DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118

REPLY TO
ATTENTION OF

June 11, 2021

Regional Planning and Environment
Division South

Mr. Don Haydel
Interagency Affairs - Field Services Division
Louisiana Department of Natural Resources
P.O. Box 44487
Baton Rouge, Louisiana 70804

Dear Mr. Haydel,

Draft Integrated Feasibility Report (DIFR) and Environmental Impact Statement (EIS) for the St. Tammany Parish Louisiana, Feasibility Study (Study) prepared by the U.S. Army Corps of Engineers, New Orleans District (CEMVN). The DIFR DEIS is available for your review and comment. The DIFR EIS is available online for download beginning **11 June 2021** at the following URL address: https://www.mvn.usace.army.mil/About/Projects/BBA-2018/studies/St-Tammany/

The DIFR EIS has been prepared in response to the Sections 1201 and 1207 of the Water Infrastructure Improvements Act of 2016 which authorize the St. Tammany Parish, Louisiana Study for water resource development and conservation that include determining the feasibility of implementing projects for multiple purposes, including but not limited to, flood risk management as set forth in the 2015 and 2016 Reports to Congress on Future Water Resources Development. The St. Tammany Parish Louisiana Feasibility Study was authorized for inclusion as a funded study in the Bipartisan Budget Act of 2018 (Pub. L. 115–123), Division B, Subdivision 1, Title IV (BBA 2018) in a Memorandum from the Office of the Deputy Commanding General for Civil and Emergency Operations. The Memorandum provided that plan formulation will be limited to Coastal Storm Risk Management and Flood Risk Management in accordance with BBA 2018. The Government is authorized by BBA 2018 to conduct the Study at full Federal expense to the extent that appropriations provided under the Investigations heading of the BBA 2018 are available and used for such purpose.

The DIFR EIS evaluates impacts associated with alternatives considered including the Tentatively Selected Plan (TSP) as proposed is a comprehensive plan that includes Coastal Storm Risk Management (CSRM), Flood Risk Management (FRM), and nonstructural features to address flooding in St. Tammany Parish.

Anticipated direct and indirect impacts are discussed in the DIFR DEIS and CEMVN will continue to coordinate with resource agency partners in its efforts to minimize those effects. Indirect impacts are anticipated to be significant where drainage is obstructed by the levee,

particularly any drainage that currently empties into the Big Branch National Wildlife Refuge and coordination continues to address these issues.

We request your concurrence with the enclosed Consistency Determination, which addresses the applicable Coastal Use Guidelines. Based on the enclosed information, we believe that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program.

Due to COVID-19, CEMVN will host virtual public meetings on 28 June at 1:00 PM and 29 June 2021 at 6:00 PM to provide information on the DIFR and DEIS, and to receive verbal public comments; times and meeting details to follow in subsequent media release and advertisements. Information about public meetings, including login information, will be posted to the New Orleans District website: https://www.mvn.usace.army.mil/Media/Public-Meetings/

Please review the DIFR EIS from the website and provide comments within 45 days of the date of this letter. Interested parties may express their views on the TSP or proposed action. All comments postmarked on or before the expiration of the comment period will be considered. Comments should be mailed to the attention of Mr. Everard Baker; U. S. Army Corps of Engineers Regional Planning and Environment Division South; New Orleans Environmental Branch; CEMVN PDN-UDP; 7400 Leake Avenue, New Orleans, Louisiana 70119.

Comments may also be provided by emails to everard.baker@usace.army.mil. Mr. Everard Baker may be contacted at (504) 862-1514.

Marshall K. Harper

MARSHALL K. HARPER
Chief, Environmental Planning Branch

CONSISTENCY DETERMINATION

Louisiana Coastal Use Guidelines

Draft Integrated Feasibility Report and Environmental Impact Statement for the St. Tammany Parish Louisiana, Feasibility Study St. Tammany Parishes, Louisiana

INTRODUCTION

Section 307 of the Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et. seq. requires that "each federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with approved state management programs." In accordance with Section 307, a Consistency Determination has been prepared for the proposed Draft Integrated Feasibility Report (DIFR) and Environmental Impact Statement (EIS) for the St. Tammany Parish Louisiana, Feasibility Study. (See Figure 1). Coastal Use Guidelines were written in order to implement the policies and goals of the Louisiana Coastal Resources Program and serve as a set of performance standards for evaluating projects. Compliance with the Louisiana Coastal Resources Program, and therefore, Section 307, requires compliance with applicable Coastal Use Guidelines.

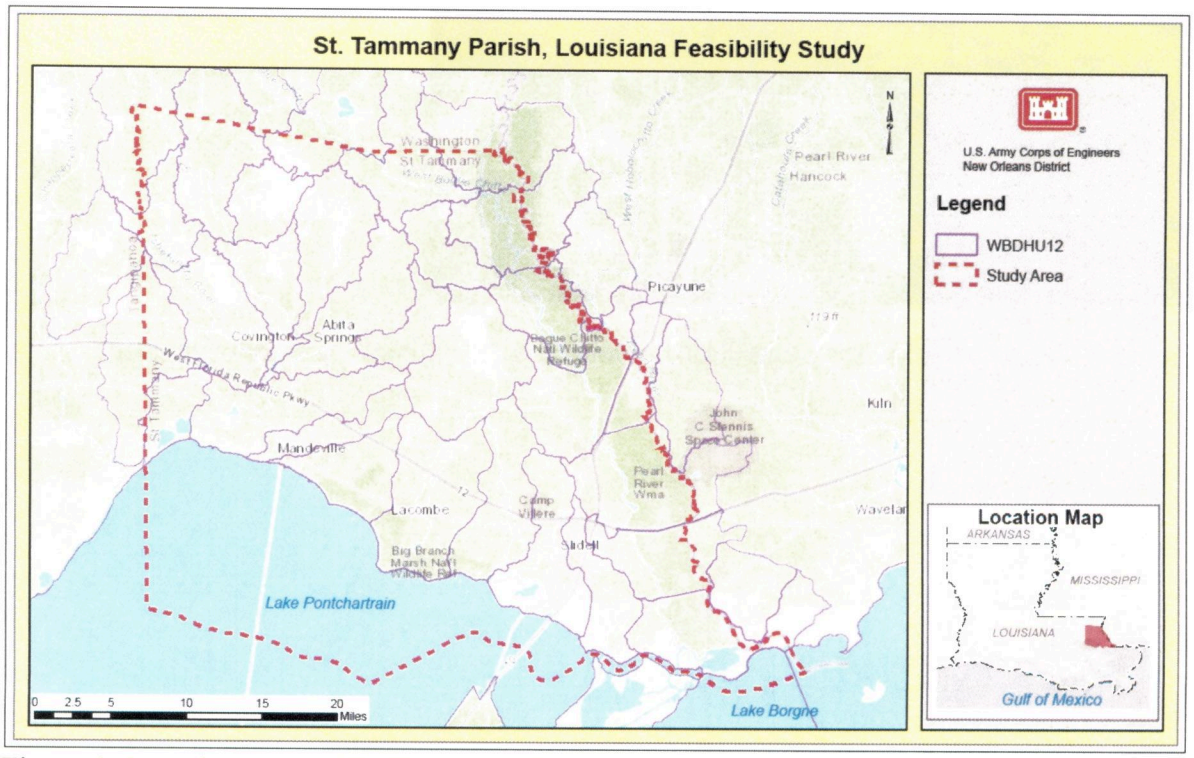

Figure 1. Location map of St. Tammany Parish, Louisiana DIFR EIS. (Source: ESRI)

PURPOSE AND NEED FOR THE PROPOSED ACTION

St. Tammany Parish has experienced repeated, widespread flooding (Figure 2) from rainfall and riverine bank overtopping, waves, and storm surge, including historic impacts during Hurricane Katrina in August of 2005 and recently with the flood of August of 2016. Hurricane Katrina damaged over 48,000 residential structures, causing $1.45 billion in damages (U.S. Department of Housing and Urban Development 2006). The flood of August of 2016, in St. Tammany Parish, caused flood impacts to approximately 900 businesses and 8,000 employees, together with impacts to transportation along both I-10 and I-12. (Louisiana Economic Development 2016), and caused major disruptions, damages, and economic impacts to the Parish. Different locations within the study area experience different flood damages since the sources of flooding vary across the Parish and drainage subbasins. Figure 3 shows repetitive loss areas, flood zones, and frequently flooded roads and also the areas that experience coastal flooding and/or riverine flooding.

