AECOM

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

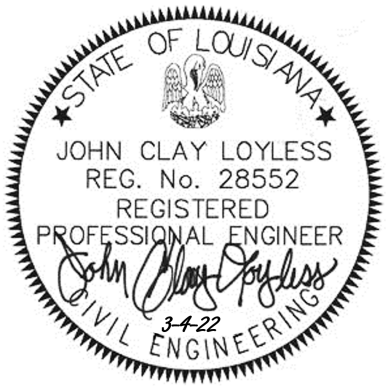
PO-0029/PO-0062

Early Works

St. John the Baptist Parish

State of Louisiana Coastal Protection
and Restoration Authority

March 2022



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ADVERTISEMENT FOR BIDS

Sealed bids will be received for the State of Louisiana by the Coastal Protection and Restoration Authority, 150 Terrace Avenue, 4th Floor Conference Center, Baton Rouge, Louisiana 70802 until **2:00 P.M., Wednesday, April 13, 2022.**

ANY PERSON REQUIRING SPECIAL ACCOMMODATIONS SHALL NOTIFY THE COASTAL PROTECTION AND RESTORATION AUTHORITY OF THE TYPE(S) OF ACCOMMODATION REQUIRED NOT LESS THAN SEVEN (7) DAYS BEFORE THE BID OPENING.

FOR: **River Reintroduction into Maurepas Swamp and West Shore Lake Pontchartrain Flood Risk Reduction Project – Early Works**
St. John the Baptist Parish, Louisiana

PROJECT NUMBER: **PO-0029/PO-0062**

Complete Bid Documents for this project are available in electronic form. They may be obtained without charge and without deposit from http://coastal.la.gov/resources/rfps-rsiqs-contracts/bids/. Printed copies can also be obtained from:

COASTAL PROTECTION AND RESTORATION AUTHORITY (CPRA)
150 Terrace Avenue, Baton Rouge, LA 70802
Attn: Jordan DeLaune
E-mail: cpra.bidding@la.gov Phone: (225) 342-1150 Fax: (225) 800-5599

All bids shall be accompanied by bid security in an amount of five percent (5.0%) of the sum of the base bid and all alternates. The form of this security shall be as stated in the Instructions to Bidders included in the Bid Documents for this project.
The successful Bidder shall be required to furnish a Performance and Payment Bond written as described in the Instructions to Bidders included in the Bid Documents for this project.

A NON-MANDATORY PRE-BID CONFERENCE WILL BE HELD at
10:00 AM on March 29, 2022 via Zoom webinar at: https://us06web.zoom.us/j/81247815823
Meeting audio may be accessed through your computer/device. If your computer/device does not have audio, meeting audio can be accessed via phone with the following call-in information:
Conference Line Phone Number: (213)-270-2124; Conference code: 707334

Contact Travis Byland at (225) 342-6750 if directions are needed to the Non-Mandatory Pre-Bid Conference.

Bids shall be accepted from Contractors who are licensed under LA. R.S. 37:2150-2192 for the classification of **Heavy Construction**. In accordance with LA. R.S. 37:2163(D), anyone objecting to the classification must send a certified letter to both the Louisiana State Licensing Board for Contractors and the CPRA at the address listed above. The letter must be received no later than ten (10) working days prior to the day on which bids are to be opened.
Bidder is required to comply with provisions and requirements of LA R.S.38:2212(B)(5). No bid may be withdrawn for a period of forty-five (45) calendar days after receipt of bids, except under the provisions of LA. R.S. 38:2214.

The Owner reserves the right to reject any and all bids for just cause. In accordance with La. R.S. 38:2212(B)(1), the provisions and requirements of this Section; and those stated in the bidding documents shall not be waived by any entity.

When this project is financed either partially or entirely with State Bonds or financed in whole or in part by federal or other funds which are not readily available at the time bids are received, the award of this Contract is contingent upon the granting of lines of credit, or the sale of bonds by the Bond Commission or the availability of federal or other funds. The State shall incur no obligation to the Contractor until the Contract between Owner and Contractor is fully executed.

Coastal Protection and Restoration Authority is a participant in the Small Entrepreneurship (SE) Program (the Hudson Initiative) and the Veteran-Owned and Service-Connected Disabled Veteran-Owned (LaVet) Small Entrepreneurships Program. Bidders are encouraged to consider participation. Information is available from Coastal Protection and Restoration Authority or on its website at http://www.coastal.la.gov/.

STATE OF LOUISIANA, COASTAL PROTECTION AND RESTORATION AUTHORITY
LAWRENCE B. HAASE, EXECUTIVE DIRECTOR

INSTRUCTIONS TO BIDDERS

COMPLETION TIME:

The Bidder shall agree to fully complete the contract within **one hundred and twenty (120)** consecutive calendar days for the Base Bid, subject to such extensions as may be granted under Section GP-44 of the General Provisions and acknowledges that this construction time will start on or before the date specified in the written "Notice to Proceed" from the Owner.

LIQUIDATED DAMAGES:

The Bidder shall agree to pay as Liquidated Damages the amount of **Three Thousand Dollars ($3,000.00)** for each consecutive calendar day for which the work is not complete, beginning with the first day beyond the contract completion date stated on the "Notice to Proceed" or as amended by change order.

ARTICLE 1

DEFINITIONS

1.1 The Bid Documents include the following:

Advertisement for Bids
Instructions to Bidders
Bid Form
Bid Bond
General Provisions
Special Provisions
Technical Specifications
Construction Drawings
Contract Between Owner and Contractor and Performance and Payment Bond
Affidavit
User Agency Documents (if applicable)
Change Order Form
Recommendation of Acceptance
Other Documents (if applicable)
Addenda issued during the bid period and acknowledged in the Bid Form

1.2 All definitions set forth in the General Provisions and the Special Provisions are applicable to the Bid Documents, unless otherwise specifically stated or written.

1.3 Addenda are written and/or graphic instruments issued by the Engineer prior to the opening of bids
which modify or interpret the Bid Documents by additions, deletions, clarifications, corrections and prior approvals.

1.4 A bid is a complete and properly signed proposal to do the work or designated portion thereof for the sums stipulated therein supported by data called for by the Bid Documents.

1.5 Base bid is the sum stated in the bid for which the Bidder offers to perform the work described as the base, to which work may be added, or deleted for sums stated in alternate bids.

1.6 An alternate bid (or alternate) is an amount stated in the bid to be added to the amount of the base bid if the corresponding change in project scope or materials or methods of construction described in the Bid Documents is accepted.

1.7 A Bidder is one who submits a bid for a prime Contract with the Owner for the work described in the Bid Documents.

1.8 A Sub-bidder is one who submits a bid to a Bidder for materials and/or labor for a portion of the work.

1.9 Where the word "Engineer" is used in any of the documents, it shall refer to the Prime Designer of the project, regardless of discipline.

ARTICLE 2

PRE-BID CONFERENCE

2.1 A Pre-Bid Conference may be held at the time and location described in the Advertisement for Bids. The purpose of the Pre-Bid Conference is to

familiarize Bidders with the requirements of the Project and the intent of the Bid Documents, and to receive comments and information from interested Bidders. If the Pre-Bid Conference and/or Job Site Visit is stated in the Advertisement for Bids to be a Mandatory Pre-Bid Conference and/or Mandatory Job Site Visit, bids shall be accepted only from those bidders who attend the Pre-Bid Conference and/or Job Site Visit. Contractors who are not in attendance for the entire Pre-Bid Conference and/or Job Site Visit will be considered to have not attended.

2.2 Any revision of the Bid Documents made as a result of the Pre-Bid Conference shall not be valid unless included in an addendum.

ARTICLE 3

BIDDER'S REPRESENTATION

3.1 Each Bidder by making his bid represents that:

3.1.1 He has read and understands the Bid Documents and his bid is made in accordance therewith.

3.1.2 He has visited the site and has familiarized himself with the local conditions under which the work is to be performed.

3.1.3 His bid is based solely upon the materials, systems and equipment described in the Bid Documents as advertised and as modified by addenda.

3.1.4 His bid is not based on any verbal instructions contrary to the Bid Documents and addenda.

3.1.5 He is familiar with the Code of Governmental Ethics requirement that prohibits public servants and/or their immediate family members from bidding on or entering into contracts; he is aware that the Designer and its principal owners are considered Public Servants under the Code of Governmental Ethics for the limited purposes and scope of the Design Contract with the State on this Project (see Ethics Board Advisory Opinion, No. 2009-378 and 2010-128); and neither he nor any principal of the Bidder with a controlling interest therein has an immediate family relationship with the Designer or any principal within the Designer's firm. (see La. R.S. 42:1113). Any Bidder submitting a bid in violation of this clause shall be disqualified and any contract entered into in violation of this clause shall be null and void.

3.2 The Bidder must be fully qualified under any State or local licensing law for Contractors in effect at the time and at the location of the work before submitting his bid. In the State of Louisiana, Revised Statutes 37:2150, et seq. will be considered, if applicable.

The Contractor shall be responsible for determining that all of his Sub-bidders or prospective Subcontractors are duly licensed in accordance with law.

ARTICLE 4

BID DOCUMENTS

4.1 Copies

4.1.1 Bid Documents may be obtained from the Coastal Protection and Restoration Authority as stated in the Advertisement for Bids.

4.1.1.2 In addition to the availability of printed Bid Documents, the Coastal Protection and Restoration Authority will provide the Bid Documents in electronic format. They may be obtained without charge and without deposit as stated in the Advertisement for Bids.

4.1.1.2.2 Where electronic distribution is provided, all other plan holders are responsible for their own reproduction costs.

4.1.2 Complete sets of Bid Documents shall be used in preparing bids; neither the Owner nor the Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

4.1.3 The Owner or Engineer in making copies of the Bid Documents available on the above terms, do so only for the purpose of obtaining bids on the work and do not confer a license or grant for any other use.

4.2 Interpretation or Correction of Bid Documents

4.2.1 Bidders shall promptly notify the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids of any ambiguity, inconsistency or error which they may discover upon examination of the Bid Documents or of the site and local conditions.

4.2.2 Bidders requiring clarification or interpretation of the Bid Documents shall make a written request to the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids, to reach him/her at least seven days prior to the date for receipt of bids.

4.2.3 Any interpretation, correction or change of the Bid Documents will be made by addendum. Interpretations, corrections or changes of the Bid Documents made in any other manner will not be binding and Bidders shall not rely upon such interpretations, corrections and changes.

4.3 Substitutions

4.3.1 The materials, products and equipment described in the Bid Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitutions shall be allowed after bids are received.

4.3.2 No substitution will be considered unless written request for approval has been submitted by the Proposer and has been received by the Engineer at least seven (7) working days prior to the opening of bids. (La. R.S. 38:2295(C)) Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including model numbers, drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. It shall be the responsibility of the proposer to include in his proposal all changes required of the Bid Documents if the proposed product is used. Prior approval is given contingent upon supplier being responsible for any costs which may be necessary to modify the space or facilities needed to accommodate the materials and equipment approved.

4.3.3 If the Engineer approves any proposed substitution, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner.

4.4 Addenda

4.4.1 Addenda will be mailed or delivered to all who are known by the Coastal Protection and Restoration Authority to have received a complete set of Bid Documents.

4.4.2 Copies of addenda will be made available for inspection wherever Bid Documents are on file for that purpose.

4.4.3 Except as described herein, addenda shall not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening of bids, excluding Saturdays, Sundays, and any other legal holidays. If the necessity arises of issuing an addendum modifying the Bid Documents within the seventy-two (72) hour period prior to the advertised time for the opening of bids, then the opening of bids shall be extended at least seven but no more than twenty-one (21) working days, without the requirement of re-advertising. The revised time and date for the opening of bids shall be stated in the addendum.

4.4.4 Each Bidder shall ascertain from the Coastal Protection and Restoration Authority prior to submitting his bid that he has received all addenda issued, and he shall acknowledge their receipt on the Bid Form.

4.4.5 The Owner shall have the right to extend the bid date by up to (30) thirty days without the requirement of re-advertising. Any such extension shall be made by addendum issued by the Coastal Protection and Restoration Authority.

ARTICLE 5

BID PROCEDURE

5.1 Form and Style of Bids

5.1.1 Bids shall be submitted on the Louisiana Uniform Public Work Bid Form provided by the

Engineer.

5.1.2 The Bidder shall ensure that all applicable blanks on the Bid Form are completely and accurately filled in.

5.1.3 Bid sums shall be expressed in both words and figures, and in case of discrepancy between the two, the written words shall govern.

5.1.4 Any interlineation, alteration or erasure must be initialed by the signer of the bid or his authorized representative.

5.1.5 Bidders are cautioned to complete all alternates should such be required in the Bid Form. Failure to submit alternate prices will render the bid non responsive and shall cause its rejection.

5.1.6 Bidders are cautioned to complete all unit prices should such be required in the Bid Form. Unit prices represent a price proposal to do a specified quantity and quality of work. Unit prices are incorporated into the base bid or alternates, as indicated on the Unit Price Form, but are not the sole components thereof.

5.1.7 Bidder shall make no additional stipulations on the Bid Form nor qualify his bid in any other manner.

5.1.8 Written evidence of the authority of the person signing the bid for the public work shall be submitted in accordance with La. R.S. 38:2212(B)(5).

5.1.9 On any bid in excess of fifty thousand dollars ($50,000.00), the Contractor shall certify that he is licensed under R.S. 37: 2150-2173 and show his license number on the bid above his signature or his duly authorized representative.

5.2 Bid Security

5.2.1 No bid shall be considered or accepted unless the bid is accompanied by bid security in an amount of five percent (5.0%) of the base bid and all alternates.

The bid security shall be in the form of a certified check or cashier's check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a Bid Bond written by a surety company licensed to do business in Louisiana and signed by the surety's agent or attorney-in-fact. The Bid Bond shall be written on the Coastal Protection and Restoration Authority Bid Bond Form, and the surety for the bond must meet the qualifications stated thereon. The Bid Bond shall include the legal name of the bidder be in favor of the State of Louisiana, Coastal Protection and Restoration Authority, and shall be accompanied by appropriate power of attorney. The Bid Bond must be signed by both the bidder/principal and the surety in the space provided on the Coastal Protection and Restoration Authority Bid Bond Form. Failure by the bidder/principal or the surety to sign the bid bond shall result in the rejection of the bid.

Bid security furnished by the Contractor shall guarantee that the Contractor will, if awarded the work according to the terms of his proposal, enter into the Contract and furnish Performance and Payment Bonds as required by these Bid Documents, within fifteen (15) days after written notice that the instrument is ready for his signature.

Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as penalty.

5.2.2 The Owner will have the right to retain the bid security of Bidders until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected.

5.3 Submission of Bids

5.3.1 The Bid shall be sealed in an opaque envelope. The bid envelope shall be identified on the outside with the name of the project, and the name, address, and license number of the Bidder. The envelope shall not contain multiple bid forms, and will be received until the time specified and at the place specified in the Advertisement for Bids. It shall be the specific responsibility of the Bidder to deliver his sealed bid to the Coastal Protection and Restoration Authority at the appointed place and prior to the announced time for the opening of bids. Late delivery of a bid for any reason, including late delivery by United States Mail, or

express delivery, shall disqualify the bid.

If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Bid Enclosed" on the face thereof. Such bids shall be sent by Registered or Certified Mail, Return Receipt Requested, addressed to:

Coastal Protection and Restoration Authority
P. 0. Box 44027
Baton Rouge, Louisiana, 70804-4027.

Bids sent by express delivery shall be delivered to:
Coastal Protection and Restoration Authority
150 Terrace Avenue
Suite 100
Baton Rouge, Louisiana 70802

5.3.2 Bids shall be deposited at the designated location prior to the time on the date for receipt of bids indicated in the Advertisement for Bids, or any extension thereof made by addendum. Bids received after the time and date for receipt of bids will be returned unopened.

5.3.3 Bidder shall assume full responsibility for timely delivery at location designated for receipt of bids.

5.3.4 Oral, telephonic or telegraphic bids are invalid and shall not receive consideration. Owner shall not consider notations written on outside of bid envelope which have the effect of amending the bid. Written modifications enclosed in the bid envelope, and signed or initialed by the Contractor or his representative, shall be accepted.

5.4 Modification or Withdrawal of Bid

5.4.1 A bid may not be modified, withdrawn or canceled by the Bidder during the time stipulated in the Advertisement for Bids, for the period following the time and bid date designated for the receipt of bids, and Bidder so agrees in submitting his bid, except in accordance with R.S. 38:2214 which states, in part, "Bids containing patently obvious, unintentional, and substantial mechanical, clerical or mathematical errors, or errors of unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the bid, may be withdrawn by the Contractor if clear and convincing sworn, written evidence of such errors is furnished to the public entity within forty eight hours of the Bid Opening excluding Saturdays, Sundays and legal holidays".

5.4.2 Prior to the time and date designated for receipt of bids, bids submitted early may be modified or withdrawn only by notice to the party receiving bids at the place and prior to the time designated for receipt of bids.

5.4.3 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders.

5.4.4 Bid Security shall be in an amount sufficient for the bid as modified or resubmitted.

5.5 Prohibition of Discriminatory Boycotts of Israel

By submitting its bid, the bidder certifies and agrees that the following information is correct:

In preparing its bid, the bidder has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israel-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The bidder has also not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. The state reserves the right to reject any bids if this certification is subsequently determined to be false and to terminate any contract awarded based on such a false response.

ARTICLE 6

CONSIDERATION OF BIDS

6.1 Opening of Bids

6.1.1 The properly identified Bids received on time will be opened publicly and will be read aloud, and a tabulation abstract of the amounts of the base bids and alternates, if any, will be made available to Bidders.

6.2 Rejection of Bids

6.2.1 The Owner shall have the right to reject any or all bids and in particular to reject a bid not accompanied by any required bid security or data required by the Bid Documents or a bid in any way incomplete or irregular.

6.3 Acceptance of Bid

6.3.2 It is the intent of the Owner, if he accepts any alternates, to accept them in the order in which they are listed in the Bid Form. Determination of the Low Bidder shall be on the basis of the sum of the base bid and the alternates accepted. However, the Owner shall reserve the right to accept alternates in any order which does not affect determination of the Low Bidder.

ARTICLE 7

POST-BID INFORMATION

7.1 Submissions

7.1.1 The Contractor shall submit a Work Plan and Progress Schedule prior to the Pre-Construction Conference in conformance with applicable sections of the General and Special Provisions.

It is the preference of the Owner that, to the greatest extent possible or practical, the Contractor utilize Louisiana Subcontractors, manufacturers, suppliers and labor.

7.1.2 The General Contractor shall be responsible for actions or inactions of Subcontractors and/or material suppliers.

The General Contractor is totally responsible for any lost time or extra expense incurred due to a Subcontractor's/or Material Supplier's failure to perform. Failure to perform includes, but is not limited to, a Subcontractor's financial failure, abandonment of the project, failure to make prompt delivery, or failure to do work up to standard. Under no circumstances shall the Owner mitigate the General Contractor's losses or reimburse the General Contractor for losses caused by these events.

7.1.3
In accordance with La. R.S. 38:2227 [references La. R.S. 38:2212(A)(3)(c)(ii), which has since been renumbered as La. R.S. 38:2212(B)(3)], La. R.S. 38:2212.10 and La. R.S. 23:1726(B) the apparent low bidder on this project shall submit the completed Attestations Affidavit (Past Criminal Convictions of Bidders, Verification of Employees and Certification Regarding Unpaid Workers Compensation Insurance) form found within this bid package to the Coastal Protection and Restoration Authority contact person listed in the Advertisement For Bids within 10 days after the opening of bids**.**

ARTICLE 8

PERFORMANCE AND PAYMENT BOND

8.1 Bond Required

8.1.1 The Contractor shall furnish and pay for a Performance and Payment Bond written by a company licensed to do business in Louisiana, which shall be signed by the surety's agent or attorney-in-fact, in an amount equal to 100% of the Contract amount. Surety must be listed currently on the U. S. Department of Treasury Financial Management Service List (Treasury List) as approved for an amount equal to or greater than the contract amount, or must be an insurance company domiciled in Louisiana or owned by Louisiana residents. If surety is qualified other than by listing on the Treasury list, the contract amount may not exceed fifteen percent of policyholders' surplus as shown by surety's most recent financial statements filed with the Louisiana Department of Insurance and may not exceed the amount of $500,000. However, a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A. M. Best's Key Rating Guide shall not be subject to the $500,000 limitation, provided that the contract amount does not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide nor fifteen percent of policyholders' surplus as shown by

surety's most recent financial statements filed with the Louisiana Department of Insurance. The Bond shall be signed by the surety's agent or attorney-in-fact. The Bond shall be in favor of the Coastal Protection and Restoration Authority.

8.2 Time of Delivery and Form of Bond

8.2.1 The Bidder shall deliver the required bond to the Owner simultaneous with the execution of the Contract.

8.2.2 Bond shall be in the form furnished by the Coastal Protection and Restoration Authority, entitled CONTRACT BETWEEN OWNER AND CONTRACTOR AND PERFORMANCE AND PAYMENT BOND, a copy of which is included in the Bid Documents.

8.2.3 The Bidder shall require the Attorney-in-Fact who executes the required bond on behalf of the surety to affix thereto a certified and current copy of his power of Attorney.

ARTICLE 9

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

9.1 Form to be Used

9.1.1 Form of the Contract to be used shall be furnished by the Coastal Protection and Restoration Authority, an example of which is bound in the Bid Documents.

9.2 Award

9.2.1 After award of the Contract, the successful Bidder, if a corporation, shall furnish to the Owner the most current copy of a Disclosure of Ownership Affidavit on file with the Secretary of State.

9.2.2 In accordance with Louisiana Law, when the Contract is awarded, the successful Bidder shall, at the time of the signing of the Contract, execute the Non-Collusion Affidavit included in the Contract Documents.

9.2.3 When this project is financed either partially or entirely with State Bonds, the award of this Contract is contingent upon the sale of bonds by the State Bond Commission. The State shall incur no obligation to the Contractor until the Contract between Owner and Contractor is duly executed.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Coastal Protection and Restoration Authority
150 Terrace Avenue
Suite 100
Baton Rouge, LA 70802
(Owner to provide name and address of owner)

BID FOR: River Reintroduction into Maurepas Swamp and West Shore Lake Pontchartrain Flood Risk Reduction Project PO-0029/PO-0062, Early Works
(Owner to provide name of project and other identifying information)

The undersigned bidder hereby declares and represents that she/he: a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: AECOM and dated: February 2022 .
(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____ .

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____ Dollars ($ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NOT APPLICABLE Dollars ($ NOT APPLICABLE)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NOT APPLICABLE Dollars ($ NOT APPLICABLE)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NOT APPLICABLE Dollars ($ NOT APPLICABLE)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

_____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

**** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM
UNIT PRICE FORM

TO: Coastal Protection and Restoration Authority
150 Terrace Avenue
Suite 100
Baton Rouge, LA 70802
(Owner to provide name and address of owner)

BID FOR: River Reintroduction Into Maurepas Swamp and West Shore Lake Pontchartrain Flood Risk Reduction Project PO-0029/PO-0062, Early Works
(Owner to provide name of project and other identifying information)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___Mobilization & Demobilization (ref Specification 01 00 00)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
1	1	LS		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___Traffic Control and Coordination (ref Specification 01 55 26.00 12)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
2	1	LS		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___Silt Fence (ref Specification 01 57 23.00 12)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
3	4,850	LF		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___ Truck Wash Down Racks (ref Specification 01 57 23.00 12)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
4	1	LS		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___Clearing and Grubbing (ref Specification 31 11 00.00 12)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
5	1	LS		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___Hydro-Seeding (ref Specification 32 92 19)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
6	1	LS		

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

DESCRIPTION:	❑ Base Bid or ❑ Alt.# ___			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION *(Quantity times Unit Price)*
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Wording for "DESCRIPTION" is to be provided by the Owner.
All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

BID BOND

FOR
COASTAL PROTECTION AND RESTORATION AUTHORITY PROJECTS

Date: _____

KNOW ALL MEN BY THESE PRESENTS:

That_____of_____, as Principal, and_____, as Surety, are held and firmly bound unto the State of Louisiana, Coastal Protection and Restoration Authority (Obligee), in the full and just sum of five (5%) percent of the total amount of this proposal, including all alternates, lawful money of the United States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial Management Service list of approved bonding companies as approved for an amount equal to or greater that the amount for which it obligates itself in this instrument or that it is a Louisiana domiciled insurance company with at least an A - rating in the latest printing of the A. M. Best's Key Rating Guide. If surety qualifies by virtue of its Best's listing, the Bond amount may not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide.

Surety further represents that it is licensed to do business in the State of Louisiana and that this Bond is signed by surety's agent or attorney-in-fact. This Bid Bond is accompanied by appropriate power of attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its proposal to the Obligee on a Contract for:

_____

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing and give a good and sufficient bond to secure the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this obligation shall be void; otherwise this obligation shall become due and payable.

_____	_____
PRINCIPAL (BIDDER)	SURETY
BY: _____	BY: _____
AUTHORIZED OFFICER-OWNER-PARTNER	AGENT OR ATTORNEY-IN-FACT(SEAL)

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT EARLY WORKS

Name of Project

PO-0029/PO-0062

Project No.

STATE OF _____

PARISH OF _____

ATTESTATIONS AFFIDAVIT

Before me, the undersigned notary public, duly commissioned and qualified in and for the parish and state aforesaid, personally came and appeared Affiant, who after being duly sworn, attested as follows:

LA. R.S. 38:2227 PAST CRIMINAL CONVICTIONS OF BIDDERS

A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:

(a) Public bribery (R.S. 14:118)
(b) Corrupt influencing (R.S. 14:120)
(c) Extortion (R.S. 14:66)
(d) Money laundering (R.S. 14:230)

B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:

(a) Theft (R.S. 14:67)
(b) Identity Theft (R.S. 14:67.16)
(c) False accounting (R.S. 14:70)
(d) Issuing worthless checks (R.S. 14:71)
(e) Bank fraud (R.S. 14:71.1)
(f) Forgery (R.S. 14:72)
(g) Contractors; misapplication of payments (R.S. 14:202)
(h) Malfeasance in office (R.S. 14:134)

LA. R.S. 38:2212.10 Verification of Employees

A. At the time of bidding, Appearer is registered and participates in a status verification system to verify that all new employees in the state of Louisiana are legal citizens of the United States or are legal aliens.

B. If awarded the contract, Appearer shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

C. If awarded the contract, Appearer shall require all subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT EARLY WORKS

Name of Project

PO-0029/PO-0062

Project No.

LA. R.S. 23:1726(B) Certification Regarding Unpaid Workers Compensation Insurance

A. R.S. 23:1726 prohibits any entity against whom an assessment under Part X of Chapter 11 of Title 23 of the Louisiana Revised Statutes of 1950 (Alternative Collection Procedures & Assessments) is in effect, and whose right to appeal that assessment is exhausted, from submitting a bid or proposal for or obtaining any contract pursuant to Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950 and Chapters 16 and 17 of Title 39 of the Louisiana Revised Statutes of 1950.

B. By signing this bid /proposal, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

_____	_____
NAME OF BIDDER	**NAME OF AUTHORIZED SIGNATORY OF BIDDER**
_____	_____
DATE	**TITLE OF AUTHORIZED SIGNATORY OF BIDDER**

_____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER/AFFIANT

Sworn to and subscribed before me by Affiant on the _____ day of _____ , 20___ .

_____

Notary Public

FOR INFORMATION ONLY

This document will be prepared by the Coastal Protection and Restoration Authority in the form appropriate for the project.

CONTRACT BETWEEN OWNER AND CONTRACTOR
AND PERFORMANCE AND PAYMENT BOND

This agreement entered into this _____ day of _____ , 2022, by (CONTRACTOR NAME) hereinafter called the "Contractor", whose business address is_____, and the State of Louisiana Coastal Protection and Restoration Authority, herein represented by its Executive Director executing this contract, and hereinafter called the "Owner".

Witnesseth that the Contractor and the Owner, in consideration of premises and the mutual covenants; consideration and agreement herein contained, agree as follows:

Statement of Work: The Contractor shall furnish all labor and materials and perform all of the work required to build, construct and complete in a thorough and workmanlike manner:

Project No.	PO-0029/PO-0062
Project Name	River Reintroduction into Maurepas Swamp and West Shore Lake Pontchartrain Flood Risk Reduction Project, Early Works

in strict accordance with Contract Documents prepared by Owner.

It is recognized by the parties herein that said Contract Documents, including by way of example and not of limitation, the Plans, Specifications (including General Provisions, Special Provisions, and Technical Specifications), Any Addenda thereto, Instructions To Bidders, this Contract, Advertisement For Bids, Affidavit, Bid Form, Bonds (Bid, Performance, and Payment),any Submitted Post-Bid Documentation, Notice of Award, Notice to Proceed, Change Orders, and Claims, if any, impose duties and obligations upon the parties herein, and said parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Contract Documents are incorporated herein by reference with the same force and effect as though said Contract Documents were herein set out in full.

Time for Completion: The work shall be commenced on a date to be specified in a written order of the Owner and shall be completed within _____ consecutive calendar days from and after the said date.

Liquidated Damages: Contractor shall be assessed Liquidated Damages in the amount of **$_____** per day for each consecutive calendar day which work is not complete beginning with the first day beyond the completion time.

Compensation to be paid to the Contractor: The Owner will pay and the Contractor will accept in full consideration for the performance of the Contract the sum of **_____ Dollars ($)** which sum represents the Contract Price.

Performance and Payment Bond: To these presents personally came and intervened _____, herein acting for _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned herein, he hereby in his capacity as its Attorney in Fact obligates his said company, as Surety for the said Contractor, unto the said Owner, up to the sum of **_____ Dollars ($)**. By issuance of this bond, the surety acknowledges they are in compliance with R.S. 38:2219.

The condition of this performance and payment bond shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Owner, from all cost and damages which he may suffer by said Contractor's non-performance or should said Contractor not pay all persons who have and fulfill obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said Surety agrees and is bound to so perform the Contract and make said payment(s).

Provided, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Owner of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Owner or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions or other forbearance being hereby waived.

The Contractor agrees to abide by the requirements of the following as applicable: Title VI of the Civil Rights Act of 1964 and Title VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246 as amended, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, the Fair Housing Act of 1968 as amended, and Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

Contractor agrees not to discriminate in its employment practices, and will render services under this Contract without regard to race, color, religion, sex, sexual orientation, national origin, veteran status, political affiliation, disability, or age in any matter relating to employment. Any act of discrimination committed by Contractor, or failure to comply with these statutory obligations when applicable shall be grounds for termination of this Contract.

In Witness whereof, the parties hereto on the day and year first above written have executed this agreement in seven (7) counterparts, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:

STATE OF LOUISIANA
COASTAL PROTECTION AND
RESTORATION AUTHORITY

_____ BY: _____
Lawrence B. Haase, Executive Director

_____

_____ BY: _____

_____

SURETY: _____

_____ BY:_____
ATTORNEY IN FACT

_____

_____
ADDRESS

_____
TELEPHONE NUMBER

STATE OF LOUISIANA
PARISH OF _____

PROJECT NO. PO-0029/PO-0062
NAME River Reintroduction into Maurepas Swamp and West Shore Lake Pontchartrain Flood Risk Reduction Project, Early Works
LOCATION: St. John the Baptist Parish, Louisiana

A F F I D A V I T

Before me, the undersigned authority, duly commissioned and qualified within and for the State and Parish aforesaid, personally came and appeared_____representing who, being by me first duly sworn deposed and said that he has read this affidavit and does hereby agree under oath to comply with all provisions herein as follows:

PART I.

Section 2224 of Part II of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

(1) That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and

(2) That no part of the Contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the Contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.

PART II.

Section 2190 of Part I of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

That affiant, if an architect or engineer, or representative thereof, does not own a substantial financial interest, either directly or indirectly, in any corporation, firm, partnership, or other organization which supplies materials for the construction of a public work when the architect or engineer has performed architectural or engineering services, either directly or indirectly, in connection with the public work for which the materials are being supplied.

For the purposes of this Section, a "substantial financial interest" shall exclude any interest in stock being traded on the American Stock Exchange or the New York Stock Exchange.

That affiant, if subject to the provisions of this section, does hereby agree to be subject to the penalties involved for the violation of this section.

_____

AFFIANT

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____, 2022.

_____

NOTARY

PART I. GENERAL PROVISIONS

GP-1 DEFINITION OF TERMS

Whenever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to the singular or plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs and the titles of other documents or forms.

Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

a. Acceptance: A written approval from the Engineer which certifies that specific items of work in the Contract have been completed and/or obligations have been fulfilled by the Contractor.

b. Addenda: Those written or graphic documents which are issued prior to opening of Bids in accordance with the Bidding Requirements and clarify or change the bidding requirements or the proposed Contract Documents.

c. Application of Payment: That form which is used by the Contractor to request partial and final payment and is deemed acceptable to the Owner. It shall be accompanied by any supporting documentation required by the Contract Documents.

d. A.S.T.M.: American Society for Testing and Materials.

e. Bid: An offer or proposal submitted on the prescribed form setting forth the prices for the Work.

f. Bidder: The person, association of persons, firm, or corporation submitting a proposal for the Work.

g. Bidding Requirements: The Advertisement for Bids, Instructions to Bidders, Form of Bid Security, if any, and Bid Form with any supplements.

h. Change Order: A written order which is submitted to the Contractor, signed by the Owner, and authorizes an addition, deletion, or revision in the Work, or an adjustment in the contract price or the contract time issued after the effective date of the Contract.

i. Claim: A written demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both or other relief with respect to the terms of the Contract.

j. Contract: The written agreement between the Owner and the Contractor which defines the work to be completed and shall be understood to also include all Contract Documents.

k. Contract Documents: The Contract, all addenda which pertains to the Contract Documents, Bid Documents and specified Attachments accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award, Contractor's Bid when attached as an exhibit to the Agreement, the Bonds (Bid and Performance/Payment), General Provisions, Special Provisions, Technical Specifications, Plans, and all Field or

Change Orders issued after the execution of the Agreement. Shop Drawings and other submittals by the Contractor are not Contract Documents.

l. Contract Price: The moneys payable by the Owner to the Contractor for the Work in accordance with the Contract Documents as stated in the Contract.

m. Contract Time: The number of calendar days specified in the Contract for completion of the Work, together with any extensions authorized through change orders.

n. Contractor: The person, association of persons, firm, or corporation entering into the duly awarded Contract.

o. Contracting Agency: The State of Louisiana, Coastal Protection and Restoration Authority (CPRA).

p. Day: When any period of time is referred to in the Contract Documents using days, it will be computed to exclude the first day and include the last day of such period. If the last day of any such period falls on a Saturday, Sunday, or a legal holiday, that day will be omitted from the computation. A calendar day is measured as twenty-four (24) hour period starting at midnight and ending the following midnight.

q. Design Report: A written report by the Engineer which provides the design methodology for the Work.

r. Effective Date of the Contract: The date indicated in the Contract on which it becomes effective.

s. Engineer: The State of Louisiana, Coastal Protection and Restoration Authority, or its designee.

t. Equipment: All machinery, implements, and power-tools, in conjunction with the necessary supplies for the operation, upkeep, maintenance, and all other tools and apparatuses necessary for the proper construction and acceptable completion of the Work.

u. Extension of Contract: Any extension of time for completion of Work beyond the Contract Time which is granted by the Owner, recommended by the Engineer and approved by the Coastal Protection and Restoration Authority in the form of a Change Order.

v. Federal Sponsor: The federal agency which has been tasked, if applicable, to manage the implementation of the project.

w. Field Order: A written order issued by the Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or Contract Time.

x. Laboratory: The firm, company, or corporation which is used to test materials and is approved for use by the Engineer.

y. Laws and Regulations; Laws or Regulations: Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

z. Materials: Any substance used in the Work to build structures, but does not include material used in false work or other temporary structures not incorporated in the Work.

aa. Milestone: A principal event specified in the Contract Documents relating to an intermediated completion date or time prior to the Contract Times.

bb. Notice of Award: A written notice to the successful Bidder stating that the Bid has been accepted by the Owner and that the successful Bidder is required to execute the Contract and furnish the Payment and Performance Bond and Non-Collusion Affidavit.

cc. Notice to Proceed: The written notice to the Contractor by the Owner which provides the starting date for the Contract Time.

dd. Owner: The Owner is the State of Louisiana (State) which acts through the Contracting Agency.

ee. Performance and Payment Bond: The approved form of security furnished by the Contractor and Surety for the faithful performance of the Work, and the payment for all labor, materials, and/or obligations incurred by the Contractor in the prosecution thereof.

ff. Plans: That part of the Contract Documents prepared or approved by the Engineer which graphically shows the scope, intent, and character of the Work to be completed by the Contractor.

gg. Project Site: The location where the Work is to be performed as stated in the Contract Documents.

hh. Resident Project Representative: An authorized representative of the Engineer who is responsible to inspect the Work and materials furnished by the Contractor.

ii. Right-of-way: That entire area reserved for constructing, maintaining, and protecting the proposed improvement, structures, and appurtenances of the Work.

jj. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portions of the Work will be judged.

kk. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for the Contractor and submitted by the Contractor to illustrate some portion of the Work to be performed.

ll. Specifications: That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the work to be performed and certain administrative details applicable thereto.

mm. State: The State of Louisiana.

nn. Structures: Bridges, plugs, weirs, bulkheads, berms, dams, levees, and other miscellaneous construction encountered during the Work and not otherwise classified herein.

oo. Subcontractor: Any person, association of persons, firm, or corporation who contracts with the Contractor to perform any part of the project covered by the Contract.

pp. Submittals: Certificates, samples, shop drawings, and all other project data which are submitted to the Engineer in order to verify that the correct products will be installed on the project.

qq. Successful Bidder: The lowest responsive and responsible Bidder whom the Owner makes an award.

rr. Special Provisions: That part of the Contract Documents which amends or supplements these General Provisions.

ss. Surety: The corporate body, licensed to do business in Louisiana, bound with and for the Contractor's primary liability, and engages to be responsible for payment of all obligations pertaining to acceptable performance of the Work contracted.

tt. Temporary Structures: Any non-permanent structure required while engaged in the prosecution of the Contract.

uu. Work: All work specified herein or indicated on the Plans.

vv. Work Plan: A written plan by the Contractor that details how the Work will be provided including layout drawings, projected schedule (Initial Progress Schedule), and a list of labor hours, materials, and equipment.

GP-2 BID REQUIREMENTS

The Contract and Bonds which govern the Work shall be performed in accordance with the Plans, Specifications, and the Louisiana Standard Specifications for Roads and Bridges, 2016 edition. The Bidder understands that all quantities for performing the Work have been estimated by the Engineer, and that the Bid shall be the sum of the quantities multiplied by their respective unit rates. The Contract shall be awarded by the Owner through a comparison of all bids. It is the responsibility of each Bidder before submitting a Bid to:

2.1. Examine the Bidding Documents including the Plans and Specifications and any Addenda or related data identified in the Bidding Documents;

2.2. Visit the Project Site to become familiar with the local conditions if they are believed to affect cost, progress, or the completion of the Work;

2.3. Become familiar and satisfied with all federal, state, and local Laws and Regulations that may affect cost, progress, or the completion of the Work;

2.4. Study and correlate all information known to the Bidder including observations obtained from Bidder's visits, if any, to the Project Site, with the Bidding Documents;

2.5. Submit a written notice to the Engineer within three (3) days regarding any conflicts, errors, ambiguities, or discrepancies discovered in the Bidding Documents and confirm that the written resolution thereof by the Engineer is acceptable to the Bidder; and

2.6. Determine that the Bidding Documents are generally sufficient to convey an understanding of all terms and conditions for completing the required Work.

The submission of a Bid will constitute an incontrovertible representation that the Bidder has complied with every requirement of these Specifications. The Bidder shall comply with all other requirements specified in the Advertisement For Bids and the Instruction To Bidders.

GP-3 AVAILABILITY OF PLANS AND SPECIFICATIONS

One (1) set of Plans and Specifications shall be furnished to each Bidder. Three (3) sets of the Plans and Specifications shall be furnished to the Contractor upon award of the Contract. Additional sets may be furnished to the Contractor upon request from the Coastal Protection and Restoration Authority, 150 Terrace Avenue, Suite 100, Baton Rouge, Louisiana 70802.

GP-4 LAWS, REGULATIONS, STANDARDS, SPECIFICATIONS, AND CODES

Bidders are required to become familiar and remain in compliance with all Federal, State, and local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority which may affect those employed for the execution of the Work or which may affect the conduct of the Work. The Contractor shall indemnify the Owner and its representatives against any claim or liability arising from all violations of any laws, bylaws, ordinances, codes, regulations, orders, or decrees, whether by the Contractor or by the Contractor's employees. The filing of a bid will be presumptive evidence that the Bidder has complied with this requirement. The Owner will not be responsible for any inaccurate interpretations or conclusions drawn by the Contractor from information and documentation provided by the Owner.

References to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws and Regulations, whether such reference be specific or by implication, may not be in effect at the time of opening the Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents. No provision of any such standard, specification, manual, or code, or any instruction of a supplier shall be effective to change the duties or responsibilities of the Owner or Engineer, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Bid Documents. No such provision shall be effective to assign to the Owner or Engineer, or any of their consultants, agents, or employees any duty or authority to supervise or direct the performance of the Contractor's obligations or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

The obligations imposed by these specifications are in addition to and are not to be construed in any way as a limitation of any rights available to the Engineer or Owner which are otherwise imposed by any laws or regulations or other provisions within the Contract Documents.

The Contractor shall abide by laws set forth in the Davis-Bacon Act of 1931 which states that all laborers and mechanics employed by recipients, the recipient's contractors, or subcontractors on this project shall be paid wages at rates no less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40 United States Code. Additionally, with respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Number 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and The Copeland Act of Title 40 (40 U.S.C. § 3145). Prevailing Wage Determination Schedules, as determined by the United States Department of Labor, are provided in the Appendix. Prevailing Wage Determination Schedules are subject to modification by the United States Department of Labor. The Contractor is responsible for utilizing the most current Prevailing Wage Determination Schedule. These documents can be downloaded from the following link: http://www.wdol.gov/dba.aspx#3. Modifications to

Prevailing Wage Determination Schedules shall be effective if received (or posted) no less than 10 days prior to bid opening.

GP-5 PRE-BID CONFERENCE AND SITE VISIT

A Pre-Bid Conference and/or Job Site Visit may be held at the location and on the date provided in the Advertisement For Bids. If the Pre-Bid Conference and/or Job Site Visit is stated in the Advertisement for Bids to be a MANDATORY Pre-Bid Conference and/or MANDATORY Job Site Visit, bids shall be accepted only from those bidders who attend the Pre-Bid Conference and/or Job Site Visit in its entirety. Failure to attend a mandatory Pre-Bid Conference and/or mandatory Job Site Visit in its entirety will result in a null or void Bid.

All questions shall be in writing and faxed or emailed to the Coastal Protection and Restoration Authority contact person listed in the Advertisement For Bids after the Pre-Bid Conference and by the due date announced at the Pre-Bid conference. In order to ensure adequate response time, all questions and/or requests for clarification or interpretation of the Bid Documents should be received by the Coastal Protection and Restoration Authority at least seven days prior to the date for receipt of bids. Oral statements will not be binding or legally effective. The Coastal Protection and Restoration Authority will issue addenda in response to all questions arising at the Pre-Bid Conference and site visit to all prospective Bidders on record. All prospective Bidders on record may contact the Coastal Protection and Restoration Authority contact person for any additional information.

GP-6 NOTICE OF AWARD

The Owner, or its designated bidding agent, shall provide written notice to the Successful Bidder stating that the Owner will sign and deliver the Contract upon compliance with the conditions enumerated therein and within the time specified.

GP-7 NOTICE TO PROCEED AND CONTRACT TIME

The Contractor shall start the Work and begin the Contract Time on the dates provided in the Notice to Proceed. The Work shall be conducted using sufficient labor, materials, and equipment as necessary to ensure completion within the Contract Time. The Contract Time for completion of the Base Bid for the Work is provided in the Instructions To Bidders, unless an extension is granted to the Contract Time as specified in GP-44. If the Bid contains an Alternate Bid(s), and the Alternate Bid(s) is awarded and included in the Contract, the Contract Time associated with the Alternate Bid(s) will be as provided in the Instructions To Bidders. Unless otherwise noted in the Contract Documents, Contract Time will be on a calendar day basis. Contract Time shall consist of the number of calendar days stated in the Instructions To Bidders and the Contract beginning with the date noted in the written Notice to Proceed, including Saturdays, Sundays, holidays and non-work days.

The following table defines the monthly anticipated adverse weather days that are expected to occur during the Contract Time and will constitute the baseline monthly weather time for

evaluations. The schedule is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the regional geographic area.

Monthly Anticipated Adverse Weather Calendar Days											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
5	5	4	4	4	5	7	7	5	3	3	4

Adverse weather days must prevent Work for fifty percent (50%) or more of the work day and delay work critical to the timely completion of the project. The number of actual adverse weather days shall be calculated chronologically from the first to the last day of each month.

If adverse weather conditions are the basis for a claim for additional time, the Contractor shall document that weather conditions had an adverse effect on the scheduled construction. An increase in Contract Time due to weather due to weather shall not be cause for an increase in the contract sum.

GP-8 WORK PLAN

The Contractor shall develop a written Work Plan which accounts for all of the construction activities required by the Contract Documents. The Work Plan shall include a list of the individual construction tasks to be completed and the estimated dates for beginning and completing the tasks. It shall also include all other items which are applicable to completing the Work such as, but not limited to, the following:

a. Typical report form for the Bi-Weekly Progress Meeting;

b. Typical form for Daily Progress Report;

c. Hurricane and Severe Storm Plan;

d. Site-specific Health and Safety Plan;

e. The delivery method and source(s) of all construction materials (company or producer name, mailing and physical address, phone number, and name of contact person).

f. The personnel, material, subcontractors, fabricators, suppliers, types of equipment, and equipment staging areas the Contractor proposes to use for construction;

g. Shop drawings, test results, and sample submittals;

h. Survey layout and stakeout;

i. All supplemental items specified in the Special Provisions.

The Work Plan shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall review the Work Plan and have the Contractor make any necessary revisions prior to acceptance of the plan. **No payment for mobilization will be made until the Work Plan has been accepted by the Engineer.**

GP-9 PROGRESS SCHEDULE

The Contractor shall develop a written Progress Schedule which provides for an orderly progression of the Work, submittals, tests, and deliveries in order to complete the Work within the specified Milestones and Contract Time. All of the items listed in the Work Plan shall be integrated into the Progress Schedule. The format of the schedule shall be composed using Microsoft Project®, or any other software deemed acceptable by the Engineer. It shall be updated weekly by the Contractor, at a minimum. The Progress Schedule shall also include, but not be limited to the following:

a. All of the elements in the Work Plan, including updates;

b. A work order issued from Louisiana One Call ordering all their subscribers in the project area to mark their utilities;

c. A telephone log verifying that all property owners and utilities have been contacted. This log should list the time, date, and names of the personnel representing the property owners, utilities, and Contractor;

The Progress schedule must reflect the anticipated adverse weather delays described in GP-7 on all weather dependent activities.

The Progress Schedule shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall perform a review and have the Contractor make any necessary revisions prior to acceptance of the schedule. Acceptance will not impose responsibility on the Owner or Engineer for the sequencing, scheduling, or progression of the Work. The Contractor is fully responsible for progression of the Work in order to maintain compliance with the Progress Schedule and Contract Time.

GP-10 DAILY PROGRESS REPORTS

The Contractor shall record the following daily information on Daily Progress Reports:

a. Date and signature of the author of the report;

b. Dollar amount of all bid items that are fabricated, installed, backfilled, pumped, constructed, damaged, replaced, etc. The amount of material shall be expressed in the units stated in the bid;

c. Field notes of all surveys;

d. Notes on all inspections;

e. Details of Health and Safety meetings;

f. A brief description of any Change Orders, Field Orders, Claims, Clarifications, or Amendments;

g. Condition of all navigation aids (i.e., warning signs, lighted marker buoys) and any repairs performed on them;

h. Weather conditions (adverse weather day, wind speed and direction, temperature, wave height, precipitation, etc.);

i. The amount of time lost to severe weather or personnel injury, etc;

j. Notes regarding compliance with the Progress Schedule;

k. Visitor log (Instructions for format will be furnished by the Field Engineer).

The daily progress reports shall be submitted to the Engineer at the Bi-Weekly Progress Meetings specified in GP-13 in both hard copy and digital format (Adobe Acrobat® Format, or approved equal). The typical form for Daily Progress Reports shall be developed by the Contractor and incorporated into the Work Plan.

GP-11 HURRICANE AND SEVERE STORM PLAN

The Contractor shall develop and maintain a written Hurricane and Severe Storm Plan. The Plan shall include, but not be limited to, the following:

a. What type of actions will be taken before storm strikes at the Project Site. The plan should specify what weather conditions or wave heights will require shutdown of the Work and removal of equipment, personnel, etc.

b. Notes from continuous monitoring of NOAA marine weather broadcasts and other local commercial weather forecasts.

c. Equipment list with details on their ability to handle adverse weather and wave conditions.

d. List of safe harbors or ports and the distance and travel time required to transfer equipment from the Project Site.

e. Hard copies of any written approvals or operations schedules associated with the use of the safe harbors or ports.

f. Method of securing equipment at the safe harbors or ports.

g. List of tug boats and work boats and their respective length, horsepower, etc. which will adequately transfer the equipment to safe harbor or port under adverse weather conditions.

h. Methods which will be used to secure equipment left onsite during adverse weather conditions.

i. Evacuation or immediate reaction plans to be taken by personnel for sudden storm occurrences.

j. Operations procedures which will be used to secure critical dredging equipment such as spuds, swing wires, anchor wires, or tugs during adverse weather conditions.

k. Communications protocol with local law enforcement and fire and rescue agencies.

The Contractor shall incorporate the Hurricane and Severe Storm Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-12 HEALTH AND SAFETY PLAN AND INSPECTIONS

The Contractor shall develop and maintain a written Health and Safety Plan which allows the Work to be performed in compliance with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the safety of personnel or property. This includes maintaining compliance with the Code of Federal Regulations, Title 29, Occupational Safety and Health Administration (OSHA) and all applicable Health and Safety Provisions of the State of Louisiana.

The Contractor shall institute a daily inspection program to assure that the requirements of the Health and Safety Plan are being fulfilled. Inspections shall include the nature of deficiencies observed, corrective action taken or to be taken, location of inspection, date, and signature of the person responsible for its contents. The results of the inspections shall be recorded on Daily Progress Reports and kept at the Project Site during the Work.

The Contractor shall incorporate the Health and Safety Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-13 PROGRESS MEETINGS AND REPORTS

The Engineer shall schedule meetings to review the progress of the Work, coordinate future efforts, discuss compliance with the Progress Schedule and resolve miscellaneous problems. The Engineer or Resident Project Representative, Contractor, and all Subcontractors actively working at the Project Site shall attend each meeting. Representatives of suppliers, manufacturers, and other Subcontractors may also attend at the discretion of the Contractor. The Contractor shall record the details of each meeting in a Progress Report. The format of this report shall be developed by the Contractor, approved by the Engineer, and included in the Work Plan. The progress meetings and reports shall be scheduled according to the Special Provisions.

GP-14 PRE-CONSTRUCTION CONFERENCE

A Pre-Construction Conference shall be held by the Contractor, Owner, Engineer, local stakeholders, and other appropriate personnel prior to starting construction on the date specified in the Special Provisions. This conference shall serve to establish a mutual understanding of the Work to be performed, the elements of the Progress Schedule and Work Plan, expectations for bi-weekly progress meetings, the Plans and Specifications, processing Applications for Payment, and any other items of concern. If any subcontractors are not present, another pre-construction conference will be required.

GP-15 CONTRACT INTENT

The Bid Documents are complementary; what is called for by one is as binding as if called for by all. Clarifications and interpretations or notifications of minor variations and deviations of the Contract Documents will be issued by Engineer as provided in these Specifications. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from

the Bid Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided at no additional cost to the Owner.

GP-16 ENGINEER AND AUTHORITY OF ENGINEER

The Engineer will be the designated representative of the Owner, the initial interpreter of the Contract Documents and the judge over acceptability of all the Work. Claims, disputes, and other matters relating to the acceptability of the Work, performance by the Contractor or the interpretation of the requirements of the Contract Documents must be submitted to the Engineer in writing. Upon written request from the Contractor, the Engineer shall issue written clarifications or interpretations which are consistent with the overall intent of the Contract Documents. Such written clarifications and interpretations will be binding on the Owner and the Contractor. Either the Owner or the Contractor may make a Claim if a written clarification or interpretation justifies an adjustment in the Contract Price or Contract Times.

The Engineer has the authority to suspend the Work in whole or in part due to failure of the Contractor to correct conditions unsafe for workmen or the general public, carry out provisions of the Contract, perform conformance work, or to carry out orders. The Engineer shall submit a written order to the Contractor for work which must be suspended or resumed. Nothing in this provision shall be construed as establishing responsibility on the part of the Engineer for safety which is the responsibility of the Contractor.

The Engineer or Resident Project Representative shall keep a daily record of weather and flood conditions and may suspend the Work as deemed necessary due to periods of unsuitable weather, conditions considered unsuitable for execution of the Work, or for any other condition or reason deemed to be in the public interest.

GP-17 CONFORMITY WITH PLANS AND SPECIFICATIONS

All work and materials involved with the Work shall conform with the lines, grades, cross sections, dimensions, and other requirements shown on the Plans or indicated in these Specifications unless otherwise approved by the Engineer.

GP-18 CLARIFICATIONS AND AMENDMENTS TO CONTRACT DOCUMENTS

The Contract Documents may be clarified or amended by the Engineer to account for additions, deletions, and revisions to the Work after the Effective Date of the Contract. The clarifications and amendments shall be addressed by either a Change Order or a written clarification by the Engineer. The Contractor shall not proceed with the Work until the Change Order or clarification has been issued by the Engineer. The Contractor shall not be liable to the Owner or Engineer for failure to report any such discrepancy unless the Contractor had reasonable knowledge.

The Contractor may request a clarification or amendment for the following:

a. Any conflict, error, ambiguity, or discrepancy within the Contract Documents; or

b. Any conflict, error, ambiguity, or discrepancy between the Bid Documents and the provision of any Law or Regulation applicable to the performance of the Bid; or

c. Any standard, specification, manual, or code (whether or not specifically incorporated by reference in the Bid Documents); or

d. Instructions by a supplier.

The official form for a written clarification is provided in the appendices of the Contract Documents. This form shall be filled out appropriately by the Contractor and submitted to the Engineer. The Engineer shall clarify the issue in writing on either the clarification form, Field Order or a Change Order and submit it to the Contractor.

GP-19 SUBCONTRACTS

The Contractor shall provide the names of all Subcontractors to the Engineer in writing before awarding any Subcontracts. The Contractor shall be responsible for the coordination of the trades and Subcontractors engaged in the Work. The Contractor is fully responsible to the Owner for the acts and omissions of all the Subcontractors. The Owner and Engineer will not settle any differences between the Contractor and Subcontractors or between Subcontractors. The Contractor shall have appropriate provisions in all Subcontracts to bind Subcontractors to the Contractor by the terms of the General Provisions and other Contract Documents, as applicable to the Work of Subcontractors. The provisions should provide the Contractor the same power regarding termination of Subcontracts that the Owner may exercise over the Contractor under any provisions of the Contract Documents.

GP-20 WORKERS, METHODS, AND EQUIPMENT

The Contractor shall provide competent, qualified, and trained personnel to perform the Work. The Contractor shall not employ any person found objectionable by the Engineer. Any person employed by the Contractor or any Subcontractor who, in the opinion of the Engineer, does not perform the Work in a proper, skillful, and orderly manner shall be immediately removed upon receiving a written order by the Engineer. The Engineer may also suspend the Work until the Contractor removes the employee or provides a suitable replacement. Such an employee shall not be re-employed in any portion of the Work without written approval from the Engineer.

The on-site superintendent for the Contractor shall be competent, English-speaking, and qualified to receive orders, supervise, and coordinate all Work for the Contractor and any Subcontractors. The qualifications of the superintendent must be established and approved by the Engineer prior to commencement of the Work. The superintendent shall be furnished by the Contractor regardless of how much Work may be sublet. In the performance of the Work under this Contract, the Contractor shall conduct operations to avoid interference with any other Contractors.

All equipment, products, and material incorporated into the Work shall be as specified, or if not specified, shall be new, of good quality, and protected, assembled, used, connected, applied, cleaned, and conditioned in accordance with the manufacturer's instructions, except as otherwise may be provided in the Bid Documents. All equipment shall be of sufficient size and mechanical condition to meet the requirements of the Work and produce a satisfactory quality of work. Equipment shall not damage adjacent property throughout the performance of the Work. The Plant and Equipment Schedule should be completed by the Contractor.

The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures used to complete the Work in conformance with the Contract Documents.

The Contractor shall obtain permission from the Engineer if a method or type of equipment other than specified in the Contract is desired. The request shall be in writing and shall include a full description of the methods, equipment proposed, and reasons for the modification. A proposed item of material or equipment may be considered by the Engineer to be functionally equal to an item specified in the Contract if:

a. It is at least equal in quality, durability, appearance, strength, and design characteristics;

b. There is no increase in any cost including capital, installation, or operating to the Owner;

c. The proposed item will conform substantially, even with deviations, to the detailed requirements of the item named in the Bid Documents.

If, after trial use of the substituted methods or equipment, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue use of the substituted methods or equipment and shall complete the Work with the specified methods and equipment. The Contractor shall remove the deficient Work and replace it with Work of specified quality or take other corrective action as directed. No change will be made in basis of payment for construction items involved or in Contract Time as a result of authorizing a change in methods or equipment.

GP-21 ACCIDENT PREVENTION, INVESTIGATIONS, AND REPORTING

The Contractor shall be responsible to develop and maintain all safeguards and safety precautions necessary to prevent damage, injury, or loss throughout the performance of the Work. All accidents at the Project Site shall be investigated by the immediate supervisor of employee(s) involved and reported to the Engineer or Resident Project Representative within one (1) working day. A complete and accurate written report of the accident including estimated lost time days shall be submitted to the Engineer within four (4) calendar days. A follow-up report shall be submitted to the Engineer if the estimated lost time days differ from the actual lost time days.

GP-22 PRESERVATION AND RESTORATION OF PROPERTY, MONUMENTS, ETC.

The Contractor shall comply with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the preservation and protection of public and private property. The Contractor shall install and maintain suitable safeguards and safety precautions during the Work as necessary to prevent damage, injury, or loss to property. This responsibility shall remain with the Contractor until the Work has been completed and accepted. Any damage, injury, or loss to property which is caused by the Contractor or Subcontractors shall be repaired or replaced at the expense of the Contractor.

The Contractor shall protect all land monuments, State and United States bench marks, geodetic and geological survey monuments, and property markers from disturbance or damage until an authorized agent has witnessed or otherwise referenced their location. The Contractor shall also provide protection for all public and private property including trees, utilities, pipes, conduits, structures, etc. These items shall not be removed unless directed by the Engineer.

The Contractor shall be responsible to completely repair all damages to public or private property due to any act, omission, neglect, or misconduct in the execution of the Work unless it is due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, public enemies, or governmental authorities. The damage must be repaired at the expense of the Contractor before final acceptance of the Work can be granted by the Engineer. If the Contractor fails to repair the damage within forty-eight (48) hours, the Owner may independently proceed with the repairs at the expense of the Contractor by deducting the cost from the Contract. If the Contractor cannot provide for the cost of repairs, the Surety of the Contractor shall be held until all damages, suits, or claims have been settled.

GP-23 PROTECTION OF WORK, MATERIALS, AND EQUIPMENT

It shall be the responsibility of the Contractor to protect the Work, materials, and equipment from damages or delays due to inflows, tidal rise, and storm water runoff which may occur at the Project Site. The Owner shall not be held liable or responsible for these types of delays or damages.

GP-24 LAND RIGHTS

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from public and private landowners in order to perform the Work. A land rights memorandum which lists all known responsible contacts and required stipulations is provided in the appendices of the Contract Documents. The Contractor is responsible to notify all of the contacts and abide by stipulations listed in that memorandum.

GP-25 UTILITIES

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from known public and private utilities in order to perform the Work. The utilities include, but are not limited to telephone, telegraph, power poles or lines, water or fire hydrants, water or gas mains and pipelines, sewers, conduits, and other accessories or appurtenances of a similar nature which are fixed or controlled by a city, public utility company or corporation.

The Contractor shall conduct the Work in such a manner as to cooperate and minimize inconveniences with utilities. Prior to commencement of the Work, the Contractor is responsible to notify all of the utilities and abide by stipulations required by the utility company(s). The Contractor shall also call Louisiana One Call at 811 or (800) 272-3020 a minimum of 5 working days prior to construction to locate existing utilities at the Project Site.

Any damage to utilities that is caused by the Contractor within the Project Site shall be repaired at the expense of the Contractor. The Owner will not be responsible for any delay or damage incurred by the Contractor due to working around or joining the Work to utilities left in place or for making adjustments.

Any unidentified pipes or structures which may be discovered within the limits of the Project Site shall not be disturbed and shall be reported to the Engineer as soon as possible.

Construction or excavation shall not be performed around unidentified utilities without prior approval from the Engineer.

GP-26 PERMITS

Federal and State permits that are required to perform the Work, such as the Department of the Army Permit, Coastal Use Permit, LDEQ Clean Water Permit, LDWF Fill Material License, and LADOTD highway crossing permit have been secured by the Owner. Permit conditions affecting the construction processes have been included in these Specifications. Copies of these permits will be provided to the Contractor at the pre-construction conference. These permits will not relieve the responsibility of the Contractor from obtaining any additional permits which may be needed to complete the Work. Copies of any special permits that are obtained by the Contractor must be submitted to the Owner. The Contractor shall conform to the requirements therein and display copies of the permits in a public setting at the Project Site at all times.

GP-27 PROJECT SITE CLEAN-UP

The Contractor shall keep the Project Site free from accumulations of waste material or trash at all times. All trash and waste materials shall be removed by the Contractor and disposed off-site in an approved waste disposal facility. In addition, all equipment, tools, and non-conforming work shall also be removed prior to the Work being accepted. No materials shall be placed outside of the Project Site.

GP-28 OWNER INSPECTION

The Owner, Resident Project Representative, and Federal Sponsor shall have the right to perform reasonable inspections and testing of the Work at the Project Site. Access shall be granted to the entire Project Site including all materials intended for use in the Work. The Contractor shall allow reasonable time for these inspections and tests to be performed. The inspections shall not relieve the Contractor from any obligation in accordance with the requirements of the Contract.

The Owner shall notify the Contractor prior to all tests, inspections, and approvals of the Work which are to be conducted at the Project Site. The Owner shall also provide the Contractor with the written results of all inspections and tests. Inspections, tests, or Payments made by the Owner shall not constitute acceptance of non-conforming Work or prejudice the Owner's rights under the Contract.

GP-29 DUTIES OF RESIDENT PROJECT REPRESENTATIVE

A Resident Project Representative may be assigned by the Engineer to the Project Site to observe the Contractor and monitor the progress and manner in which the Work is being performed. The Resident Project Representative will also report to the Engineer and Contractor whenever materials or Work fail to comply with the Contract. The Resident Project Representative is authorized to reject any materials or suspend work which does not comply with the Contract until the issue is resolved by the Engineer.

However, the Resident Project Representative is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract, or to approve or accept any portion of the Work,

or to issue instructions contrary to the Plans and Specifications. The Resident Project Representative shall not manage or perform duties for the Contractor.

GP-30 CONSTRUCTION STAKES, LINES, AND GRADES

The Engineer shall direct the Contractor to all control points necessary for setting stakes and establishing lines and grades as shown on the Plans. The Contractor shall be responsible for laying out all of the Work. All layouts shall be witnessed and verified by the Engineer or Resident Project Representative prior to beginning the Work. The Contractor shall be responsible for proper execution of the Work according to the layouts after receiving verification from the Engineer.

The Contractor shall be responsible for furnishing and maintaining stakes such that the Work can be verified for acceptance. The Engineer may suspend the Work at any time if it cannot be adequately verified due to the number, quality, or condition of the stakes.

GP-31 CONTRACTOR'S RESPONSIBILITY FOR WORK

The Contractor shall execute all items covered by the Contract, and shall furnish, unless otherwise definitely provided in the Contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to complete the Work. The Contractor shall pay constant attention to the progress of the Work and shall cooperate with the Engineer in every way possible. The Contractor shall maintain a complete copy of the Contract at all times, including the Plans, Specifications, and any authorized modifications.

GP-32 ENVIRONMENTAL PROTECTION

The Contractor shall comply with and abide by all federal, state, and local laws and regulations controlling pollution of the environment, including air, water, and noise. The Contractor shall take precautions to prevent pollution of waters and wetlands with fuels, oils, bituminous materials, chemicals, sewage, or other harmful materials and contaminants, and to prevent pollution of the atmosphere from particulate and gaseous matter, in accordance with all terms and conditions of federal, state, and local air and water pollution control laws and programs and their rules and regulations, including the federal Clean Air Act and the federal Clean Water Act.

The Contractor shall adhere to the provisions which require compliance with all standards, orders, or requirements contained under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, which prohibit the use under non-exempt Federal contracts, grants, or loans, of facilities included on the Environmental Protection Agency (EPA) list of Violating Facilities.

Construction operations in rivers, streams, lakes, tidal or coastal waters, reservoirs, canals, wetlands, and any other impoundments shall be restricted to areas where it is necessary to accomplish the Work and performed in accordance with any applicable federal, state, and local laws, regulations, permit requirements, and guidelines, and the Contractor shall conduct the Work in a manner that will not cause damaging concentrations of silt or pollution to water.

Contractor shall maintain and operate equipment to minimize noise, dust, and vibration near noise, dust and vibration-sensitive areas such as churches, hospitals, schools, and residential areas, and assure that any activities conducted near such areas are not unduly disruptive. Contractor shall maintain all equipment with properly functioning mufflers.

The Contractor shall be responsible for determining and utilizing any erosion and pollution control features or methods that may be necessary to comply with all federal, state, and local laws and regulations.

GP-33 SANITARY PROVISION

The Contractor shall provide and maintain sanitary accommodations for use by all employees and Subcontractors. Facilities shall comply with the requirements of the Louisiana State Board of Health and Hospitals and other authorities having jurisdiction. Committing public nuisance on the Project Site is prohibited.

GP-34 PAYMENT OF TAXES

The Contractor shall be responsible for all taxes and duties that maybe levied under existing State, Federal, and local laws during the completion of the Work. The Owner will presume that the amount of such taxes is included in the unit prices bid by the Contractor and will not provide additional reimbursement.

GP-35 RADIO AND TELEPHONES

The Contractor shall furnish and maintain radio and telephone equipment throughout the Contract Time which will allow communication between the Contractor and the Engineer or Resident Project Representative.

GP-36 NAVIGATION

All marine vessels shall comply with the following Federal Laws and Regulations:

a. The International Navigational Rules Act of 1977 (Public Law 95-75, 91 Stat. 308, or 33 U.S.C. 1601-1608); and

b. The Inland Navigation Rules Act of 1980 (Public Law 96-591, 94 Stat. 3415, 33 U.S.C. 2001-2038).

These rules can be found on the Internet at:
http://www.navcen.uscg.gov/?pageName=navRulesContent

All marine vessels shall display the lights and day shapes required by Part C- Lights and Shapes of the Inland Navigation Rules. The location, type, color, and size of the lights and day shape shall be in accordance with Annex I - Positioning and Technical Details of Lights and Shapes. Any vessel engaged in dredging is considered a “Vessel restricted in her ability to maneuver” and shall display all the lights and shapes required in Rule 27, “Vessel Not Under Control.”

GP-37 OBSTRUCTION TO NAVIGATION

The Contractor shall minimize all obstructions to navigation in compliance with pertinent U. S. Coast Guard regulations while conducting the Work. The Contractor shall promptly move any floating equipment or marine vessels which obstruct safe passage of other marine vessels. Upon completion of the Work, the Contractor shall remove all marine vessels and other floating equipment such as temporary ranges, buoys, piles, and other marks or objects that are not permanent features of the Work.

GP-38 MARINE VESSELS AND MARINE ACTIVITIES

All marine vessels regulated by the USCG shall have the required USCG documentation that is current before being placed in service. A copy of any USCG Form 835 issued to the vessel in the preceding year shall be made available to the Owner and Engineer and a copy shall be on board the vessel. All officers and crew shall possess valid USCG licenses as required by USCG regulations. These certificates, classifications, and licenses shall be posted in a public area on board each vessel.

All dredges and quarter boats not subject to USCG inspection and certification or not having a current ABS classification shall be inspected in the working mode annually by a marine surveyor accredited by the National Association of Marine Surveyors (NAMS) or the Society of Accredited Marine Surveyors (SAMS) and having at least 5 years' experience in commercial marine plant and equipment. The inspection certificate shall be posted in a public area on board each dredge and/or quarter boat.

All other plant and support vessels shall be inspected before being placed in service and at least annually by a qualified person. The inspection certificate shall be posted in a public area on board each plant and/or vessel.

GP-39 RECORD KEEPING

The Contractor shall maintain orderly records of the Progress Schedule, Daily Progress Reports, Progress Meetings, correspondence, submittals, reproductions of original Contract Documents, Change Orders, Field Orders, certificates, additional drawings issued subsequent to the executed Contract, clarifications and interpretations of the Contract Documents by the Engineer, and other related documents at the Project Site until all of the Work is accepted by the Engineer.

