ft NAVD88. The north alignment will extend from the channel approximately 1150 linear feet and tie-in to existing Reach “J-2” Levee. It will have a maximum elevation of +24 ft NAVD88.

The preload levee will be constructed mostly of clay. Some sand and rock and will also be used. Approximately 150,000 cubic yards of fill will be required. The preload will be constructed over a wick drain foundation that will extend within and drain the upper 45 feet of clay foundation.

The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District’s off-site borrow source (“J-1 borrow site”) adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. It is about 5 miles north of the main project site.

Area of Potential Effects (APE)

The preload levee requires a right-of-way, staging area, and borrow material. The totality of these is considered to be the APE, while noting that the borrow source has been previously coordinated for no historic properties affected, and the staging area is on land previously disturbed by construction of the existing levees. Known resources and past investigations within each of the identified APE’s are described below in the “Identification and Evaluation” portion of this letter.

Identification and Evaluation

Background and literature review has been conducted by USACE staff. Historic properties in the project vicinity were identified based on a review of the NRHP database, the Louisiana Cultural Resources Map, historic map research, and a review of cultural resources survey reports.

A site visit was made to the preload and staging areas Right-of-Way by USACE archaeologists Dr. Paul Hughbanks and Mr. Jason Emery. Observation of soil strata was made by walking bankline, observing overturned trees, and other remnants of animal or natural activity. These observations suggested prior soil mixing, and no strata suggesting past cultural remains was visible.

The borrow source has been previously utilized and was coordinated for cultural resources as a part of the Environmental Assessments (EA) #406 and #450. As depicted on Figure #4, the borrow would come primarily from the 29 acres defined as Area A. In addition, borrow would be removed from Area B and the space between existing ponds. Lastly, the access road for excavation and removal will be located between Areas B and C.

EA#406 described a 2.6 mile levee to fill in a gap between previously constructed levees on either side, with the current borrow source being utilized for construction material. The letters of coordination for Section 106 of the National Historic Preservation Act (February 14, 2005 and April 15, 2005), discussed measures to protect prehistoric site 16TR33 located near the levee construction, and that no historic properties existed within the proposed borrow area. Letters of concurrence to the protective measures and the no historic properties for borrow area, were received from

the Chitimacha Tribe of Louisiana (May 16, 2005) and the Louisiana SHPO (March 30, 2005 and May 18, 2005).

The definition and use of the borrow area was revisited again with EA#450. A Louisiana SHPO concurrence for no historic properties affected, was received on October 20, 2008.

Assessment of Effects

The Staging Areas and Preload Area have been previously disturbed by both manmade manipulation of the land, and by natural forces of subsidence and flooding. The borrow source has been previously used, and previously coordinated for no historic properties affected, in letters of coordination for past documents. As such, the USACE has made a determination of no historic properties affected as a result of this undertaking. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE requests your comments within 30 days.

We look forward to your concurrence with this determination. Should you have any questions or need additional information with this undertaking, please contact Dr. Paul Hughbanks, Archaeologist; U.S. Army Corps of Engineers, New Orleans District at paul.j.hughbanks@usace.army.mil; or Jason Emery, Archaeologist and Tribal Liaison at (504) 862-2364 jason.e.emery@usace.army.mil.

Sincerely,

HARPER.MARSHALL.KEVIN.1536114358

Digitally signed by HARPER.MARSHALL.KEVIN.1536114358
Date: 2021.06.09 13:38:33 -05'00'

MARSHALL K. HARPER
Chief, Environmental Planning Branch

CC:File
LA SHPO
An electronic copy of this letter with enclosures will be provided to the Section 106 Inbox, section106@crt.la.gov.

Figure 1. Humble Canal Preload Area and J-1 Borrow Source, Lafourche Parish.