Figure 2. Flooding in St. Tammany Parish. Source: St. Tammany Parish Government.

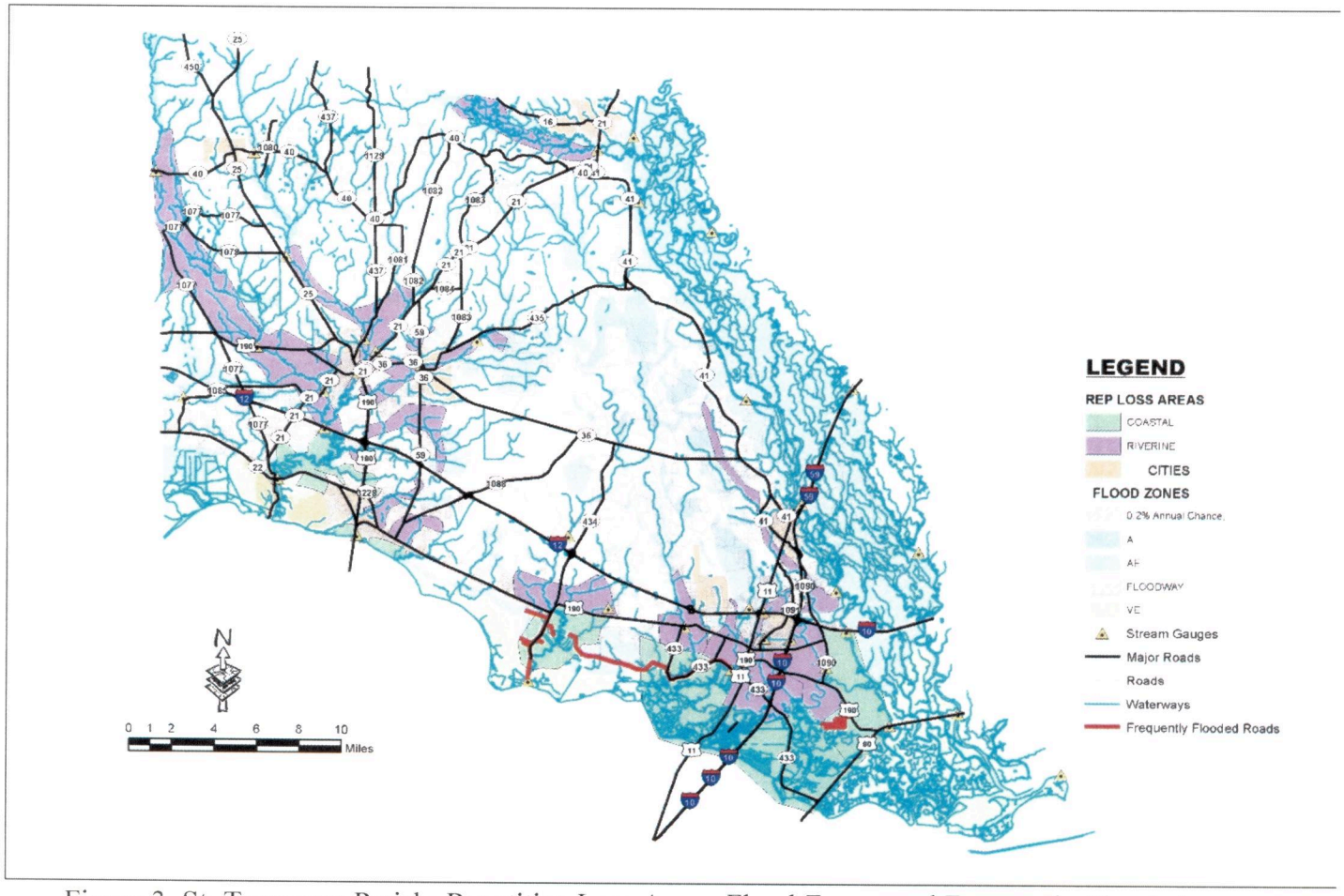

Figure 3. St. Tammany Parish- Repetitive Loss Areas, Flood Zones, and Frequently Flooded Roads (Source STPG 2020).

The headwater flooding from rainfall is intensified by tidal events, resulting in flood damages to industrial, commercial, and agricultural facilities as well as residential structures and critical evacuation routes. Additionally, tidal events can create a backwater effect that does not allow rainfall to drain from within the basin.

There is widespread public support to provide protection to an area that is prone to coastal storm damages from tidal surges, storm surges, and rainfall. Providing this protection would help to reduce the risk to human life, health, and safety by reducing flood impacts to structures, evacuation routes, and critical infrastructure.

In addition to the flooding problem, St. Tammany Parish is host to a dynamic coastal ecosystem that includes numerous state and federally protected wetland habitats, essential fish habitat, and has high fish and wildlife values. The ecosystem provides habitat for migratory birds, wildlife, finfish, shellfish, and other aquatic organisms including threatened or endangered species. See Figure 4 for a habitat map of the study area of St. Tammany Parish, Louisiana.

The overall goal of the St. Tammany Parish Feasibility Study is to reduce the severity of flood damages and risk to public health and safety, caused by heavy rainfall, riverine flooding, tropical storms, and hurricanes. The Federal objective of water and related land resources project planning is to contribute to national economic development (NED), consistent with protecting the Nation's environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. Planning objectives represent desired positive changes to future conditions. All the objectives focus on alternatives within the St. Tammany Parish, Louisiana area and within the 50-year period of analysis from 2032 to 2082.