GP-40 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in three (3) copies. Each certificate shall be certified by an authorized agent of the supplying company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date of shipment. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the testing date. The Contractor shall also certify that all materials and test reports conform to the requirements of the Contract. Certification shall not be construed

as relieving the Contractor from furnishing satisfactory material if the material is tested and determined to be in nonconformance.

GP-41 SUBMITTALS

The Contractor shall review all Submittals for compliance with the requirements of the Contract prior to delivery to the Engineer. Each Submittal shall contain a signed statement by the Contractor that it complies with the Contract requirements with any exceptions explicitly listed. The Contractor shall comply with these requirements for Submittals from Subcontractors, manufacturers, and suppliers.

All Submittals shall include sufficient data to demonstrate that the requirements of the Contract are met or exceeded. All submittals shall be legible and marked with the project title and clearly identify the item submitted. Each submittal package shall include an itemized list of the items submitted.

All Submittals will be reviewed within fourteen (14) days after being received by the Engineer. The Contractor shall allow the Engineer sufficient time for review, corrections, and resubmission of all Submittals prior to beginning the associated Work. The Contract Time shall not be extended based on incorrect or incomplete Submittals.

GP-42 CLAIMS FOR EXTRA COSTS

The Contractor is expected to complete the Work according to the Contract Price specified in the Bid Documents. If the Contractor deems additional compensation is due for work, materials, delays or other additional costs/or expenses not covered in the Contract or not ordered as extra work, the Contractor shall give the Engineer written notice thereof within fourteen (14) calendar days after the receipt of such instructions and, in any event, before commencing the procedure. The Contractor shall justify the claim for extra cost by providing supporting data and calculations. The Engineer shall determine whether the Contractor is entitled to be compensated for such extra cost and shall make any required adjustments of the Contract in accordance with GP-43. If no written claim is made within this fourteen (14) calendar-day period, the Contractor will be deemed to have waived any claim for extra cost for such work.

Claim for damages or delays of the Work shall not be made by the Contractor for a relocation of the construction operation or portions thereof to other locations within the geographical scope of the project, when in the opinion of the Engineer, such relocation is necessary for the most effective prosecution of the Work and may be accomplished without undue hardship.

GP-43 ALTERATION OF THE CONTRACT AND COMPENSATION

Using Change Orders, Field Orders, or Written Amendments, the Owner may order extra work or make changes by altering the details of construction, add to or deduct from the Work. The requirements and stipulations of these documents shall be binding on the Owner and Contractor throughout the remainder of the Contract. Any claim for an extension of Contract Time caused thereby shall be adjusted at the time of ordering such change.

The value of any such extra work or change shall be determined in one or more of the following ways and in the following priority:

a. By application of the unit prices in the Contract to the quantities of the items involved or subsequently agreed upon; or

b. By mutual acceptance between the Owner and Contractor of a lump sum.

If none of the above methods is agreed upon, the Contractor, provided he is so ordered by the Owner in writing, shall proceed with the Work on a "force account" basis. In such a case, the Contractor shall keep and preserve in such form as the Engineer may direct, a correct itemized account of the direct cost of labor, materials, equipment, together with vouchers bearing written certification by the Contractor. In any case, the Engineer shall certify to the amount, including an allowance of fifteen percent (15%) for jobsite and home office overhead indirect expenses and profit due to the Contractor. Where such change involves a subcontractor, an allowance of fifteen percent (15%) for overhead and profit shall be due the subcontractor and an allowance of ten percent (10%) shall be due the Contractor. Pending final determination of value, payments on account of changes shall be made on the Engineer's estimate and as approved in an executed Change Order.

If the Contractor is prevented from completing the Work according to the Contract Price due to the Owner, the Contractor may be entitled to any reasonable and necessary addition of cost as determined by the Engineer. Neither the Owner nor the Contractor shall be entitled to any damages arising from events or occurrences which are beyond their control, including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, acts of war, and other like matters. The provisions of this section exclude recovery for damages caused by the Contractor and compensation for additional professional services by either party.

GP-44 EXTENSION OF CONTRACT TIME

The Contractor is expected to complete the Work within the Contract Time specified in the Bid Documents. A legitimate increase of the Contract time may be requested by the Contractor throughout the course of the Work. This Claim must be submitted to the Engineer in writing within fourteen (14) days of the event which caused the time delay to the Contractor. If an extension of Contract Time involves an increase in Contract Price, both claims shall be submitted together. The Contractor shall justify the increase of the Contract Time in the Claim using supporting data and calculations. The Engineer may deny the claim if there is insufficient information to make a determination. If the Claim is approved, the Engineer shall issue a Change Order within thirty (30) days of the Claim. The Contract Time shall be increased on a basis that is commensurate with the amount of additional or remaining Work. For example, the Contract Time can be increased where the number of actual adverse weather days exceeds the number of days estimated in the Contract.

GP-45 OWNER'S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE

45.1 TERMINATION FOR CAUSE

The Owner shall submit a written notice to the Contractor and Surety which justifies placement of the Contractor in default if:

a. The Work is not begun within the time specified in the Notice to Proceed; or

b. The Work is performed with insufficient workmen, equipment, or materials to assure prompt completion; or

c. The Contractor performs unsuitable, neglected or rejected work, refuses to remove materials; or

d. The Work is discontinued; or

e. The Work is not completed within the Contract Time or time extension; or

f. Work is not resumed within a reasonable time after receiving a notice to continue; or

g. The Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or

h. The Contractor allows any final judgment to stand unsatisfied for a period of ten (10) days; or

i. The Contractor makes an assignment for the benefit of creditors; or

j. The Work is not performed in an acceptable manner.

If the Contractor or Surety does not remedy all conditions cited in the written notice within ten (10) days after receiving such a notice, the Contractor will be in default and the Owner shall remove the Contractor from the Work. If the Contractor is placed into default, the Owner may obtain the necessary labor, materials, and equipment or enter into a new Contract in order to complete the Work. All costs incurred by the Owner for completing the Work under the new Contract will be deducted from the payment due the Contractor. If the expense exceeds the sum payable under the Contract, the Contractor and Surety shall be liable to pay the Owner the difference.

45.2 TERMINATION FOR CONVENIENCE

Owner may, at any time, terminate this Contract or any portion thereof, for Owner's convenience, upon providing written notice to the Contractor. In such case, Contractor shall be paid for all work completed through the date notice was provided (less payments already received) and reasonable demobilization and restocking charges incurred and reasonable overhead and profit based upon industry standards on the work performed. In no event shall the Contractor be entitled to payment of overhead and profit on work not performed. In the event it is determined that the Contractor was wrongfully terminated for cause, pursuant to Section GP 45.1 above, such termination shall be automatically converted to a termination for convenience under and payment made as provided under this Section.

GP-46 TEMPORARY SUSPENSION OF WORK

The Engineer shall have the authority to temporarily suspend the Work in whole or in part. A Field Order shall be issued to the Contractor for any of the Work that is suspended for periods exceeding one (1) calendar day. The Field Order shall include the specific reasons and details for the suspension. The Contract Time shall not be extended if the Work is suspended due to failure by the Contractor to comply with a Field Order or with the Plans and Specifications. If the Work is suspended in the interest of the Owner, the Contractor shall make due allowances for the lost time.

GP-47 NON-CONFORMING AND UNAUTHORIZED WORK

Work not conforming to the Plans, Specifications, Field Orders, or Change Orders shall not be accepted for payment. Unacceptable or unauthorized work shall be removed and replaced in an acceptable manner at the expense of the Contractor in order to obtain final acceptance of the Work.

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the Owner after seven (7) calendar days written notice to the Contractor, may correct such deficiencies itself or by use of other contractors without prejudice to any other remedy it may have, and may deduct the cost thereof from the payment then or thereafter due to the Contractor.

GP-48 CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

The Contractor may terminate the Contract or Work and recover payment from the Owner for labor and materials if the Work is stopped through no act or fault of the Contractor for more than three (3) months. For example, such an occurrence could be caused by a court order or other public authority. In any case, the Contractor shall submit a written notice to the Engineer at the beginning of the occurrence, and a written Claim to the Owner at the end of the occurrence.

GP-49 BREACH OF CONTRACT

The Owner shall submit a written Claim to the Contractor regarding any breach of the Contract. The Contractor must provide a written response to the Owner regarding the breach of Contract within ten (10) days after the Claim. This response must provide either an admission to the Claim or a detailed denial based on relevant data and calculations. The failure of the Contractor to provide a proper response within ten (10) days shall result in justification of the Claim by default.

GP-50 NO WAIVER OF LEGAL RIGHTS

The Owner shall not be prevented from recovering costs from the Contractor, Surety, or both due to failure of the Contractor to fulfill all of the obligations under the Contract. If a waiver is provided to the Contractor for a breach of Contract by the Owner, it shall not apply to any other breach of Contract. Final acceptance of the Work shall not prevent the Owner from correcting any measurement, estimate, or certificate. The Contractor shall be liable to the

Owner without prejudice to the terms of the Contract or any warranty for latent defects, fraud, or gross negligence.

GP-51 LIABILITY FOR DAMAGES AND INJURIES

To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner, Engineer, and their officers, employees, representatives, and/or agents from all suits, actions, claims, costs, losses, demands, and judgments (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) brought because of injuries or damage sustained by a person or property due to the operations of Contractor; due to negligence in safeguarding the Work, or use of unacceptable materials in constructing the Work; or any negligent act, omission, or misconduct of the Contractor; or claims or amounts recovered under the Workmen's Compensation Act or other law, ordinance, order, or decree; any money due the Contractor as considered necessary by the Owner for such purpose may be retained for use of the State or in case no money is due, the performance and payment bond may be held until such suits, actions, claims for injuries or damages have been settled and suitable evidence to that effect furnished to the Owner; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that adequate Workman's Compensation, Public Liability, and Property Damage Insurance are in effect.

The indemnification obligations of the Contractor shall not extend to the liability of the Owner, Engineer, and their affiliates arising out of the preparation or approval of the Plans, Specifications, maps, opinions, reports, surveys, or Change Orders, or for providing directions or instructions which are the primary cause of the injury or damage.

Should the Owner or Contractor suffer from any injury or damage due to an error, omission, or act of the other party or their legally liable affiliates, a written Claim shall be submitted to the other party within ten (10) days. The Claim shall provide all details regarding the injury or damage, the results of any investigations, and the action to be taken to prevent any reoccurrence.

GP-52 LIABILITY FOR LOSSES BY ACTS OF THE GOVERNMENT

The Owner shall not be liable for any loss or damage suffered by the Contractor arising out of a cessation of Work under this Contract due to any act or order of any local, state, or federal government agency. If this cessation occurs, the Contractor may request an extension of the Contract Time according to the provisions in GP-44.

GP-53 FINAL INSPECTION AND ACCEPTANCE

Whenever the Work provided for, or contemplated by the contract, has been satisfactorily completed, all punch list items completed and the final cleaning up is performed, the Engineer shall be notified in writing that said work is completed and ready for final inspection. The Engineer shall, unless otherwise provided, make the final inspection within a reasonable length of time after the receipt of such notification.

If all construction provided for in the contract is found completed to the Engineer's satisfaction, the inspection shall constitute the final inspection and the Engineer will make recommendation

to the Owner for final acceptance and notify the Contractor in writing of this recommendation of acceptance.

The Owner will record the Notice of Acceptance with the Clerk of Court in the Parish(s) in which the Work has been performed. The recording of the Notice of Acceptance shall commence a lien period of not less than forty-five (45) consecutive calendar days, during which period the retainage will be withheld by the Owner. The Owner will provide the Contractor with a copy of the Certificate of Recordation.

GP-54 AS-BUILT DRAWINGS

The Contractor shall submit all originals and copies of the As-Built Drawings to the Engineer for review and acceptance in accordance with the Special Provisions. The As-Built Drawings shall provide complete data for quantities, dimensions, specified performance and design criteria, and similar items which clearly represent the services, materials, and equipment the Contractor has provided. All revision sheets shall be clearly stamped with the words "As-Built".

GP-55 COMPLETION OF CONTRACT

Notwithstanding any other provision of this Contract and all applicable and necessary time delays under Louisiana law, completion of the Contract requires all of the Work to be complete, inspected by the Engineer, accepted by the Owner as recommended by the Engineer, and after final payment is made. After the Contract is complete, the Contractor will then be released from further obligation except as set forth in the Contract Bond and Contractor's Guarantee.

GP-56 CONTRACTOR'S GUARANTEE

The Contractor is obligated to provide a written guarantee to the Owner that all of the Work conforms to the Contract Documents. The Work shall be guaranteed to survive for a minimum period of 1 year after final acceptance, unless otherwise specified in the Technical Specifications.

a. The guarantee shall include:

   1. A written warranty by the manufacturer for each piece of installed project equipment or apparatus furnished under the Contract.

   2. Any necessary repair of replacement of the warranted equipment during the guarantee period at no cost to the Owner.

   3. Satisfactory operation of installed equipment including, but not limited to, any mechanical and electrical systems furnished and constructed under the Contract during the guarantee period. The Contractor shall repair all equipment which fails due to defective materials or faulty workmanship during the guarantee period. The Contractor shall also be liable for all other ancillary expenses incurred by the Owner due to the failure.

b. The guarantee shall exclude defects or damage caused by:

1. Abuse or improper modification, maintenance, or operation by anyone other than the Contractor; or

2. Wear and tear under normal usage.

c. This obligation by the Contractor shall be absolute. The following actions will not constitute acceptance of non-conformance Work or release the Contractor from obligation to furnish the Work in accordance with the Contract Documents:

1. Observations by the Owner or Engineer; or

2. Recommendations by the Engineer or payment by the Owner; or

3. Use of the Work by the Owner; or

4. Issuance of a notice of acceptance by the Owner pursuant to the provisions of GP-53, or failure to do so; or

5. Any inspection, test, or approval by others; or

6. Any correction to non-conforming work by the Owner.

GP-57 DISPUTE RESOLUTION

The parties shall use their best efforts to resolve all disputes in an amicable fashion. Prior to filing suit by either party with respect to any claims, or disputes arising between the parties, the disputes shall be submitted first to non-binding mediation. The mediation shall be conducted in accordance with the Construction Industry Mediation Rules of the American Arbitration Association. If the parties cannot agree to a private mediator, then the mediator shall be selected by the American Arbitration Association, upon the filing of a demand for mediation.

If the dispute is not resolved by mediation within 60 days from the request for mediation, then either party may institute legal proceedings. Any litigation involving the Owner and arising under or related to the Contract or the bidding or award thereof shall be instituted exclusively in the 19th Judicial District Court in and for the Parish of East Baton Rouge, State of Louisiana.

GP-58 PAYMENT

The Owner hereby agrees to pay to the Contractor as full compensation for all work performed under the contract, and/or supplemental agreements thereto, the monetary value of the actual quantities in the completed work according to the schedule of unit prices and/or lump sum prices set forth in attached bid proposal and/or duly authorized supplements thereto, and made a part of the Contract.

Partial payments under the Contract shall be made at the request of the Contractor not more than once each month, based upon partial estimates agreed to by the Contractor and Engineer

and shall be furnished to the Engineer and approved by the Engineer prior to transmittal to the Owner for approval and payment.

A Subcontractor Report (included in the appendices of the Contract Documents) should be submitted by the Contractor with each request for partial payment, to be used for informational purposes only by CPRA.

The partial estimates will be approximately stated, and all partial estimates and payments shall be subject to corrections in the estimate rendered following the discovery of any error in any previous estimates.

The payment of the partial estimate shall be taken as verification that the work has been performed and that its quality is satisfactory, however it will in no way serve as a release to the Contractor for the responsibility of any portions thereof. The work and any particulars relating thereto shall be subject to revision and adjustment by the Engineer and/or the Owner at any time prior to final payment, regardless of any previous action taken.

There shall be reserved from the payments provided for the Contract ten percent (10%) for contracts less than $500,000 or five percent (5%) for contracts of $500,000 or more, of the estimates submitted, said sum to constitute a trust fund for the protection of and payment to any person or persons, mechanic, subcontractor or materialmen who shall perform any labor upon such contract, or the doing of said work, and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such work, and shall be withheld for a minimum of forty-five (45) calendar days after final acceptance of the completed contract and filing of the Notice of Acceptance as described in GP-53.

After the expiration of the forty-five (45) calendar day period, the reserve in excess of a sum sufficient to discharge the claims of materialmen and laborers who have filed their claims, together with a sum sufficient to defray the cost of such action and to pay attorneys' fees, shall be paid to the Contractor.

The Contractor shall be responsible for obtaining and furnishing a clear lien and privilege certificate to the Owner at the expiration of the retainage period, and prior to payment of any reserve withheld.

GP-59 PAYMENTS WITHHELD

In addition to the percentage provided for in Section GP-58 of these General Provisions and in accordance with any other provision of this Contract, the Owner may withhold such amounts from any payment as may be necessary to protect himself from loss on account of:

a) Defective work not remedied;

b) Claims filed or reasonable evidence indicating probable filing of claims;

c) Failure of the Contractor to make payments properly to subcontractors or for material or labor;

d) Reasonable evidence that the Work will not be completed within the Contract time and that the unpaid balance would not be adequate to cover damages for the anticipated delay;

e) A reasonable doubt that the contract can be completed within the time period remaining under the contract;

f) Damage to another contractor;

g) Failure to submit required reports; or

h) Modifications of the contract which necessitate the execution of change orders prior to payment of funds.

Furthermore, nothing contained in this Section shall be deemed to limit the right of the Owner to withhold liquidated damages, as stated in the Instructions to Bidders, from any amounts which may be due and owed the Contractor for work performed under the contract.

GP-60 LIENS

Neither the final payment nor any part of the retained percentage shall come due until the Contractor shall deliver to the Owner a complete release of all liens arising out of this contract, or receipts in full in lieu thereof, and, if required by the Owner, an affidavit that so far as he has knowledge or information, the releases and receipts include all labor and material for which a lien could be filed; but if any subcontractor refuses to furnish a release or receipt in full, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any lien, construction cost, or attorney's fees.

GP-61 EQUAL EMPLOYMENT OPPORTUNITY

The State of Louisiana is an equal opportunity employer, and looks to its Contractor, subcontractors, vendors and suppliers to take affirmative action to effect this commitment in its operations.

By submitting the bid proposal and executing the Contract, the Contractor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veterans Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, and the Age Act of 1975, and the Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

The Contractor agrees not to discriminate in its employment practices, and will render services the Contract, without regard to their race, age, color, religion, sex, national origin, veteran status, political affiliation or disabilities. Any act of discrimination committed by the Contractor, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of the Contract.

GP-62 ANTI-KICKBACK CLAUSE

The Contractor agrees to adhere to the mandate dictated by the Copeland “Anti-Kickback” Act which provides that each contractor or subcontractor shall be prohibited from inducing,

by any means, any person employed in the completion of the work, to give up any part of the compensation to which he is otherwise entitled.

GP-63 SUSPENSION/DEBARMENT

Contractor certifies, by signing and submitting any bid, that their company, any subcontractors, or principals are not suspended, debarred, or ineligible from entering into contracts with any department or agency of the Federal Government or of the State of Louisiana, or in receipt of notice of proposed debarment or suspension.

Contractor agrees to secure from any contractor(s) and subcontractor(s) for the captioned project, certification that such contractor(s) and subcontractor(s) are not suspended, debarred or declared ineligible from entering into contracts with any department or agency of the Federal Government or of the State of Louisiana, or in receipt of a notice of proposed debarment or suspension.

Contractor shall provide immediate notice to Owner in the event of it or its contractor(s) or any subcontractor(s) being suspended, debarred or declared ineligible by any department or agency of the Federal Government or of the State of Louisiana, or upon receipt of a notice of a proposed debarment or suspension, either prior to or after execution of this Contract.

Upon receipt of notice of suspension, debarment, or declaration that Contractor or its contractor(s) or any subcontractor(s) is/are ineligible to enter into contracts with any department or agency of the Federal Government or of the State of Louisiana, either prior to or after execution of this Contract, Owner reserves the right to review cause for said debarment, suspension, or declaration of ineligibility, and to terminate this Contract pursuant to the terms of GP-45 OWNER'S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE, or take such other action it deems appropriate under this Contract.

GP-64 LOUISIANA FIRST HIRING ACT

Contractor shall comply with the Louisiana First Hiring Act (La. R.S. 39:2201-2204), which requires that within ten (10) days of executing the Contract, Contractor shall submit the following information to the Louisiana Workforce Commission:

1. The number and types of jobs anticipated for the Work.

2. The skill level of the jobs anticipated for the Work.

3. The wage or salary range for each job anticipated for the Work.

4. Methods, if any, that the Contractor will use to recruit unemployed persons or person employed in low wage jobs to fill job openings for the Work.

END OF PART I - GENERAL PROVISIONS

PART II. SPECIAL PROVISIONS

SP-1 LOCATION OF WORK

The Project Site is located in St John the Baptist Parish, Louisiana. It begins on the north side of LA Hwy 44 (River Road), adjacent to approximate Mississippi River Mile 144, and continues northeast to the Canadian National Railway (CN RR) property boundary. The site is bounded by River Rd. to the south, Marathon Petroleum property to the west, CN RR to the north, and a residential neighborhood to the east. Approximate coordinates for the center of the project are 30°03'19" N and 90°38'18" W (NAD 83).

SP-2 WORK TO BE DONE

The Contractor shall provide all labor, materials, and equipment necessary to perform the Work. The Work shall include, but not be limited to: Mobilization and Demobilization to/from the Project Site; planning and implementing traffic control; constructing the site's construction entrance; clearing and grubbing; demolition; grading the site for drainage; hydroseeding; and other items pursuant to the completion of the Work as identified throughout the Contract Documents. The Work shall be performed in accordance with these Specifications and in conformity to lines, grades, and elevations shown on the Plans or as directed by the Engineer. The Equipment used for the Work shall be operated within the boundaries of the Project Site and away from existing vegetated wetlands or any other sensitive areas. The Contractor shall be responsible for returning all disturbed wetlands to pre-existing conditions at no expense to the Owner. 24-hour Work periods are not permitted. If the Contractor determines that 24-hour Work periods are necessary, they shall request written authorization from the Owner; written authorization shall describe the reasons the Contractor believes 24-hour Work is warranted. The tasks associated with the Work are described as follows:

2.1 Traffic Control: The Contractor shall maintain traffic flow along River Road during all construction activities, and shall comply with all governing laws, ordinances and regulations regarding safety, so as to ensure safety of the workmen and the traveling public during all phases of construction.

2.2 Clearing and Grubbing: Clearing and grubbing operations consist of removing all trees, stumps, down timber, brush, vegetation, abandoned structures, fencing, and other similar debris. It also consists of proper hauling and disposal of this debris off-site and the filling in of all holes generated by the Work.

2.3 Demolition: The Contractor shall demolish any abandoned structures encountered within the Work area.

2.4 Grading Site: After clearing and grubbing, the Contractor shall grade the site as indicated on the Plans to drain the site towards its centerline and towards the north.

2.5 Hydro-seeding: The Contractor shall seed the full cleared site prior to demobilization.

SP-3 CONTRACT MILESTONES

Milestone	Location or Recipient	Due Date
Bid Advertisement	Publications	As advertised.
Pre-Bid Conference (GP-5)	Location provided in Advertisement for Bids	Provided in Advertisement for Bids.
Questions on Bid Documents (GP-5 and SP-5)	Submit to Owner*	Provided in Instructions to Bidders.
Effective Date of Contract	Submit to Contractor and Owner	Stated in Contract.
Start of Contract Time	Submit to Contractor and Owner	Stated in Notice to Proceed.
List of all Subcontractors (GP-19)	Submit to Engineer	Prior to awarding any Subcontracts.
Notice of Intent to LDEQ	Submit to LDEQ, copy the Engineer	LDEQ Permit based on this NOI must be secured before Mobilization to the site
Work Plan (GP-8 and SP-7)	Submit to Engineer	14 days prior to Pre-Construction Conference.
Progress Schedule (GP-9)	Submit to Engineer	14 days prior to starting construction, monthly thereafter.
Traffic Control Plan (01 55 26.00 12)	Submit to Engineer	14 days prior to any anticipated traffic control work.
Daily Progress Reports (GP-10 and SP-4, Par 4.2.2)	Submit to Resident Project Representative, Engineer	12:00 pm each day from mobilization to demobilization.
Notices to Utilities and LADOTD (GP-25)	Submit to Engineer	Prior to mobilization
Pre-Construction Conference (GP-14)	Contractor, Engineer, and Resident Project Representative	Scheduled by the Engineer after the Notice to Proceed is issued.
Progress Meetings and Reports (GP-13, GP-39)	Submit to Owner, Engineer, and Resident Project Representative	Bi-weekly.
As-Built Drawings	Submit to Engineer	Five (5) working Days prior to Final Inspection. Final due 14 working days after Final Inspection.
Written Notice of Completion of Work (GP-53)	Submit to Engineer	Provided in GP-53 Final Inspection and Acceptance.
End of Contract Time	Contractor and Owner	120 consecutive calendar days from NTP

*Official questions shall be submitted in writing by the Bidder to the Owner, in conformance with the terms as specified by the Engineer at the Pre-Bid Conference. What is stated in verbal correspondence during the Pre-Bid Conference is not binding. Official clarifications may be provided by the Engineer via formal issuance of Addenda.

SP-4 DELIVERABLES

4.1 Prior to Construction: The Contractor shall provide the following information to the Engineer at the Pre-Construction Conference:

4.1.1 Updates to the Work Plan and Progress Schedule based on comments from the Engineer

4.1.2 Proposed changes to the layout of the Work;

4.1.3 Records of communication between the Contractor and private property owners, utilities, government agencies, etc.

4.2 During Construction: The Contractor shall provide the following information to the Engineer during construction:

4.2.1 Progress Schedule as specified in GP-9;

4.2.2 Daily Progress Reports as specified in GP-10. In addition to submission at Bi-Weekly Progress Meetings, Contractor shall submit Daily Progress Reports to the Resident Project Representative daily by 12:00 pm the following day;

4.2.3 Copies of all inspection and monitoring reports;

4.2.4 All Change Orders, Field Orders, Claims, Clarifications, and Amendments;

4.2.5 Copies of all delivery slips, which shall include the source of construction materials, date of delivery, exact quantity, and size of materials delivered with each shipment to the Project Site;

4.2.6 The Contractor shall contact the Engineer a minimum of five (5) working days prior to the anticipated completion of the Work in order to schedule the final inspection.

4.3 Post Construction: The following documents shall also be submitted to the Engineer after completion of the Work:

4.3.1 As-Built Drawings with revisions such as field or change orders shown in red such that revisions are easily distinguishable from the original design.

SP-5 CONTACT INFORMATION

Prior to the Bid opening date, the Contractor shall send all questions and requests for clarification or interpretation of the Bid Documents in writing to the attention of Jordan DeLaune of the Coastal Protection and Restoration Authority. The address and contact information is as follows:

Coastal Protection and Restoration Authority (CPRA)
150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Jordan DeLaune
Phone: 225-342-1150
Email: Cpra.Bidding@LA.GOV

After execution of the contract between Owner and Contractor, the successful Contractor shall contact the Construction Manager concerning bid documentation or questions. The addresses and contact information for the Construction Manager and Project Engineer are listed as follows:

CPRA Construction Manager
Barry Richard, P.E.
2045 Lakeshore Dr.
New Orleans, LA 70122
Phone: 504-280-4059
Email: Barry.Richard@la.gov

CPRA Project Engineer
Thomas McLain II, P.E.
150 Terrace Ave.
Baton Rouge, LA 70802
Phone: 225-342-6307
Email: Thomas.McLain@la.gov

The Owner and Engineer shall submit all written Claims, Field Orders, Change Orders and all other documentation to the Contractor at the address indicated on the Bid.

SP-6 PRE-BID SITE VISIT REQUIREMENTS

As stated in GP-2, the Contractor is responsible for understanding the Work and becoming familiar with the local conditions before submitting their Bids. Prospective Contractors that intend to visit the Project Site as part of their Bid preparations must obtain their own right of entry before their visits. Prospective Contractors shall contact the following individual to obtain Site access:

John David Neal
MPLX Terminal Manager
Phone: 615-927-3512

SP-7 INSURANCE AND BONDS

The Contractor shall purchase and maintain without interruption, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees or subcontractors. The duration of the contract shall be from the inception of the contract until the date of final payment.

7.1 Minimum Scope and Limits of Insurance

7.1.1 Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Worker's Compensation Law of the State of Louisiana. Employers Liability is included with a minimum limit of $500,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime Law coverage shall be included, and the Employers Liability limit increased to a minimum of $1,000,000. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only.

7.1.2 Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and Completed Operations Liability, shall have a minimum limit

per occurrence based on the project value. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. A Claims-made form is unacceptable.

The aggregate loss limit must apply to each project. ISO form CG 25 03 (current form approved for use in Louisiana), or equivalent, shall also be submitted. The State project number, including part number, and project name shall be included on this endorsement.

COMBINED SINGLE LIMIT (CSL) PER OCCURRENCE

The required minimum combined single limit amount of insurance shall be as provided below:

Initial Contract Amount	**Minimum Insurance**
Up to $1,000,000	**$1,000,000**
From $1,000,001 to $2,000,000	**$2,000,000**
Over $2,000,000	**$5,000,000**

7.1.3 Automobile and Watercraft Liability

Automobile Liability Insurance and Watercraft Liability Insurance shall have a minimum combined single limit per occurrence of $1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned automobiles and/or watercraft. If any non-licensed motor vehicles and/or watercraft are engaged in operations within the terms of the contract on the site of the work to be performed thereunder, such insurance shall cover the use of any such vehicles.

NOTE: If the Contractor does not own an automobile and/or watercraft and such vehicles are utilized in the execution of the Contract, then hired and non-owned coverage is acceptable. If an automobile and/or watercraft is not utilized in the execution of the contract, then automobile and/or watercraft coverage is not required.

7.1.4 Excess Umbrella

Excess Umbrella Insurance may be used to meet the minimum requirements for General Liability, Automobile Liability, and Watercraft Liability only.

7.1.5 Pollution Liability (required when asbestos or other hazardous material abatement is included in the contract)

Pollution Liability insurance, including gradual release as well as sudden and accidental, shall have a minimum limit of not less than $1,000,000 per claim. A Claims-made form will be acceptable. A policy period inception date of no later than the first day of anticipated Work under this contract and an expiration date of no earlier than 30 days after anticipated completion of all Work under the contract shall be provided. There shall be an extended reporting period of at least 24 months, with full reinstatement of limits, from the expiration date of the policy. The policy shall not be cancelled for any reason, except non-payment of premium.

7.1.6 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and accepted by the Owner. The Contractor shall be responsible for all deductibles and self-insured retentions.

7.2 Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

7.2.1 Worker's Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees and volunteers for losses arising from Work performed by the Contractor for the Owner.

7.2.2 General Liability Coverage

The Owner, its officers, agents, employees and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. ISO Form CG 20 10 (current form approved for use in Louisiana), or equivalent, is to be used.

The Contractor's insurance shall be primary as respects the Owner, its officers, agents, employees and volunteers. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, officials, employees or volunteers. Any insurance or self-insurance maintained by the Owner shall be excess and non-contributory of the Contractor's insurance.

The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the policy limits.

7.2.3 All Coverages

Coverage shall not be canceled, suspended, or voided by either party (the Contractor or the insurer) or reduced in coverage or in limits except after 30 days written notice has been given to the Owner. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy.

Neither the Acceptance of the completed Work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.

The insurance companies issuing the policies shall have no recourse against the Owner for payment of premiums or for assessments under any form of the policies.

Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the Owner, its officers, agents, employees and volunteers.

7.2.4 Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully

authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of A-:VI or higher. This rating requirement may be waived for Worker's compensation coverage only.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance as required in the Contract.

7.2.5 Verification of Coverage

Contractor shall furnish the Owner with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Owner before Work commences and upon any contract renewal thereafter.

The Certificate Holder must be listed as follows:

State of Louisiana
Coastal Protection and Restoration Authority
150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Project # PO-0029.

In addition to the Certificates, Contractor shall submit the declarations page and the cancellation provision endorsement for each insurance policy. The Owner reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, this contract, at the election of the Owner, may be suspended, discontinued or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the Contract.

If the Contractor does not meet the insurance requirements at policy renewal, at the option of the Owner, payment to the Contractor may be withheld until the requirements have been met, OR the Owner may pay the renewal premium and withhold such payment from any monies due the Contractor, OR the contract may be suspended or terminated for cause.

7.2.6 Subcontractors

Contractor shall include all Subcontractors as insureds under its policies OR shall be responsible for verifying and maintaining the certificates provided by each Subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The Owner reserves the right to request copies of Subcontractor's certificates at any time.

If Contractor does not verify Subcontractors' insurance as described above, Owner has the right to withhold payments to the Contractor until the requirements have been met.

7.2.7 Worker's Compensation Indemnity

In the event Contractor is not required to provide or elects not to provide Worker's

compensation coverage, the parties hereby agree the Contractor, its Owners, agents and employees will have no cause of action against, and will not assert a claim against, the State of Louisiana, its departments, agencies, agents and employees as an employer, whether pursuant to the Louisiana Worker's Compensation Act or otherwise, under any circumstance. The parties also hereby agree that the State of Louisiana, its departments, agencies, agents and employees shall in no circumstance be, or considered as, the employer or statutory employer of Contractor, its Owners, agents and employees. The parties further agree that Contractor is a wholly independent Contractor and is exclusively responsible for its employees, Owners, and agents. Contractor hereby agrees to protect, defend, indemnify and hold the State of Louisiana, its departments, agencies, agents and employees harmless from any such assertion or claim that may arise from the performance of this contract.

7.2.8 Indemnification/Hold Harmless Agreement

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its officers, agents, servants, employees and volunteers, from and against any and all Claims, damages, expenses and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants and employees, or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any Claims, demands, suits or causes of action, except those Claims, demands, suits or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards, Commissions, its officers, agents, servants, employees and volunteers.

Contractor agrees to investigate, handle, respond to, provide defense for and defend any such Claims, demands, suits or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the Claims, demands, suits, or causes of action are groundless, false or fraudulent.

SP-8 WORK PLAN SUPPLEMENTAL

The following items shall be included in the Work Plan in addition to those required by those required by GP-8:

8.1 The field Equipment, methodology, labor, Materials, and incidentals to be used for Mobilization and Demobilization of all Equipment required;

8.2 The layout of all staging area(s) required for any and all other Work items;

8.3 The field Equipment, methodology, labor, Materials, and incidentals to be used for Clearing and Grubbing required as part of Section 31 11 00.00 12, including the possible demolition of abandoned structures;

8.4 The field Equipment, methodology, labor, Materials, and incidentals to be used for Storm Water Pollution and Prevention required as part of Section 01 57 23.00 12.