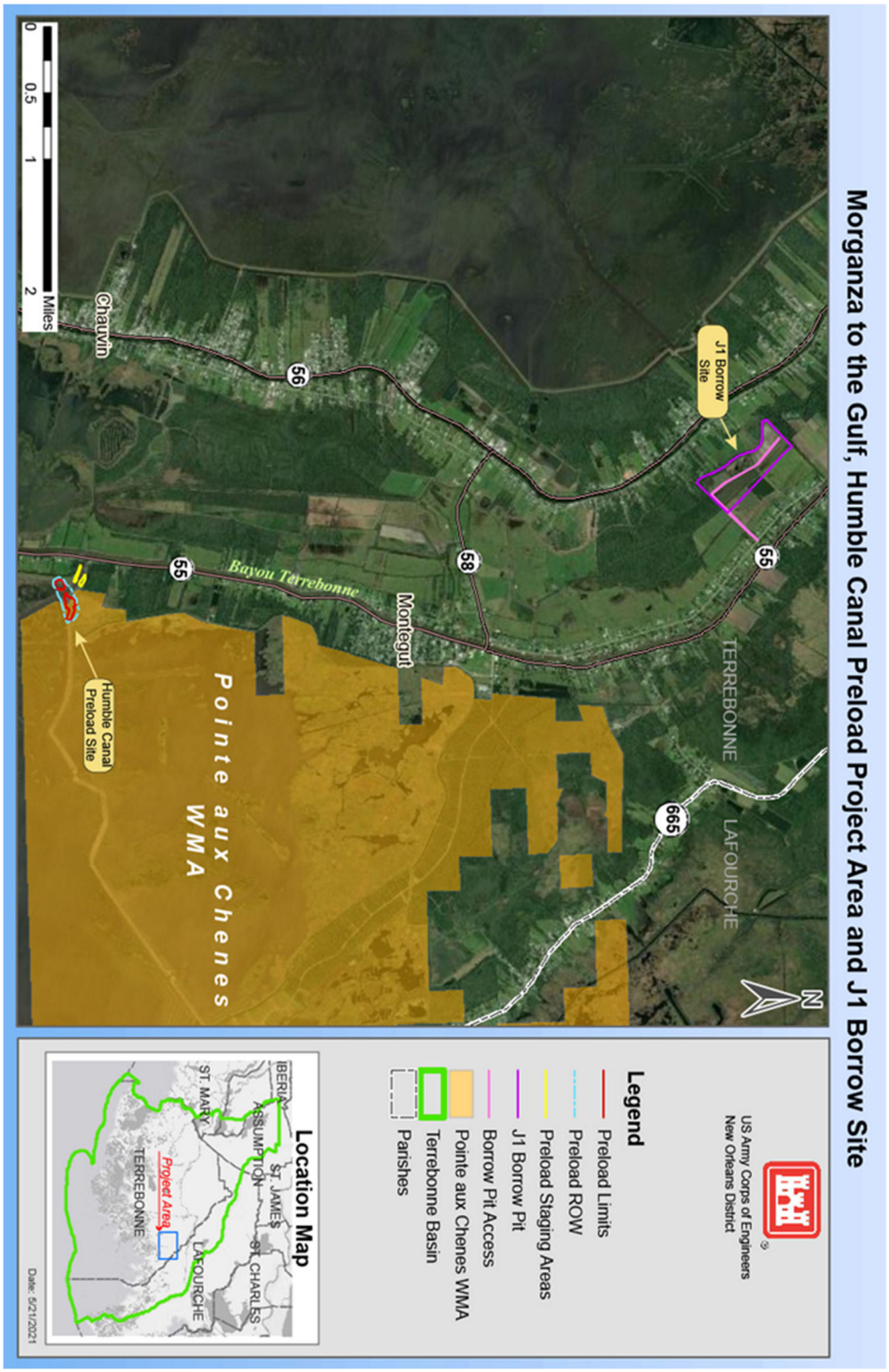


Figure 2. Humble Canal Preload Project Area