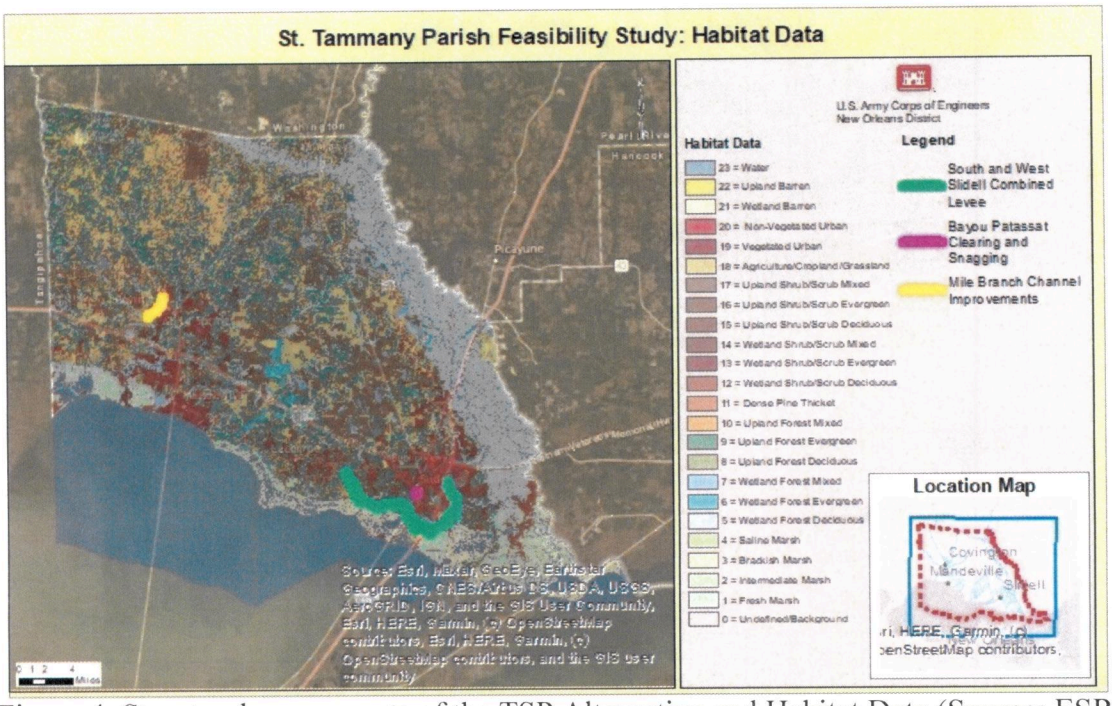

Figure 4. Structural components of the TSP Alternative and Habitat Data (Source: ESRI)

DESCRIPTION OF THE PROPOSED ACTION

The following narrative describes the three structural features and the nonstructural component of the Tentatively Selected Plan (TSP). See Figures 4-7- for the structural components and Figure 8 for the nonstructural component of the TSP proposed action.

<u>Alternative 6c (Combined South and West Slidell Levee)</u>

Alternative 6c is a combination of two alignments portions of West Slidell levee from alternative 5 and alternative 6a South Slidell Levee and Floodwall. The two alignments are tied together with a railroad gate where the alignments intersect with Norfolk Southern railway. The levee is comprised of approximately 16.3 miles (85,900 ft) of alignment with a combination of 14 miles (73,700 ft) of levees and 2.3 miles (12,200 ft) of floodwall located in the City of Slidell, Louisiana.

The elevation of the west Slidell levee varies between 13 ft and 14.5 ft depending on the location. The levee elevation varies depending on location. The total levee alignment would impact approximately 162 acres of construction area. This levee alignment would require approximately 1,528,000 cubic yards of fill which includes a 30% contingency.

The floodwall alignment consists of approximately 2 miles of floodwall segments. The typical T-wall section consists of a 3 ft thick, 8.5 ft wide slab with a 1.5 ft thick stem. The height of the stem varies. Preliminary assumptions are 1H:3V battered H12 x 74 piles, 60 ft deep, paired every 5 ft, and 30 ft deep steel PZ sheet pile. Approximately 1,850 square ft of slope protection will be provided at floodwall/levee tie-ins. The design of the T-wall including the foundation is subject to change once detailed geotechnical investigations are conducted.

Additional constructible features are included in this alternative: five pump stations, four control structures, three sluicegates, seven vehicular gates, one railroad gate, and seven ramps. Interstate-10 will also be elevated. See Figure 4 and Figure 5 for maps of the this portion of the TSP proposed action.

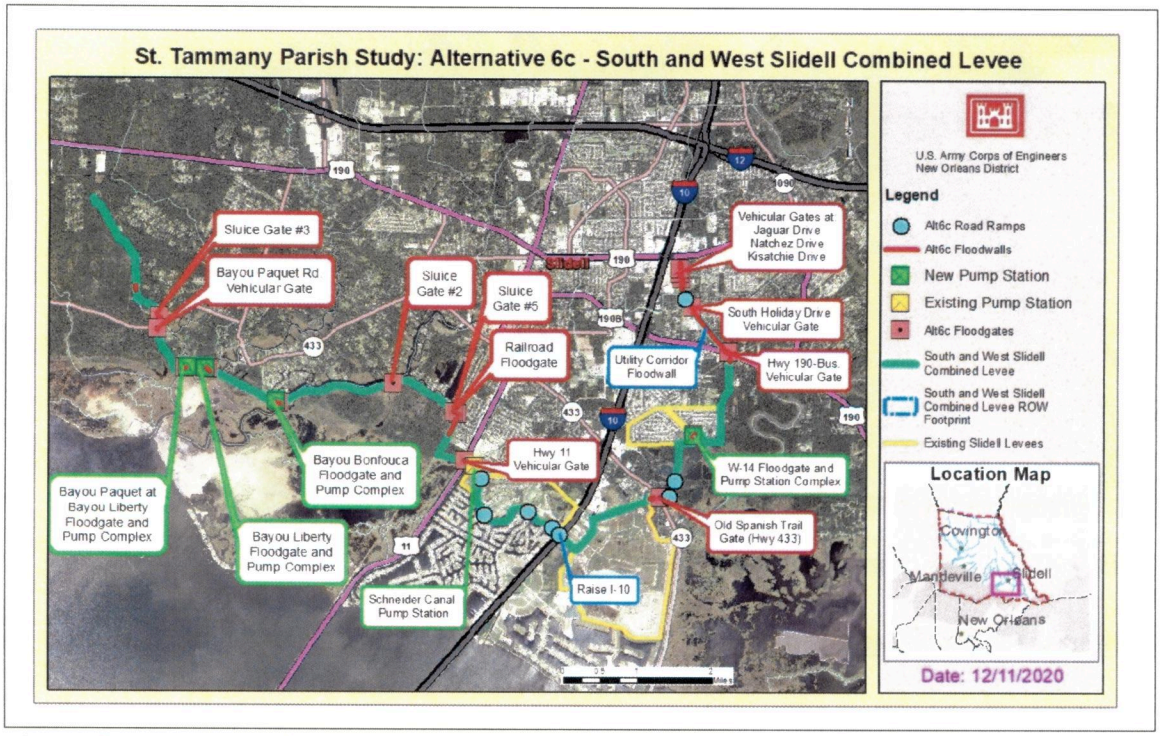

Figure 5. South and West Slidell Combined Levee (Source: ESRI)

Bayou Patassat Channel Improvements

Bayou Patassat is a small tributary of Bayou Bonfouca. The preliminary design of the channel improvements proposed as part of the TSP assumes an existing bank elevation of 1 ft, a 10 ft bottom width at elevation (-) 5 ft. The bank is at 1V:3H slope. Land access to the site is through Bayou Lane or the existing pump station. Possible staging areas include the city owned land

around the bayou and pump station or at the grassy area at the end of Bayou Lane. It is assumed that access to the bayou will be via the city owned property along the channel. If necessary, a temporary culvert can be placed in the channel to allow for crossing over to the southernmost bank. Approximately 0.17 miles (900 ft) of clearing and snagging would occur in the channel. Material removed may include trees, debris, trash, or other obstructions within the waterway. For the channel improvement, approximately 2 acres of Right of Way (ROW) would be needed for a temporary easement within the channel. Approximately 0.6 acres of ROW would be tree clearing, with the majority of the work taking place on the southernmost bank. All trees and debris cleared would likely be chipped on site and then hauled to the nearest landfill. The nearest landfills are the Slidell Landfill and Waste Management. See Figure 6 for a map of the Bayou Patassat channel improvements proposed as part of the TSP.