8.5 A summation of planned waste management operations that shall include, but is not limited to:

8.5.1 The name of individual(s) responsible for waste management and waste management tracking, along with roles and responsibilities on the project;

8.5.2 the landfill(s) where waste will be disposed of;

8.5.3 the locations on- or off-site where materials will be stockpiled prior to hauling to the landfill(s);

8.5.4 description of the means of transportation of hauled waste materials;

8.5.5 plans for recycling or beneficial reuse of materials or sales of Merchantable Timber;

SP-9 FAILURE TO COMPLETE ON TIME

For each Day the Work remains incomplete beyond the Contract Time, as specified in SP-3, or Extension of Contract Time, as specified in GP-44, the sum of three thousand dollars ($3,000) per calendar Day will be deducted from any money due to the Contractor as liquidated damages. The Contractor and Surety shall be liable for any liquidated damages that are in excess of the amount due to the Contractor.

SP-10 LANDOWNER AND UTILITY INFORMATION

The Owner has executed temporary easement, servitude, or right-of-way agreements required to perform the Work at the Project Site from the landowners, utilities and pipeline operators (Grantors) listed below. Copies of the executed agreements with the grantors are included in the Land Rights Memorandum in **APPENDIX C**. The Contractor shall abide by the stipulations set forth by the executed agreements. The Contractor shall notify all grantors at least 14 working days prior to initiation of access to the said lands for the purpose of work planning, implementing, constructing, operating, modifying, monitoring and maintaining the Project Site or as otherwise stipulated in the executed agreements. The Contractor shall abide by the stipulations set forth by the respective landowners below:

Louisiana Department of Transportation and Development
Contact: Ernest Matherne
Phone: 985-375-0130

Enterprise Pipeline Company (Acadian)
Contact: Bryan Giroir
Phone: 985-493-4619

Atmos Gas Company
Contact:
Phone:

Marathon Terminal (MPLX)
Contact: John David Neal
Phone: 615-927-3512

St. John the Baptist Parish
Contact: Reed Alexander
Phone: 985-651-6800

The Contractor shall add all grantors as additional insured. It is also agreed and understood that the Contractor will at all times indemnify and hold harmless all landowners from and against any and all Claims, demands, causes of action, judgments, liabilities, and expense of every nature, including attorney's fees, by reason of personal injury, death (including but not limited to injuries to and death of employees of the landowners and the Contractor's employees) or damage to property, (including environmental) which arises out of, results from, or is in any manner related to, directly or indirectly, any operations or acts hereunder, or to the exercise of your rights hereunder, or to your presence upon or use of the landowners' premises above referred to, or to the use or existence of your facilities on such premises. The indemnity provisions of this paragraph shall not apply if any such injury, death, damage, liability claim, or cause of action is caused by the negligence of the landowners, their employees, agents, or representatives.

The Contractor shall notify Louisiana One Call at least fourteen (14) working days in advanced of any construction work. Based on surveys conducted during PO-0029 engineering and design, the majority of utilities run along the north edge of River Road. A small number are also located near the CN RR property at the north edge of the Site. See Plans for additional utility disposition information.

SP-11 EFFECTED PIPELINE SYSTEM REQUIREMENTS

Letters of no objection have been issued by Enterprise Products, owner of the Nalco-Garyville and Cypress Pipelines, and Atmos Energy. Both entities own gas lines that are being crossed by the proposed site access roadway from LA Hwy 44 (River Road). These letters present the commitments CPRA (and by extension the Contractor) has made with Enterprise and Atmos regarding the Work proposed on and around their active natural gas lines. Requirements of these agreements include, but are not limited to, notification and communication requirements, warning signs/signals, required depth of cover, and allowable angles of intersection with said pipelines.

The Contractor is responsible for reading, understanding, and adhering to all requirements described in both Letters of No Objection; these documents are included in **APPENDIX E**.

SP-12 PERMITTING AND ENVIRONMENTAL COMPLIANCE

Copies of all permits and environmental compliance documents acquired by CPRA for the Work are included in **APPENDIX F**. Documents in this Appendix include: the Finding of No Significant Impact (FONSI) from the USACE's Environmental Assessment (EA); USACE's BBA Construction Mitigation EA #576; the USACE's Environmental Impact Statement Appendix A, regarding Consistency Determination; and the LADOTD Permit.

SP-13 THREATENED AND ENDANGERED SPECIES

The Contractor shall at all times perform all work and take such steps required to prevent any interference of disturbance to fish and wildlife. The Contractor will not be permitted to alter

water flows or otherwise disturb native habitat adjacent to the project area that are critical to fish or wildlife. Construction activities are not likely to adversely affect threatened and endangered species. There is no critical habitat for any threatened or endangered species found in proximity to the construction activity. Colonial nesting wading birds (including but not limited to heron, egrets and ibis) and bald eagles may be found at the Project Site and should be avoided to reduce the risk of injuring birds. The nesting activity period general extends from February 15 through September 15 for wading bird and September to May for bald eagles. Presence of nesting wading birds or nesting bald eagles must be **immediately reported to Brad Miller at (225) 342-4122**. If nests of these birds are present at the work area; a no work distance restriction of 1,000 feet for colonial nesting wading birds and a distance restriction of 1,500 feet from a nesting bald eagle must be implemented. Coordination by New Orleans District personnel with the U.S Fish and Wildlife Service may result in a reduction of no-work distance restriction depending on the species of birds found nesting at the Project Site. The Contractor should note that no federally listed birds that are known to occur in the project area.

SP-14 NOTIFICATION OF DISCOVERY OF HISTORICAL OR CULTURAL SITES

If during construction activities the Contractor observes items that may have prehistoric, historical, archaeological, or cultural value, the Contractor shall immediately cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources. Such observations shall be reported immediately to the Owner and Engineer so that the appropriate authorities may be notified, and a determination made as to their significance and what, if any, special dispositions of the finds should be made. The Contractor shall report any observed unauthorized removal or destruction of such resources by any person to the Owner and Engineer so the appropriate State of Louisiana authorities can be notified. The Contractor shall not resume Work at the site in question until State authorities have determined the significance of resource(s) of interest. The Unanticipated Discoveries Plan is located in **APPENDIX G**.

SP-15 ADJUSTMENT OF QUANTITIES

Where the quantity of Work with respect to any item is covered by a unit price, such quantities are estimated quantities to be used when comparing Bids and the right is reserved by the Owner to increase/decrease such quantities up to 25% without adjustment of the unit price as may be necessary to complete the Work as described in these Plans and Specifications and/or remain within funding limits.

SP-16 DEMOLITION OF UNPERMITTED STRUCTURES BUILT BY ADJACENT RESIDENTS

The eastern boundary of the Project site is shared with an adjacent residential community. Some residents have built unpermitted structures beyond their property boundaries that encroach on the Work area. Residents have been provided time to remove said properties before the start of the Work; however, structures may remain at the time of Mobilization. The Contractor shall remove any structures within the Work area per the requirements of Section 31 11 00.00 12 CLEARING AND GRUBBING. **The Resident Project Representative shall be informed prior to the start of demolition of any such items**.

SP-17 NOTIFICATION OF DISCOVERY OF HAZARDOUS MATERIALS

The Contractor shall notify the Resident Project Representative immediately if hazardous materials, or materials suspected of being hazardous, are encountered during any phase of the Work. The Contractor shall cease operations in the vicinity of the material until direction is provided by the Resident Project Representative or the Engineer.

SP-18 FINAL CLEAN-UP

Final clean-up shall include the removal of the Contractor's plant, all Equipment, and Materials either for disposal or reuse. The Contractor shall remove all non-perishable debris, trash, and garbage from the Project Site prior to final Acceptance. Unless otherwise approved in writing by the Engineer, the Contractor is not permitted to abandon any Materials at the Project Site. Any stakes or other markers placed by the Contractor shall be removed as a part of the final clean-up.

SP-19 MISPLACED MATERIAL AND EQUIPMENT

The Project Site is close to residential property, petroleum refining operations, and a road that serves as a local evacuation route (River Road). The Contractor shall at all times be aware of the location and/or position of cleared, grubbed and demolished Materials; Equipment; or other Materials. Should the Contractor, during the progress of the Work misplace any Equipment or Materials outside of what is authorized and permitted without the approval of the Owner or Engineer, the Contractor shall give immediate notice, with description and location of such misplaced Materials to the Owner and Engineer. Following coordination with the Engineer, the Contractor shall immediately recover and remove the misplaced Material. Misplaced Materials shall be removed at the Contractor’s expense. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at their own expense.

In the event of refusal, neglect, or delay in compliance with the above requirements, such misplaced Materials may be removed by the Owner, and the cost of such removal may be deducted from any money due or to become due to the Contractor or may be recovered under their bond.

SP-20 PROHIBITION OF DISCRIMINATORY BOYCOTTS OF ISRAEL IN STATE PROCUREMENT

By submitting a response to this solicitation, the Bidder or proposer certifies and agrees that the following information is correct:

In preparing its response, the Bidder or proposer has considered all proposals submitted from qualified, potential Subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any Subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The Bidder also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. The State reserves the right to reject the response of the Bidder

or proposer if this certification is subsequently determined to be false, and to terminate any Contract awarded based on such a false response.

SP-21 COMPLIANCE WITH FEDERAL LAW

The Contractor and any subcontractors must comply with applicable Federal labor laws covering non-Federal construction, including but not limited to, the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c) and to the extent if applicable 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change to the provisions of the Davis-Bacon Act) (formerly 40 U.S.C. 276a et seq). Contractor further agrees, in the case of any equipment and/or product authorized to be purchased under this Contract, to comply with the Buy American Act 41 U.S.C. 8301-8305 (formerly 41 U.S.C. 10a-10c).

Further, the Contractor and its employees, subcontractors and agents shall agree to comply with all applicable Federal, State, and Local laws, policies, and ordinances, in carrying out all provisions of this Contract.

END OF PART II - SPECIAL PROVISIONS

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MOBILIZATION AND DEMOBILIZATION

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SECTION 01 00 00

MOBILIZATION AND DEMOBILIZATION

PART 1 GENERAL

1.1 SCOPE

Mobilization consists of the Contractor’s preparatory work and operations, including those necessary for movement of personnel, equipment, supplies, and incidentals to the project site; establishment of offices and other facilities necessary for the Work; the cost of bonds, any required insurance; and other preconstruction expenses necessary for start of the Work. Demobilization consists of the Contractor’s removal of all personnel, equipment, supplies, on-site facilities, and incidentals from the project site upon completion of construction activities.

1.2 MEASUREMENT AND PAYMENT

Mobilization and Demobilization will be measured for payment as lump sum. The Owner will pay this sum in two installments:

(1) Sixty-percent (60%) of the lump sum price upon completion of the Contractor’s mobilization at the work site.

(2) The remaining forty-percent (40%) upon completion of demobilization.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall provide all plant, materials, equipment, labor, and other items required to fully mobilize and demobilize from the project site.

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TRAFFIC CONTROL AND COORDINATION

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TRAFFIC CONTROL AND COORDINATION
03/14

PART 1 GENERAL

1.1 SCOPE

The work provided for in this section consists of providing and maintaining traffic control and coordination; maintenance of traffic routing features including barricades, danger, warning, and detour signs; and the preparation of a Traffic Control Device Plan as specified herein.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD	(2020) Manual of Uniform Traffic Control Devices

LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition), LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD)

LSSRB 713	Temporary Traffic Control

1.3 MEASUREMENT AND PAYMENT

No measurement will be made for the preparation of a Traffic Control Device Plan, nor the maintenance, control and coordination of traffic routing including barricades, danger, warning and detour signs as specified herein. Payments will be made at the contract job price for "Traffic Control and Coordination" in accordance with the payment schedule of Table 1. Price and payment shall constitute full compensation for providing all plant, labor, materials and equipment to complete the work as specified herein and as shown on the plans.

Table 1

Percent of Total Contract Amount Earned	Allowable Percentage of Lump Sum Pricefor Traffic Control and Coordination
Initial Erection	40
25	60
50	80
75	95
100	100

1.4 SUBMITTALS

Engineer approval is required for submittals with a "P" designation; submittals not having a "P" designation are for information only. The following shall be submitted in accordance with GP-41, SUBMITTALS:

SD-01 Preconstruction Submittals

Traffic Control Plan; P

A minimum of 14 calendar days (exclusive of mailing time) prior to the commencement of any traffic control operations, the Contractor shall submit for the acceptance of the Engineer, both a hard copy and digital copy of the Traffic Control Device Plan as specified herein.

PART 2 PRODUCTS

2.1 SIGNS AND BARRICADES

In accordance with LSSRB 713, the Contractor shall provide all necessary signs, barricades, temporary pavement markings, and other traffic routing items in accordance with the Louisiana Manual on Uniform Traffic Control Devices (MUTCD), Construction Section as well as all signs, barricades, blinking lights or other necessary traffic control devices required by the Parish of St. John the Baptist or other governing specifications.

PART 3 EXECUTION

3.1 GENERAL

No existing signs or signals shall be removed without the Resident Project Representative's approval. The Contractor shall accept all responsibilities during the time of removal. The Contractor shall notify the Resident Project Representative in writing a minimum of three (3) working days prior to the controls being removed and reinstalled. All signs, signals, and markings removed shall be in-place at the time of final inspection.

3.2 TRAFFIC CONTROL DEVICE PLAN

The Contractor shall develop and implement a site specific Traffic Control Device Plan (TCDP) and truck haul route plan which shall provide for the safe and expeditious movement of traffic through Construction Zone and into/out of the flow of regular traffic on River Road. A Construction Zone 1 is defined as the immediate area of actual construction which interferes with the driving or walking public. The TCDP shall comply with the requirements set forth in the MUTCD, as revised, and with the general requirements stipulated below.

(1) The TCDP for the site shall address the conditions for providing traffic flow and/or detours within the zone during the influence of construction. The TCDP shall be schematically drawn on sheet(s) large enough to show adequate details and be easily readable and reproducible. If larger than 11-inches by 17-inches, the sheet(s) shall be submitted with a reproducible transparency so that the Resident Project Representative can produce additional copies as needed.

(2) The TCDP shall be designed and stamped by a Professional Engineer registered in the State of Louisiana. The qualifications of the Engineer shall be submitted for review and approval of the Resident Project Representative, and where applicable, the Louisiana Department of Transportation (LADOTD)and Development, Traffic Operations. Engineers for this project will be qualified by education and experience in Categories 1 and 2 as noted below. All categories require a minimum of four years' experience and education.

a. Category 1 - Traffic Control through Construction Zones. Urban experience in MUTCD applications, plan preparations, studies in volume, speed, and pedestrians, and tort liability.

b. Category 2 - Permanent Sign / Marking. Urban experience in MUTCD applications, studies in volume, speed, pedestrians, and accident analysis.

The Contractor shall submit both a hard copy and digital copy of the TCDP to the Resident Project Representative prior to any anticipated traffic control work for the St. John the Baptist Parish Traffic Engineering Division's review and approval. Adequate time (a minimum of 14 calendar days exclusive of mailing time) shall be allowed for review and approval. Such approval is required prior to start of any work which might affect the traffic pattern in the area.

3.3 TRAFFIC CONTROL

The Contractor shall be responsible for the installation and maintenance of all devices and requirements for the duration of the construction period. The necessary precautions shall include, but not be limited to, such items as proper construction warning signs, signals, lighting devices, battery operated flashers, markings, barricades, channelization, and hand signaling devices (flagging operations). The Contractor shall monitor traffic control devices daily and shall make appropriate changes to correspond to existing conditions. All work shall be performed in accordance with the LSSRB 713, except as noted. Traffic control devices shall be in accordance with the MUTCD.

3.3.1 Coordination

The Contractor shall consult with the Resident Project Representative and the St. John the Baptist Parish Traffic Engineering Division immediately upon any vehicular or pedestrian safety or efficiency problem incurred due to construction of the project.

3.3.2 Traffic Engineer

A qualified Traffic Engineer shall be provided by the Contractor to inspect the job site at the beginning of the project, after significant changes, and at 30-day intervals. If warranted, the Contractor's Traffic Engineer shall adjust the TCDP and provide written description of the TCDP changes to the Engineer. The Contractor shall immediately implement the revised TCDP. A written report by the Traffic Engineer is required following each inspection. They shall be submitted to the Contractor and the Engineer verifying compliance with the Plan and adequacy of traffic control devices and operating conditions. All deficiencies noted by the report shall be immediately corrected by the Contractor.

3.4 PUBLIC CONVENIENCE AND SAFETY

3.4.1 Road Closure

No road shall be closed by the Contractor to the public except by written permission of the Owner. While so closed, the Contractor shall maintain traffic over, through, or around the work included in his Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether work has ceased temporarily or not. The Contractor shall notify the Owner at the earliest possible date after the Contract has been executed, and in any case before the starting of any construction that might in any way inconvenience or endanger traffic, so that the necessary arrangements may be determined.

3.4.2 Fire Protection

Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules, or regulations or within 15 feet of a fire hydrant, in the absence of such ordinances, rules, or regulations.

3.5 BARRICADES, DANGER, WARNING, AND DETOUR SIGNS

3.5.1 General

The Contractor shall, at his own expense, provide, erect, paint, and maintain all construction barricades. The Contractor shall provide suitable and sufficient lights, torches, reflectors, or other danger signals and signs, provide a sufficient number of watchmen and flagmen, and take all necessary precautions for the protection of the work and safety of the public. The Contractor shall replace any permanent street signs or markers which must be moved to facilitate his construction with temporary signs as necessary.

3.5.2 Warning Signs, Painting, Illumination

The Contractor shall erect warning signs beyond the limits of the project, sufficiently in advance of any place on the project where operations interfere with the use of the road by traffic, including all intermediate points where the new work crosses or coincides with the existing road. Barricades shall be kept well painted and suitable warning signs shall be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.

3.6 EMERGENCY CONTRACTOR DESIGNATION

The Contractor shall designate a person(s) who can be contacted and shall be available on a seven-day week, 24-hour basis through the entire period that the contract is in force. Name(s) and telephone number(s) of the individual(s) designated shall be furnished to the Resident Project Representative prior to starting work. The person contacted shall be able to respond to emergencies occurring along the length of the project during normal, after work, and holiday hours.

-- End of Section --

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STORM WATER POLLUTION PREVENTION PLAN

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STORM WATER POLLUTION PREVENTION PLAN

PART 1 GENERAL

1.1 SCOPE

The work specified in this section consists of the Contractor implementing, and diligently pursuing all measures required in the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP consists of Section GP-32, ENVIRONMENTAL PROTECTION, and all references and attachments including existing and future signed certification statements. The purpose of the SWPPP is to control soil erosion and the resulting sediment to the extent necessary to prevent sediment from leaving the contract right-of-way and prevent pollution of any water body caused by the runoff from the areas of construction activities under this contract, under the terms of PERMIT NO. LAR100000 and PERMIT NO. LAR200000 (copies of both included in Appendix H) , and as specified herein and shown on the Plans. The requirements of these specifications are supplemental to and shall become part of the overall environmental protection efforts required by GP-32, ENVIRONMENTAL PROTECTION. The Contractor shall review the SWPPP to determine requirements for compliance. In addition, the Contractor shall ascertain that their subcontractors have reviewed the plan and that they comply with its provisions. The Contractor shall ensure that all subcontractors sign, "Certification Statements #2 and #3" (blank forms attached at the end of this section).

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D4491	(1999; R 2004e1) Water Permeability of Geotextiles by Permittivity
ASTM D4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D4751	(2020) Standard Test Method for Determining Apparent Opening Size of a Geotextile
ASTM D4833	(2000e1) Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
ASTM D4873	(2002) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)

PERMIT NO. LAR100000	(2019) Storm Water General Permit for Construction Activities, Five (5) Acres or More
PERMIT NO. LAR200000	(2018) Storm Water General Permit for Small Construction Activities

1.3 MEASUREMENT AND PAYMENT

1.3.1 SWPPP

No separate measurement and payment will be made for the implementation of the Storm Water Pollution Prevention Plan required by this section, except as specified in paragraphs "Silt Fence" and "Truck Wash-Down Racks". Price and payment for SWPPP implementation shall be included in the item "Mobilization and Demobilization".

1.3.2 Silt Fence

Measurement for silt fences satisfactorily placed will be made by the linear foot. Payment for silt fences as specified herein will be made at the contract unit price per linear foot for "Silt Fences". Price and payment shall constitute full compensation for furnishing all plant, labor, materials, and equipment, including geotextile, and performing all operations necessary for the placement, maintenance, removal, and disposal of silt fences throughout the contract period, including final dressing and cleanup.

1.3.3 Truck Wash Down Racks

Measurement and payment for truck wash down racks will be as specified in Section 01 57 23.01 12 TRUCK WASH DOWN RACKS.

1.4 DEFINITIONS

Additional definitions used in this Section that are not included in GP-1, DEFINITION OF TERMS, include:

a. Construction Owner - The construction owner is the party that has operational control over plans and specifications including the ability to make changes to those items. CPRA is the construction owner.

b. Construction Operators - The construction operators are the party having control over the plans and specifications and the party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions. Both CPRA and the Contractor are the construction operators.

c. Notice of Intent (NOI) - A document that is completed and submitted to the Louisiana Department of Environmental Quality as application for coverage to discharge under the PERMIT NO. LAR100000. (Copy provided at the end of this section.)

d. Notice of Termination (NOT) - A document that is completed and submitted to the Louisiana Department of Environmental Quality to

terminate permission to discharge under the PERMIT NO. LAR100000. The NOT must be filed within 30 days after final stabilization of the construction site has been achieved or the Contractor is no longer the construction operator. (Copy provided at the end of this section.)

e. Completion Report - A document that is completed and submitted to the Louisiana Department of Environmental Quality to terminate permission to discharge under PERMIT NO. LAR200000. The Completion Report must be submitted to the Permits Division of the LDEQ by January 28 of the year following the calendar year in which the project was completed. (Copy provided in Appendix H.)

1.5 GENERAL

The Contractor shall implement the SWPPP specified in a manner which will meet the requirements of Section GP-32, ENVIRONMENTAL PROTECTION, and the requirements of the Louisiana Pollution Discharge Elimination System (LPDES) permit, PERMIT NO. LAR100000 effective October 1, 2019 PERMIT NO. LAR200000, effective March 20, 2018.

1.5.1 Environmental Assessment of Contract Deviations

The Contractor is advised that deviations from the SWPPP could result in the requirement for the Owner to reanalyze the project from an environmental standpoint. Deviations from the SWPPP erosion control requirements as specified herein and as shown on the drawings which may have an environmental impact will require an extended review, processing, and approval time by the Owner.

1.5.2 Notice Of Intent

Upon preparation of a complete SWPPP, the NOI will be submitted by the Owner to the LDEQ as application for the Owner's coverage under the terms of PERMIT NO. LAR100000. A copy of the the Owner's NOI will be provided to the Contractor at the Pre-construction Conference for the Contractor's use in preparing their NOI. If a specific LPDES permit applicable to this construction item has been received from the LDEQ in response to the NOI, a copy of the specific LPDES permit will also be provided to the Contractor. The Contractor shall make any necessary modification to this SWPPP; attach the Construction Owner / Operator certification statement provided at the end of this section to the SWPPP; and certify by signing the statement as the construction operator. The Contractor shall then submit an NOI to the LDEQ as application for their coverage under the terms of PERMIT NO. LAR100000, prior to initiating any construction activities. Certified mail is recommended for Contractor's proof of submittal. A copy of the Contractor's NOI submittal shall be provided to the Engineer at the time of submittal. LDEQ will provide a specific LPDES permit to the Contractor in response to that NOI submittal. The NOI's of both the Contractor and the Owner, as well as the specific permits in response to the NOI, shall be posted at the job site by the Contractor. (Forms are attached at the end of this Section.)

1.6 SUBMITTALS

Engineer approval is required for submittals with a "P" designation; submittals not having a "P" designation are for information only. The following shall be submitted in accordance with GP-41, SUBMITTALS:

SD-04 Samples

Silt Fence Geotextile; P

A sample, approximately 2 feet by 4 feet, of each geotextile that the Contractor plans to use shall accompany the certificate required below.

SD-07 Certificates

Silt Fence Geotextile; P

A mill certificate or affidavit shall be provided attesting that the geotextile meets the chemical, physical, and manufacturing requirements stated in this specification. The mill certificate or affidavit shall specify the actual Minimum Average Roll Values and shall identify the geotextile supplied by roll identification numbers. The Contractor shall submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile.

Geotextile shall not be delivered to the site until the geotextile is approved by the Engineer.

1.7 RECORD RETENTION REQUIREMENTS

1.7.1 Documents

The Contractor shall retain copies of the SWPPP and all reports required by the general permit, and all records of data used to complete the NOI, for a period of at least three (3) years from the date that the construction site is finally stabilized. Records of the NOI as well as any data used to complete it, the SWPPP, and any reports required by PERMIT NO. LAR100000 shall be retained by the permittee for at least three (3) years from the date that the site is finally stabilized.

1.7.2 Plan Accessibility

A copy of the SWPPP and copies of all permits received, shall be retained at the construction site (or other local location accessible to the State Administration Authority and the public) from the date of construction initiation to the date of final stabilization. The Contractor shall have a copy of the plan available at a central location on-site for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. A notice shall be posted near the main entrance to the construction site with the following information: (1) the LPDES permit number for the project or a copy of the NOI if a permit has not yet been assigned; (2) the name and telephone number of a local contact person; (3) a brief description of the project; and (4) the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

1.7.3 Activity Records

The dates of the following activities shall be recorded:

(1) Major grading activities occurred.

(2) Construction activities temporarily or permanently ceased.

(3) Stabilization measures were initiated.

1.7.4 LDEQ Correspondence

Any written correspondence with the LDEQ concerning the NOI, NOT, SWPPP, or discharges from any facility covered under PERMIT NO. LAR100000, shall be identified by permit number, if one has been assigned, and sent to the address below:

Louisiana Department of Environmental Quality
Office of Environmental Services
P.O. Box 4313
Baton Rouge, LA 70821-4313

Attn: Permits Division

1.8 MAINTENANCE AND SURVEILLANCE FEES

The Contractor shall, without additional expense to the Owner, be responsible for paying any state required annual maintenance and surveillance fee for work associated with coverage under PERMIT NO. LAR100000. See Section GP-26, PERMITS, for additional detail of the responsibility of the Contractor and the Owner regarding Permit costs and fees.

1.9 EROSION AND SEDIMENT CONTROLS

The controls and measures required for controlling sediment during construction are described below.

1.9.1 Stabilization Controls

The stabilization practices to be implemented shall include any temporary measure to restrict erosion from the construction site. On their Daily Progress Reports (See GP-10 and SP-4), the Contractor shall record the dates when the major grading activities occur, (e.g., clearing and grubbing and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Except as provided in paragraphs "Unsuitable Conditions" and "No Activity for Less Than 21 Days", stabilization practices shall be initiated as soon as practicable, but no more than 14 days after, in any portion of the site where construction activities have temporarily or permanently ceased.

1.9.1.1 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.

1.9.1.2 No Activity for Less Than 21 Days

Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the fourteenth day. However, stabilization practices shall be initiated on that portion of the site by the fourteenth day in the case where

construction activities will not resume within 21 days after construction activities have ceased.

1.9.2 Structural Controls

Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. At the Contractor's option, the structural practices shall include either of the following devices. Location and details of installation and construction are shown on the drawings.

1.9.2.1 Silt Fence Barrier

The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed, as shown on the Plans, to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g., clearing and grubbing and grading). Silt fences shall be installed in the locations indicated on the Contractor's SWPPP. Final removal of silt fence barriers shall be upon approval by the Engineer.

1.9.2.2 Straw Bale Barrier

The Contractor shall provide bales of straw as a temporary structural practice to minimize erosion and sediment runoff. Bales shall be properly placed to effectively retain sediment immediately after completing each phase of work (e.g., clearing and grubbing and grading) in each independent runoff area (e.g., in an area between a ridge and drain, bales shall be placed as work progresses, bales shall be removed/replaced/relocated as needed for work to progress in the drainage area) as required herein. Areas where straw bales are to be used are shown on the Contractor's SWPPP. Final removal of straw bale barriers shall be upon approval by the Engineer. Rows of bales of straw shall be provided as follows:

a. Along the downhill perimeter edge of all areas disturbed.

b. Along the top of the slope or top bank of drainage ditches, channels, swales, etc. that traverse disturbed areas.

c. Along the toe of all cut slopes and fill slopes of the construction areas.

d. Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc., that traverse disturbed areas or carry runoff from disturbed areas. Rows shall be spaced a maximum of 100-feet apart.

e. Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales. Rows shall be spaced a maximum of 199-feet apart.

f. At the entrance to culverts that receive runoff from disturbed areas.

1.9.2.3 Diversion Dikes

Diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18-inches. The minimum base width shall be 2-feet and the minimum top width shall be 6-feet. The Contractor shall ensure that the diversion dikes are not damaged by construction operations or traffic. Diversion dikes shall be located and installed as shown on the Contractor's SWPPP.

1.9.2.4 Truck Wash Down Racks

See Section 01 57 23.01 12 TRUCK WASH DOWN RACKS.

PART 2 PRODUCTS

2.1 COMPONENTS FOR SILT FENCE BARRIER

2.1.1 Silt Fence Geotextile

The geotextile shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85% by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. Geotextile shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The silt fence geotextile shall meet the following requirements:

GEOTEXTILE FOR SILT FENCE

PROPERTY	TEST PROCEDURE	VALUE
Grab Breaking Load, pounds	ASTM D4632	200 minimum
Grab Elongation at Ultimate, percent	ASTM D4632	20 maximum
Puncture Strength, pounds	ASTM D4833	130 minimum
AOS, U.S. Standard Sieve No.	ASTM D4751	30 to 70
Permittivity, per second	ASTM D4491	0.25 minimum

2.1.2 Wooden Posts and Steel T-Posts

The Contractor may use either rounded wooden posts or steel T-posts for silt fence construction. Wooden posts utilized for silt fence construction, shall have a minimum 3½-inches diameter, and shall have a minimum length of 7-feet and shall be either oak or pine wood. Steel T-posts utilized for silt fence construction, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 7-feet.

2.1.3 Identification Storage and Handling

Geotextile shall be identified, stored and handled in accordance with ASTM D4873.

2.2 COMPONENTS FOR STRAW BALE BARRIER

The straw in the bales shall be stalks from oats, wheat, rye, barley, rice, or from grasses such as Bahia, Bermuda, Johnson grass, etc.,

furnished in air dry condition. The bales shall have a standard cross section of 14-inches by 18-inches. All bales shall be either wire-bound or string-tied. The Contractor may use either wooden stakes or steel posts to secure the straw bales to the ground. Wooden stakes utilized for this purpose, shall have minimum dimensions of 2-inches by 2-inches in cross section and shall have a minimum length of 3-feet. Steel posts (standard "U" or "T" section) utilized for securing straw bales, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 3-feet.

PART 3 EXECUTION

3.1 INSTALLATION OF SILT FENCE BARRIER

The silt fence shall be located and installed as indicated on the Plans and approved version of the Contractor's SWPPP. Geotextile shall be from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, geotextile shall be spliced together at a support post, with a minimum 6-inches overlap, and securely sealed. A trench shall be excavated 4-inches wide and 6-inches deep on the upslope side of the location of the silt fence. The 4-inches by 6-inches trench shall be backfilled and the soil compacted over the geotextile. The geotextile shall be attached to the land side of the post with wire or other method recommended by the manufacturer such that a 6-inches length of geotextile is left unattached at the bottom of the post. The unattached section of geotextile shall be embedded in the trench and the trench backfilled. It is the responsibility of the Contractor to maintain the integrity of the silt fence. The Contractor shall immediately correct any deficiencies. The silt fence shall be promptly repaired or replaced should it become damaged or otherwise ineffective. The silt fence is to remain in place upon completion of the project, or as directed by the Resident Project Representative. Its maintenance shall be continual for the period during which excavated materials are placed near the silt fence.

3.2 INSTALLATION OF STRAW BALE BARRIER

Straw bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales to prevent deterioration of the bindings. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4-inches. After the bales are staked and chinked (gaps filled by wedging with straw), the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4-in against the uphill side of the barrier. Loose straw shall be scattered over the area immediately uphill from a straw bale barrier to increase barrier efficiency. Each bale shall be securely anchored by at least two stakes driven through the bale. The first stake or steel post in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or steel pickets shall be driven a minimum 18-in deep into the ground to securely anchor the bales.

3.3 INSTALLATION OF TRUCK WASH DOWN RACKS

Operation of truck wash down racks shall not include use of detergents. Sediments resulting from operation of truck wash down racks shall not be permitted to pollute any receiving waters. Sediments shall be utilized in

the job or disposed of as construction debris. Sediment retention measures shall be utilized as described in Section 01 57 23.01 12 TRUCK WASH DOWN RACKS.

3.4 MAINTENANCE

The Contractor shall maintain temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures.

3.4.1 Silt Fence Barrier Maintenance

Silt fences shall be inspected in accordance with paragraph "INSPECTIONS." Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the geotextile on a silt fence decompose or become ineffective, and the barrier is still necessary, the geotextile shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier. Sediments shall be utilized in the job or disposed of as construction debris. When a silt fence is no longer required, it shall be removed. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 19 HYDRO-SEEDING.

3.4.2 Straw Bale Barrier Maintenance

Straw bale barriers shall be inspected in accordance with paragraph "INSPECTIONS." Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits shall be removed when deposits reach one-half of the height of the barrier. Sediments shall be utilized in the job or disposed of as construction debris. Bale rows used to retain sediment shall be turned uphill at each end of each row. When a straw bale barrier is no longer required, it shall be removed. The immediate area occupied by the bales and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 19 HYDRO-SEEDING

3.4.3 Diversion Dike Maintenance

Diversion dikes shall be inspected in accordance with paragraph "INSPECTIONS." Close attention shall be paid to the repair of damaged diversion dikes and necessary repairs shall be accomplished promptly. When diversion dikes are no longer required, they shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 19 HYDRO-SEEDING.

3.5 INSPECTIONS

3.5.1 General

The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that

have not been finally stabilized, stabilization practices, structural practices, other controls, and areas where vehicles exit the site at least once every 14 calendar days, before anticipated storm events (or series of storm events such as intermittent showers over one or more days) expected to cause a significant amount of runoff, and within 24 hours of the end of any storm that produces 0.5-inch or more rainfall at the site. Inspection Report formatting and applicable.

3.5.2 Inspections Details

Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the natural environment. Erosion and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

3.5.3 Inspection Reports

For each inspection conducted, the Contractor shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, maintenance performed, and actions taken. The report shall be furnished to the Resident Project Representative within 24 hours of the inspection. A copy of the inspection report shall be maintained on the job site. Contractor shall provide inspection reports in a format pre-approved by the Owner.

3.6 NOTICE OF TERMINATION

Upon stabilization and elimination of all storm water discharges authorized by PERMIT NO. LAR100000, or where the operator of all storm water discharges at a facility changes, a Notice of Termination (NOT) shall be certified and submitted by the Contractor to the Permits Division at the LDEQ. A copy of the NOT form is provided at the end of this section. Certified mail is recommended for proof of the NOT submittal. The NOT shall be submitted within 30 days of final stabilization of the construction site or when the Contractor is no longer the construction operator.