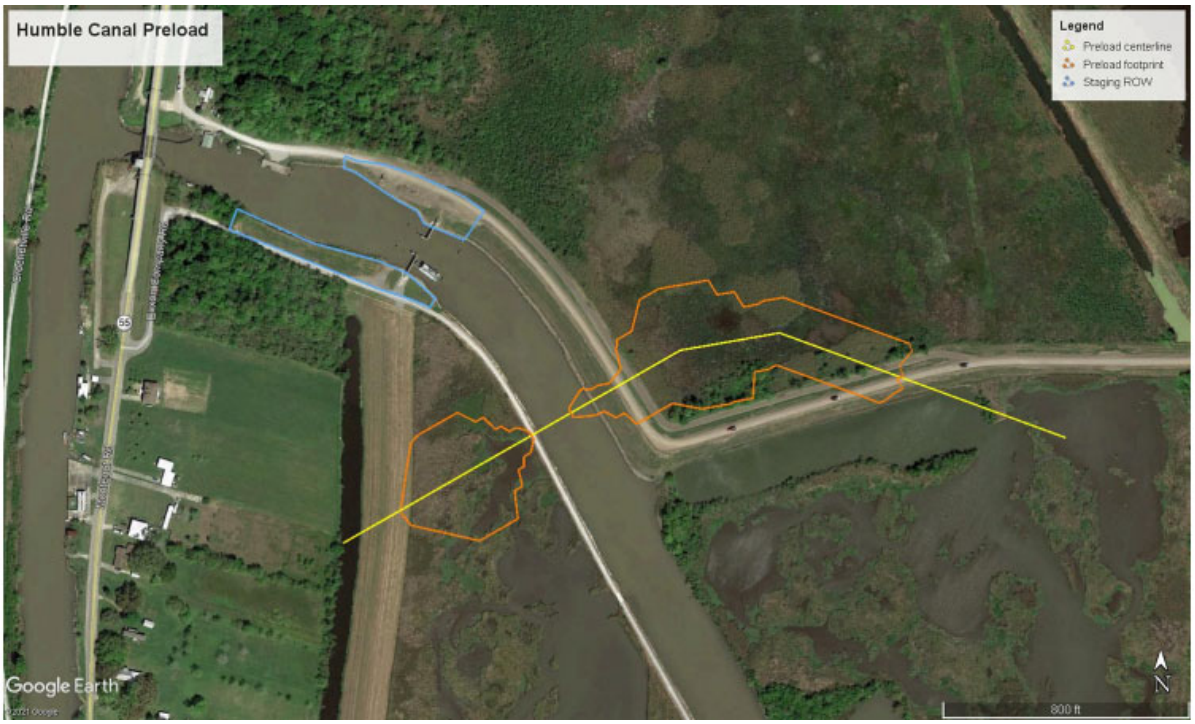
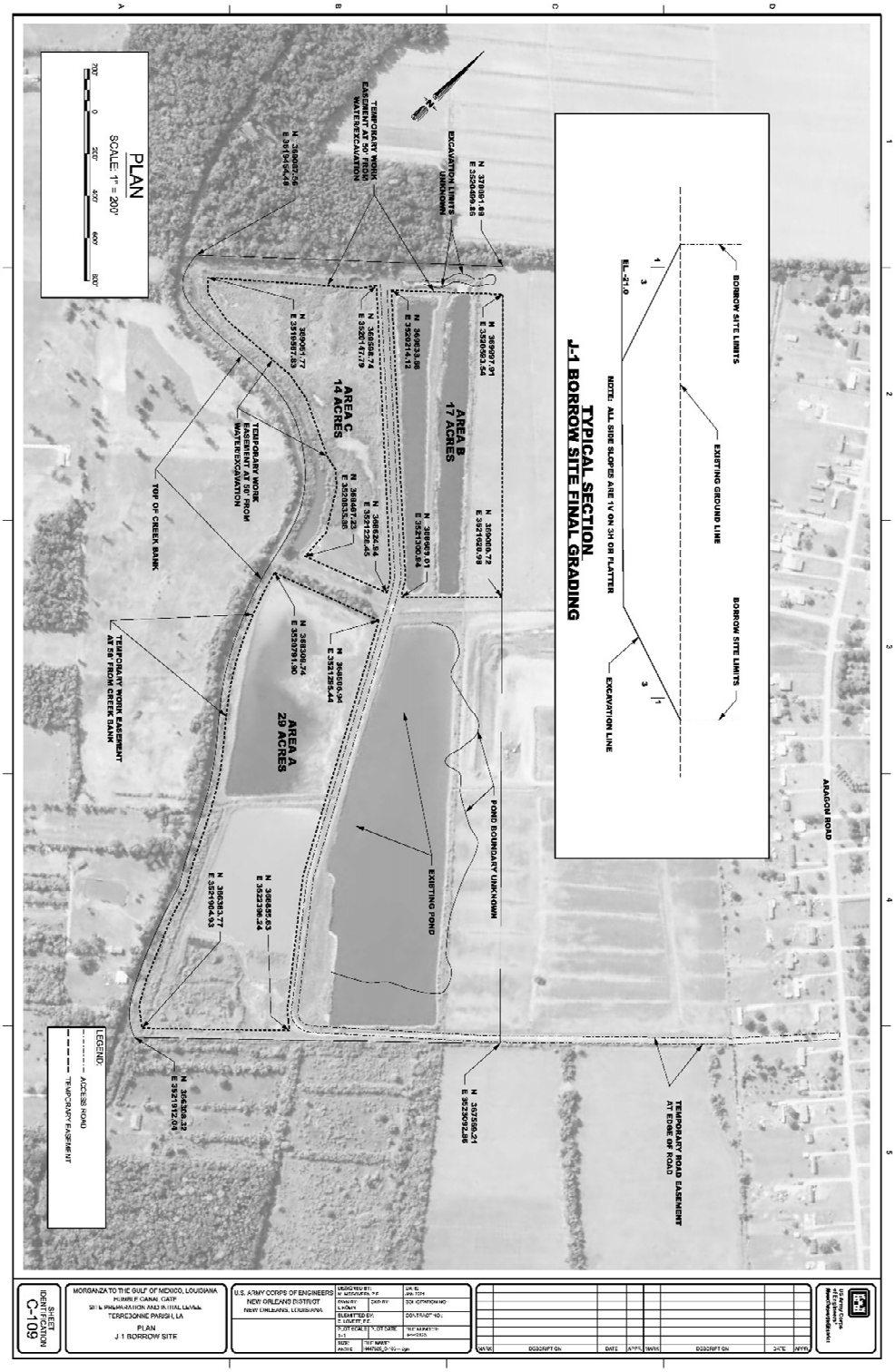