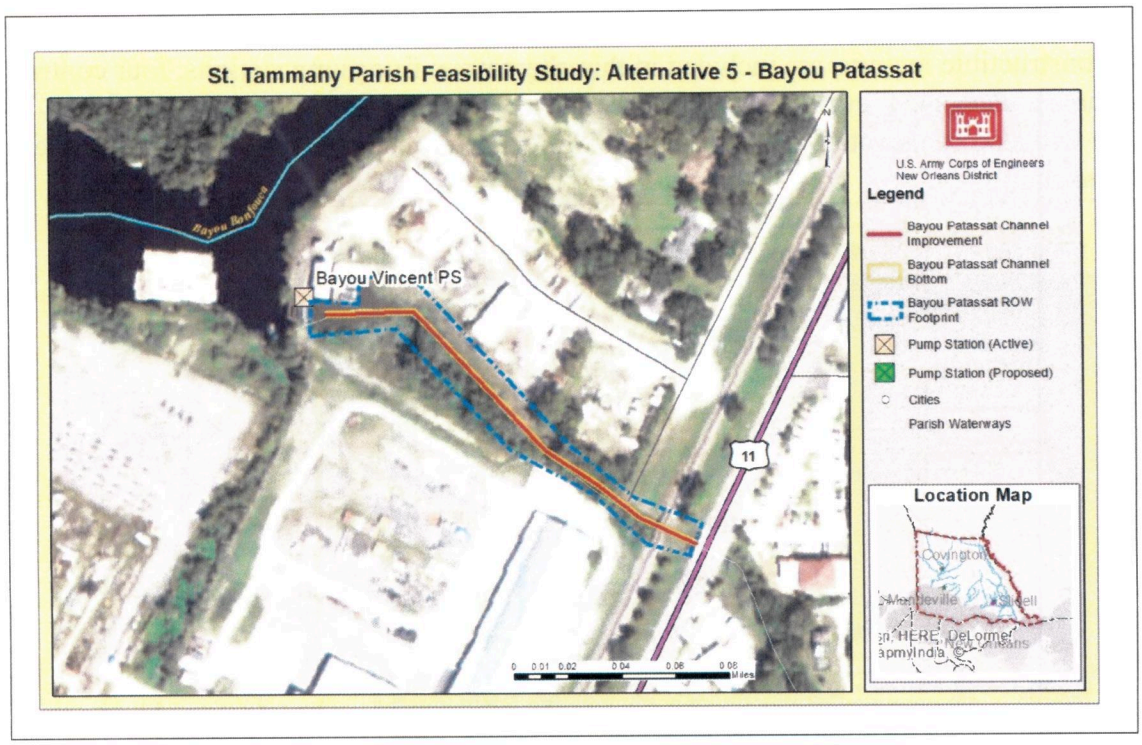

Figure 6. Bayou Patassat Channel Improvements. (Source: ESRI)

The Mile Branch Channel Improvements

This part of the proposed action TSP consists of channel improvements on the lower 2.15 miles (11,341 ft channel) of Mile Branch in Covington. The preliminary design assumes an existing bank elevation of 1 ft, a 10-ft bottom width at elevation (-) 5ft. The bank is at 1V:3H slope. The improvements include clearing and grubbing and mechanical dredging of the channel. The channel bottom would be lowered by 5 ft. Approximately 20 acres of channel would be cleared and grubbed prior to mechanical dredging. An assumed maximum of 130,000 cubic yards of material may be mechanically dredged from the channel. Material removed may include sediment, trees, debris, or other obstructions within the waterway. For the channel improvements, approximately 34 acres of ROW would be needed for a temporary easement.

The Mile Branch channel improvements may include bridge replacements or culverts (starting from north to south) at 29th, 28th, 25th, 23rd, 21st, 19th, and 18th Avenues. No work is anticipated at the 15th and 11th Avenue channel crossings as those bridges have been replaced prior to this study (and the new bridges were designed to safely pass higher flows on Mile Branch). See Figure 7 for a map of the Mile Branch channel improvements proposed as part of the TSP.

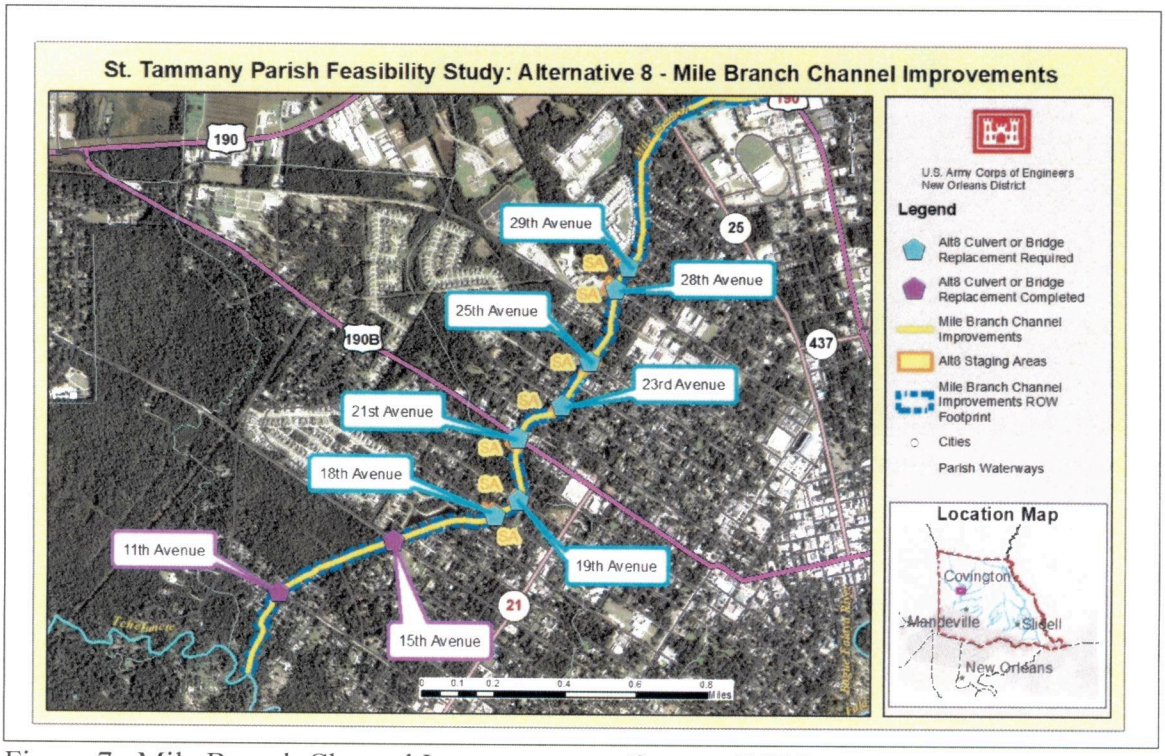

Figure 7. Mile Branch Channel Improvements. (Source: ESRI)

Nonstructural Alternative

The Nonstructural portion of the TSP includes a total of 8,498 homes will be elevated to the future 100-year stage up to 13 feet and nonresidential structures floodproofed up to 3 feet. The floodproofing of these structures will address the structures in the 50 year floodplain that are not included in the areas benefitted from the structural measures of the TSP. It is estimated that 6,632 homes will be raised and 1,855 structures floodproofed. These structures counts are preliminary and will continue to be evaluated and refined and are not absolute. Structure- specific analysis will be performed after the study during the Pre-construction Engineering and Design (PED) to determine final eligibility and the most appropriate and cost-effective flood proofing measures to be employed. This includes analysis of elevations, floodproofing, buyouts and acquisitions. Property owners who have preliminarily eligible structures that wish to participate in the flood proofing measures will be required submit an application and provide a right-of- entry for their structure to undergo an environmental site assessment, appraisal, inspections and evaluations to determine the final eligibility of the structure for flood proofing. See Figure 3 below for a map of the proposed action.

