United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

July 23, 2021

9043.1
ER21/0230

Mrs. Amy Dixon
CEMVN-PMR-C
7400 Leake Ave.
New Orleans, LA 70118-3651

RE: St. Tammany Parish, Louisiana Feasibility Study Integrated Draft Feasibility Report with Draft Environmental Impact Statement

Dear Ms. Dixon:

The U.S. Department of the Interior (Department) has reviewed the Integrated Draft Feasibility Report/Draft Environmental Impact Statement (Integrated Draft Report/DEIS) and offer the following comments in accordance with the provisions of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401,as amended; 16 U.S.C. 661 et seq.).

General Comments

The Fish and Wildlife Service (Service) continues to recommend that construction features of theproposed project not be located within Big Branch Marsh National Wildlife Refuge (NWR). If the U.S. Army Corps of Engineers (USACE) determines that this option is not feasible, close coordination with the Service will be necessary, throughout the planning, construction, and mitigation design and monitoring phases of the project to minimize impacts to that refuge to the maximum extent practicable.

As discussed in Project Delivery Team (PDT) meetings, levee alignments should avoid and/or minimize intercepting drainage and causing flooding of forested wetlands. To avoid such impacts, an interior borrow canal may be needed to maintain drainage to areas that would otherwise be impacted. The Service recommends that the USACE assess whether such a canal would be needed and provide that information in the subject document. In addition, any planned floodgates should be designed to efficiently handle the drainage needs and avoid increased flooding duration and depths for the large protected area north of any levee alignments. A description of the floodgate designs and effects to flooding duration and depths should also be included in the Integrated Draft Report/DEIS.

The Service's FWCA Report and recommendations with the USACE's responses should be incorporated in the main document (FWCA recommendations) and appendices (FWCA Report) of the Integrated Draft Report/DEIS. The Service recommends revising the Integrated Draft Report/DEIS accordingly. Because the FWCA Report and recommendations were not properly incorporated in the Integrated Draft Report/DEIS and without sufficient impacts analyses (see below Page 52, Section 4 comment), the Service does not find the Integrated Draft Report/DEIS adequate and does not believe the reporting requirements of Section 2(b) of the FWCA were met.

The Service is unable to complete impacts analyses because private land access is still unavailable at this time. The Service respectfully requests that the USACE consider allowing time to determine the project impacts and to resubmit an Integrated Draft Report/DEIS for a second public review once impacts analyses and a signed draft FWCA Report and recommendations are available, which would be fully incorporated into the Integrated Draft Report/DEIS.

Specific Comments

Page 23, Section 3.1 Existing Conditions (Affected Environment) Study Area: As part of a planning initiative, the Louisiana Department of Wildlife and Fisheries, Wildlife Diversity Program, identified 22 habitat types occurring within St. Tammany Parish and analyzed the status of those habitat types (Tables 1-3). Of the 22 vegetative habitat types identified, 15 are classified at wetlands, of which all are in a state of decline.

Table 1. Status of wetland vegetative types in St. Tammany Parish (source: Louisiana Department of Wildlife and Fisheries, 1999 and St. Tammany New Directions 2025 web site).

Wetland Vegetative Type	Abundance/Status	Trend
Fresh Marsh	Rare	Stable/Very Slowly Declining
Intermediate Marsh	Common	Stable/Very Slowly Declining
Brackish Marsh	Uncommon	Stable/Very Slowly Declining
Hillside Seepage Bog	Exceedingly Rare	Declining
Bald Cypress/Bald Cypress-Tupelo Swamp	Common	Slowly Declining
Pond Cypress/Blackgum Swamp	Rare (old growth very rare)	Slowly Declining
Bottomland Hardwood Forest	Common (old growth very rare)	Slowly Declining
Small Stream Forest	Common (old growth very rare)	Declining
Bayhead Swamp	Common (poor quality)	Declining
Slash Pine-Pond Cypress/Hardwood Forest	Critically Imperiled	Declining
Slash Pine/Wiregrass	Rare	Probably Declining
Gum Pond	Uncommon (old growth very rare)	Slowly Declining
Shrub Swamp	Uncommon	Slowly Declining

Forested Seep	Rare	Declining
Longleaf Pine Flatwood Savannah	Rare	Declining

Table 2. Status of aquatic vegetative types in St. Tammany Parish (source: Louisiana Department of Wildlife and Fisheries, 1999 and St. Tammany New Directions 2025 web site).

Aquatic Vegetative Type	Abundance/Status	Trend
Submersed Estuarine Grassbeds	Very Rare	May Be Slowly Increasing
Fresh Floating/Submersed Vegetation	Common	Stable

Table 3. Status of upland vegetative types in St. Tammany Parish (source: Louisiana Department of Wildlife and Fisheries, 1999 and St. Tammany New Directions 2025 web site).