Figure 3. J-1 Borrow Area

Figure 4. J-1 Borrow Area



JOHN BEL EDWARDS
GOVERNOR

THOMAS F. HARRIS
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

June 21, 2021

Daniel Meden
Corps of Engineers- New Orleans District
7400 Leake Avenue
New Orleans, LA 70118
Via email: Daniel.C.Meden@usace.army.mil

RE: **C20130001 Mod 02,** Coastal Zone Consistency
New Orleans District, Corps of Engineers
Direct Federal Action
Morganza to the Gulf Project Mod 02 - Humble Canal Preload Project
Terrebonne Parish

Dear Mr. Meden:

The above referenced project modification has been reviewed for consistency with the Louisiana Coastal Resources Program in accordance with Section 307 (c) of the Coastal Zone Management Act of 1972, as amended. The project modification, as proposed in this application, is consistent with the LCRP.

If you have any questions concerning this determination please contact Jim Bondy of the Consistency Section at (225) 342-3870 or james.bondy@la.gov.

Sincerely,

/S/ Charles Reulet
Administrator
Interagency Affairs/Field Services Division

CR/MH/jab

cc: Dave Butler, LDWF

From: James Bondy
To: Meden, Daniel C CIV USARMY CEMVN (USA)
Subject: [Non-DoD Source] C20130001 Mod 02 COE-NOD - Humble Canal Preload Project, Terrebonne Parish
Date: Thursday, May 27, 2021 9:38:29 AM

Daniel,

I wouldn't look for this one to happen real fast. After looking at comments from other agencies on the original authorization and on Mod 01, I am expecting comments on Mod 02… which will slow process down. The 60-Day deadline is July 9th, so we will definitely have it by then.

Thanks,
Jim

From: Meden, Daniel C CIV USARMY CEMVN (USA) [mailto:Daniel.C.Meden@usace.army.mil]
Sent: Thursday, May 27, 2021 8:45 AM
To: James Bondy <James.Bondy@LA.GOV>
Subject: Follow-up on Humble Canal CZC Mod

Good morning, Jim!

How are you today? I wanted to check in with you on the status of the coastal zone consistency modification for Humble Canal since we had previously had a determination done for the 2013 MTG alignment.

Thanks!

Daniel Meden
Biologist, Coastal Environmental Planning
RPEDS, New Orleans District
Office: 504-862-1014

(authorized or unauthorized) have no explicit or implicit expectation of privacy. Any or all uses of this system and all files on this system may be intercepted, monitored, recorded, copied, audited, inspected, and disclosed to Department of Natural Resources and law enforcement personnel. By using this system the user consents to such interception, monitoring, recording, copying, auditing, inspection, and disclosure at the discretion of DNR.