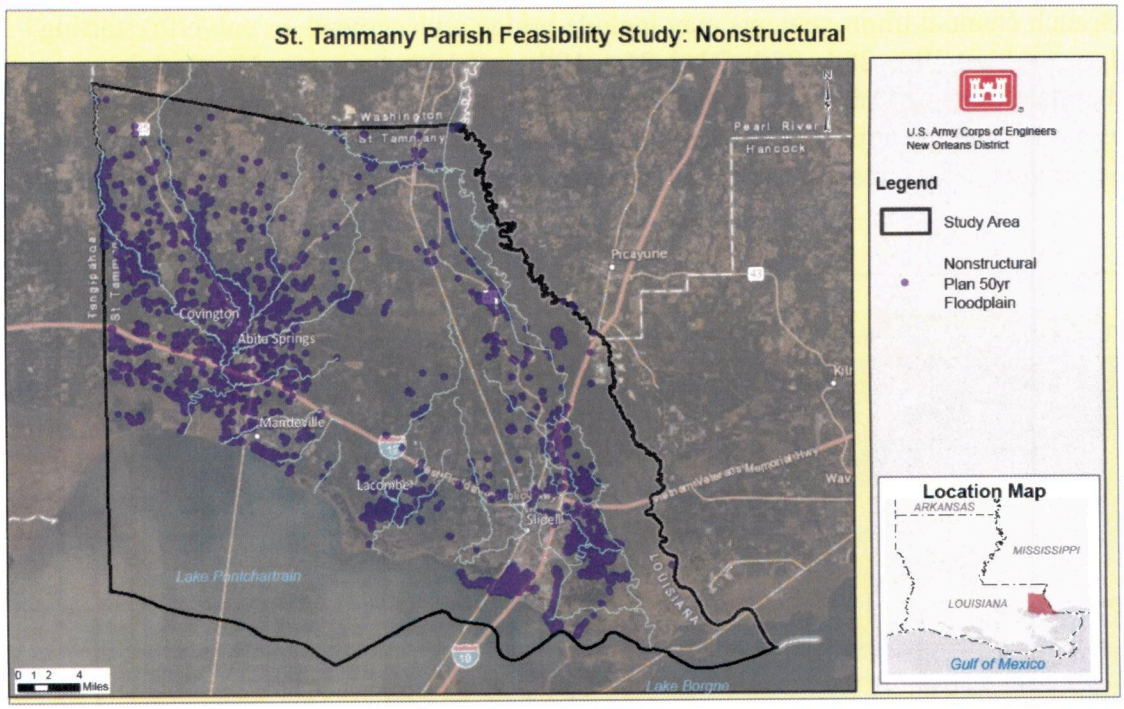

Figure 8. Nonstructural Alternative. (Source: ESRI)

Louisiana Administrative Code

Title 43

NATURAL RESOURCES

Part I. Office of the Secretary

Chapter 7. Coastal Management

Subchapter B. Coastal Use Guidelines

Coastal use guidelines as approved by the House Natural Resources Committee on July 9, 1980, the Senate Natural Resources Committee on July 11, 1980, and the governor on July 24, 1980.

§701. Guidelines Applicable to All Uses

A. The guidelines must be read in their entirety. Any proposed use may be subject to the requirements of more than one guideline or section of guidelines and all applicable guidelines must be complied with.

B. Conformance with applicable water and air quality laws, standards and regulations, and with those other laws, standards and regulations which have been incorporated into the coastal resources program shall be deemed in conformance with the program except to the extent that these guidelines would impose additional requirements.

C. The guidelines include both general provisions applicable to all uses and specific provisions applicable only to certain types of uses. The general guidelines apply in all situations. The specific guidelines apply only to the situations they address. Specific and general guidelines should be interpreted to be consistent with each other. In the event there is an inconsistency, the specific should prevail.

D. These guidelines are not intended to nor shall they be interpreted so as to result in an involuntary acquisition or taking of property.

E. No use or activity shall be carried out or conducted in such a manner as to constitute a violation of the terms of a grant or donation of any lands or waterbottoms to the state or any subdivision thereof. Revocations of such grants and donations shall be avoided.

F. Information regarding the following general factors shall be utilized by the permitting authority in evaluating whether the proposed use is in compliance with the guidelines:

1. type, nature, and location of use;

2. elevation, soil, and water conditions and flood and storm hazard characteristics of site;

3. techniques and materials used in construction, operation, and maintenance of use;

4. existing drainage patterns and water regimes of surrounding area including flow, circulation, quality, quantity, and salinity; and impacts on them;

5. availability of feasible alternative sites or methods of implementing the use;

6. designation of the area for certain uses as part of a local program;

7. economic need for use and extent of impacts of use on economy of locality;

8. extent of resulting public and private benefits;

9. extent of coastal water dependency of the use;

10. existence of necessary infrastructure to support the use and public costs resulting from use;

11. extent of impacts on existing and traditional uses of the area and on future uses for which the area is suited;

12. proximity to and extent of impacts on important natural features such as beaches, barrier islands, tidal passes, wildlife and aquatic habitats, and forest lands;

13. the extent to which regional, state, and national interests are served including the national interest in resources and the siting of facilities in the coastal zone as identified in the coastal resources program;

14. proximity to, and extent of impacts on, special areas, particular areas, or other areas of particular concern of the state program or local programs;

15. likelihood of, and extent of impacts of, resulting secondary impacts and cumulative impacts;

16. proximity to and extent of impacts on public lands or works, or historic, recreational, or cultural resources;

17. extent of impacts on navigation, fishing, public access, and recreational opportunities;

18. extent of compatibility with natural and cultural setting;

19. extent of long term benefits or adverse impacts.

G. It is the policy of the coastal resources program to avoid the following adverse impacts. To this end, all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable significant:

1. reductions in the natural supply of sediment and nutrients to the coastal system by alterations of freshwater flow;

2. adverse economic impacts on the locality of the use and affected governmental bodies;

3. detrimental discharges of inorganic nutrient compounds into coastal waters;

4. alterations in the natural concentration of oxygen in coastal waters;

5. destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features;

6. adverse disruption of existing social patterns;

7. alterations of the natural temperature regime of coastal waters;

8. detrimental changes in existing salinity regimes;

9. detrimental changes in littoral and sediment transport processes;

10. adverse effects of cumulative impacts;

11. detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging;

12. reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest;

13. discharges of pathogens or toxic substances into coastal waters;

14. adverse alteration or destruction of archaeological, historical, or other cultural resources;

15. fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas;

16. adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands;

17. adverse alteration or destruction of public parks, shoreline access points, public works, designated recreation areas, scenic rivers, or other areas of public use and concern;

18. adverse disruptions of coastal wildlife and fishery migratory patterns;

19. land loss, erosion, and subsidence;

20. increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such hazards;

21. reduction in the long term biological productivity of the coastal ecosystem.