3.7 COMPLETION REPORT

Upon stabilization and elimination of all storm water discharges authorized by PERMIT NO. LAR200000, or where the operator of all storm water discharges at a facility changes, a Completion Report shall be certified and submitted by the Contractor to the Permits Division at the LDEQ. A copy of the Completion Report form is provided at the end of this section. Certified mail is recommended for proof of the Completion Report submittal. The Completion Report shall be submitted within 30 days of final stabilization of the construction site or when the Contractor is no longer the construction operator.

CERTIFICATION STATEMENT #1

Any person, including the construction owner/operator, signing documents (the SWPPP, modifications to the SWPPP, or other reports) under Part VI.G. of PERMIT NO. LAR100000 or PERMIT NO. LAR200000 shall make the following certification.

(Contract Title)

(Permit Number)

(Document being Certified, such as SWPPP)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the Notice of Intent is deemed to constitute my determination of eligibility under one or more of the requirements of Permit Part I.A.3.e(1), related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part I.A.3.f of the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

Printed Name _____

Title _____

Company _____

Date _____

Telephone _____

CERTIFICATION STATEMENT #2

Any Contractor or subcontractor implementing any part of this plan must prepare and sign a copy of the following certification.

(Contract Title)

(Permit Number)

I certify, under penalty of law, that I understand the terms and conditions of the Louisiana Pollutant Discharge Elimination System (LPDES) general permit that authorizes storm water discharges associated with construction activity from the construction site identified as part of this certification.

Firm Name: _____

Address: _____

_____ Telephone No: _____

Signature: _____ Title: _____

Date: _____

CERTIFICATION STATEMENT #3

Any Contractor or subcontractor that does not meet the definition of "operator" that will conduct activities that may impact the effectiveness of the SWPPP control measures must prepare and sign the following certification.

(Contract Title)

(Permit Number)

I certify, under penalty of law, that I will coordinate, through the contractor, owner, or directly, with the Contractor (s) identified in the pollution prevention plan having responsibility for implementing storm water control measures to minimize any impact my actions may have on the effectiveness of these storm water control measures.

Firm Name: _____

Address: _____

_____ Telephone No: _____

Signature: _____ Title: _____

Date: _____

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TRUCK WASH-DOWN RACKS

03/14

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SECTION 01 57 23.01 12

TRUCK WASH-DOWN RACKS
03/14

PART 1 GENERAL

1.1 SCOPE

The work specified in this section consists of the Contractor designing, implementing, and maintaining approved truck wash-down rack at the egress point from the construction site.

1.2 MEASUREMENT AND PAYMENT

No measurement will be made for the temporary truck wash-down rack designed, constructed, and maintained by the Contractor. Payment for the temporary truck wash-down rack, including its maintenance and removal, will be made at the contract job price for "Truck Wash-Down Rack".

The Owner will pay this sum in two installments:

(1) Sixty-percent (60%) of the lump sum price upon completion of installation of the Truck Wash Down Rack.

(2) The remaining forty-percent (40%) upon completion of the Truck Wash Down Rack's removal from the site.

Price and payment shall constitute full compensation for furnishing the design, and all plant, labor, equipment, and material to complete the work as specified herein and as shown on the Plans.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 Truck Wash-Down Rack

The Contractor shall design, submit to the Engineer for approval, and provide a hard-surfaced truck wash-down rack located at a point of egress from the construction site onto River Road during hauling and construction operations to prevent mud and debris transport onto public roads. All trucks utilized for hauling shall be pressure washed on the wash-down rack prior to departing the construction site. The truck wash-down rack shall be sized and located within the right-of-way for the access road per the Contractor's proposed equipment and construction site layout.

1. The hard surfaced truck wash-down rack shall consist of a Contractor designed steel grated structure, wooden timber crane mats, or an equivalent method.

2. Surfacing shall consist of three (3) inches of asphaltic pavement over 12-inch graded-crushed aggregate meeting the requirements of Section 32 15 00.00 12 SURFACING (GRANULAR). The

surfacing shall be located between the truck wash-down rack and River Road.

3. All truck wash-down rack waste water and sediment shall be intercepted before draining offsite. The water shall be returned to the interior of the project site. The sediment shall be removed and disposed of offsite at a certified facility. Details of the wash-down rack waste routing and disposal should be included in the Contractor's SWPPP, as described in Section 07 57 23.00 12, STORM WATER POLLUTION PREVENTION PLAN.

4. Additionally, the Contractor shall station a mechanical street sweeper on site and shall immediately clean River Road of any debris that falls off the washed trucks. The mechanical street sweeper shall be onsite at all times to clean the streets. Failure of the Contractor to comply with these requirements shall result in the Contractor stopping all hauling operations until the streets are cleaned of debris.

5. Upon completion of the hauling operation, the Contractor shall remove the truck wash-down rack and all appurtenances from the construction site.

6. The area where the truck wash-down rack was located shall be restored to the existing condition, or better than, prior to construction activities. All aggregate placed between the wash-down rack and the roadway shall be removed.

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DIVISION 31 - EARTHWORK

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SEPARATOR GEOTEXTILE

05/09

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SECTION 31 05 19.04 12

SEPARATOR GEOTEXTILE
05/09

PART 1 GENERAL

1.1 SCOPE

The work provided for herein consists of furnishing all plant, labor, material, equipment; performing all operations required for furnishing, hauling, placing the separator geotextile; and maintaining the geotextiles until placement of the specified material is completed and accepted.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D883	(2020a) Standard Terminology Relating to Plastics
ASTM D4491	(1999; R 2004e1) Water Permeability of Geotextiles by Permittivity
ASTM D4632	(1991; R 2003) Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
ASTM D4751	(2020) Standard Test Method for Determining Apparent Opening Size of a Geotextile
ASTM D4884	(1996; R 2003) Strength of Sewn or Thermally Bonded Seams of Geotextiles

1.3 MEASUREMENT AND PAYMENT

No separate measurement and payment will be made for geotextile material and placement. Geotextiles as specified on the Plans are incidental to item "Truck Wash Down Racks" and Contractor's temporary internal haul roads.

1.4 SUBMITTALS

Engineer approval is required for submittals with a "P" designation; submittals not having a "P" designation are for information only. The following shall be submitted in accordance with GP-41, SUBMITTALS.

SD-01 Preconstruction Submittals

Work Plan

The Contractor shall submit a work plan to the Engineer. The plan shall include the following information:

a. The dimensions of the geotextile panels, whether the geotextile will be seamed, lapped, or both. Distance between laps, if applicable.

b. A detailed description of how the geotextile will be placed and stretched.

SD-04 Samples

Geotextile

A 5-foot by 5-foot sample of each geotextile that the Contractor plans to use shall accompany the certificate. If seams are to be used, then an additional 5-foot by 5-foot sample of each geotextile containing a sample seam in the center of the geotextile sample shall be submitted with the certificate. Geotextiles shall not be delivered to the project site until the geotextile samples have been submitted and the Engineer approves their certificates.

SD-07 Certificates

Geotextile; P

Contractor shall submit the geotextile manufacturer's certification of compliance. All brands of geotextile and all seams that are used in construction shall be accepted on the following basis. At least 30 days prior to installation, the Contractor shall furnish to the Engineer, in duplicate, a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile. The certificate shall contain the signer's title, name and address of the Contractor, contract number, and project name and location. The mill certificate or affidavit shall attest that the geotextile meets the chemical, physical, and manufacturing requirements stated in this specification and that the seams used meet the seam requirements.

1.5 QUALITY CONTROL

1.5.1 General

The Contractor shall establish and maintain quality control for the geotextile and placement to assure compliance with contract requirements, and maintain records of his quality control for all construction operations including but not limited to the following:

(1) Installation Equipment. Type, size and suitability for construction of the prescribed work.

(2) Geotextile Submittals. Geotextile samples, manufacturer's certification of compliance, and work plan.

(3) Construction. Lay-out, geotextile inspection, and stone placement above the geotextile.

1.5.2 Reporting

These Reports, as well as the records of corrective action(s) taken, shall be submitted to the Resident Project Representative and the Engineer with the Contractor's Daily Progress Reports as stipulated in GP-10, DAILY PROGRESS REPORTS, and SP-4, DELIVERABLES.

1.6 SHIPMENT AND STORAGE

Geotextile shall be shipped and maintained in a heavy-duty protective cover until it is placed. During all periods of shipment and storage, the geotextile shall be protected from direct sunlight, ultra-violet rays, temperatures greater than 140 degrees Fahrenheit, mud, dirt, and other contaminants. Geotextiles delivered to the project site shall be clearly marked to show the brand name, type of geotextile, tensile strength, location and date of manufacture, and its length (machine direction) and width.

PART 2 PRODUCTS

2.1 GEOTEXTILE

The geotextile shall be a woven pervious sheet made with plastic yarn as defined by ASTM D883. The geotextiles shall meet the requirements listed in Table 2. Geotextile fibers shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of propylene, ethylene, ester, amide, or vinylidene-chloride, and shall contain stabilizers and/or inhibitors added to the base plastic, if necessary, to make the filaments resistant to deterioration due to ultra-violet exposure. The edges of the geotextile shall be selvedged to present unraveling.

TABLE 2
REQUIREMENTS* FOR SEPARATOR GEOTEXTILE

PROPERTY	TEST PROCEDURE	ACCEPTABLE VALUES
Grab Breaking Load	ASTM D4632	200 pounds minimum in any principal direction
Seam Strength (**)	ASTM D4884	100 pounds per inch minimum
Elongation at Break	ASTM D4632	15 percent minimum in any principle direction
Apparent Opening Size (AOS)	ASTM D4751	No finer than the U.S. Standard Sieve No. 70 and no coarser than the U.S. Standard Sieve No. 30
Permittivity	ASTM D4491	0.35 per second minimum

(*) Value represents minimum average roll value of new geotextile received from the manufacturer or distributor.

(**) All of the samples shall yield test values that are greater than the minimum value that is specified.

TABLE 2
REQUIREMENTS* FOR SEPARATOR GEOTEXTILE

PART 3 EXECUTION

3.1 GEOTEXTILE INSTALLATION

The geotextile shall be placed in the manner and at the locations shown on the drawings. The Contractor shall prepare the surface to receive the geotextile to ensure that the surface is relatively smooth and free of obstructions, depressions, debris, soft or low-density pockets of material, or stone which could damage the geotextile during placement. At the time of installation, the geotextile shall be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation or storage. The geotextile shall be protected at all times during construction to ensure that the geotextile's original chemical and physical properties are not changed. The work shall be scheduled so that all of the geotextile that is placed is covered with a layer of the specified material by the end of each workday. Failure to comply shall require replacement of geotextile. All wrinkles and sags shall be stretched out immediately before stone is placed on the geotextile. The geotextile shall be protected from damage during placement of stone. This shall be accomplished by limiting the height of drop to less than 1 foot, or the water surface, whichever is greater. In the event that this damages the geotextile, the stone and gravel shall be placed directly on the geotextile with zero height of drop. Before placement of stone and gravel, the Contractor shall demonstrate that the placement technique will not damage the geotextile. The Contractor at no additional cost to the Owner shall replace any geotextile that is rejected or damaged.

3.2 SEAMS AND LAPS

Seams or laps may be utilized to produce panels of geotextile. Seams or laps shall be perpendicular to the centerline of the structure or roadway. Seams or laps shall not run parallel with the direction of the centerline.

3.2.1 Seams

All seams shall be sewn using thread meeting the requirements for plastic yarn specified in paragraph "GEOTEXTILE". The sheets of geotextile shall be sewn at the factory or other approved location. Seam strengths shall meet the requirements of Table 1.

3.2.2 Laps

Geotextile panels placed along the centerline shall be overlapped a minimum of 2 feet with the upstream panel on top of the downstream panel.

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DIVISION 31 - EARTHWORK

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CLEARING AND GRUBBING

04/08

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SECTION 31 11 00.00 12

CLEARING AND GRUBBING
04/08

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for the clearing and grubbing of the areas specified herein or indicated on the Plans, for the removal and disposal of all cleared and grubbed materials, and for the filling of all holes caused by grubbing operations, as specified herein. Clearing and grubbing shall be performed within the entire area of the limits of work, as shown on the Plans and defined by the permanent and temporary rights-of-way. No clearing and grubbing operations shall be performed outside the limits of work, as shown on the Plans and defined by the permanent and temporary rights-of-way.

1.2 MEASUREMENT AND PAYMENT

Clearing and Grubbing operations will be measured for payment as lump sum. Payment(s) will be made at the contract job price for “Clearing and Grubbing”; the Owner will pay this sum in up to three (3) installments. Installment payments (if requested by Contractor) are based on the percentage of total Work area successfully Cleared and Grubbed, as reported in the Contractor’s Daily Progress Reports and confirmed by the Resident Project Representative, and per the following:

(1) Thirty-percent (30%) of the lump sum price upon completion of thirty-percent (30%) of total Clearing and Grubbing operations.

(2) Thirty-percent (30%) of the lump sum price upon completion of sixty-percent (60%) of total Clearing and Grubbing operations.

(3) The remaining forty-percent (40%) upon demobilization from the site.

Price and payment shall constitute full compensation for furnishing all plant, labor, material and equipment and performing all operations necessary for clearing, grubbing, and vegetation removal of the areas indicated on the Plans and as specified herein, for removing and disposing of all cleared, grubbed, and vegetation removal materials, and for filling holes resulting from grubbing operations with native materials to achieve a uniformly graded surface.

1.3 QUALITY CONTROL

The Contractor shall establish and maintain quality control for clearing and grubbing operations to assure compliance with contract requirements, and maintain records of his/her quality control for all construction operations including but not limited to the following:

(1) Clearing. Station to station limits, transverse clearing limits

from applicable centerline; percentages of area complete; type of material.

(2) Grubbing. Station to station limits, transverse grubbing limits from applicable centerline; percentage of area complete; type of material.

(3) Disposition of Cleared and Grubbed Materials. Method and location of disposition; damage to timber or improvements which are not to be cleared.

These records, as well as the records of corrective action(s) taken, shall be submitted to the Resident Project Representative and the Engineer with the Contractor's Daily Progress Reports as stipulated in GP-10, DAILY PROGRESS REPORTS, and SP-4, DELIVERABLES.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

All clearing and grubbing shall be completed within the limits of work as shown on the Plans, within the permanent and temporary rights-of-way, and per the specifications herein.

3.2 CLEARING

3.2.1 General

Clearing, unless otherwise specified, shall consist of the complete removal above the ground surface, except as indicated below, of all trees, stumps, down timber snags, brush, vegetation, old piling, loose stone, abandoned structures, fencing, and similar debris.

3.2.2 Merchantable Timber

Merchantable timber within the areas to be cleared on or after the date of award of this contract may be disposed of as the Contractor sees fit, as long as all such merchantable timber is removed from within the limits of work indicated on the Plans. Such merchantable timber may be sold off-site by the Contractor or be satisfactorily disposed of in accordance with the provisions of paragraph "DISPOSAL OF DEBRIS."

3.2.3 Trees

Trees shall be felled in such a manner as to avoid damage to trees to be left standing, to existing structures and installations and with due regard for the safety of employees and others.

3.2.4 EXISTING FACILITIES TO BE REMOVED

Unknown abandoned structures, pipes, foundations, or other items that require removal from the site may be encountered during Clearing and Grubbing operations. No demolition of existing features shall be done before ensuring that traffic control is properly implemented to maintain traffic flow along River Road.

3.2.5 Structures

a. Remove existing structures indicated to be removed according to the Plans. Also remove previously unknown structures encountered within the work area.

b. Demolish structures in a systematic manner from the top of the structure to the ground.

c. Locate demolition and deconstruction equipment throughout the project work area and remove materials so as to not impose excessive loads on adjacent earthworks and existing structures to remain in place.

d. Do not demolish any existing structure before approval by the Resident Project Representative.

3.2.6 Vegetation

Vegetation to be removed shall consist of, grass, bushes, and weeds. Close-growing grass and other vegetation shall be removed from all areas within the limits of work shown on the Plans to provide a complete bare earth surface. Acceptance of the vegetation removal operation shall precede the demobilization of the Contractor.

3.2.7 Miscellaneous Structure Foundations and Debris

The Contractor shall also remove all abandoned foundations, debris, and other materials which remain after buildings or other structures have been removed.

3.2.8 Areas to be Cleared

3.2.8.1 General

The entire area as shown on the Plans within the permanent and temporary right-of-way shall be cleared.

3.3 GRUBBING

3.3.1 General

Grubbing shall consist of the removal of all stumps, branches, roots, buried logs, old piling, old paving, old foundations, pipes, drains, and other concentrated masses of unsuitable material.

3.3.2 Areas to be Grubbed

3.3.2.1 Embankments and Structures

Grubbing shall be performed within the limits of work shown on the Plans. All roots and other projections over 1 1/2-inches in diameter shall be removed to a depth of 3-feet below the natural surface of the ground. The areas to be grubbed include all areas within the limits of work specified herein from which trees, stumps, down timber, snags, old piling, abandoned structures, and other projections have been removed.

3.3.2.2 Channels and Ditches

All stumps and exposed roots and other obstructions shall be removed from within the limits of work shown on the Plans. The Contractor shall create a small swale as shown on the Plans to route stormwater runoff from the River Road end of the work area to the CN Railroad ditch. The swale shall be sloped at a minimum of 2 percent. The entire cleared and grubbed area shall be graded such that stormwater flows into the swale for collection and discharge to the north end of the limits of work. The graded areas shall be sloped at a minimum of 1 percent.

3.3.3 Pipes and Drains

Pipes and drains shall be removed as indicated on the Plans. The Contractor shall inform the Resident Project Representative of all pipes and drains not shown on the Plans which are encountered during grubbing. Such pipes and drains shall not be removed or disturbed until so directed by the Resident Project Representative.

3.3.4 Filling of Holes

All holes caused by grubbing operations and removal of pipes and drains shall be backfilled with native material from the work site in 12-inch layers to the elevation of the adjacent ground surface, and each layer compacted to a density at least equal to that of the adjoining undisturbed material.

3.4 DISPOSAL OF DEBRIS

3.4.1 General

All debris resulting from clearing and grubbing operations at the construction site shall be removed from the site. The Contractor shall make a reasonable effort to channel merchantable material into the commercial market to make beneficial use of materials resulting from clearing and grubbing operations. Details of planned disposal operations shall be described in the Contractor's submitted Work Plan, as described in SP-7, WORK PLAN SUPPLEMENTAL, Para. 7.5.

3.4.2 Removal From Site of Work

The Contractor shall remove all of the debris from the site of the work. Such disposal shall comply with all applicable Federal, State, and Local laws. The Contractor shall, at their option, either retain for their own use or dispose of by sale or otherwise, such materials of value. The Owner is not responsible for the protection and safekeeping of any materials retained by the Contractor. Such materials shall be removed from the site of the work before the date of completion of the work. The Contractor shall not place debris, materials, or equipment from clearing and grubbing operations on adjacent property. If the Contractor intends to use a landfill not on the approval list, they shall submit this in writing for approval by the Resident Project Representative as soon as practicable, preferably before submission of the Work Plan.

Approved disposal sites in the vicinity are as follows:

River Birch Landfill
2000 Hwy. 90
Avondale, LA 70094

Jefferson Parish Landfill
5800 Hwy. 90
Avondale, LA 70094

Gator Debris Landfill & Recycling
5194 LA-70
Sorrento, LA 70778

Gentilly Landfill
10200 Almonaster Avenue
New Orleans, LA 70127

3.4.3 Removal of Abandoned Drainage Structures

Drainage structures, including all pipes and drains designated as salvageable by the Resident Project Representative, and which are to be removed from within the designated limits of work will not become the property of the Contractor, but shall be stored by the Contractor on accessible sites within the rights-of-way, at locations designated by the Resident Project Representative. Removal operations shall be conducted in such a manner that material designated to be salvaged will not be damaged.

-- End of Section --

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ASPHALTIC CONCRETE PAVEMENT

-- End of Section Table of Contents --

SECTION 32 12 16

ASPHALTIC CONCRETE PAVEMENT

PART 1 GENERAL

1.1 SCOPE

This Section of the Specifications details requirements of placing hot mix asphaltic concrete in accordance with the items of work shown on the Plans and as specified herein.

1.2 References

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD)

LSSRB	(2016) Louisiana Standard Specifications for Roads and Bridges

1.3 MEASUREMENT AND PAYMENT

No separate measurement and payment will be made for asphaltic concrete materials or their placement. Asphaltic concrete specified on the Plans areis incidental to item “Truck Wash Down Racks” and Contractor’s construction entrance and internal haul roads.

1.4 SUBMITTALS

CPRA approval is required for submittals with a "P" designation; submittals not having a "P" designation are for information only. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Asphaltic Concrete Mixtures; P

Asphaltic concrete mixes shall be submitted for approval to the Engineer before paving operations begin. The submitted job mix formula shall be in accordance with LSSRB Section 502 – Superpave Asphaltic Concrete Mixtures.

PART 2 PRODUCTS

2.1 ASPHALT PAVING

Hot Mix asphaltic-paving materials shall conform to LSSRB Standard Specifications, Section 502 - Superpave Asphaltic Concrete Mixtures, 2016 Edition.

PART 3 EXECUTION

3.1 GENERAL

Place hot mix asphaltic concrete paving to the limits shown on the Plans and in accordance with LSSRB Standard Specifications, Section 502 - Superpave Asphaltic Concrete Mixtures, 2016 Edition.

-- End of Section --

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DIVISION 32 - EXTERIOR IMPROVEMENTS

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SURFACING (GRANULAR)

04/08

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SECTION 32 15 00.00 12

SURFACING (GRANULAR)
04/08

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor and materials and performing all work necessary to construct and maintain surfacing for the access roadways throughout the project, including the ingress and egress portions that connect to River Road.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM C88	(2018) Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	(2017) Standard Test Method for Materials Finer than 75-um (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C131	(2006) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	(2006) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D4318	(2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D75	(2003) Standard Practice for Sampling Aggregates

1.3 MEASUREMENT AND PAYMENT

1.3.1 Access Roads, Including Ingress\Egress and Truck Wash Down Racks

No separate measurement or payment will be made for granular roadway surfacing. Surfacing (Granular) as specified on the Plans is incidental to item "Truck Wash Down Racks" and Contractor's temporary internal haul roads.

1.4 SUBMITTALS

Engineer approval is required for submittals with a "P" designation; submittals not having a "P" designation are for information only. The following shall be submitted in accordance with GP-41, SUBMITTALS.

SD-06 Test Reports

Sampling and Testing; P

Certified LA abrasion, Atterberg limits, soundness and gradation test results of surfacing material shall be submitted to the Engineer for approval prior to shipment.

1.5 QUALITY CONTROL

1.5.1 General

The Contractor shall establish and maintain quality control for the surfacing operations to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to compliance with surfacing standards, quality and gradation of surfacing, thickness of surfacing prior to compaction, and width and location of the roads in relation to the project centerline.

1.5.2 Sampling and Testing

All laboratory facilities, personnel, and equipment used to test granular material shall be pre-approved by the Engineer before start of the work.

1.5.2.1 Sampling

Sampling of material shall be performed in conformance with ASTM D75. Sampling will be observed by the Resident Project Representative.

1.5.2.2 Testing

Testing of surfacing materials shall be performed on two samples selected by the Resident Project Representative. Testing of surfacing materials shall include gradation and Atterberg limit testing as indicated in ASTM C136. All test results shall be furnished to the Engineer to confirm materials' compliance with the specifications. Surfacing materials not meeting the specifications shall be removed from the site and replaced with surfacing materials meeting the specifications.

1.5.3 Reporting

Test Records, as well as the records of corrective action(s) taken, shall be submitted to the Resident Project Representative and the Engineer with the Contractor's Daily progress Reports as stipulated in GP-10, DAILY PROGRESS REPORTS, and SP-4, DELIVERABLES.

PART 2 PRODUCTS

2.1 SURFACING

Surfacing material shall be one of the following:

2.1.1 Surfacing Stone

Surfacing stone shall come from a source on the LADOTD Approved Material List, which can be found at http://wwwapps.dotd.la.gov/engineering/materials_lab/QualifiedProjectList/ApprovedMate The source shall be pre-approved by the Engineer, shall consist of 100 percent stone, and shall meet the following requirements when tested in accordance with ASTM C136 and ASTM C117, Procedure B:

U.S. Sieve	Percent Passing
1-1/2-inch	100
3/4-inch	50 to 100
No. 4	35 to 65
No. 40	10 to 32
No. 200	3 to 15

The fraction of material passing the No. 40 sieve shall conform to the following requirements when tested in accordance with ASTM D4318:

Liquid Limit (Max.)	25
Plasticity Index (Max.)	4

Crushed stone shall show an abrasion loss of not more than 40 percent when tested in accordance with ASTM C131 and a soundness loss of not more than 15 percent when subjected to 5 cycles of the magnesium sulfate soundness test in accordance with ASTM C88.

PART 3 EXECUTION

3.1 BASE PREPARATION

Prior to placement of the surfacing as indicated on the drawings, all debris shall be removed from the area to receive the surfacing. Base preparation for the entire access road, including ingress/egress turn-outs, shall be completed in advance of placing surfacing.

3.2 PLACEMENT AND COMPACTION

The placement of surfacing shall not commence until all grading operations in the area have been finalized, including final dressing of the subgrade. No surfacing shall be placed or compacted on a muddy or rutted subgrade. The surfacing material shall be compacted to provide a smooth, uniform, closely-knit riding surface free from ridges and depressions. Compaction shall be performed by making two or more passes with a rubber-tired roller. The surfaced area shall have a minimum of 12 inches of stone. Any damage to the finished surfacing by the Contractor's construction operations shall be repaired by the Contractor at no expense to the Owner.

3.2.1 Shaping

The surface course shall be shaped by the use of a blade grader or other suitable means. Any ruts formed shall be shaped as often as necessary to prevent breaking through the surfacing material into the subgrade or into the geotextile fabric. Holes, waves, and deficiencies in thickness, which may develop and are not filled by shaping, shall be filled by adding more

material. Shaping shall continue until the surface is free from ruts, waves, and undulations.

3.2.2 Rollers

The minimum requirements for rubber-tired rollers to be used for compaction will be a 10-ton, 11-wheel, 7.50 by 15 tires, towed type, tandem pneumatic-tired roller. All rollers shall be towed at speeds not to exceed 5 miles per hour.

3.3 MAINTENANCE

3.3.1 Access Roads, Including Ingress\Egress Turn-outs

The access roads, including ingress\egress turn-outs shall be maintained by such shaping and addition of surfacing material as directed by the Resident Project Representative to provide a usable and drivable road under all weather conditions. No additional payment will be made for this maintenance.

Additional surfacing materials required to repair any damages to the finished surfacing occasioned by the Contractor's construction operations will not be measured for payment.

-- End of Section --

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HYDRO-SEEDING

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SECTION 32 92 19

HYDRO-SEEDING

PART 1 GENERAL

1.1 SCOPE

This Section of the Specifications details requirements of work and materials to be used in connection with Hydro-Seeding in accordance with the items of work shown on the Plans and as specified herein.

1.2 MEASUREMENT AND PAYMENT

No measurement will be made for hydro-seeding. Payment for seeding the Work site after Clearing and Grubbing Operations will be made at the contract lump sum price for "Hydro-Seeding". Price and payment shall constitute full compensation for furnishing all plant, labor, materials, and equipment and performing all operations necessary for seeding areas indicated on the Plans and as specified herein.

PART 2 PRODUCTS

The products to be used for Hydro-Seeding shall meet the requirements of Section 739, Hydro-Seeding of "Louisiana Standard Specifications for Roads and Bridges", 2016 Edition (LADOTD).

PART 3 EXECUTION

3.1 GENERAL

All work for Hydro-Seeding shall be in accordance with Section 739, Hydro-Seeding of "Louisiana Standard Specifications for Roads and Bridges", 2016 Edition (LADOTD).

-- End of Section --

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX A

DAVIS BACON ACT PREVAILING WAGE DETERMINATION SCHEDULES

"General Decision Number: LA20200002 01/10/2020

Superseded General Decision Number: LA20190002

State: Louisiana

Construction Type: Heavy

Counties: Acadia, Ascension, Bossier, Caddo, Calcasieu, East Baton Rouge, Lafayette, Lafourche, Livingston, Ouachita, Rapides, St Landry, St Martin, Terrebonne, Webster and West Baton Rouge Counties in Louisiana.

HEAVY CONSTRUCTION PROJECTS (includes flood control, water & sewer lines, and water wells; excludes elevated storage tanks, industrial construction-chemical processing, power plants, and refineries)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/10/2020

CARP1098-004 07/01/2014

ASCENSION, EAST BATON ROUGE, LIVINGSTON AND WEST BATON ROUGE PARISHES

	Rates	Fringes
CARPENTER (formbuilding/formsetting).....	$ 26.16	8.39

CARP1098-014 07/01/2014

CALCASIEU PARISH

	Rates	Fringes
CARPENTER (formbuilding/formsetting).....	$ 26.16	6.80

CARP1098-015 07/01/2014

ACADIA, LAFAYETTE, ST. LANDRY AND ST. MARTIN PARISHES

	Rates	Fringes
CARPENTER (formbuilding/formsetting).....	$ 26.16	5.60

CARP1098-016 07/01/2014

BOSSIER, CADDO, OUACHITA, RAPIDES AND WEBSTER PARISHES

	Rates	Fringes
CARPENTER (formbuilding/formsetting).....	$ 20.80	6.80

CARP1846-008 07/01/2019

LAFOURCHE and TERREBONNE PARISHES

	Rates	Fringes
CARPENTER (formbuilding/formsetting).....	$ 26.51	9.60

ELEC0130-009 12/02/2019

LAFOURCHE AND TERREBONNE PARISHES

	Rates	Fringes
ELECTRICIAN.....	$ 31.65	11.98

ELEC0194-007 09/02/2019

BOSSIER, CADDO, and WEBSTER PARISHES

	Rates	Fringes
ELECTRICIAN		
Lineman and Heavy Equipment Operator.....	$ 28.45	12.60

ELEC0446-007 01/01/2018

OUACHITA PARISH

	Rates	Fringes
ELECTRICIAN.....	$ 23.71	1%+11.60

ELEC0576-006 09/01/2019

RAPIDES PARISH

	Rates	Fringes
ELECTRICIAN.....	$ 25.30	4.25%+8.10

ELEC0861-006 09/01/2018

ACADIA, CALCASIEU, LAFAYETTE, AND ST. MARTIN PARISHES

	Rates	Fringes
ELECTRICIAN	$ 27.78	13.25

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* ELEC0995-006 12/30/2019

ASCENSION, EAST BATON ROUGE, LIVINGSTON, ST. LANDRY, AND WEST BATON ROUGE PARISHES

	Rates	Fringes
ELECTRICIAN	$ 26.78	11.33

SULA2004-006 04/29/2004

	Rates	Fringes
CARPENTER (all other work)	$ 12.81	0.00
Cement Mason/Concrete Finisher	$ 13.77	0.00
Laborers		
Common	$ 8.20	0.00
Pipelayer	$ 9.45	0.00
Power Equipment Operators		
Backhoe/Excavator	$ 13.01	0.00
Bulldozer	$ 13.83	0.00
Crane	$ 16.62	3.28
Dragline	$ 15.16	0.00
Front End Loader	$ 11.50	0.00
Motor Grader/Blade	$ 11.75	0.00
Oiler	$ 8.59	2.50
Trackhoe	$ 12.64	0.00
Water Well Driller	$ 11.91	2.44
Winch	$ 11.38	0.00
Truck Driver, Dump	$ 10.25	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic

violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate

that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX B

FORM FOR WRITTEN CLARIFICATIONS OF CONTRACT DOCUMENTS

CHANGE ORDER NO. __

OWNER:	State of Louisiana, Coastal Protection & Restoration Authority
CONTRACTOR	_____
PROJECT:	River Reintroduction Into Maurepas Swamp and West Shore
FILE NO:	Lake Pontchartrain - Early Works (PO-0029/PO-0062)
SOLICITATION NO:	_____
CONSTRUCTION MANAGER:	

The following changes are hereby proposed to be made to the Contract Documents:

-

Description: See attached summary.

Attachments (list documents supporting change):

-

Change in Contract Price		**Change in Contract Time**	
Original Contract Price		Original Contract Time (calendar days)	
Net Increase /(Decrease) from previous Change Orders		Net Increase /Decrease from previous Change Orders (days)	
Contract Price prior to this Change Order		Contract Time prior to this Change Order (calendar days)	
Net Increase/(Decrease) of this Change Order		Net Increase (Decrease) of this Change Order (days)	
Contract Price with this Change Order		Contract Time with this Change Order (calendar days)	

RECOMMENDED:

By:_____
Engineer

Date:_____

RECOMMENDED:

By:_____
CPRA Construction Manager

Date:_____

ACCEPTED:

By:_____
Contractor

Date:_____

Maureps Swamp/West Shore - Early Works (PO-0029/0062)

SUMMARY OF CHANGE ORDER NO:_____

ITEM NO.	DESCRIPTION	UNIT	ORIGINAL QUANTITY	ADJUSTED QUANTITY	UNIT PRICE	AMOUNT OVERRUN	AMOUNT UNDERRUN
Net Increase of this Change Order							

Justification:

-

No additional/additional contract time is requested to accomplish the work for the change order.

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX C

LAND RIGHTS MEMORANDUM

Place Holder For Land Rights Memorandum

(PO-0029/PO-0062)

Land Rights Memorandum to be included via Addendum prior to Bid Opening

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX D

COASTAL CONSTRUCTION AND VEGETATIVE PROJECTS – SUBCONTRACTOR REPORT

CURRENT INVOICE NO._____
PURCHASE ORDER NO. _____

COASTAL CONSTRUCTION AND VEGETATIVE PROJECTS
SUBCONTRACTOR REPORT
PRIME CONTRACTOR

Name & Address of Subcontractor(s)	$ Value Paid to Subs for this Invoice Period	Cumulative $ Value Paid to Subs for this Purchase Order

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works Final Submission

APPENDIX E

PIPELINE COMPANY INFORMATION – LETTERS OF NO OBJECTION

Enterprise Products

ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

LETTER OF NO OBJECTION
Expires: 6 months from date of this Letter

February 8, 2022

Travis Byland
Coastal Protection and Restoration Authority
Travis.Byland@LA.GOV

RE: REQUEST FOR ENCROACHMENT ACROSS THE NALCO - GARYVILLE PIPELINE
(ACADIAN; LID #307-01300; TRACT # N/A; DB #18425)
LETTER OF NO OBJECTION – ST. JOHN THE BAPTIST PARISH, LA

Dear Mr. Byland:

This letter is to memorialize our understanding regarding your request on behalf of Coastal Protection and Restoration Authority ("CPRA") regarding CPRA'S proposed construction one (1) access roadway as per plans and/or specifications from CPRA received February 3, 2022, a copy of which are attached hereto as EXHIBIT A (collectively referred to as the "ENCROACHMENT") crossing the Nalco - Garyville pipeline (the "PIPELINE") of Acadian Gas Pipeline System ("COMPANY") located within the right-of-way/easement (the "EASEMENT") and as depicted on the GIS map attached hereto as EXHIBIT B.