Upland Vegetative Type	Abundance/Status	Trend
Hardwood Slope Forest	Very Rare	Declining
Mixed Hardwood-Loblolly Forest	Uncommon	Declining
Shortleaf Pine/Oak-Hickory Forest	Critically Imperiled	Declining
Longleaf Pine Flatwoods	Critically Imperiled	Rapidly Declining
Upland Longleaf Pine Forest	Critically Imperiled	Rapidly Declining

Currently, this section of the Integrated Draft Report/DEIS only contains a figure (Figure 3-1) depicting habitat data for Tammany Parish with no analysis of their associated abundance or trends. Because this section of the Integrated Draft Report/DEIS describes baseline conditions within thestudy area, the Service recommends that the above inventory of the existing fish and wildlife habitat types, and associated abundance and trends, be included within this section to provide additional information on current conditions within the Parish.

<u>Page 29, Section 3.2.1 Natural Environment:</u> The Service conducted a preliminary habitat typesdelineation using National Wetlands Inventory (NWI) maps and Multi-Resolution Land Characteristics (MRLC) National Land Cover Data (NLCD) for the Tentatively Selected Plan (TSP) footprint. Habitat types identified include: 1) bottomland hardwoods (BLH), 2) scrub/shrub, 3) fresh marsh, 4) intermediate marsh, 5) pine/hardwood, and 6) pine savannah. The subject section of the Integrated Draft Report/DEIS did not identify (or describe) pine/hardwood and pine savannah habitats as occurring within the project area. We recommendrevising the Integrated Draft Report/DEIS accordingly. These habitat types may be refined based on findings during upcoming field visits conducted by the Service.

<u>Page 33, Section 3.2.1.6 Threatened, Endangered and Protected Species:</u> This section referencesa January 31, 2020, letter that the Service provided to the USACE regarding endangered, threatened, at-risk, and protected species occurring within the study area. This

section includes the bottlenose dolphin; however, this species was not identified in the Service's letter. The National Marine Fisheries Service (NMFS) likely requested that impacts to this species be addressed. We recommend revising this section for clarity to identify which species are under the Service's purview and which are under the NMFS' purview.

Page 52, Section 4 Formulation of Alternative Plans, Step 2 of Planning Process: Identification of Existing Conditions and Page 53, Step 6 of the Planning Process: Select TSP and then a Recommended Plan: Section 4 states that "the PDT documented the relevant existing conditionsrelated to….the affected environment by looking at historic trends and potential changes that would happen in the future if no actions were taken." Step 6 states "…the selection of the TSP from the Final Array of Alternatives was informed by among other things…environmental impacts and mitigation." The Service does not believe that existing and future conditions of fishand wildlife resources, or mitigation requirements, have been adequately addressed within the Integrated Draft Report/DEIS. This project is following the tight timeline of the SMART Planning process. Large-scale projects, such as this one, require some time to inventory current/baseline conditions of fish and wildlife resources and to adequately assess and describe future conditions of those resources under both the future with and future without project scenarios. Currently, the Service has not been able to undertake an adequate analysis within the time allotted due to reasons beyond the Service's control; these reasons have been shared and communicated with USACE. First, site visits are essentialto gathering the necessary data needed to assess and quantify impacts to fish and wildlife resources, which then allows for formulation of mitigation requirements. To date, the Service has not received Right of Entry (ROE) permission from the USACE, which is necessary for the Service to conduct these site visits on private land. Second, the tools for analyzing all the affected habitat types that needed to be evaluated were not available and had to be developed. Without the proper tools, the risk and uncertainty of impacts and mitigation cost based on desktop analysis using a "surrogate" habitat are unknown and likely very high. The time to develop the correct tools was reasonable but delayed possible analysis (had ROE been available) beyond project deadlines. Based on this information, the Service requests additional time to complete the necessary work to adequately assess fish and wildlife resource impacts andprovide the USACE the mitigation requirements to offset these impacts.

Page 71, Section 4.2.2 Structural Measure Cost Estimates and Appendix C, Section 7 Direct andIndirect Rough Order of Magnitude Mitigation Estimates: This section states that "Mitigation costs due to unavoidable habitat impacts were calculated for each alternative and measure." Because the current quality of fish and wildlife resources, and future impacts to those resources,have not yet been quantified under both the future with and future without project scenarios, it isunclear how mitigation costs associated with direct and indirect impacts were calculated for costestimates. The Service recommends that the USACE provide a detailed description of how mitigation cost estimates were derived without completed standard quantification models (i.e., HSIs and WVAs).

Page 128, 5.3.1.1 Wetland Resources, TSP, South Slidell and West Slidell Levee, Direct, Indirect, and Cumulative Impacts: The Integrated Draft Report/DEIS recognizes that pine/hardwood and pine savannah habitats occur within the project area. This section, however,only identifies and discusses direct impacts associated with marsh, swamp, and

BLH habitats.

Direct impacts associated with all habitat types occurring within the project area should be quantified and described.