Response to §701.A - G. These guidelines have been read in their entirety. The proposed action would be in conformance with all applicable state laws, regulations, and standards. Therefore, the proposed action is consistent with these guidelines.

H. 1. In those guidelines in which the modifier "maximum extent practicable" is used, the proposed use is in compliance with the guideline if the standard modified by the term is complied with. If the modified standard is not complied with, the use will be in compliance with the guideline if the permitting authority finds, after a systematic consideration of all pertinent information regarding the use, the site and the impacts of the use as set forth in Subsection F above, and a balancing of their relative significance, that the benefits resulting from the proposed use would clearly outweigh the adverse impacts resulting from noncompliance with the modified standard and there are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the modified standard and:

a. significant public benefits will result from the use; or

b. the use would serve important regional, state, or national interests, including the national interest in resources and the siting of facilities in the coastal zone identified in the coastal resources program, or;

c. the use is coastal water dependent.

2. The systematic consideration process shall also result in a determination of those conditions necessary for the use to be in compliance with the guideline. Those conditions shall assure that the use is carried out utilizing those locations, methods, and practices which maximize conformance to the modified standard; are technically, economically, environmentally, socially,

and legally feasible and practical; and minimize or offset those adverse impacts listed in §701.G and in the Subsection at issue.

I. Uses shall to the maximum extent practicable be designed and carried out to permit multiple concurrent uses which are appropriate for the location and to avoid unnecessary conflicts with other uses of the vicinity.

J. These guidelines are not intended to be, nor shall they be, interpreted to allow expansion of governmental authority beyond that established by R.S. 49:214.21-49:214.42, as amended; nor shall these guidelines be interpreted so as to require permits for specific uses legally commenced or established prior to the effective date of the coastal use permit program nor to normal maintenance or repair of such uses.

Response: Guidelines for §701.H – J. have been read in their entirety and are acknowledged. These guidelines have been addressed through the preparation of responses to the guidelines contained within the specific use guidelines.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§703. Guidelines for Levees

A. The leveeing of unmodified or biologically productive wetlands shall be avoided to the maximum extent practicable.

Response: Partially concur. The proposed Project represents the least environmentally damaging alternative, however unavoidable impacts to wetlands in the construction footprint would still occur. These impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

B. Levees shall be planned and sited to avoid segmentation of wetland areas and systems to the maximum extent practicable.

Response: Partially Concur. The proposed levee alignment was planned to avoid segmentation of wetlands to the maximum extent practicable; however, some segmentation would result from the proposed alignment and those wetland impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

C. Levees constructed for the purpose of developing or otherwise changing the use of a wetland area shall be avoided to the maximum extent practicable.

Response: Concur. The proposed levee system was not designed to enclose and develop existing wetlands. Rather, the proposed plan is to provide risk reduction to hurricane and storm surges. The current measures are consistent with this guideline.

D. Hurricane and flood protection levees shall be located at the nonwetland/wetland interface or landward to the maximum extent practicable.

Response: Partially concur. The proposed project represents the least environmentally damaging alternative, however unavoidable impacts to wetlands in the construction footprint would still occur. These impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

E. Impoundment levees shall only be constructed in wetland areas as part of approved water or marsh management projects or to prevent release of pollutants.

Response: Concur. To clarify, the proposed project is for a storm risk reduction levee instead of an impoundment levee. The structural features of this storm risk reduction levee were located to minimize to the extent practicable project-induced wetland impacts by locating project features crossing existing rights-of-way and incorporating drainage structures, gates, and pump stations into the design to maintain hydrologic connections.

F. Hurricane or flood protection levee systems shall be designed, built and thereafter operated and maintained utilizing best practical techniques to minimize disruptions of existing hydrologic patterns, and the interchange of water, beneficial nutrients, and aquatic organisms between enclosed wetlands and those outside the levee system.

Response: Concur. The proposed hurricane and storm damage risk reduction system will be constructed utilizing the best management practices (BMPs) to minimize disruption of existing hydrologic patterns and the interchange of water, beneficial nutrients and aquatic organisms between the enclosed wetlands and those outside the risk reduction system. The current project as proposed is consistent with this guideline.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§705. Guidelines for Linear Facilities

A. Linear use alignments shall be planned to avoid adverse impacts on areas of high biological productivity or irreplaceable resource areas.

Response: Concur. Impacts to areas of high biological productivity, such as swamp and bottomland hardwood (BLH) habitats, were avoided to the maximum extent possible. The 2017 Master Plan projects for Flood Risk Management (FRM) and Coastal Storm Risk Management (CSRM) in St. Tammany Parish were included in the development of management measures and alternatives. The PDT has been in contact with the CPRA Master Plan team to better ensure coordination and consistency between this study and the 2017 Master Plan and the draft 2023 Master Plan under development. One of the planning opportunities implemented for natural resources includes areas of high biological productivity was to protect the function and increase the resiliency of the ecosystem to reduce flood damages and the planning objective implemented was to increase resiliency of coastal and riparian habitats as natural resources to reduce flood damages. The TSP or proposed action for this project follows these planning guidelines to the maximum extent practicable.

B. Linear facilities involving the use of dredging or filling shall be avoided in wetland and estuarine areas to the maximum extent practicable.

Response: Concur. Placement of fill material on wetlands would occur as a part of the proposed action. However, impacts were avoided to the maximum extent practicable and areas where wetlands cannot be avoided will be mitigated in kind and in coordination with the LDNR and the interagency team.

C. Linear facilities involving dredging shall be of the minimum practical size and length.

Response: Concur. Linear facilities would be of minimum practical size and length as a part of the proposed action.

D. To the maximum extent practicable, pipelines shall be installed through the "push ditch" method and the ditch backfilled.

Response: This guideline is not applicable with the proposed action.

E. Existing corridors, rights-of-way, canals, and streams shall be utilized to the maximum extent practicable for linear facilities.

Response: Concur. The levee system would be constructed parallel to existing corridors, ROWs, canals, and streams to the maximum extent practicable.

F. Linear facilities and alignments shall be, to the maximum extent practicable, designed and constructed to permit multiple uses consistent with the nature of the facility.

Response: This guideline is not applicable with the proposed action as there no multiple use permits.

G. Linear facilities involving dredging shall not traverse or adversely affect any barrier island.

Response: This guideline is not applicable as there are no barrier islands pertaining to the proposed action.

H. Linear facilities involving dredging shall not traverse beaches, tidal passes, protective reefs, or other natural gulf shoreline unless no other alternative exists. If a beach, tidal pass, reef, or other natural gulf shoreline must be traversed for a non-navigation canal, they shall be restored at least to their natural condition immediately upon completion of construction. Tidal passes shall not be permanently widened or deepened except when necessary to conduct the use. The best available restoration techniques which improve the traversed area's ability to serve as a shoreline shall be used.

Response: This guideline is not applicable as none of the listed features pertain to the proposed action.

I. Linear facilities shall be planned, designed, located, and built using the best practical techniques to minimize disruption of natural hydrologic and sediment transport patterns, sheet flow, and water quality and to minimize adverse impacts on wetlands.