COMPANY is committed to protecting the environment and the health and safety of our employees, contractors, customers and the public by conducting its business in a safe and environmentally responsible manner. Activity that may disturb the PIPELINE, its appurtenant assets or its support structure can pose a threat to the environment, persons and public safety. Consequently, we request that CPRA adhere to this same commitment to the environment and safety when undertaking construction of the ENCROACHMENT. At this time, COMPANY will not make an objection to the proposed ENCROACHMENT, conditioned upon CPRA'S understanding of the following:

1. A minimum of 48 hours (excluding weekends and holidays) prior to commencing construction activities relating to the ENCROACHMENT, CPRA will (i) confirm that the local One-Call has been notified of the construction activities (CPRA or its agents may contact One-Call by dialing 811) and (ii) contact COMPANY'S Operations representative Bryan Giroir at 985-493-4619, so that Mr. Giroir or his designated representative can be present during any approved construction operations.

2. COMPANY'S designated representative in the field ("COMPANY'S REPRESENTATIVE") will have the right to observe the construction of the ENCROACHMENT. CPRA understands that COMPANY'S REPRESENTATIVE may suspend any work activities on the ENCROACHMENT if COMPANY'S REPRESENTATIVE, in his sole and absolute discretion, determines that such activities are in violation of any applicable law, ordinance or regulation or pose an imminent risk of bodily injury or death to persons, a threat to the environment or damage to the PIPELINE.

3. The following language must be conspicuously displayed on all drawings depicting the PIPELINE:

WARNING! HIGH PRESSURE PIPELINE
Excavation and/or Construction Prohibited without Prior Written Permission From
Acadian Gas Pipeline System

4. CPRA'S crossing(s) will be as close to ninety (90) degrees as possible to the PIPELINE, but not less than forty-five (45) degrees. COMPANY requests physical verification of the PIPELINE depth of cover and alignment, prior to work being performed near the PIPELINE. Physical verification may be via hydro-excavation or any other method approved by COMPANY'S REPRESENTATIVE.

If the pipeline is not at the anticipated alignment or depth, CPRA will adjust accordingly at no expense to COMPANY or its affiliates.

5. CPRA'S aforementioned access road crossing will be installed in such a way that a minimum depth of cover of four feet (4') is maintained between the top of the PIPELINE and the top of the access road surface. CPRA shall be responsible for all future damage to the access road including its replacement or restoration in the event that COMPANY, or its designee, must access the pipeline and/or associated EASEMENT to perform routine or emergency maintenance. CPRA'S placement of the driveway shall not impede natural overland storm water sheet flow and shall allow for positive drainage sheet flow across PIPELINE EASEMENT and no ponding of storm water. In addition, ease of access should be considered when the need arises to traverse along the PIPELINE EASEMENT across the access road.

6. CPRA understands that moving heavy construction equipment across the PIPELINE can damage the PIPELINE, thereby posing a threat to the environment and the safety of persons in the vicinity and the public. COMPANY recommends CPRA provide COMPANY with a **minimum of 72 business hours notice** prior to crossing the PIPELINE with any heavy equipment. Wherever CPRA is intending to cross the PIPELINE with heavy equipment, CPRA may be required to place eight-inch (8") timber matting or air bridge matting over the PIPELINE as determined by COMPANY'S REPRESENTATIVE. NOTE: It is the responsibility of CPRA to confirm that the timber matting is constructed in a manner that will sustain proposed heavy equipment. No medium to large vibratory compaction equipment is allowed within minimum ten feet (10') from the PIPELINE, only walk-behind vibratory rollers/compactors are allowed. CPRA will maintain a minimum stable soil cover of three feet (3') of cover over the top of the PIPELINE at locations where construction or maintenance activities will take place over the PIPELINE.

7. No excavation or removal of cover will be permitted within the PIPELINE EASEMENT without prior approval by COMPANY'S REPRESENTATIVE. COMPANY requires hand excavation, other approved non-mechanical means, when reaching a distance of eighteen inches (18") plus half the diameter of the pipeline as measured from the pipeline outside wall; however, at no point shall mechanical excavation be performed when less than twenty four inches (24") from PIPELINE outside wall. All mechanical digging equipment must have the teeth removed or barred with a plate welded across the teeth.

8. No permanent structures other than the approved ENCROACHMENTS will be permitted on the EASEMENT, including, but not limited to, light or utility poles, fences, buildings, houses, barns, garages, patios, swimming pools, or reinforced concrete slabs.

9. The existence of the ENCROACHMENT does not modify or constitute a waiver of COMPANY'S rights under the Permit or any other rights which may be implied by law or equity; and COMPANY expressly reserves all such rights.

10. CPRA understands that COMPANY'S issuance of this letter of no objection was based on many factors, including the circumstances of the COMPANY, the PIPELINE and COMPANY'S business at the time issued and in the future these factors and circumstances can change. COMPANY'S issue of no objection to the construction of the ENCROACHMENT will **expire six (6) months from the date of this letter**, unless CPRA has commenced and diligently continued construction of the ENCROACHMENT. If CPRA is unable to commence construction of the ENCROACHMENT within six (6) months after the date of this letter or, if after timely commencement of construction of the ENCROACHMENT, suspends construction thereof for a period greater than six (6) months, and CPRA still intends to construct and/or complete construction of the ENCROACHMENT, CPRA must resubmit the construction plans for the ENCROACHMENT, whether or not such plans have changed, for review by COMPANY and COMPANY, in its sole and absolute discretion, will determine whether it will have no objection at that time to such plans as resubmitted.

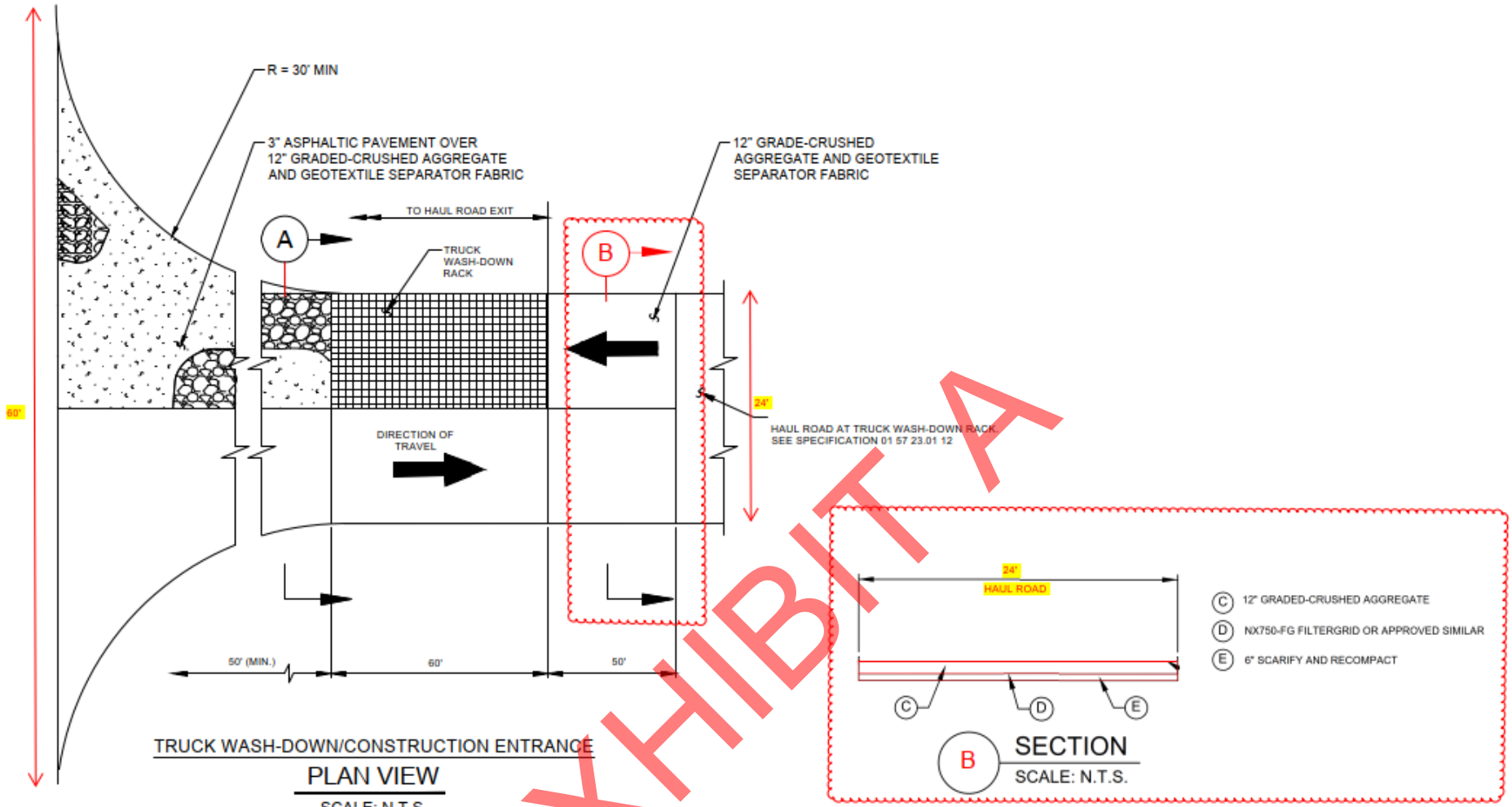
If you believe anything set forth in this letter misstates our understanding or if you require more information or clarification of any matters set forth herein, please contact the undersigned at your soonest convenience. The undersigned can be reached at (713) 381-3128 or contacted via e-mail at clair@eprod.com

Regards,

Cameron Lair

Cameron Lair
Encroachment Analyst

cc: Israel Silva
Caesar Leynes
Paul Lair
Alex Lopez
Bryan Giroir



TRUCK WASH-DOWN/CONSTRUCTION ENTRANCE

PLAN VIEW

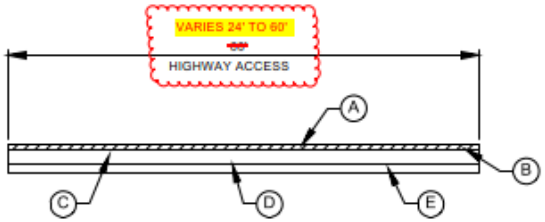
SCALE: N.T.S.

B SECTION

SCALE: N.T.S.

NOTES:

1. SECTION A-A REPRESENTS THE REQUIRED ACCESS ROAD SURFACE BETWEEN THE TRUCK WASH-RACK AND THE EGRESS POINT. CONTRACTOR CAN PROPOSE AN ALTERNATIVE ACCESS SECTION AND TRUCK WASH-RACK DETAIL



A SECTION

SCALE: N.T.S.

A 3" BITUMINOUS SURFACING (GRADE 1)

B PRIME COAT (MC-30)

C 12" GRADED-CRUSHED AGGREGATE

D NX750-FG FILTERGRID OR APPROVED SIMILAR

E 6" SCARIFY AND RECOMPACT

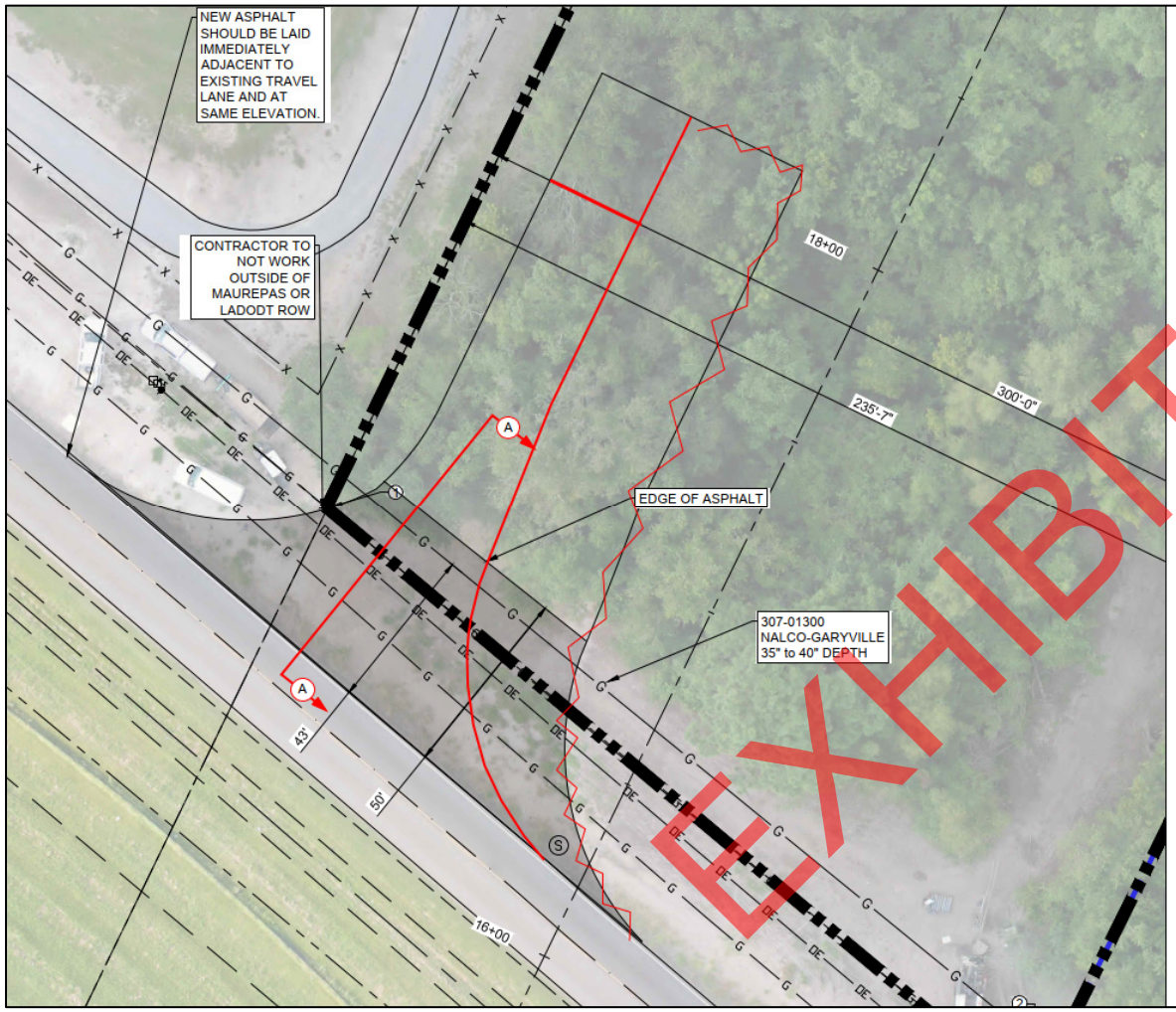
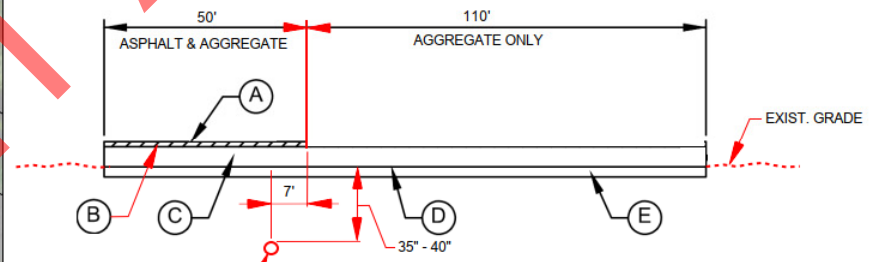


EXHIBIT A

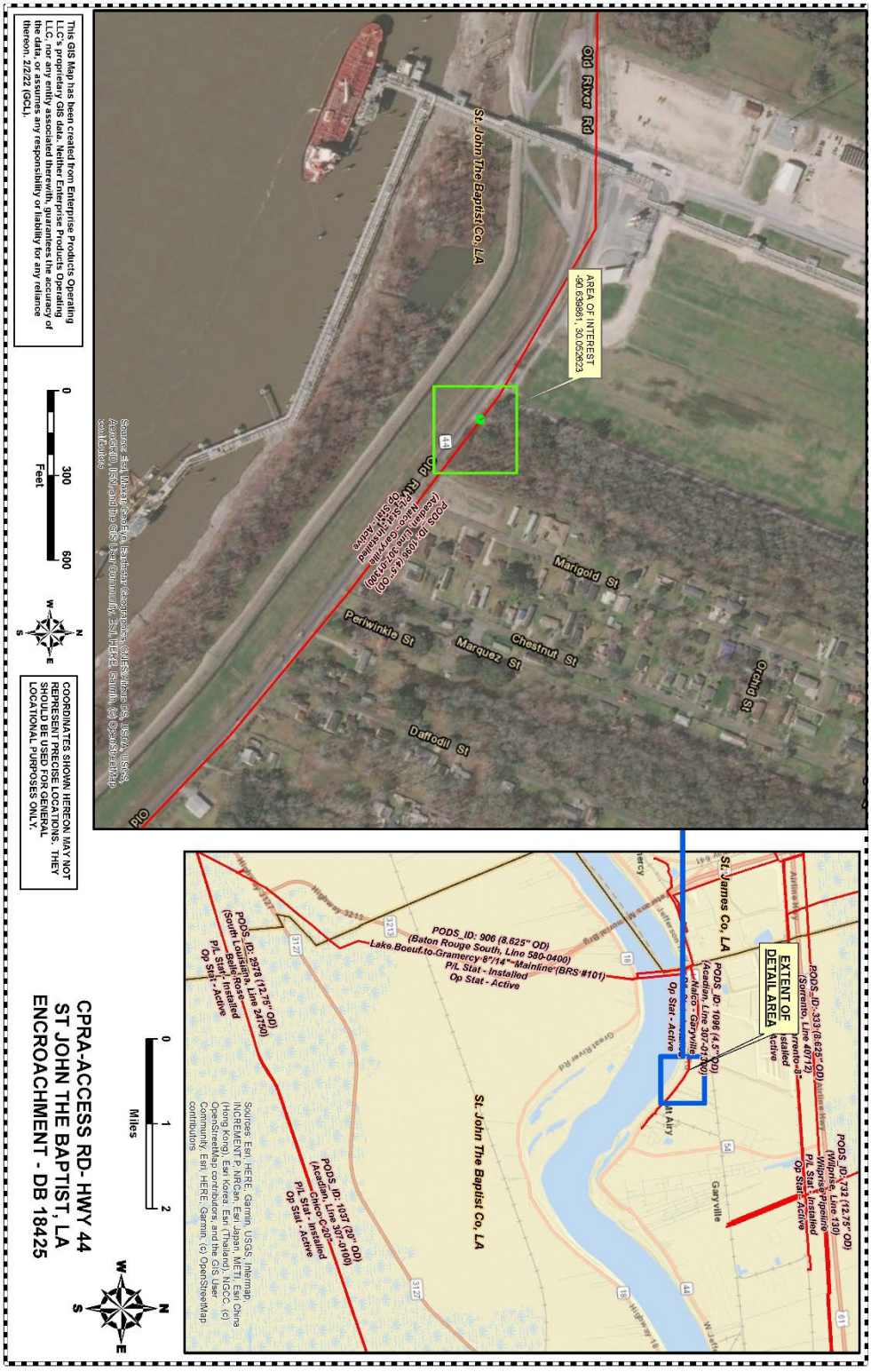


A SECTION
SCALE: N.T.S.

(A) 3" BITUMINOUS SURFACING (GRADE 1)
(B) PRIME COAT (MC-30)
(C) 12" GRADED-CRUSHED AGGREGATE
(D) NX750-FG FILTERGRID OR APPROVED SIMILAR
(E) 6" SCARIFY AND RECOMPACT

NOTE:
UTILITY OWNER TO COORDINATE WITH CPRA TO DETERMINE IF PROTECTION OF THE PIPELINE IS REQUIRED AND THE DESIGN OF SUCH PROTECTION.

EXHIBIT B


CPRA-ACCESS RD- HWY 44
ST JOHN THE BAPTIST, LA
ENCROACHMENT - DB 18425
AREA OF INTEREST
-90.638861, 30.052823
Old River Rd
St. John The Baptist Co, LA
Marigold St
Periwinkle St
Marquez St
Chestnut St
Daffodil St
Orchid St
EXTENT OF DETAIL AREA
St. James Co, LA
St. John The Baptist Co, LA
Garyville
Mt Airy
Highway 18
Great River Rd
PODS_ID: 906 (8.625" OD)
(Baton Rouge South, Line 580-0400)
Lakes Boeuf to Gramercy 8"/14" Mainline (BRS #101)
P/L Stat - Installed
Op Stat - Active
PODS_ID: 1098 (4.5" OD)
(Acadian, Line 307-0130)
Acadian - Garyville
Op Stat - Active
PODS_ID: 393 (8.625" OD)
(Sorrento, Line 407-0120)
P/L Stat - Installed
Op Stat - Active
PODS_ID: 732 (12.75" OD)
(Williams Pipeline
P/L Stat - Installed
Op Stat - Active
PODS_ID: 2978 (12.75" OD)
(South Louisiana, Line 24750)
P/L Stat - Installed
Op Stat - Active
PODS_ID: 1037 (30" OD)
(Acadian, Line 307-0100)
Chico Creek
P/L Stat - Installed
Op Stat - Active
Feet
0
300
600
Miles
0
1
2
N
S
E
W
This GIS Map has been created from Enterprise Products Operating LLC's proprietary GIS data. Neither Enterprise Products Operating LLC nor any entity associated therewith, guarantees the accuracy of the data or assumes any responsibility or liability for any reliance thereon. 2/2/22 (GCL).
COORDINATES SHOWN HEREON MAY NOT REPRESENT PRECISE LOCATIONS. THEY SHOULD BE USED FOR GENERAL LOCATIONAL PURPOSES ONLY.
Sources: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX F

PERMITS AND ENVIRONMENTAL COMPLIANCE

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

APR 15 2020

REPLY TO
ATTENTION OF

Regional Planning and Environment
Division South
Environmental Planning Branch

FINDING OF NO SIGNIFICANT IMPACTS (FONSI)

ENVIRONMENTAL ASSESSMENT #576

BIPARTISAN BUDGET ACT CONSTRUCTION PROJECTS; WEST SHORE LAKE PONTCHARTRAIN (WSLP), COMITE RIVER DIVERSION (COMITE), AND EAST BATON ROUGE FLOOD RISK MANAGEMENT (EBR), BBA CONSTRUCTION MITIGATION

Description of the Recommended Plan: The U.S. Army Corps of Engineers (USACE), Mississippi Valley Division, New Orleans District (CEMVN), has prepared this Environmental Assessment (EA) #576, incorporated by reference herein, to evaluate alternatives to compensate for unavoidable impacts to significant resources associated with the construction of the West Shore Lake Pontchartrain (WSLP), Comite River Diversion (Comite), and East Baton Rouge Flood Risk Management (EBR) projects; also known collectively as the Bipartisan Budget Act of 2018 (BBA 18) Construction Projects.

The watersheds where the impacts are occurring for the BBA Construction Projects are the Lake Pontchartrain Basin (LPB) and the Mississippi River Basin (MSRB). Because the mitigation need is so large, the project delivery team (PDT) also explored opportunities within the larger watershed that encompasses the southern part of the Mississippi Alluvial Plain. A watershed is an area of land that drains all the streams and rainfall to a common outlet. Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. One component used when determining ecoregions is hydrology, as well as other parameters such as vegetation and soils. Therefore, an ecoregion could be considered a type of watershed. The PDT determined that, when necessary to mitigate outside the LPB and the MSRB, the appropriate expanded watershed to utilize for the BBA 18 mitigation planning was the Mississippi Alluvial Plain, ecoregion 73, within south Louisiana.

The PDT determined that mitigating bottomland hardwood forest (BLH) impacts in the

Mississippi Alluvial Plain would offer the best opportunity to replace the lost functions and values of impacted BLH forest if those forests could not be mitigated in the impacted LPB or MSRB. All swamp impacts (due to WSLP) will occur within the Mississippi Alluvial Plain ecoregion 73. Mitigating those swamp impacts within the same ecoregion offers the best opportunity to compensate fully for the lost functions and values within an area sharing similar ecological attributes when mitigating outside the watershed of impacts.

The tentatively-selected mitigation alternative projects are located within the Mississippi Alluvial Plain and would compensate for the BBA Construction Projects' impacts to fully satisfy the mitigation requirements incurred by these projects. Although some recommended projects are located outside of the LPB and MSRB, those out-of-basin (OB) projects would not be implemented until all projects within the LPB and MSRB have been implemented to the extent practicable. Coastal zone (CZ) impacts will be compensated in the Louisiana coastal zone.

While the BBA Construction Projects are three different projects, the compensatory mitigation alternatives for those projects are evaluated together in this EA under National Environmental Policy Act (NEPA) regulations on the following grounds: 1) the mitigation projects will compensate for impacts occurring in the same geographical region within the Lake Pontchartrain Basin and the mitigation projects themselves also will be implemented in the Lake Pontchartrain Basin to the extent practicable; 2) the mitigation projects for the different BBA Construction projects are sometimes located adjacent to one another and will involve the same construction/implementation methods; 3) the decision points and timing for mitigation projects should be earlier than for construction (as mitigation should occur prior to or at least not later than construction) and will likely be the same or similar for all the BBA 18 Construction projects.

At this time, CEMVN anticipates that the BBA 18 Construction projects will have the following impacts:

Habitat Type/BBA Project	**AAHUs Impacted**
BLH-Wet CZ/WSLP	343
BLH-Wet Non-CZ/EBR, Comite	702
Swamp CZ/WSLP	1,504

The tentatively-selected mitigation alternative would mitigate for 1,045 AAHUs of BLH-Wet and 1,504 AAHUs of swamp impacted by the construction of the BBA Construction Projects.

Tentatively Selected Alternative				
	Projects	**Habitat**	**AAHUs**	**Acres**
BLH-Wet in CZ (WSLP)	Mitigation Bank (LPB)	BLH-wet	TBD	TBD
	Mitigation Bank (OB)	BLH-wet	TBD	TBD

	Saint John (LPB)	BLH-wet	42.1	94.7
	Albania South (OB)	BLH-wet	Max of 99	Max of 180
	Albania North (OB)	BLH-wet	Max of 99	Max of 190.4
Swamp in CZ (WSLP)	Mitigation Bank (LPB)	Swamp	TBD	TBD
	Mitigation Bank (OB)	Swamp	TBD	TBD
	Pine Island (LPB)	Swamp	774.7	1,965.0
	Joyce (LPB)	Swamp	195.1	1,126.1
	Albania South (OB)	Swamp	up to 87.7	up to 192.1
	Albania North (OB)	Swamp	up to 424.1	up to 964.8
	Cote Blanche (OB)	Swamp	up to 212.1	up to 446
BLH-Wet Out of CZ (Comite, EBR)	Mitigation Bank (LPB or MSRB)	BLH-wet	TBD	TBD
	Mitigation Bank (OB)	BLH-wet	TBD	TBD
	Ascension (LPB)	BLH-wet	28.5	55.8
	Feliciana (LPB)	BLH-wet	155.6	267.0
	GBRPC (LPB)	BLH-wet	54.1	134.9
	St James (LPB)	BLH-wet	676.2	1246.0

LPB – In Lake Pontchartrain Basin. MSRB – Mississippi River Basin. OB – Outside LPB or MSRB.

Projects converting agricultural land/low quality habitat types already at the required elevation for the target habitat type would include work items such as construction of new access roads, clearing and grubbing, backfilling of existing ponds/ditches, demolition of onsite structures, leveling/harrowing soil to receive planting, and planting of canopy and mid-story plant species required to establish BLH and/or swamp habitat.

Projects converting agricultural land/low quality habitat types not at the required elevation for the target habitat type include all the same actions as those projects that have the required elevation except that a reduction of the site elevations is necessary. This would be accomplished by removing the top 6 inches to 1 foot of soil. The removed earthen material would be used to fill depressions at the site to achieve uniform target elevations throughout the site or would be hauled off by a Contractor to a Government approved disposal area.

Projects converting open water to forested wetlands would require such construction activities as construction of containment dikes, hydraulic dredging of fill material from lake bottom and placement of fill material within containment dikes, planting of canopy and mid-story plant species required to establish BLH and/ or swamp habitat, and gapping or degrading of containment dikes after the fill material has settled to the target elevation.

Projects enhancing degraded forested wetlands would require such construction elements as invasive species control and planting of canopy and mid-story plant species required to establish BLH and/or swamp habitat.

Detailed project descriptions including site specific components are presented in Appendix G of EA #576.

Factors Considered in Determination: This U. S. Army Corps of Engineers, New Orleans District (CEMVN) has assessed the impacts of the "no action" and the tentatively-selected alternative on important resources in the project area. No significant adverse impacts were identified for any of the relevant resources. Mitigation alternatives within the LPB and MSRB are environmentally preferred and would be implemented to the extent practicable prior to the OB alternatives.

The risk of encountering HTRW is low. A coastal zone determination was submitted to LDNR on Dec 11, 2019 and LDNR concurred with the determination that the proposed action is consistent, to the maximum extent practicable with the Louisiana Coastal Resources Program on March 4, 2020. A Water Quality Certificate was received from LDEQ on Sept 9, 2019 (WQC 190828-02). A Clean Water Act 404 (b)(1) evaluation was signed on March 12, 2020. Louisiana Department of Environmental Quality has no objection to the proposed project concerning the air quality impact analysis documented in the EA. CEMVN determined that the proposed action will have no effect or is not likely to adversely affect any NMFS or USFWS ESA-listed species and/or designated critical habitat. NMFS concurred in a letter dated Nov 21, 2019 and USFWS concurred in a letter/email January 28, 2020. This office has concurred with, or resolved, all Fish and Wildlife Coordination Act Report recommendations submitted by USFWS dated March 27, 2020.

CEMVN has chosen to address potential impacts to historic properties under the National Historic Preservation Act (NHPA) Section 106 (36 CFR Part 800) through development of a Programmatic Agreement (PA).

In fulfillment of CEMVN's Section 106 responsibilities, on March, 04, 2020, CEMVN and the Louisiana State Historic Preservation Office executed the *Programmatic Agreement Among the U.S. Army Corps of Engineers, New Orleans District; Amite River Basin Commission; East Baton Rouge Parish; Louisiana Coastal Protection and Restoration Authority; Louisiana Department of Transportation and Development; Pontchartrain Levee District; Louisiana State Historic Preservation Officer of The Department of Culture, Recreation & Tourism; and Choctaw Nation Of Oklahoma; Regarding the Bipartisan Budget Act of 2018 Compensatory Habitat Mitigation Program for the Comite River Diversion, East Baton Rouge Parish Watershed Flood Risk Management, and West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Projects In Louisiana.* To remain in compliance with Section 106, the NHPA stipulations and conditions detailed within the PA and set forth in this FONSI will be followed.

Environmental Design Commitments: The following commitments are an integral part of the proposed action:

1. If the proposed action is changed significantly or is not implemented within one year, CEMVN will reinitiate coordination with the USFWS to ensure that the proposed action would not adversely affect any federally listed threatened or endangered species, or their habitat.

2. Inadvertent Discovery and Unexpected Effects: If during the course of work, archaeological artifacts (prehistoric or historic) are discovered or unexpected effects to historic properties, including architecture, architectural elements, and/or archaeology, are identified, the contractor shall stop work in the general vicinity of the discovery or unexpected effect and take all reasonable measures to avoid or minimize harm to the artifacts(s) or affected property. The contractor will ensure that the discovery is secured and stabilized, as necessary, and access to the area is restricted. The contractor will inform CEMVN. Furthermore, if during the course of work, Native American artifacts or human remains are encountered CEMVN will immediately contact Tribes. The contractor would not proceed with work until CEMVN completes consultation with the Louisiana SHPO, Tribes, and others, as appropriate.

3. Louisiana Unmarked Human Burial Sites Preservation Act: If human bone or unmarked grave(s) are present within the Work area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The contractor shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The contractor shall also notify USACE and the Louisiana Division of Archaeology within seventy-two hours of the discovery. Discoveries of unmarked graves, burials, human remains, or items of cultural patrimony on Federal or Tribal lands shall be subject to the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. §3001-3013, 18 U.S.C. § 1170) and the Archaeological Resources Protection Act of 1979 (ARPA)(16 U.S.C. §470aa – 470mm). Tribes will be contacted as soon as possible in the event Native American artifacts or human remains are encountered.

4. The use of any public lands, e.g., Louisiana Department of Wildlife and Fisheries, should be coordinated with the agency owning those lands. This coordination should continue through all planning, construction and operation stages.

5. Standard sturgeon, sea turtle and manatee Protection Measures will be included in and required by all project contracts. All contract personnel associated with the project will be informed of the potential presence of the Gulf sturgeon, sea turtles, and West Indian manatees and the need to avoid collisions with the species. Standard Protection measures, found in Appendix J of SEA #576 will be implemented when construction activities take place in areas where Gulf sturgeon, sea turtles, or manatees could occur.

Public Involvement: The tentatively-selected alternative has been coordinated with appropriate Federal, state, and local agencies and businesses, organizations, and individuals through distribution of Draft EA #576 for a 30-day public review and comment period from January 31, 2020 through March 2, 2020. During this public comment period, comments were received from Federal, state, and local resource and governmental agencies as well as the general public.

Agency Comments and Responses (Appendix P)

a. LDWF- Comment letter dated 28 Feb 2020

b. CPRAB - email dated 31 January 2020
c. LDEQ- email dated 06 March 2020
d. USFWS- letter dated 02 March 2020
e. Louisiana Department of Health and Hospitals- letter dated 21 February 2020

Agency comments:
LDWF
Prefers the restoration of sand and gravel mines along the Amite River project over all others and does not support the creation of wetlands where soil removal is necessary (with the exception of the Amite project). Requests that impacts on LDWF land be mitigated on LDWF land. Supports the River Reintroduction into Maurepas Swamp. And requests that projects throughout the basin that afford the greatest positive impact to Inflated Heelsplitter be prioritized.

CPRAB
Requests that the River Reintroduction into Maurepas Swamp (P0-0029) Project be considered for implementation for all of the required swamp habitat to mitigate for unavoidable impacts to significant resources.

LDEQ
Has no objections to proposed projects. Provided its standard General Comments.

USFWS
Prefers the restoration of sand and gravel mines along the Amite River. Recommends stream mitigation. Requests a meeting to discuss screening criteria and process. The meeting occurred on March 19, 2020.

Louisiana Department of Health and Hospitals
Has no objections to proposed projects. Provided its standard General Comments.

General Public Comments and Responses (Appendix P)
a. Nearly 600 comments were received from the general public urging the CEMVN to consider the CPRA River Reintroduction in to the Maurepas Swamp.

b. Three comments were received from existing or proposed mitigation banks requesting to be considered for credit purchases at the time of implementation.

c. The Amite River Basin and Water Conservation District requested information regarding use of lands it previously purchased for compensatory mitigation for the Comite project.