Indirect impacts associated with the proposed levee are not adequately discussed, and the Servicecontinues to recommend that a detailed description of those impacts be included in this section. For example, the hydrologic changes associated with the new levee and structures, as it relates tonormal drainage patterns from rainfall events, should be addressed. There is an overly general statement saying habitats will shift and adjust to some change (either an increase or decrease) in water levels adjacent to the levee. There is no description on the quantity of water level change, where the change is expected, or what the ramifications of those changes would be to the environment. In addition, the Integrated Draft Report/DEIS does not describe how the indirect impact area was identified and delineated. The USACE delineated a preliminary indirect impactarea early on in the planning process for screening purposes. Since that time, a Hydrology and Hydraulic (H&H) model has been completed; however, modifications to the indirect impact area based on the results of that model have not occurred. The Service recommends that a descriptionof how the extent of the preliminary indirect impact area was identified and why modifications tothat area are not necessary as a result of the H&H model outputs.

This section also states that "Cumulative effects are anticipated to be shifts in vegetation as drainage and flow across the area changes." A detailed description of those anticipated changesshould be included. In addition, there is no analysis of the drainage basin level effects to the system from the construction of floodgates, floodwalls, or levees (e.g., cumulative effects of existing levees [or other relevant existing or foreseeable projects] in conjunction with the proposed levee on basin-wide hydrology). The Service recommends that this information be included in this section.

<u>Page198, Section 6.3 Risk and Uncertainty:</u> This section does not mention the risk and uncertainty of using a rough order of magnitude (ROM) desktop analysis for project impacts andmitigation cost. The desktop analysis used a "surrogate" habitat for the ROM estimate of pine savannah and pine/hardwood habitat, which was not fully explained. As mentioned above, the habitat analysis tools for these habitat types had to be developed. Without quantifying the habitat impacts with the newly developed tools, the uncertainty of the results being within the ROM estimate is extremely high and unknown. The Service recommends addressing this issue in the Risk and Uncertainty Section.

<u>Page 154, Section 5.3.1.7, Threatened, Endangered and Protected Species:</u> This section containsthe USACE's determination that the proposed project is "not likely to adversely affect" federallylisted threatened and endangered species or their critical habitat. A Biological Assessment, however, has not been prepared and supporting documentation to support this determination has not yet been provided to the Service. Endangered Species Act (ESA) section 7 consultation is ongoing to address potential impacts to the West Indian manatee, Alabama heelsplitter mussel, Louisiana quillwort, Gulf sturgeon (and its critical habitat), gopher tortoise, ringed map turtle, and red-cockaded woodpecker. We recommend this

section be revised accordingly.

Page 36, Appendix C Environmental, USACE Responses to the Service's Recommendations: The Service previously provided the USACE with preliminary FWCA recommendations. One of those recommendations was to provide the Service the operation plan of the water control structures under both the coastal storm and heavy rainfall event scenarios.

In response to that recommendation, the USACE stated "Gates and pump stations would onlybe operated during tropical storms, high water, and maintenance events. Estimates for this currently are approximately 10 days per year. Details regarding these will be found in Engineering Appendix D. The draft operations plan would be completed during PED and shared with USFWS."

Appendix D covers floodwall and levee elevation and design, but does not cover operational control during rain events that happen more than 10 times during the year. The Integrated Draft Report/DEIS identifies cubic feet per second for each pump station, with each one having a 20- foot-wide navigable floodgate for vessels to cross. The Service believes response to these concerns would be best addressed in either the Environmental or Hydrologic & Hydraulics appendix rather than in Engineering. In addition, as recommended above, holistic floodplain management considerations should be evaluated related to the TSP/preferred alternative.

Appendix D Engineering, Annex 4, Life Safety Risk, Section 3.0 Consequences and Section 4.2 Hydrology and Hydraulics: Section 3.0 states "Limited modeling has been done to inform the potential benefits and consequences of the flood reduction alternatives. HEC-LifeSIM modeling was not available at the time of this screening level life safety risk assessment. At the time of this assessment, the PDT has not made the determination to complete HEC-LifeSIM during Planning or Preconstruction Engineering and Design Phase. Currently, the Planning PDT does not include a HEC-LifeSIM modeler. Hydraulic modeling input is required to generate consequences. The determination of when to complete this effort is currently pending."

Section 4.2 states "HEC-RAS (2D) and ADCIRC modeling is complete. Additional iterations will be made with flood gates in place for multiple bayou crossings and design of the pump stations. Additional RAS modeling needed may impact gate dimensions and operating procedures."

The Service recommends these determinations, models, and results be a part of this study including vetting the many assumptions and uncertainties.

The Department appreciates the opportunity to review and provide comments on the Integrated Draft Report/DEIS for the St. Tammany Parish, Louisiana, Feasibility Study.

If you have any questions regarding these comments, please contact Karen Soileau (337-291-3132) of the U.S. Fish and Wildlife Service, Louisiana Ecological Services Office.

We appreciate the opportunity to provide these comments.

Sincerely,

John V Nelson

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John V. Nelson
Regional Environmental Officer