Response: Concur. The proposed levee alignment includes measures to decrease disruption of natural hydrologic and sediment transport patterns, sheet flow, and water quality and to minimize adverse impacts on wetlands. These include multiple pumps and gates to help reduce hydrologic disruption.

J. Linear facilities shall be planned, designed, and built using the best practical techniques to prevent bank slumping and erosion, and saltwater intrusion, and to minimize the potential for inland movement of storm-generated surges. Consideration shall be given to the use of locks in navigation canals and channels which connect more saline areas with fresher areas.

Response: Concur. The proposed action would reduce the potential for inland movement of storm-generated surges. Best management practices would be used to prevent bank slumping and erosion during construction, operations, and maintenance.

K. All nonnavigation canals, channels, and ditches which connect more saline areas with fresher areas shall be plugged at all waterway crossings and at intervals between crossings in order to compartmentalize them. The plugs shall be properly maintained.

Response: This guideline is not applicable with the proposed action.

L. The multiple use of existing canals, directional drilling, and other practical techniques shall be utilized to the maximum extent practicable to minimize the number and size of access canals, to minimize changes of natural systems, and to minimize adverse impacts on natural areas and wildlife and fisheries habitat.

Response: This guideline is not applicable with the proposed action.

M. All pipelines shall be constructed in accordance with Parts 191, 192, and 195 of Title 49 of the Code of Federal Regulations, as amended, and in conformance with the Commissioner of Conservation's Pipeline Safety Rules and Regulations and those safety requirements established by R.S. 45:408, whichever would require higher standards.

Response: This guideline is not applicable with the proposed action.

N. Areas dredged for linear facilities shall be backfilled or otherwise restored to the pre-existing conditions upon cessation of use for navigation purposes to the maximum extent practicable.

Response: This guideline is not applicable with the proposed action.

O. The best practical techniques for site restoration and revegetation shall be utilized for all linear facilities.

Response: The levees constructed as part of the TSP will be revegetated with suitable grass and turf upon construction completion. Any wetland and bottomland hardwood habitat impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

P. Confined and dead end canals shall be avoided to the maximum extent practicable. Approved canals must be designed and constructed using the best practical techniques to avoid water stagnation and eutrophication.

Response: This guideline is not applicable with the proposed action.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§707. Guidelines for Dredged Spoil Deposition

A. Spoil shall be deposited utilizing the best practical techniques to avoid disruption of water movement, flow, circulation, and quality.

Response: Concur.

B. Spoil shall be used beneficially to the maximum extent practicable to improve productivity or create new habitat, reduce or compensate for environmental damage done by dredging activities, or prevent environmental damage. Otherwise, existing spoil disposal areas or upland disposal shall be utilized to the maximum extent practicable rather than creating new disposal areas.

Response: Non Concur. No beneficial use is planned with fill material placed in the proposed levee system. Spoil consisting of debris materials from the proposed channel improvements would be disposed at an approved landfill. Any wetland and bottomland hardwood habitat impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

C. Spoil shall not be disposed of in a manner which could result in the impounding or draining of wetlands or the creation of development sites unless the spoil deposition is part of an approved levee or land surface alteration project.

Response: Concur. Spoil from the channel improvements shall be placed at an approved landfill. The fill for the structural features of the TSP storm risk reduction levee were located to minimize to the extent practicable project-induced wetland impacts by locating project features crossing existing rights-of-way and incorporating drainage structures, gates, and pump stations into the design to maintain hydrologic connections.

D. Spoil shall not be disposed of on marsh, known oyster or clam reefs, or in areas of submersed vegetation to the maximum extent practicable. Any identified impacts to wetlands will require mitigation.

Response: Concur. Spoil from the channel improvements shall be placed at an approved landfill. The mitigation plan is still in development, but will address any impacts to wetlands. Any wetland and bottomland hardwood habitat impacts will be addressed in a mitigation plan in coordination with LDNR and the interagency team.

E. Spoil shall not be disposed of in such a manner as to create a hindrance to navigation or fishing, or hinder timber growth.

Response: Concur. Spoil from the channel improvements shall be placed at an approved landfill. There will be temporary impacts to navigation and recreational fishing in the direct project area during construction but should cease after construction completion. The fill for the structural features of the TSP storm risk reduction levee were located to minimize impacts to the extent practicable by locating project features crossing existing rights-of-way and incorporating drainage structures, and navigable gates, and pump stations into the design to maintain hydrologic connections.

F. Spoil disposal areas shall be designed and constructed and maintained using the best practical techniques to retain the spoil at the site, reduce turbidity, and reduce shoreline erosion when appropriate.

Response: Non Concur. Spoil from the channel improvements shall be placed at an approved landfill. Fill disposal and construction for the structural levee components of the TSP would utilize BMPs and a Stormwater Pollution Prevention Plan would be prepared and followed during construction.

G. The alienation of state-owned property shall not result from spoil deposition activities without the consent of the Department of Natural Resources.

Response: Concur. No alienation of state-owned property would result from the proposed Project. Spoil from the channel improvements shall be placed at an approved landfill. There will be temporary impacts to state owned property in the direct project area during construction but should cease after construction completion. The fill for the structural features of the TSP storm risk reduction levee were located to minimize impacts to the extent practicable by locating project features crossing existing rights-of-way and incorporating drainage structures, and navigable gates, and pump stations into the design to maintain hydrologic connections. CEMVN is working closely with the nonfederal sponsor CPRAB for any real estate issues or concerns and is coordinating with LDNR with this Coastal Zone Consistency Determination.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§709. Guidelines for Shoreline Modification

Response: These guidelines are not applicable as the actions proposed for the TSP will not occur along shorelines therefore do not include shoreline alteration.

§711. Guidelines for Surface Alterations

A. Industrial, commercial, urban, residential, and recreational uses are necessary to provide adequate economic growth and development. To this end, such uses will be encouraged in those areas of the coastal zone that are suitable for development. Those uses shall be consistent with the other guidelines and shall, to the maximum extent practicable, take place only:

1. on lands 5 feet or more above sea level or within fast lands; or

2. on lands which have foundation conditions sufficiently stable to support the use, and where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved, and where the public safety would not be unreasonably endangered, and:

a. the land is already in high intensity of development use; or

b. there is adequate supporting infrastructure; or

c. the vicinity has a tradition of use for similar habitation or development.

Response: This guideline is not applicable with the proposed action. However, the TSP as proposed FRM and CSRM project when implemented will reduce the risk for flooding for industrial, commercial, urban, residential and recreational use within the project area.

B. Public and private works projects such as levees, drainage improvements, roads, airports, ports, and public utilities are necessary to protect and support needed development and shall be encouraged. Such projects shall, to the maximum extent practicable, take place only when:

1. they protect or serve those areas suitable for development pursuant to §711.A; and

2. they are consistent with the other guidelines; and

3. they are consistent with all relevant adopted state, local, and regional plans.

Response: Concur. The proposed action is consistent with this guideline as it is consistent with the other guidelines and with all relevant adopted state, local, and regional plans including the state master plan.

C. Reserved.

D. To the maximum extent practicable wetland areas shall not be drained or filled. Any approved drain or fill project shall be designed and constructed using best practical techniques to minimize present and future property damage and adverse environmental impacts.

Response: Concur. All unavoidable project-related impacts to wetland areas would be fully mitigated for by the plan described in the draft environmental impact statement (EIS) in coordination with LDNR and the interagency team.