Decision: The tentatively-selected alternative would satisfy CEMVN requirements to mitigate for 1,045 AAHUs of BLH-Wet and 1,504 AAHUs of Swamp habitat. The CEMVN Environmental Planning Branch has assessed the potential environmental impacts of the tentatively-selected alternative as described in the EA #576 and the "no action" alternative and has concluded that there would be no significant impacts.

I have reviewed the EA #576 and have considered public and agency comments and

recommendations. Based on the assessment conducted in EA #576 which is attached hereto and made a part hereof, and the implementation of the environmental design commitments listed above, I have determined that the tentatively-selected alternative would have no significant impact on the human environment.

Based on the above-described evaluation and coordination, the tentatively-selected alternative is the recommended plan for implementation. The plan is justified and complies with relevant environmental statutes. All practicable means to avoid and minimize environmental harm with respect to each alternative mitigation feature have been incorporated. For Corps-constructed mitigation features, monitoring would occur as set forth in Appendix H. It is in the public interest to implement the Recommended Plan.

4/13/2020
Date

Stephen P. Murphy
Colonel, U.S. Army
District Commander

BIPARTISAN BUDGET ACT (BBA) CONSTRUCTION PROJECTS;
WEST SHORE LAKE PONTCHARTRAIN (WSLP), COMITE RIVER DIVERSION,
AND EAST BATON ROUGE (EBR) FLOOD RISK MANAGEMENT,
BBA CONSTRUCTION MITIGATION
EA #576

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APPENDIX H: Planting Guidelines, Success Criteria, Monitoring, and Adaptive Management

APPENDIX I: Agency Coordination

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1. INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mississippi Valley Division, New Orleans District (CEMVN), has prepared this Environmental Assessment (EA) to evaluate alternatives to compensate for unavoidable impacts to significant resources associated with the construction of the West Shore Lake Pontchartrain (WSLP), Comite River Diversion (Comite), and East Baton Rouge Flood Risk Management (EBR) projects; also known collectively as the Bipartisan Budget Act of 2018 (BBA) Construction Projects.

The WSLP project is located in southeast Louisiana on the east-bank of the Mississippi River in St. Charles, St. John the Baptist, and St. James Parishes. Part of the Water Infrastructure Improvement for the Nation Act (WIIN Act, Public Law 114-322) in 2016 authorized construction of the WSLP Project. The Bipartisan Budget Act of 2018 (BBA 2018, Public Law 115-123) funded construction of the WSLP Project. The WSLP Project, as described in the 2016 Environmental Impact Statement (EIS), is approximately 18.3 miles in length and includes 17.3 miles of levee, one mile of T-wall, four pumping stations with associated drainage structures, two additional drainage structures, one gated rod crossing, two gated railroad crossings, and approximately 35 utility relocations. Shifts in the approved alignment are currently being considered as further engineering and design of the project continues. If these changes are shown to be necessary a supplemental NEPA document would be prepared to address them. Based on the possible changes to date, the WSLP Project could impact as much as 10,875 acres of swamp and 4,893 acres of wetland bottomland hardwoods (BLH-Wet) in the Louisiana (LA) Coastal Zone (CZ). This equates to a mitigation need of approximately 1,504 average annual habitat units (AAHUs) of CZ swamp and 343 AAHUs of CZ BLH-Wet. Some swamp impacts would occur within the Maurepas Swamp Wildlife Management Area operated by the LA Department of Wildlife and Fisheries (LDWF). Any impacts to LDWF lands from this project would be mitigated on or adjacent to LDWF lands to the extent practicable.

The Comite Project is located in East Baton Rouge Parish, LA in the southern portion of the Comite River Basin. The Comite Project was authorized by Section 101(11) of the Water Resources Development Act of 1992 (Public Law 102-580), as amended and reauthorized by Section 301(b)(5) of the Water Resources Development Act of 1996 (Public Law 104-303), and as amended by Section 371 of the Water Resources Development Act of 1999, Public Law 106-53, with technical corrections to Section 371 contained in Section 6 of Public Law 106-109. The primary project features discussed in the original EIS include a control structure at the Comite River; a control structure at Lilly Bayou; three control drop structures at the intersections of the diversion channel with White, Cypress and Baton Rouge Bayous; a drop control structure in the vicinity of McHugh Road; two railroad bridges; four highway bridges; and one parish road bridge. Based on the currently approved plan, approximately 891 acres and 704.6 AAHUs of BLH-Wet would be impacted by the construction of this project. Construction of some project features was previously completed and compensation for those earlier construction impacts was also previously completed. To date, 385.62 AAHUs have been mitigated, leaving 319 AAHUs of remaining mitigation.

The EBR project is located in East Baton Rouge Parish, LA and is intended to reduce flooding throughout East Baton Rouge Parish by improving approximately 66 miles of channels in 5 sub-basins including: Jones Creek and tributaries, Ward Creek and its tributaries, Bayou Fountain, Beaver Bayou, and Blackwater Bayou and its main tributary. Construction of the Amite River and Tributaries,

Louisiana, East Baton Rouge Parish Watershed flood risk management project within the parish of East Baton Rouge, Louisiana was authorized by Section 101(21) of the Water Resources Development Act of 1999, Public Law 106-53, as modified by Division D, Section 116 of the Consolidated Appropriations Resolution of 2003, Public Law 108-7, and Section 3074 of the Water Resources Development Act of 2007, Public Law 10-114. Based on the currently approved plan, the project would impact approximately 293 acres of BLH-Wet which would require approximately 383 AAHUs of BLH mitigation.

Figures depicting the locations of each of the construction projects are located in Appendix A, Figures 1, 2, and 3.

This EA provides an assessment of proposed alternative projects to compensate for the BBA Construction Projects' impacts and identifies the tentatively selected alternative (TSA) that would fully satisfy the mitigation requirements incurred by these projects. While the BBA Construction Projects are three different projects, the compensatory mitigation alternatives for those projects are evaluated together in this EA under National Environmental Policy Act (NEPA) regulations on the following grounds: 1) the mitigation projects will compensate for impacts occurring in the same geographical region within the Lake Pontchartrain Basin and Mississippi River Basin and the mitigation projects themselves also likely would occur in the Lake Pontchartrain Basin and Mississippi River Basin to the extent possible; 2) the mitigation projects for the different BBA projects may be located adjacent to one another and would involve the same construction/implementation methods; 3) the decision points and timing for mitigation should be earlier than for construction (as mitigation should occur prior to or at least not later than construction) and would be the same or similar for all the BBA 18 projects.

Impacts from construction of the respective BBA Construction Projects are described in the original Environmental Impact Statements (EISs) and associated supplemental NEPA documents (see section 1.3.2) for those projects. The CEMVN has made and continues to make a concerted effort to avoid and minimize environmental impacts to the maximum extent practicable while designing and constructing the BBA Construction Projects. However, unavoidable impacts have occurred and continue to occur to BLH-Wet, and swamp. When unavoidable impacts occur, the CEMVN is required to offset those impacts through compensatory mitigation by replacing the lost habitat's functions and services equally and in-kind. Compensatory mitigation is required by the Water Resources Development Act (WRDA) of 1986, Section 906, as amended and by the Clean Water Act Section 404(b)(1) Guidelines.

EA #576 has been prepared in accordance with the NEPA and the Council on Environmental Quality's (CEQ) NEPA implementing regulations (40 Code of Federal Regulations [CFR] Parts1500-1508), as reflected in the USACE ER 200-2-2 (33 CFR Part 230). The draft EA has been distributed for a 30-day public review and comment period. All comments received during the public comment period are considered part of the official record and can be found in Appendix P. This EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the District Commander, U.S. Army Corps of Engineers, CEMVN District, to make an informed decision on the appropriateness of an EIS or a Finding of No Significant Impact (FONSI).

Unless otherwise indicated, all figures cited within this EA can be found in Appendix A and all tables in Appendix B. A list of the abbreviations is provided in Appendix P.

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the proposed action is to compensate for habitat losses incurred as a result of the WSLP, Comite and EBR projects to two specific types of habitat: bottomland hardwoods wet (BLH-Wet) and swamp, some of which occur within the LA CZ. The proposed mitigation would replace the lost functions and services of the impacted habitats through restoration or enhancement activities designed to create/increase/improve the habitat functions and services at specific mitigation sites.

1.2 AUTHORITY FOR THE PROPOSED ACTION

Compensatory mitigation for project impacts is a feature of each BBA Construction Project and is authorized by each respective Project's authorizing legislation, cited above. The proposed action is funded under Public Law 115-123, the Bipartisan Budget Act of 2018, signed into law February 9, 2018. Among other things, Public Law 115-123 provided $17.398 billion for disaster recovery in six appropriations accounts: Investigations; Construction; Mississippi River and Tributaries; Operation and Maintenance; Flood Control and Coastal Emergencies; and Expenses.

1.3 PRIOR REPORTS

1.3.1 INTRODUCTION

A number of studies and reports on water resources development in the proposed project area have been prepared by CEMVN, other Federal, state, and local agencies, research institutes, and individuals. The following NEPA documents are incorporated by reference into this EA.

1.3.2 NEPA DOCUMENTS

EBR: Amite River and Tributaries, Louisiana East Baton Rouge Parish Watershed Flood Control Projects, Feasibility Report and Environmental Impact Statement, 1995

Comite: Amite River and Tributaries Study, Feasibility Report on Comite River Basin, 1991

Comite: Amite River and Tributaries, Louisiana, Comite River Basin; Revision of Comite Diversion Authorized Plan, EA #222, 1995

Comite: Amite River and Tributaries, Louisiana Comite River Basin: Comite River Diversion Supplemental Mitigation Options, East Baton Rouge Parish, Louisiana, EA #426, 2012

WSLP: West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Study, Final Integrated Feasibility Report and Environmental Impact Statement, 2016

WSLP: Supplemental Environmental Assessment #570, West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Structural Alignment Surveys and Borings Investigations, St. Charles and St. John the Baptist Parishes, Louisiana, 2019

The foregoing documents are incorporated by reference herein.

2. ALTERNATIVE FORMULATION

The following sections walk the reader through the planning process for the swamp and BLH-Wet features of the BBA mitigation plan, from development of the potential mitigation projects for each habitat type to identification of the tentatively selected alternative (TSA).

2.1 MITIGATION MEASURES DEVELOPMENT AND SCREENING CRITERIA

The CEMVN is required to mitigate for BBA Construction Project impacts to BLH-Wet and swamp, some of which occur in the Louisiana Coastal Zone (Table 2-1).

Bottomland hardwoods are broadleaf deciduous forested wetlands. They are generally found along the edges of lakes and rivers and in sinkholes. Bottomland forests represent a transition between drier upland hardwood forest and swamp. While trees and plants in this ecosystem cannot tolerate long periods of flooding (as in a swamp), they are flooded periodically when water levels rise. Species common to bottomland hardwoods include oaks, hickories, American elm, cedar elm, green ash, sweetgum, sugarberry, boxelder, common persimmon, honey locust, red mulberry, eastern cottonwood, black willow, American sycamore, etc. The designation of 'wet or dry' (e.g. BLH-Wet or BLH-Dry) refers to the amount of flooding experienced by the stand in question. Dry bottomland hardwoods seldom or never experience inundation by flood waters.

Swamps are broadleaf and needleleaf deciduous forested wetlands that experience inundation either permanently or seasonally throughout the year. They are generally found along the edges of lakes and rivers. A swamp is defined as an area supporting or capable of supporting a canopy of woody vegetation that covers at least 33 percent of the area's surface, and with at least 60 percent of that canopy consisting of any combination of bald cypress, tupelo gum, red maple, buttonbush, and/or planertree.

The proposed compensatory mitigation would replace the lost functions and values of the impacted areas through restoration or enhancement activities that increase/improve the habitat functions and services within a particular mitigation site. Enhancement would involve implementing actions to improve already existing low quality habitat. Restoration would involve creating a habitat type from open water or agricultural fields where none currently exists but which historically occurred in the vicinity of the project area.

Forested wetlands provide many functions in southern Louisiana. They improve water quality by retaining or transforming excess nutrients and by trapping sediment and heavy metals, reduce shoreline erosion by buffering wave and storm action, and they provide wildlife habitat for breeding, nesting, and foraging of various species.

Table 2-1. Impacts from BBA Construction Projects

Habitat Type/BBA Project	AAHUs Impacted
BLH-Wet CZ/WSLP	343
BLH-Wet Non-CZ/EBR, Comite	702
Swamp CZ/WSLP	1,504

2.1.1 MITIGATION FORMULATION REQUIREMENTS

In accordance with the USACE Implementation Guidance for Section 2036(a) of the WRDA 2007, Mitigation for Fish and Wildlife and Wetlands Losses, and Appendix C to Engineer Regulation 1105-2-100, compensatory mitigation was formulated to occur within the same watershed as the impacts and to replace the functions and services of each habitat type with functions and services of the same habitat type. The watersheds where the impacts are occurring for the BBA Construction Projects are the Lake Pontchartrain Basin (LPB) and the Mississippi River Basin (MSRB) (Appendix A, Figure 4). Consistent with WRDA 1986, Section 906, as amended, mitigation projects were formulated so that they could be implemented during construction of the parent project to the maximum extent practicable. The parent project deadlines as determined by USACE, currently 2021, 2023, and 2024, drove the Project Delivery Team (PDT) to only consider projects on public land (identified through real estate database and public records research) and on private lands that were submitted as part of the scoping process. For this effort, public lands are considered any lands owned by any public entity (i.e. Federal, state, parish, city, etc.). Because the mitigation need is so large and the number of available sites/projects that could meet this formulation strategy were limited, the PDT also explored opportunities within the larger watershed that encompasses the southern part of the Mississippi Alluvial Plain. Proposed mitigation sites within the LPB and MSRB would be implemented first as compensation for lost habitats within the watersheds of impact is environmentally preferred. Only once all options within the LPB and MSRB have been utilized to the extent practicable would mitigation sites outside of the basins but within the Mississippi Alluvial Plain be implemented. See Appendix Q for further detail on the process of moving outside of the LPB and MSRB.

To be considered, mitigation measures were required either to restore or to enhance the same habitat types that were impacted (e.g. “habitat type for habitat type”) from the BBA Construction Projects. This included mitigating impacts that will occur within the Louisiana (LA) Coastal Zone (CZ) with projects in the LA CZ. The phrase “mitigation measures” refers to potential actions at a given site that could provide mitigation for the BBA Construction Projects impacts. Design of the mitigation measures was completed by the PDT in coordination with the resource agencies.

Initially, the PDT reviewed the existing mitigation plans that were part of the original BBA Construction Project Feasibility Studies. Some of these plans are quite old, formulated in the 1990s. Portions of those mitigation plans are currently infeasible due to changes in existing conditions or land ownership. Because mitigation is required to occur before or concurrent with construction of the BBA Construction Projects (WRDA 1986, Section 906), the PDT conservatively assumed that no portion of the existing mitigation plans could be implemented and identified new alternatives to fulfill the mitigation requirements.

2.1.2 NEPA SCOPING

Scoping is a critical component of the overall public involvement process to solicit input from affected Federal, state, and local agencies, Indian Tribes, the public, and interested stakeholders. The NEPA scoping process is designed to provide an early and open means for determining the scope of issues (problems, needs, and opportunities) to be identified and addressed in the NEPA document. A public website page with BBA mitigation information that included a request for submission of potential mitigation projects was established in late summer of 2018 and available here:

https://www.mvn.usace.army.mil/About/Projects/BBA-2018/Mitigation/

Subsequently, CEMVN held an "Industry Day" on September 7, 2018 in an effort to obtain potential compensatory mitigation measures from the general public. Potential mitigation measures from the public were accepted until October 31, 2018. Four mitigation measures were identified as a result of Industry Day, of which two measures, Pine Island and Sunset Ridge, are included in the final array. The other two measures, Guste Island and a 5,500 acre area in St. John the Baptist Parish, did not meet the screening criterion that measures could not be preservation of an existing habitat type. As such, they were removed from further consideration.

In addition, the PDT also searched for measures beyond what was submitted during the CEMVN Industry Day. In an effort to expedite implementation of the mitigation projects and ensure mitigation occurs concurrent with construction of the BBA Construction Projects (WRDA 1986, Section 906), the other sources utilized to obtain additional measures included:

- Measures identified for Hurricane & Storm Damage Risk Reduction System (HSDRRS) Mitigation (thorough investigations in the LPB and Barataria Basins were made under this study). Includes expansion of those project areas or projects that were not implemented by that program.
- Publicly owned properties inside the Lake Pontchartrain (LPB) Basin, Mississippi River Basin (MSRB) (which included BBA Construction Project lands), and the southern Mississippi Alluvial Plain.
- Measures identified by the resource agencies.

USACE approved mitigation banks with perpetual conservation servitudes within the LPB, MSRB, and the larger watershed currently in compliance with their mitigation banking instrument (MBI) and able to service the habitat types impacted by the BBA Construction Projects are also considered as potential mitigation measures.

In total, the scoping process resulted in the identification of more than 5,000 mitigation measures.

2.1.3 INITIAL SCREENING

Screening criteria developed by the PDT sought to achieve as large as possible tracts of land for the purposes of obtaining greater ecological output within the watershed and to produce cost efficiencies that would be experienced during construction and OMRR&R phases. Proposed measures had to meet the following criteria and those that did not meet all of the criteria were eliminated from further consideration.

- Proposed measures could not convert existing wetlands to uplands or marsh to BLH-Wet
- Proposed measures will comply with applicable laws and policies
- Proposed measures will be free of known Hazardous, Toxic, or Radioactive Waste (HTRW)
- Proposed measures will provide for in-kind replacement of impact AAHUs by habitat type
- Proposed measures for swamp will be within the Louisiana Coastal Zone (because swamp impacts are within the LACZ)
- Proposed measures will be technically viable (e.g., salinity suitable for target habitat type)

- Proposed Corps-constructed measures cannot be part of the Future Without Project condition
- Proposed measures will have independent utility (not dependent on implementation of or modification to other projects)
- Proposed measures will not consist of preservation of an existing habitat type (because preservation does not replace lost habitat)
- Proposed measures mitigating CZ swamp impacts will be 40 acres in size or larger
- Proposed measures mitigating CZ BLH-Wet impacts will be 50 acres in size or larger
- Proposed measures mitigating Non-CZ BLH-Wet impacts will be 100 acres in size or larger

Initial screening reduced the number of potential mitigation measures from over 5000 to 20. For detailed information on the screening criteria, see appendix E.

2.2 MITIGATION PROJECT DEVELOPMENT BY HABITAT TYPE

Following initial screening, several of the remaining 20 mitigation measures were refined by reshaping (re-configuring) them by habitat type. Reshaping of mitigation measures occurred when multiple measures existed in a common geographical area. In such cases, these mitigation measures were reshaped into a single project by habitat type that maximized the potential returns for that site while meeting the mitigation requirement, and are coined "mitigation projects" within this document. In some cases, reshaping resulted in portions of the original measures to be eliminated from the proposed project for a specific habitat type since they were outside of the reshaped project boundary. As such, the original measure may not have been eliminated outright, but rather carried forward in an altered state.

At the time of screening, mitigation banks in LPB existed that had BLH-Wet and swamp credits and MSRB that had BLH-Wet credits available for purchase. Many of these banks also had potential credits that may be released in the future. It is not known which banks would have available credits when the decision whether to purchase bank credits is made: some banks may not have credits remaining, some may have more credits, some may be closed, and additional mitigation banks may be approved. As such, a generic mitigation bank project for each of the two habitat types, including in and out of coastal zone options for BLH, were created for the next step of the mitigation project analysis using information obtained from existing banks in the basin; no specific banks were evaluated. The Regulatory In lieu fee and Bank Information Tracking System (RIBITS) (https://ribits.usace.army.mil/) has information on all currently approved banks in the basin including their credit availability.

2.2.1 MITIGATION PROJECTS ELIMINATED FOLLOWING INITIAL SCREENING

Three of the 20 mitigation measures were eliminated following the initial screening because coordination with the land owner revealed that they were being used for research and development under other existing programs. Additionally, further investigations of the St James, Ascension, and Gravity sites caused them to be removed from further consideration as sites that could mitigate LA CZ impacts. As such these measures are considered to mitigate Non-CZ BLH-Wet impacts. This resulted in the expansion of the St. James BLH-Wet mitigation measure and the loss of the St. James swamp mitigation measure.

2.3 FINAL ARRAY OF MITIGATION PROJECTS BY HABITAT TYPE

The following are the final array of measures that remained after screening and refinement. These projects are described in detail in Appendix G. Table 2-2 Final Array of Potential Mitigation Projects

CLASSIFICATION : UNCLASSIFIED BLH In Coastal Zone	AAHU's	Acres	BLH Out Coastal Zone	AAHU's	Acres	Swamp In Coastal Zone	AAHU's	Acres
Banks LPB	TBD	TBD	**Banks LPB/MSRB**	TBD	TBD	**Banks LPB**	TBD	TBD
St John LPB	42	94.7	**Ascension LPB**	29	55.8	**Pine Island LPB**	775	1965
Banks OB	TBD	TBD	**St. James LPB**	676	1246	**Joyce LPB**	195	1126.1
Albania South OB	Up to 96	Up to 192.1	**Feliciana LPB**	156	267	**Banks OB**	TBD	TBD
Albania North OB	Max of 343	Max of 657	**GBRPC OB**	54	134.9	**Albania South OB**	Up to 76	Up to 192.1
			Amite LPB	236	368.6	**Albania North OB**	Up to 380	Up to 964.8
			Gravity LPB	40	75.2	**Cote Blanche OB**	Up to 182	Up to 446
			Banks OB	TBD	TBD			
			Krotz OB	73	147.2			
			TPSB OB	248	483.8			
			Rosedale OB	113	224.8			
			Sunset Ridge OB	168	324			

LPB – In Lake Pontchartrain Basin. MSRB – Mississippi River Basin. OB – Outside LPB or MSRB.

Sea Level Rise

All mitigation projects were designed using the intermediate sea level rise (SLR) scenario. Sea level rise is measured by a tide gauge with respect to the land upon which it is situated. There are three classifications of SLR: low (historic), intermediate, and high. The intermediate and high SLR scenarios are predictions of possible future sea level change. Utilizing the intermediate SLR scenario for project design may result in a larger mitigation project than required, as the intermediate SLR rate is higher than the historic. However, if an increase in elevation became necessary for forested habitats due to future SLR, future borrow placement would be extremely problematic and likely would result in an unacceptable increase in mortality of already established forest species, which could necessitate a complete rebuild of the project. Since the USACE is required to mitigate the habitat's functions and services lost due to construction of the BBA Construction Projects and since future funding for additional construction is uncertain, overbuilding of the mitigation projects (in size, not elevation) was determined to be the least-risk design alternative.

General Construction Elements for Conversion of Habitat.
Each mitigation project in the final array was evaluated to determine the general construction elements that would be required to restore/enhance the target habitat type on the site. Table 2-3 presents the general construction categories and the mitigation projects that fall under each one. Detailed mitigation project descriptions including site specific components such as access, construction duration, and staging are presented in Appendix G.

Mitigation projects converting agricultural land/low quality habitat types already at the required elevation for the target habitat type included work items such as construction of new access roads, clearing and grubbing, backfilling of existing ponds/ditches, demolition of onsite structures, leveling/harrowing soil to receive planting, and planting of canopy and mid-story plant species required to establish BLH and/or swamp habitat.

Mitigation projects converting agricultural land/low quality habitat types not at the required elevation for the target habitat type include all the same actions as those projects that have the required elevation except that a reduction of the site elevations is necessary. This would be accomplished by removing the top 6 inches to 1 foot of soil. The removed earthen material would be used to fill depressions at the site to achieve uniform target elevations throughout the site or would be hauled off by a Contractor to a Government approved disposal area.

Mitigation projects converting open water to forested wetlands would require such construction activities as construction of containment dikes, hydraulic dredging and placement of fill material, planting of canopy and mid-story plant species required to establish BLH and/or swamp habitat, and gapping or degrading of containment dikes after the fill material has settled to the target elevation.

Mitigation projects enhancing degraded forested wetlands would require such construction elements as invasive species control and planting of canopy and mid-story plant species required to establish BLH and/or swamp habitat.

Table 2-3 Summary of General Construction Elements Needed for Mitigation Projects

Habitat Type being Mitigated	Agriculture Land/Low Quality Habitat to Forest (0.5 -1.0 ft. Degrading required)	Agriculture Land/Low Quality Habitat to Forest (No Degrading)	Open Water to Forest by Fill Placement	Enhancement of Existing Forest (Planting Only)
BLH-Wet CZ	St. John (LPB)			
	Albania South (OB)			
	Albania North (OB)			
	Cote Blanche (OB)			
BLH-Wet Non-CZ	St. James (LPB)	Ascension (LPB)		
	Feliciana (LPB)	GBRPC (LPB)		Amite (LPB)
	Gravity (OB)	Krotz (OB)		
	TPSB (OB)	Sunset Ridge (OB)		
	Rosedale (OB)			
Swamp CZ	Albania South (OB)		Pine Island (LPB)	Joyce (LPB)
	Albania North (OB)			
	Cote Blanche (OB)			

LPB – In Lake Pontchartrain Basin. MSRB – Mississippi River Basin. OB – Outside of Basin. Proposed mitigation (both credit purchases and Corps-constructed mitigation sites) within the LPB and MSRB would be implemented first. Only once all options within the LPB and MSRB have been implemented to the extent practicable would mitigation features outside of the basin but within the Mississippi Alluvial Plain be implemented.

2.4 SELECTION RATIONALE FOR TENTATIVELY SELECTED MITIGATION PROJECTS (TSMPs)

The Alternatives Evaluation Process (AE) was utilized to compare projects mitigating for the same habitat type in the final array to determine the best project for that habitat type. During the AE, mitigation projects within the same habitat type were compared to one another using the following selection criteria:

- Risk and Reliability – This criterion considers issues such as a proposed projects' susceptibility and resiliency to stressors, long-term sustainability, uncertainty relative to CEMVN's ability to implement the project, and uncertainty relative to project success.
- Environmental – This criterion evaluates a proposed project's adverse and beneficial impacts to human and natural resources.
- Time - Time evaluates the duration to contract award and to initial ecological success or Notice of Construction Complete (NCC).
- Cost Effectiveness –This criterion evaluates the average annual cost per average annual habitat unit.
- Other Cost Considerations – This criterion evaluates total proposed project costs including construction, real estate, operations and maintenance, total project and average annual costs over the 50 year period of analysis.

- Watershed and Ecological Site Considerations – This criterion evaluates the proposed project site characteristics such as the role that a potential project would play in terms of creating habitat linkages or wildlife corridors, whether the project is consistent with watershed plans such as Coast 2050, and its proximity to the BBA Construction Project impacts.

The relative scoring of the individual mitigation projects under each of these criterion for the habitat type being mitigated produced an overall score for the mitigation project. A ranking was then established for the mitigation projects under the habitat type being mitigated based on each mitigation project's overall score. Mitigation projects are listed in order of ranking in Table 2-2 and would be chosen for implementation in that order. The highest ranked mitigation projects for each habitat type were selected as the Tentatively Selected Mitigation Projects (TSMPs) for that habitat type in the Tentatively Selected Alternative (TSA; multiple projects were needed to fully satisfy the mitigation need). The BLH-Wet out of LPB projects not selected as TSMPs would serve as default projects if for any reason the TSMPs identified in the TSA could not be implemented or could not completely satisfy the BBA mitigation needs.

Chapter 4 provides an impact assessment of the final array of proposed mitigation projects. Chapter 5 provides a summary of environmental impacts with implementation of all mitigation measures required to provide the required mitigation for the BBA Construction Projects. AE Plan Selection Criteria details can be found in Appendix F. Selection criteria matrices used during the AE can be found in Appendix B, Table 2-8.

A summary of the selection rationale for each habitat type is provided below.

2.4.1 BLH-WET IN COASTAL ZONE

The PDT used the criteria discussed above to evaluate and compare the BLH-Wet in Coastal Zone (CZ) mitigation projects. Projects outside of the LPB would be considered for implementation only once the mitigation projects within the LPB are exhausted. After the overall scoring was completed by the PDT, a sensitivity analysis was conducted to verify whether different conclusions among the PDT would have changed the results of the scoring. This allowed the PDT to experiment with weighting the criteria differently to see how it would affect the overall scores. The sensitivity analysis did not significantly change the raw scores or result in a change in the rankings.

The assessments for the range of mitigation projects within the LPB and outside of the LPB identified that the generic in-basin mitigation bank project performed better than all other proposed mitigation projects under the Risk and Reliability, Environmental, Time, and Project Cost Considerations criteria and was therefore the highest ranked project based on AE results. Mitigation banks have minimal uncertainty relative to achieving ecological success because the banks are already established and are monitored through CEMVN's regulatory program. Mitigation banks are required to monitor ecological success, to adaptively manage their sites to ensure ecological success, and to maintain financial assurances to ensure project success. Banks have financial assurances in place to ensure that funds are available if needed for corrective actions. Further, use of bank credits does not require any real estate acquisitions. Because the mitigation banks are already constructed and operating and have credits available, they have no new negative environmental impacts compared to existing and future without project conditions. The purchase of bank credits can proceed considerably faster than the design, contract award and construction of the other potential projects. Additionally, the purchase of bank

credits does not require ongoing monitoring for ecological success or the operations or maintenance that would be required for Corps-constructed projects.

If CEMVN solicits the purchase of bank credits, mitigation banks wishing to sell credits to satisfy the BBA Construction Projects' mitigation obligations would be encouraged to submit competitive bids. However, if, based on cost and considering other factors, the CEMVN determines the purchase of mitigation bank credits is not cost effective or would not be appropriate, the next ranked project for that habitat type would become the TSMP for that habitat type in the TSA.

For the projects within the LPB only St. John remained; therefore, it was the second highest scoring project after in-basin bank credits. For the projects out of the LPB, Albania South, Albania North and Cote Blanche were ranked second, third and fourth respectively after out-of-basin bank credits. Those projects were scored pretty evenly but Albania South performed better Risk & Reliability considerations.

2.4.2 BLH-WET OUTSIDE COASTAL ZONE

The sites were evaluated using the same process as the BLH-Wet in CZ mitigation projects except the MSRB was added since banks with non-CZ BLH credits exist in this basin. Projects outside of the LPB and MSRB would be considered for implementation only once the projects within the LPB and MSRB are exhausted. The assessments for the mitigation projects within the LPB and MSRB and outside of the LPB and MSRB for this habitat type identified that the in-basin mitigation bank projects performed better than all other proposed mitigation projects under the Risk and Reliability, Time, and Project Cost Considerations criteria and was therefore the highest ranked project based on AE results. The same rationale for ranking and purchasing mitigation bank credits as discussed in BLH-Wet in CZ applies.

For the projects within the LPB and MSRB there were six projects in addition to the generic mitigation bank. Ascension ranked second with an advantage in Environmental, Time and Project Cost considerations in comparison to the over the third ranked project, Feliciana. The fourth (GBRPC), fifth (Gravity), and sixth (St. James) ranked projects were scored within 10% of each other. Amite ranked seventh due to Risk & Reliability, Time and Project Cost considerations.

For the projects out of the LPB and MSRB, there were five projects in addition to the generic mitigation bank project. The second highest scoring project was Krotz which had an advantage in Environmental, Time and project cost considerations. The remaining four projects were scored pretty evenly such that they were approximately within 10% of each other.

2.4.3 SWAMP IN COASTAL ZONE

The sites were evaluated using the same process as the BLH-Wet Non-CZ mitigation projects. Mitigation projects outside of the LPB would be considered for implementation once the mitigation projects within the LPB are exhausted. Similarly as in the other habitats assessed, the mitigation bank project performed better than all other proposed projects under the Risk and Reliability, Time, and Project Cost Considerations criteria and was therefore the highest ranked project based on AE results. The same rationale for ranking and purchasing mitigation bank credits as discussed in BLH-Wet in CZ applies.

For the mitigation projects within the LPB, Pine Island had higher scores over the Joyce project for Risk & Reliability, Environmental and Watershed/Ecological considerations.

For the projects out of the LPB, Albania South, Albania North and Cote Blanche were ranked second, third and fourth respectively which is the same ranking as BLH-Wet in Coastal Zone projects. They were scored pretty evenly but Albania South but performed better in Watershed/Ecological Cost Considerations vs. Albania North project. Cote Blanche performed lower due to project Cost Considerations.

2.5 TENTATIVELY SELECTED ALTERNATIVE

The following tentatively selected mitigation projects (TSMPs) by habitat type were combined like building blocks to form the TSA for the BBA Mitigation Plan. If the number of in-kind mitigation bank credits available for purchase at the time of implementation of the TSA is high and CEMVN is able to purchase a large number of credits, there is a possibility that the lowest ranked project in the TSA may ultimately not be needed in part or in whole. If the projects in the TSA are unable to satisfy the whole mitigation need for the BBA Construction Projects, additional projects in the final array would be utilized in order of ranking until full satisfaction of the mitigation requirement is completed.

Depending on remaining need after purchasing mitigation banks credits for BLH-Wet in CZ, the projects Albania South, Albania North and Cote Blanche may be available to use the entire site acreages to meet Swamp in CZ mitigation needs. Additionally, for BLH-Wet in CZ, the TSA includes Albania North instead of the higher ranked project Albania South. This is because the Albania North project provides substantially more AAHUs to meet the mitigation needs and would take advantage of greater ecological output and cost efficiencies.

Table 2-3: Tentatively Selected Alternative

	Projects	Habitat	AAHUs	Acres
BLH-Wet in CZ (WSLP)	Mitigation Bank (LPB)	BLH-wet	TBD	TBD
	Saint John (LPB) BLH-wet	BLH-wet	42	94.7
	Mitigation Bank (OB)	BLH-wet	TBD	TBD
	Albania South (OB)	BLH-wet	up to 96	up to 192.1
	Albania North (OB)	BLH-wet	Max of 343	Max of 657
Swamp in CZ (WSLP)	Mitigation Bank (LPB)	Swamp	TBD	TBD
	Pine Island (LPB)	Swamp	775	1,965.0
	Joyce (LPB)	Swamp	195	1,126.1
	Mitigation Bank (OB)	Swamp	TBD	TBD
	Albania South (OB)	Swamp	up to 76	up to 192.1
	Albania North (OB)	Swamp	up to 380	up to 964.8
	Cote Blanche (OB)	Swamp	up to 182	up to 446

BLH-Wet Out of CZ (Comite, EBR)	Mitigation Bank (LPB & MSRB)	BLH-wet	TBD	TBD
	Ascension (LPB)	BLH-wet	29	55.8
	Feliciana (LPB)	BLH-wet	156	267.0
	GBRPC (LPB)	BLH-wet	54	134.9
	St James (LPB)	BLH-wet	676	1246.0
	Mitigation Bank (OB)	BLH-wet	TBD	TBD

LPB – In Lake Pontchartrain Basin. MSRB – Mississippi River Basin. OB – Outside of Basin.