From: Meden, Daniel C CIV USARMY CEMVN (USA)
To: James Bondy
Cc: Wilkinson Wolfson, Laura L CIV USARMY CEMVN (USA)
Subject: Coastal Zone Consistency Determination for Humble Canal Preload
Date: Friday, May 7, 2021 3:54:00 PM
Attachments: C20130001 MTG; Pages from Appendices A-M for RPEIS for MtoG 5-16-13.pdf
J1 Borrow Pit Access Road.kmz
PRELOAD NORTH 20210505.kmz

Good evening, Jim!

I hope everything is going well in your neck of the woods. Things are really starting to heat up as we head into the heat of early summer.

Please see the below project information for the Humble Canal Preload project, which falls within the levee alignment of the Morganza to the Gulf project (Revised Programmatic EIS in 2013). I'm wanting to see if we could clear this under the prior Coastal Zone Consistency determination (C2013001) before sending a new cover letter and list of guidelines. Otherwise I can cover each guideline and respond to each accordingly. I have also included kmz's of the preload footprint ("Preload North 20210505") and the access road owned by our Non-Federal Sponsor, Terrebonne Levee Conservation District ("J1 Borrow Access Road")

Thanks!

"The proposed action consists of constructing an initial, or preload levee, to prepare the Humble Canal Floodgate site ("the site,") for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee would provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee would tie-in to existing flood protection levees.

The main project site is approximately 3 miles south of the town of Montegut, LA and 2 miles east of Chauvin, LA in Terrebonne Parish. It is located on Humble Canal approximately 1/3 miles east of the Bayou Terrebonne/Humble Canal intersection (Lat 29 26 08.5, Lon -90 33 44.0). A portion of the project site extends into the Pointe-aux-Chenes State Wildlife Management Area.

The preload levee will consist of north and south alignments on each side of the Humble Canal channel. The south alignment will extend from the channel approximately 500 linear feet and tie-in to existing Reach "I-3" Levee. It will have a maximum elevation of +22 ft NAVD88. The north alignment will extend from the channel approximately 1150 linear feet and tie-in to existing Reach "J-2" Levee. It will have a maximum elevation of +24 ft NAVD88.

The preload levee will be constructed mostly of clay. Some sand and rock and will also be used. Approximately 150,000 cubic yards of fill will be required. The preload will be constructed over a wick drain foundation that will extend within and drain the upper 45 feet of clay foundation. The borrow material shall be of naturally occurring earth materials. Materials that are classified in accordance with American Society for Testing and Materials,

Unified Soil Classification System (ASTM D 2487) as CL (silty clay or sandy clay) or CH (fat clay) with less than 35% naturally occurring sand content are suitable for use as levee construction material. Materials classified as ML are suitable if blended to produce a material that classifies as CL or CH according to ASTM D 2487. Allowable borrow material cannot have organic content greater than 12 percent by weight, as determined by ASTM D 2974, Method C. The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District's off-site borrow source ("J-1 borrow site") adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. It is about 5 miles north of the main project site.

For an estimated construction duration of 430 Days (5 day/week; 10 hr/days), the equipment that may be used in the various stages of construction of the preload levee includes, but is not limited to the following:

- Excavators, bulldozers, marsh excavators and buggies, barges, and pontoons will be used in clearing and grubbing, excavation, placement of levee and roadway fill, rock, and gravel.
- Dump trucks will be used to haul fill between the borrow pit and construction site and to haul other construction materials.
- Water or spray trucks will be used to process borrow material.
- Rollers will be used to compact levee and roadway fill.
- Excavator with mounted hollow mandrel will be used to install the vertical wick drains.
- A work boat will be used to install navigation aids in Humble Canal and oversee construction operations from the water when necessary.

1/2-ton and 1-ton work trucks will also be used on-site for hauling equipment."

Daniel Meden
Biologist, Coastal Environmental Planning
RPEDS, New Orleans District
Office: 504-862-1014

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVE
NEW ORLEANS LA 70118-3651

June 10, 2021

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVN-PDS-N

Kristin Sanders, SHPO
LA State Historic Preservation Officer
P.O. Box 44247
Baton Rouge, LA 70804-4241

No known historic properties will be affected by this undertaking. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.