E. Coastal water dependent uses shall be given special consideration in permitting because of their reduced choice of alternatives.

Response: This guideline is not applicable with the proposed action.

F. Areas modified by surface alteration activities shall, to the maximum extent practicable, be revegetated, refilled, cleaned, and restored to their predevelopment condition upon termination of the use.

Response: Concur. Temporary staging areas and access will be restored to predevelopment condition upon termination of use. Revegetation of the alignment would occur during construction and operations and maintenance (O&M).

G. Site clearing shall to the maximum extent practicable be limited to those areas immediately required for physical development.

Response: Concur. The proposed action would impact open water, coastal marsh, swamplands, and bottomland hardwood habitathabitat. Clearings would be limited to those areas immediately required for the proposed TSP project.

H. Surface alterations shall, to the maximum extent practicable, be located away from critical wildlife areas and vegetation areas. Alterations in wildlife preserves and management areas shall be conducted in strict accord with the requirements of the wildlife management body.

Response: Concur. The proposed action is located within the Big Branch Marsh NWR and coordination on the impacts with US Fish and Wildlife and LA Department of Wildlife and Fisheries is ongoing.

I. Surface alterations which have high adverse impacts on natural functions shall not occur, to the maximum extent practicable, on barrier islands and beaches, isolated cheniers, isolated natural ridges or levees, or in wildlife and aquatic species breeding or spawning areas, or in important migratory routes.

Response: Concur. Surface alterations in the proposed action fall within the Mississippi Flyway but would not result in high adverse impacts to migratory birds. Impacts to aquatic species and EFH are being coordinated with USFWS and NMFS.

J. The creation of low dissolved oxygen conditions in the water or traps for heavy metals shall be avoided to the maximum extent practicable.

Response: Acknowledged. The proposed action TSP will create minor, localized impacts to dissolved oxygen levels in adjacent waters may occur during placement of construction and backfill materials. These impacts would be expected to last the duration of construction activities. Floodgates when operated would have the potential to temporarily alter dissolved oxygen levels, by restricting or eliminating surface water flows during construction activities. Upon reopening of gates following a storm event, changes in dissolved oxygen levels associated with the temporary gate closure would diminish. Additionally, pump station operation during a storm event would pump fresh water from the land to the flood side of the alignment. This would likely alter DO levels on flood side.

K. Surface mining and shell dredging shall be carried out utilizing the best practical techniques to minimize adverse environmental impacts.

Response: This guideline is not applicable with the proposed action.

L. The creation of underwater obstructions which adversely affect fishing or navigation shall be avoided to the maximum extent practicable.

Response: This guideline is not applicable with the proposed action.

M. Surface alteration sites and facilities shall be designed, constructed, and operated using the best practical techniques to prevent the release of pollutants or toxic substances into the environment and minimize other adverse impacts.

Response: Concur. A SWPPP would be followed and Best Management Practices would be utilized during all activities associated with the Proposed Action to minimize the impacts of these actions to adjacent areas.

N. To the maximum extent practicable only material that is free of contaminants and compatible with the environmental setting shall be used as fill.

Response: Concur. Only compatible material will be used as fill to the maximum extent practicable. A clean water act 404(b)(1) evaluation is being prepared and will be finalized with the final EIS.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§713. Guidelines for Hydrologic and Sediment Transport Modifications

Response: These guidelines are not applicable as the actions taken did not involve hydrologic or sediment transport modifications.

§715. Guidelines for Disposal of Wastes

Response: These guidelines are not applicable as the actions taken did not involve the disposal of wastes.

§717. Guidelines for Uses that Result in the Alteration of Waters Draining into Coastal Waters

A. Upland and upstream water management programs which affect coastal waters and wetlands shall be designed and constructed to preserve or enhance existing water quality, volume, and rate of flow to the maximum extent practicable.

Response: This guideline is not applicable with the proposed action. However, channel improvement modifications proposed as part of the TSP could be beneficial for upstream waterways but are intended to improve water quality, volume and flow for existing waterways.

B. Runoff from developed areas shall to the maximum extent practicable be managed to simulate natural water patterns, quantity, quality, and rate of flow.

Response: Concur. The structural and nonstructural components of the proposed action would be designed to maintain current tidal exchange to the maximum extent practicable. A SWPPP would be followed and BMPs implemented for the proposed TSP.

C. Runoff and erosion from agricultural lands shall be minimized through the best practical techniques.

Response: The proposed plan would not involve alteration or management of agricultural lands and, therefore, this guideline is not applicable.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

§719. Guidelines for Oil, Gas, and Other Mineral Activities

Response: The actions taken did not involve oil, gas, and other mineral activities and, therefore, these guidelines are not applicable.

AUTHORITY NOTE: Promulgated in accordance with R.S. 49:214.27.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of the Secretary, LR 6:493 (August 1980).

OTHER STATE POLICIES INCORPORATED INTO THE PROGRAM

Section 213.8A of Act 361 directs the Secretary of DOTD, in developing the LCRP, to include all applicable legal and management provisions that affect the coastal zone or are necessary to achieve the purposes of Act 361 or to implement the guidelines effectively. It states:

"The Secretary shall develop the overall state coastal management program consisting of all applicable constitutional provisions, laws and regulations of this state which affect the coastal zone in accordance with the provisions of this Part and shall include within the program such other applicable constitutional or statutory provisions, or other regulatory or management programs or activities as may be necessary to achieve the purposes of this Part or necessary to implement the guidelines hereinafter set forth."

The constitutional provisions and other statutory provisions, regulations, and management and regulatory programs incorporated into the LCRP are identified and described in Appendix 1 of the LCRP Environmental Impact Statement (1980). A description of how these other authorities are integrated into the LCRP and coordinated during program implementation is presented in Chapter IV of the LCRP EIS. Since all of these policies are incorporated into the LCRP, federal agencies must ensure that their proposed actions are consistent with these policies as well as the coastal use guidelines. (CZMA, Section 307).

CONSISTENCY DETERMINATION

The levee feature of the TSP is anticipated to include direct impacts for the removal of approximately 157 acres, including 2 acres for staging, of marsh, swamp, and BLH habitat.

Indirect impacts to approximately 1,707 acres of marsh, swamp, and BLH habitats would result from the alteration of drainage and flow on the protected side of the levee, and anticipated erosion of marsh on the floodside of the levee. The Bayou Patassat measure is designed to clear the waterway of approximately 1 acre of marsh and swamp to improve flow and reduce the occurrence of stacking of water during high water events. The Mile Branch measure is estimated to have a direct impact to approximately 5 acres, including swamp and BLH, which would be refined in coordination with resource agencies when the WVA is conducted. Indirect impacts are estimated to be approximately 23 acres of BLH and swamp habitat The Clean Water Act and Executive Order 11990 requires analysis and mitigation for direct, indirect, and cumulative negative impacts to wetlands. A general mitigation plan is currently being developed and will be finalized with data from site visits and wetland value assessments in coordination with USFWS. A detailed mitigation plan is being developed in coordination with the interagency team and set forth in the final EIS and prior to signing of the Record of Decision. This acreage will be refined with coordination with environmental agency partners as the levee design is optimized.

Based on this evaluation, the U. S. Army Corps of Engineers, New Orleans District, has determined that the action is consistent, to the maximum extent practicable, with the State of Louisiana's Coastal Resources Program.