Kristin P. Sanders

Kristin P. Sanders
State Historic Preservation Officer
Date 07/07/2021

RE: Section 106 Review Consultation
Undertaking: Humble Canal Preload Construction: Morganza to the Gulf Project, Lafourche Parish, Louisiana (Lat. 29.436 Long. -90.563)
Determination: **No Historic Properties Affected**

Dear Ms. Sanders:

The U.S. Army Corps of Engineers (USACE), New Orleans District, proposes to ready a location for the weight required by construction and performance of a Sector Gate across the Humble Canal, by first constructing a pre-load levee to aid soil compaction. This construction is located near Bayou Terrebonne in Lafourche Parish (Lat. 29.436 Long. -90.563). This effort will also require a previously used borrow source, also near Bayou Terrebonne in Lafourche Parish (Lat. 29.512 Long. -90.577).

Description of the Undertaking

The objective of this project is to construct an initial, or preload levee, to prepare the site for the future construction of a floodgate, associated floodwalls, and earthen levees across Humble Canal. The preload levee will provide a good base and working surface for future construction by promoting settlement and strengthening the foundations of the future levee and floodwalls. The preload levee will tie-in to existing flood protection levees.

The main project site is approximately 3 miles south of the town of Montegut, LA and 2 miles east of Chauvin, LA in Terrebonne Parish. It is accessed via Highway 55 (Montegut Road) and Exxon Company Road. It is located on Humble Canal approximately 1/3 miles east of the Bayou Terrebonne/Humble Canal intersection). A portion of the project site extends into the Pointe-aux-Chenes State Wildlife Management Area.

The preload levee will consist of north and south alignments on each side of the Humble Canal channel. The south alignment will extend from the channel approximately

500 linear feet and tie-in to existing Reach “I-3” Levee. It will have a maximum elevation of +22 ft NAVD88. The north alignment will extend from the channel approximately 1150 linear feet and tie-in to existing Reach “J-2” Levee. It will have a maximum elevation of +24 ft NAVD88.

The preload levee will be constructed mostly of clay. Some sand and rock and will also be used. Approximately 150,000 cubic yards of fill will be required. The preload will be constructed over a wick drain foundation that will extend within and drain the upper 45 feet of clay foundation.

The borrow material used to construct the preload levee will be hauled in from Terrebonne Levee and Conservation District’s off-site borrow source (“J-1 borrow site”) adjacent to Bayou la Cache, off Aragon Road near Montegut, LA. It is about 5 miles north of the main project site.

Area of Potential Effects (APE)

The preload levee requires a right-of-way, staging area, and borrow material. The totality of these is considered to be the APE, while noting that the borrow source has been previously coordinated for no historic properties affected, and the staging area is on land previously disturbed by construction of the existing levees. Known resources and past investigations within each of the identified APE’s are described below in the “Identification and Evaluation” portion of this letter.

Identification and Evaluation

Background and literature review has been conducted by USACE staff. Historic properties in the project vicinity were identified based on a review of the NRHP database, the Louisiana Cultural Resources Map, historic map research, and a review of cultural resources survey reports.

A site visit was made to the preload and staging areas Right-of-Way by USACE archaeologists Dr. Paul Hughbanks and Mr. Jason Emery. Observation of soil strata was made by walking bankline, observing overturned trees, and other remnants of animal or natural activity. These observations suggested prior soil mixing, and no strata suggesting past cultural remains was visible.

The borrow source has been previously utilized and was coordinated for cultural resources as a part of the Environmental Assessments (EA) #406 and #450. As depicted on Figure #4, the borrow would come primarily from the 29 acres defined as Area A. In addition, borrow would be removed from Area B and the space between existing ponds. Lastly, the access road for excavation and removal will be located between Areas B and C.

EA#406 described a 2.6 mile levee to fill in a gap between previously constructed levees on either side, with the current borrow source being utilized for construction material. The letters of coordination for Section 106 of the National Historic Preservation Act (February 14, 2005 and April 15, 2005), discussed measures to protect prehistoric site 16TR33 located near the levee construction, and that no historic properties existed within the proposed borrow area. Letters of concurrence to the protective measures and the no historic properties for borrow area, were received from

the Chitimacha Tribe of Louisiana (May 16, 2005) and the Louisiana SHPO (March 30, 2005 and May 18, 2005).

The definition and use of the borrow area was revisited again with EA#450. A Louisiana SHPO concurrence for no historic properties affected, was received on October 20, 2008.

Assessment of Effects

The Staging Areas and Preload Area have been previously disturbed by both manmade manipulation of the land, and by natural forces of subsidence and flooding. The borrow source has been previously used, and previously coordinated for no historic properties affected, in letters of coordination for past documents. As such, the USACE has made a determination of no historic properties affected as a result of this undertaking. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE requests your comments within 30 days.

We look forward to your concurrence with this determination. Should you have any questions or need additional information with this undertaking, please contact Dr. Paul Hughbanks, Archaeologist; U.S. Army Corps of Engineers, New Orleans District at paul.j.hughbanks@usace.army.mil; or Jason Emery, Archaeologist and Tribal Liaison at (504) 862-2364 jason.e.emery@usace.army.mil.

Sincerely,

HARPER.MARSHALL.KEVIN.1536114358

Digitally signed by HARPER.MARSHALL.KEVIN.1536114358
Date: 2021.06.09 13:38:33 -05'00'

MARSHALL K. HARPER
Chief, Environmental Planning Branch

CC:File
LA SHPO
An electronic copy of this letter with enclosures will be provided to the Section 106 Inbox, section106@crt.la.gov.

From:	David Franks
To:	Hughbanks, Paul J CIV USARMY CEMVN (USA)
Subject:	[Non-DoD Source] RE: USACE Section 106: Finding of No Historic Properties Affected for Humble Canal Preload Levee and Borrow Source, Lafourche Parish
Date:	Tuesday, June 15, 2021 8:40:12 AM

The Seminole Nation has no objections.

From: Hughbanks, Paul J CIV USARMY CEMVN (USA) [mailto:Paul.J.Hughbanks@usace.army.mil]
Sent: Wednesday, June 9, 2021 3:44 PM
To: David Franks <Franks.D@sno-nsn.gov>
Cc: Emery, Jason A CIV USARMY CEMVN (USA) <Jason.A.Emery@usace.army.mil>
Subject: USACE Section 106: Finding of No Historic Properties Affected for Humble Canal Preload Levee and Borrow Source, Lafourche Parish

Hello:

Attached, please find a signed Finding of No Historic Properties Affected for construction of a preload area related to the Humble Canal Floodgate, Louisiana.

Please notify the Archaeologist or District Tribal Liaison with questions or comments. Their contact information follows: Dr. Paul Hughbanks, (504) 862-1100 or Paul.J.Hughbanks@usace.army.mil; Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or jason.a.emery@usace.army.mil.

Sincerely,
Paul Hughbanks
Archaeologist, Natural/Cultural Resources Analysis RPEDS, New Orleans District
Office: 504-862-1100

From: Lindsey Bilyeu
To: Hughbanks, Paul J CIV USARMY CEMVN (USA)
Subject: [Non-DoD Source] RE: USACE Section 106: Finding of No Historic Properties Affected for Humble Canal Preload Levee and Borrow Source, Lafourche Parish
Date: Thursday, July 8, 2021 2:41:48 PM

Paul,

The Choctaw Nation of Oklahoma thanks the USACE, New Orleans District, for the correspondence regarding the above referenced project. Lafourche Parish lies outside of our area of historic interest. The Choctaw Nation Historic Preservation Department respectfully defers to the other Tribes that have been contacted.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu, MS
Senior Section 106 Reviewer
Choctaw Nation of Oklahoma
Historic Preservation Department
Office: (580) 924-8280
Cell: (580) 740-9624

From: Hughbanks, Paul J CIV USARMY CEMVN (USA) <Paul.J.Hughbanks@usace.army.mil>
Sent: Wednesday, June 9, 2021 3:47 PM
To: Lindsey Bilyeu <lbilyeu@choctawnation.com>; Ian Thompson <ithompson@choctawnation.com>
Cc: Emery, Jason A CIV USARMY CEMVN (USA) <Jason.A.Emery@usace.army.mil>
Subject: USACE Section 106: Finding of No Historic Properties Affected for Humble Canal Preload Levee and Borrow Source, Lafourche Parish

Hello:

Attached, please find a signed Finding of No Historic Properties Affected for construction of a preload area related to the Humble Canal Floodgate, Louisiana.

Please notify the Archaeologist or District Tribal Liaison with questions or comments. Their contact information follows: Dr. Paul Hughbanks, (504) 862-1100 or Paul.J.Hughbanks@usace.army.mil; Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or jason.a.emery@usace.army.mil.

Sincerely,
Paul Hughbanks
Archaeologist, Natural/Cultural Resources Analysis RPEDS, New Orleans District
Office: 504-862-1100