2.6 WVA MODEL AND SEA LEVEL RISE ANALYSES

2.6.1 WVA MODEL CERTIFICATION

The WVA Bottomland Hardwood and Swamp Community Models used for the BBA Mitigation completed model certification in accordance with EC 1105-2-412 and were approved for regional use 2018.

2.6.2 WVAs

The WVA methodology 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 level 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 the Suitability Index for each variable into a single value for wetland habitat quality. That single value is referred to as the Habitat Suitability Index, or HSI.

The following WVA models (version 2.0) were used for the BBA Mitigation effort: 1) CWPPRA, WVA Methodology, Bottomland Hardwood Community Model; 2) CWPPRA, WVA Methodology, Swamp Community Model.

The WVA models assess the suitability of each habitat type for providing resting, foraging, breeding, and nursery habitat to a diverse assemblage of fish and wildlife species. This standardized, multi-species, habitat-based methodology facilitates the assessment of project-induced impacts on fish and wildlife resources. The swamp WVA model consists of seven variables: 1) stand structure; 2) stand maturity; 3) water regime; 4) salinity; 5) forest sized; 6) surrounding land use; and 7) disturbance. The Bottomland Hardwood Community Model consists of seven variables: 1) tree species composition; 2) stand maturity; 3) understory/midstory; 4) hydrology; 5) forest size; 6) surrounding land uses; and 7) disturbance.

Values for variables used in the models are derived for existing conditions and are estimated for conditions projected into the future if no mitigation efforts are applied (i.e., FWOP), and for conditions projected into the future if the proposed mitigation project is implemented (i.e., FWP), providing an

index of habitat quality, or habitat suitability, for the period of analysis. The HSI is combined with the acres of habitat to generate a number that is referred to as "habitat units." Expected project impacts/benefits are estimated as the difference in habitat units between the FWP scenario and the FWOP scenario. To allow comparison of WVA benefits to costs for overall project evaluation, total benefits are averaged over a 50-year period, with the result reported as AAHUs. Assumptions used for the BBA Mitigation WVAs are found in Appendix I.

The intent of compensatory mitigation is to offset unavoidable habitat losses by replacing those impacted habitats by restoring (re-establishment or rehabilitation), establishing (creation), or enhancing a naturally functioning system. Once the project meets its long term success criteria, it will experience natural successional phases common to that habitat type. Once the functions and services of the affected habitat have been replaced and the mitigation project becomes a naturally functioning, self-sustaining system whose habitat is protected in perpetuity, the compensatory mitigation obligation is satisfied.

2.6.3 Sea Level Rise Analysis

Wetland Acreage Predictions under Increased Sea Level Rise (SLR) Rates

USACE policy (ER 1100-2-8162), states that potential sea level change must be considered in every USACE coastal activity as far inland as the extent of estimated tidal influence. Potential increases in SLR could affect the performance and therefore ability of a mitigation project to achieve replacement of the services and functions of the impacted habitat types. Pine Island and Joyce WMA are the only two mitigation projects that may be impacted by seal level rise as they are immediately influenced by tidal ranges. Therefore, all 3 SLR scenarios were applied to only to those two projects. The rest of the mitigation projects were analyzed based on the intermediate SLR scenario to account for potential uncertainties in future SLR impacts, and therefore the risk of those proposed mitigation projects not successfully meeting the mitigation requirement due to SLR has been minimized.

Using USACE-predicted future water levels under the SLR scenarios, those water levels were converted into relative sea level rise (RSLR) rates, incorporating sea level rise effects measured at the gauges and land loss experienced in the extended project area for each project. No operations and maintenance activities were planned for any of the projects in relation to future elevation changes. The WVA then utilized the RSLR rates and project design to predict FWP acres left at the end of the 50-year period of analysis. Long term sustainability (percent land left at the end of the period of analysis) was used to analyze the impact the different SLR scenarios had on the project areas.

2.7 DATA GAPS AND UNCERTAINTIES

2.7.1 IMPACT ASSESSMENT

The BBA mitigation requirement has been assessed through review of the existing NEPA documents for the three BBA Construction Projects. Project designs for those projects are undergoing final engineering refinements and may change. A final reassessment of impacts will be completed once those designs are final to ensure all impacts from construction of the BBA Construction Projects are fully mitigated. If additional impacts are identified beyond what has been assessed in this document, then a

supplemental NEPA document would be prepared analyzing options to complete the outstanding mitigation. This supplemental NEPA document would be published for public review and comment.

2.7.2 TROPICAL STORMS

Tropical storm events can directly and indirectly contribute to coastal land loss through erosion from increased wave energies, removal and/or scouring of vegetation from storm surge and saltwater intrusion into estuaries and interior wetlands. Wetland loss and degradation of large areas can occur over a short period of time as a result of storms.

There is a risk that a single storm event, or multiple storms over a short period of time, could significantly reduce or eliminate anticipated benefits of mitigation plans in areas susceptible to storm surge and shearing. The extent of potential damage to a particular mitigation project is dependent upon several unknown variables, including: the track and intensity of the storm, the development stage of the project, changes in future conditions in the study area, and variability of project performance from forecast conditions due to other factors of risk and uncertainty.

2.7.3 CLIMATE CHANGE

Extreme changes in climate (temperature, rain, evaporation, wind) could result in conditions that cannot support the types of habitat restored, reducing the effectiveness of the mitigation plan. Extreme climate change could essentially eliminate the benefits of vegetative plantings, if the change resulted in plant mortality. The monitoring plan for all USACE constructed projects would monitor the success of any vegetative plantings and includes provisions for replanting if mortalities become such that meeting the required success criteria is in jeopardy.

2.7.4 ERRORS IN ANALYSIS

Future conditions are inherently uncertain. The forecast of future conditions is limited by existing science and technology. Future conditions described in this study are based on an analysis of historic trends and the best available information. Some variation between forecast conditions and reality is certain. Mitigation features were developed in a risk-aware framework to minimize the degree to which these variations would affect planning decisions. However, errors in analysis or discrepancies between forecast and actual conditions could affect plan effectiveness.

All of the models used in this study are mathematical representations of reality. Models simulate complex systems by simplifying real processes into expressions of their most basic variables. These tools assist with finding optimal solutions to problems, testing hypothetical situations, and forecasting future conditions based on observed data. No model can account for all relevant variables in a system. The interpretation of model outputs must consider the limitations, strengths, weaknesses, and assumptions inherent in model inputs and framework. Inaccurate assumptions or input errors could change benefits predicted by models used in this study. The potential for significant changes due to errors has been reduced through technical review, sensitivity analyses, and quality assurance procedures. However, there is inherent risk in reducing complex natural systems into the results of mathematic expressions driven by the simplified interaction of key variables.

2.7.5 WVA MODEL UNCERTAINTIES

WVA models were run on the entire final array of mitigation projects using assumptions from the WBV HSDRRS mitigation projects. Once ROE is obtained, site-specific WVAs would be run and a final resizing of the projects completed. As designs proceed, final WVAs would be completed for each TSP to determine their final size.

2.7.6 IMPLEMENTATION

The timing for implementation is an uncertainty that must be considered. If the plan is not implemented in the near future, the conditions in the study area could degrade. The impact of the uncertainties associated with the future condition of the study area could increase mitigation costs, decrease mitigation benefits, or both.

If a proposed project in the TSA becomes infeasible due to difficulties in implementation or changed conditions, the CEMVN would implement the next ranked project for that habitat type to ensure full satisfaction of the mitigation requirement. If CEMVN determines that after implementing all feasible ranked projects, any mitigation requirement would remain unfulfilled, then CEMVN would identify and evaluate new potential projects to satisfy mitigation requirements. A supplemental NEPA document would be prepared to evaluate any new mitigation alternatives.

2.7.7 MITIGATION BANK AVAILABILITY

Mitigation banks capable of supplying the credits needed to meet the BLH-Wet and swamp mitigation requirements at the time of solicitation is uncertain at this time. Banks currently able to meet the mitigation requirements may not be able to do so at the time of solicitation. In addition, new banks able to meet the mitigation requirement may become approved by the time the solicitation is released. Accordingly, identification of particular banks that could be used to meet the mitigation requirement cannot occur with any degree of certainty and has not been done for this SEA. Since the bank(s) that may ultimately be selected to provide the necessary mitigation credits is unknown, the existing conditions present at the bank site(s) are similarly unknown. Existing bank habitat quality varies depending on the success criteria met, as specified in the bank's MBI. Typically, as mitigation success criteria are met and the quality of the habitat increases within the bank, more credits are released for purchase.

2.8 PROPOSED MITIGATION ACTION

The proposed action would be a combination of mitigation bank credit purchases and Corps constructed projects as described in Section 2.5 above. Purchase of credits would be dependent on receipt of an acceptable proposal(s) and total purchase cost. No particular bank(s) is (are) proposed for use at this time. The bank(s) from which credits would be purchased would be selected through a solicitation process, through which any mitigation bank meeting eligibility requirements and having the appropriate resource type of credits could submit a proposal to sell credits. If appropriate and cost-effective, the Corps may choose to purchase mitigation bank credits from more than one bank to fulfill the compensatory mitigation requirements for a particular habitat type.

2.9 ALTERNATIVE TO THE PROPOSED ACTION

The following section describes the alternative to the proposed mitigation action of a combination of mitigation bank credits and Corps-constructed mitigation projects. Since the combination of bank credits and Corps-constructed mitigation projects will depend on future mitigation bank credit availability, the only other considered alternative to evaluate is the No Action alternative, as required by NEPA. The No Action alternative presents the future without project (FWOP) condition in which no mitigation projects would be implemented and is compared to the future with project (FWP) condition or the proposed action (combination of Corps-constructed and mitigation bank credits).

2.9.1 NO ACTION ALTERNATIVE

NEPA requires that in analyzing alternatives to a proposed action, a Federal agency consider an alternative of "No Action." Typically the No Action alternative evaluates not implementing any of the alternatives and represents the FWOP condition by which alternatives considered in detail are compared. However, because compensatory mitigation for unavoidable impacts is required by law (e.g. Clean Water Act, WRDAs of 1986, 2007, and 2016), the No Action alternative would not comply with these legal requirements. As such, for this EA, although the No Action alternative represents the baseline, FWOP condition (not completing mitigation), it would not be an alternative that could actually be selected.

Under the No Action alternative, the LPB would continue a trend of land loss caused by both natural factors such as subsidence, erosion, tropical storms and sea level rise, and human factors such as flood risk reduction, canal dredging, development, interruption of accretion processes and oil and gas exploration. The No Action alternative would not provide compensatory mitigation for unavoidable impacts from the construction of the BBA Construction Projects. The No Action alternative considers previous, current, and reasonably foreseeable future projects, which could impact the resources evaluated in the EA as part of the FWOP conditions. The locations of these projects are shown in Appendix A, Figure 26. For the purpose of this study, a future project is considered "reasonably foreseeable" if it meets one of the following criteria:

- USACE authorized ecosystem restoration , flood risk reduction, and/or navigation project with a Tentatively Selected Plan;
- CWPPRA project authorized at a Phase 2 – construction status;
- Coastal Impact Assistance Program (CIAP) ecosystem restoration or flood risk reduction project which is funded for construction;
- State of Louisiana Surplus-funded ecosystem restoration or flood risk reduction project funded for construction; or
- Louisiana Levee District permitted flood risk reduction project.

Appendix B, Table 18 list projects involving wetland or ecosystem restoration activities considered part of the no action alternative that could counter, to a degree, the current land loss trends throughout the basin and progression of wetlands to open water. In addition to these wetland or ecosystem restoration projects, a number of flood risk reduction and navigation projects that have been built or would be built within the study area that would continue to influence the hydrodynamics within the area can also be found in Appendix B, Table 18.

3. AFFECTED ENVIRONMENT

3.1 ENVIRONMENTAL SETTING STUDY AREA

The BBA Construction Projects requiring mitigation occur within the LPB and the MSRB. The proposed projects to mitigate for the BBA Construction Projects are found within LPB, MSRB and the Mississippi Alluvial Plain, south of and including the Southern Holocene Meander Belts (Appendix A, Figure 4). These areas comprise the study area, which will be the focus of the first part of this section. Discussion on why and how the Corps has decided to expand beyond the LPB and MSRB can be found in Section 2.1.

3.1.1 GEOMORPHIC AND PHYSIOGRAPHIC SETTING

Most of the present landmass of southeast LA was formed by deltaic processes of the Mississippi River. Over the past 7,000 years, the Mississippi River deposited massive volumes of sediment in five deltaic complexes. The study area lies within the Mississippi Alluvial Plain which contains natural levee ridges, man-made levees, fresh, intermediate, brackish and saline marshes, forested wetlands, lakes and bays, barrier islands, and estuaries.

3.1.2 CLIMATE

The study area is located within a subtropical latitude. The climate is influenced by the many water surfaces of the nearby wetlands, rivers, lakes, streams, and the Gulf of Mexico. Throughout the year, these water areas modify relative humidity and temperature conditions, decreasing the range between the extremes. Summers are long and hot, with an average daily temperature of 82° Fahrenheit (°F), average daily maximum of 91°F, and high average humidity. Winters are influenced by cold, dry polar air masses moving southward from Canada, with an average daily temperature of 54°F and an average daily minimum of 44°F. Annual precipitation averages 54 inches.

3.2 SIGNIFICANT RESOURCES

This section contains a list of the significant resources located in the study area and those located within the vicinity of the proposed mitigation projects by habitat type (i.e., BLH-Wet or Swamp), and describes in detail those resources that would be impacted, directly or indirectly, by construction of them.

The resources described in this section are those recognized as significant by laws, executive orders, regulations, and other standards of National, state, or regional agencies and organizations; technical or scientific agencies, groups, or individuals; and the general public. Further detail on the significance of each of these resources can be found in Appendix B, Table B-1. See Appendix A, Figure 25 for the habitats found in the study area. See Appendix B, Table B-12-14 for scientific names of species identified throughout the document.

Environmental Justice (EJ) is institutionally significant because of Executive Order 12898 of 1994. An EJ analysis focuses on the potential for disproportionately high and adverse impacts to minority or low-income populations during construction or operation of the proposed action. The CEMVN EJ team analyzed the BBA mitigation projects and determined that the type of construction activities taking place at the mitigation projects would not cause high, adverse impacts to any communities that are in the vicinity of the action nor would there be permanent high, adverse impacts to communities. Therefore EJ is not considered a significant resource for the proposed mitigation action.

The portion of Lake Pontchartrain that would be affected by the Pine Island mitigation project is not used for federal or interstate commerce and therefore navigation is not considered a significant resource for this project.

Neither EJ nor navigation will be discussed further in this document.

3.2.1 STUDY AREA

3.2.1.1 Wetlands and other Surface Waters

BLH-Wet forests in the study area are dominated by water oak, nuttall oak, green ash, red maple, and pignut hickory. Swamps in the study area are dominated by bald cypress and water tupelo, which have regenerated since extensive logging of virgin forest more than 70 years ago. The Louisiana swamps generally lack a mature canopy as was present in the forests before logging occurred and have lower productivity where isolated from riverine influences (Shaffer et al., 2003). A list of plant species referenced in this document and their scientific names can be found in Appendix B, Table B-12.

Various mitigation banks within Louisiana may be capable of supplying enough credits to meet the BLH-wet and swamp mitigation requirements. Since the bank that may ultimately be selected to provide the necessary mitigation credits is unknown, the existing conditions present at the bank site are similarly unknown. Existing bank habitat quality varies depending on the success criteria met, as specified in the bank's Mitigation Banking Instrument (MBI). Typically, as mitigation success criteria are met and the quality of the habitat increases within the bank, more credits are released for purchase.

3.2.1.2 Wildlife

Louisiana's coastal wetlands support numerous neotropical and other migratory avian species, such as rails, gallinules, shorebirds, wading birds, and numerous songbirds. The rigors of long distance flight require most neotropical migratory birds to rest and refuel several times before they reach their final destination. Louisiana coastal wetlands provide neotropical migratory birds essential stopover habitat on their annual migration routes. The coastal wetlands in the LPB and the MSRB provide important and essential fish and wildlife habitats, especially transitional habitat between estuarine and marine environments, used for shelter, nesting, feeding, roosting, cover, nursery, and other life requirements.

Emergent fresh, intermediate, and brackish wetlands are typically used by many different wildlife species, including: seabirds; wading birds; shorebirds; dabbling and diving ducks; raptors; rails; coots; and gallinules; nutria; muskrat; mink, river otter, and raccoon; rabbit; white-tailed deer; and American alligator. Emergent saline marshes are typically utilized by: seabirds; wading birds; shore birds; dabbling and diving ducks; rails, coots, and gallinules; other saline marsh residents and migrants; nutria; muskrat; mink, river otter, and raccoon; rabbits; deer; and American alligator (LCWCRTF & WCRA, 1999).

Open water habitats such as Lake Pontchartrain and Lake Borgne provide wintering and multiple use functions for brown pelicans, seabirds, and other open water residents and migrants. Open water habitats in the project area provide wintering and multiple use functions for brown pelicans, seabirds, dabbling and diving ducks, coots, and gallinules as well as other open water residents and migrants (LCWCRTF & WCRA, 1999).

Bottlenose dolphins are protected under the Marine Mammal Protection Act of 1972, and are found in temperate and tropical waters around the world including Lake Pontchartrain and Lake Borgne. There are coastal populations that migrate into bays, estuaries and river mouths as well as offshore populations that inhabit waters along the continental shelf. Their coloration ranges from light gray to black with lighter coloration on the belly. Inshore (coastal) and offshore individuals vary in color and size. Inshore animals are smaller and lighter in color, while offshore animals are larger, darker in coloration and have smaller flippers. Coastal animals prey on benthic invertebrates and fish, and offshore animals feed on squid and fish.

A list of common wildlife species found in the study area and their scientific names can be found in Appendix B, Table B-13.

3.2.1.3 Threatened and Endangered Species

Within the State of Louisiana there are 30 animal and three plant species (some with critical habitat) under the jurisdiction of the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS), presently classified as endangered or threatened. Of those 30, Table 3-1 identifies those that are known to occur in the parishes where mitigation projects in the final array are situated. The USFWS and the NMFS share jurisdictional responsibility for sea turtles and the Gulf sturgeon. Other species that were listed on the Endangered Species List but have since then been de-listed because population levels have improved are the bald eagle and the brown pelican. Currently, American alligators and shovelnose sturgeon are listed as threatened under the Similarity of Appearance clause in the Endangered Species Act (ESA) of 1973, as amended but are not subject to ESA Section 7 consultation. Appendix B, Table B-20 contains a list of Louisiana State Listed species that could potentially occur in the study area. Adverse impacts to any listed species would be avoided and/or the risk minimized through best management practices.

Table 3-1 Threatened and Endangered Species

Species	Parish	Critical Habitat	Status	Jurisdiction	
				USFWS	NFMS
Animal					

Species	Parish	Critical Habitat	Status	Jurisdiction	
				USFWS	NFMS
West Indian Manatee (*Trichechus manatus*)	A, EBR, EF, St. C, St. Ja, St. Jo, St. T, T		T	X	
Piping Plover (*Charadrius melodus)*	St. M, St. C	X	T	X	
Red Knot *(Calidris canutus rufa)*	Wherever Found				
Red Cockaded Woodpecker (*Picoides borealis*)	L, St. C, St. T, T		E	X	
Gopher Tortoise (*Gopherus polyphemus*)	St. C, St. T, T		T	X	
Ringed Map Turtle (*Graptemys oculifera*)	St. C, St. T		T	X	
Hawksbill Sea Turtle (*Eretomchelys imbricata*)	St. C		E	X	X
Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)	St. C		E	X	X
Leatherback Sea Turtle (*Dermochelys coriacea*)	St. C		E	X	X
Green Sea Turtle (*Chelonia mydas*)	St. C		T	X	X
Loggerhead Sea Turtle (*Caretta caretta*)	St. C		T	X	X
Pallid Sturgeon (*Scaphirhynchus albus*)	A, I, EBR, EF, PC, St. C, St. Ja, St. Jo, St. M, WBR,		E	X	
Gulf Sturgeon (*Acipenser oxyrinchus desotoi*)	A, L, St. B, St. C, St. J, St. T, O, T, St. H	X	T	X	X
Inflated Heelsplitter Mussel (*Potamilus inflatus*)	A, L, EBR, EF, St. C, St. T. St. H		T	X	
Plant					
Louisiana Quillwort (*Isoetes louisianensis*)	St. C, St. T		E	X	

A = Ascension, EBR= East Baton Rouge, EF= East Feliciana, L=Livingston, St. C= St. Charles, St. Ja = St. James, St. Jo= St. John, St. T= St. Tammany, T= Tangipahoa, St. M= St. Mary, PC= Pointe Coupee, I= Iberville, WBR= West Baton Rouge

3.2.1.4 Fisheries and Aquatic Resources

The NMFS oversees and manages our Nation's domestic fisheries through development and implementation of fishery management plans and actions. The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) is the primary law governing marine fisheries

management in United States Federal waters; its goals are to end overfishing, promote market-based management approaches, improve science, serve a larger role in decision-making, and enhance international cooperation.

Major water bodies within the study area include the Mississippi river, Lake Maurepas, Lake Pontchartrain, Lake Borgne, Breton Sound, Chandeleur Sound, Lake Salvador, Lake Cataouatche, Atchafalaya Bay, West Cote Blanche Bay, and Vermillion Bay. NMFS has indicated that these water bodies and adjacent wetlands provide nursery and foraging habitats which support varieties of economically important marine fishery species, including striped mullet, Atlantic croaker, Gulf menhaden, spotted and sand sea trout, southern flounder, black drum, and blue crab. Some of these species also serve as prey for other fish species managed under the MSFCMA by the Gulf of Mexico Fishery Management Council (e.g., mackerel, snapper, and grouper) and highly migratory species managed by NMFS (e.g., billfish and shark).

A list of fish and aquatic species referenced in this document and their scientific names can be found in Appendix B, Table B-14.

The existing emergent wetlands and shallow open water within the project area provide important habitat and Essential Fish Habitat (EFH), including transitional habitat between estuarine and marine environments used by migratory and resident fish, as well as other aquatic organisms for nursery, foraging, spawning, and other life requirements. Historically and currently, the area provides valuable recreational and commercial fishing habitat, oyster culture, and nursery areas for a wide variety of finfish and shellfish (Rounsefell, 1964; Penland et al., 2002).

3.2.1.5 Essential Fish Habitat

The public places a high value on seafood and recreational and commercial opportunities provided by EFH. Specific categories of EFH include all estuarine waters and substrates (mud, sand, shell, rock, and associated biological communities), subtidal vegetation (seagrasses and algae), and adjacent intertidal vegetation (marshes and mangroves). Table 3-2 shows the EFH for the managed species in southeastern Louisiana.

Table 3-2
Summary of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297) Designation of Essential Fish Habitat for Coastal Louisiana

Species	Life Stage	EFH
Brown shrimp *Farfantepenaeus aztecus*	Eggs	(Marine system) < 110, demersal
	Larvae	(Marine system) < 110 m, planktonic
	Postlarvae/ juvenile	(Estuarine system) marsh edge, submerged aquatic vegetation, tidal creeks, inner marsh
	Subadult	

	Adult	(Estuarine system) mud bottoms, marsh edge (Marine system) < 110 m, silt sand, and muddy sand
White shrimp *Litopenaeus setiferus*	Eggs	(Marine system) < 40 m, demersal
	Larvae	(Marine system) < 40 m, planktonic
	Postlarvae/ juvenile, subadult	(Estuarine system) marsh edge, submerged aquatic vegetation, marsh ponds, inner marsh, oyster reefs
	Adult	(Marine system) < 33 m, silt, soft mud
Red drum *Sciaenops ocellatus*	Eggs, larvae	(Marine system) planktonic
	Postlarvae/ juvenile	(Marine and Estuarine systems) submerged aquatic vegetation, estuarine mud bottoms, marsh/water interface
	Subadult	(Estuarine system) mud bottoms, oyster reefs
	Adult	(Marine and Estuarine systems) Gulf of Mexico & estuarine mud bottoms, oyster reefs
Red snapper *Lutijanus campechanus*	Larvae, postlarvae/juvenile	(Marine system) structure, sand/mud; 17-183 m
	Adult	(Marine system) reefs, rock outcrops, gravel; 7-146 m
Vermillion snapper *Rhomboplites aurorubens*	Juvenile	(Marine systems) reefs, hard bottom, 20-200 m
Spanish mackerel *Scomberomorus maculatus*	Larvae	(Marine system) < 50 m isobath
	Juvenile	(Marine and Estuarine systems) offshore, beach, estuarine
	Adult	(Marine system) pelagic
Bluefish *Pomatomus saltatrix*	Postlarvae/ juvenile	(Marine and Estuarine systems) beaches, estuaries, and inlets
	Adult	(Marine and Estuarine systems) Gulf, estuaries, pelagic

*Detailed information on Federally managed fisheries and their EFH is provided in the 1998 generic amendment of the Fishery Management Plans for the Gulf of Mexico prepared by the Gulf of Mexico Fishery Management Council (GMFMC).

3.2.1.6 Cultural Resources

Federal regulations require CEMVN, as an agency responsible for funds appropriated by Congress, to identify if properties are historic (listed or eligible for listing in the National Register of Historic Places (NRHP)); to assess the effects the work will have on historic properties; to seek ways to avoid, minimize, or mitigate any adverse effects to historic properties; and to evaluate the proposed action's potential for significant impacts to the human and natural environment. The consideration of impacts to historic and cultural resources is mandated under Section 101(b)4 of the NEPA as implemented by 40 CFR, Parts 1501-1508. Additionally, Section 106 of the National Historic Preservation Act (NHPA), as amended (54 U.S.C. § 300101 et seq.), requires Federal agencies to take into account their effects on historic properties (i.e., historic and cultural resources) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Section 106 lays out four (4) basic steps that must be carried out sequentially: 1) establish the undertaking and area of potential effects (APE); 2) identify and evaluate historic properties within APE; 3) assess effects to historic properties; and 4) resolve any adverse effects (avoid, minimize, or mitigate). An agency cannot assess the effects of the undertaking on historic properties until it has identified and evaluated historic properties within the APE. The federal agency must consult with the appropriate State Historic Preservation Officer/s (SHPO), Tribal Historic Preservation Officer/s (THPO) and/or tribal officials, state and local officials, non-federal sponsors/applicants, and any other consulting parties in identifying historic properties, assessing effects, and resolving adverse effects, and provide for public involvement. Additionally, it is the policy of the federal government to consult with Indian Tribal Governments on a Government-to-Government basis as required in E.O. 13175 (U.S. President 2000).

3.2.1.6.1 Archaeological Site Distribution

The generalized Pre-Contact cultural chronology for Louisiana according to Rees (2010:12) is divided into five (5) primary archaeological components or periods as follows: Paleoindian (11,500-8000 B.C.); Archaic (8000-800 B.C.); Woodland (800 B.C.-1200 A.D.); Mississippian (1200-1700 A.D.); and Historic (1700 A.D.-present). Regionally, these archaeological periods have been further divided into sub-periods based on their material culture, settlement patterns, subsistence practices, and sociopolitical organization. Specific sub-periods identified within the study area include: Poverty Point; Tchefuncte; Marksville; Baytown; Troyville; Coles Creek; Plaquemine; and Mississippian. Post-Contact Period (ca. 1650 A.D.-present) cultural affiliations follow the thematic approach set forth in the Louisiana Division of Archaeology's (LDOA) State of Louisiana Site Record Form (amended August 29, 2018) and are divided into the following temporal groups: *Historic Exploration* (1541-1803 A.D.); *Antebellum Louisiana* (1803-1860 A.D.); *War and Aftermath* (1860-1890 A.D.); *Industrial and Modern* (1890-1945 A.D.); and *Post-WWII* (1945 A.D.-present).

Based on a review of the LDOA, *Louisiana Cultural Resources Map* (LDOA Website), archaeological sites previously recorded within the current study area collectively span the entire

spectrum of Pre-Contact and Post-Contact archaeological components referenced above; encompassing some 10,000 years or more. It is also important to stress that many known of the known sites in the project vicinity have occupation spans encompassing more than one (1) of these cultural/temporal periods. Moreover, many of these sites possess more than one (1) archaeological component attesting to the long-ranging cultural importance of the region. Nevertheless, as compared to other areas of the state, relatively little survey work has been conducted within the study area.

In lieu of additional survey data, Louisiana's Comprehensive Archaeological Plan (Girard, et al. 2018) provides a useful site distribution model that can be used for baseline planning purposes. To a great extent, the unique geomorphology and ecology of Louisiana has influenced site type and location. To examine how the physical landscape impacts the archaeological record, the LDOA divides the state into a series of regions that follow the ecoregions classification of the Western Ecology Division of the United States Environmental Protection Agency (https://www.epa.gov/eco-research/ecoregion-download-files-state-region-6#pane-16). There are six (6) regions at Level III, of which four (4) fall within the present study area (Mississippi Alluvial Plain, Mississippi Valley Loess Plains, Southeastern Plains, and Southern Coastal Plains). The Mississippi Alluvial plain ecoregion covers most of the eastern half of northern Louisiana and forms a central corridor through the southern part of the state. The Mississippi Valley Loess Plains ecoregion occurs primarily within the central-southern half of the present study area. The Southern Coastal Plain ecoregion comprises the northern central-half of the present study area, spanning the Louisiana/Mississippi border. The Southeastern Plains ecoregion lies in the northern part of the south eastern portion of the state, spanning the Louisiana/Mississippi border. A map displaying the locations of potential mitigation properties plotted against the EPA Level III Ecoregions is included as Figure A-5.

Girard, et al., (2018:24-31) define how the unique environmental, biological, and physiological characteristics of each region cumulatively influenced cultural development in order to provide context to the distribution of where sites are likely or unlikely to occur within each ecoregion as is summarized below:

The Mississippi Alluvial Plain:

> *The region consists of major aggrading floodplain landforms and watercourses… In the southern portion of the* [study area] *this region includes the Holocene-age deltaic lobes of the Mississippi River... Sites are found predominantly on higher, better-drained landforms. These are typically natural levees along channels, but may include point bars and other surfaces. In many areas, the distribution and age of sites on the modern surface reflects the geological history of that area, rather than its entire occupational history… The Inland Swamp sub-region represents the transition between freshwater backswamps to fresh, brackish, and saline waters of the deltaic marshes… Much of the land is low-lying and subject to seasonal flooding. Numerous bayous drain the region with their natural levees providing the only elevated ground… Sites are concentrated along natural levees. Channel migration has eroded many landforms, and sediment deposition has buried many others.*

The Mississippi Valley Loess Plains:

> *This region consists of rolling hills and bluffs immediately east of the Mississippi Alluvial Plain* [and] *is underlain by Miocene and Pliocene sand, silt, and gravel deposits in the northern half, and by Pleistocene age silts, sands, and clays in the south… The region is dominated by the thick layer of Late Pleistocene loess derived from the Mississippi River valley that is draped over the gently rolling topography… Sites are typically situated on higher ridge crests and along stream margins. Sites will occur in surface contents in higher elevations while occasional buried sites may be found in alluvial settings.*

The *Southern Coastal Plain*:

> *The uplands consist of gently rolling topography dissected by north-south trending streams and rivers…Holocene alluvial deposits are in floodplains and on low terraces along major streams…Sites in the upland areas are concentrated on higher ridge crests and overlooking streams. Most of these deposits are shaulow with overlapping occupations and no opportunity for stratified sites. Buried and stratified sites may occur in the floodplains of the larger streams.*

Southeastern Plains:

> [The region] *consists of level to gently undulating plains formed in Pliocene and Pleistocene deposits that are covered by thin layers of loess in some areas. These deposits consist of sandy loams, silt loams, and clay loams with cherty gravels present. A series of north-south trending streams and rivers drain the region and cherty gravel bars are common. Most have moderately incised valleys with limited floodplain development, although the Bogue Chitto and Pearl Rivers can have broader floodplains with abandoned channels and ponded areas… Sites are typically situated on higher ridge crests and along stream margins. Sites will occur in surface contexts in higher elevations while occasional buried sites may be found in alluvial settings… Sites in surface contexts are impacted by agricultural and timber harvesting activities. Within the larger drainages, gravel-mining operations have destroyed sites within the limits of their activities.*

3.2.1.6.2 Historic Properties

Preserving historic properties as important reflections of our American heritage became a national policy through passage of the Antiquities Act of 1906, the Historic Sites Act of 1935, and Section 106 of the NHPA, and it's implementing regulations, 36 Code of Federal Regulations [CFR] Part 800. The passage of the NHPA established the NRHP and the process for adding properties to it. National Register (NR)-listed properties typically fall into one (1) of five (5) categories: building, structure, object, site, and district. The National Park Service (NPS) uses the following definitions to differentiate NR historic resource types (NPS 1995):

- Building: A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

- Structure: The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter."

- Object: The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or a relatively small in scale and simply constructed. CEMVN's background research indicates that there are no NRHP-listed Objects within the study area.

- Site: A site is the location of a significant event, a prehistoric/historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.

- District: A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

In addition to the five (5) common types of NR properties mentioned above, the study area also has the potential to contain National Historic Landmarks (NHLs) and archaeological sites not presently listed on the NR:

- National Historic Landmark: The NPS has developed criteria for the recognition of nationally significant properties, which are designated NHLs and prehistoric and historic units of the NPS. NHLs are those districts, sites, buildings, structures, and objects designated by the Secretary of the Interior (SOI) as possessing national significance in American history, architecture, archeology, engineering, and culture. NHLs are afforded a special level of protection and Section 110(f) of the NHPA, requires that before approval of any federal Undertaking which may directly and adversely affect any NHL, the head of the responsible federal agency shall, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark, and shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the Undertaking.

- Archaeological Sites Not Presently Listed on the National Register: Not every archaeological site is eligible for the NR because not all archaeological sites possess both significance and sufficient integrity to be considered eligible for listing. Most eligibility determinations made pursuant to the Section 106 process are called "consensus determinations" because agreement between the federal agency and the SHPO/THPO is all that is normally required for federal undertakings; no formal nomination to or listing on the NR is necessary. The LA SHPO maintains databases of all previously recorded sites within Louisiana. Individual alternative actions will be screened against the databases to determine if sites that have been identified as eligible for NR-listing, but not yet enrolled, exist within proposed work areas.

CEMVN has completed an initial review of existing information regarding historic properties within the potential mitigation areas selected for the TSA. Historic Properties within the proposed Area of Potential Effect (APE) for each mitigation property were identified based on

CEMVN's review of the NRHP database, the *Louisiana Cultural Resources Map* provided by SHPO, historic map research, and a review of the EPA Level III Ecoregions. CEMVN's preliminary review of the array of properties evaluated is summarized in Table 3-3 (below):

Table 3-3. Historic Properties within the APE

Mitigation Site	Previously recorded Archaeological Sites within Parcel	Previous Survey within Parcel[1]	Previous Survey Coverage	Other Notes:
Pine Island	16ST45 (partial); 16ST98 (partial)	22-0824 - A+R	Partial	Project area situated in dense cluster of sites. Primarily prehistoric. Little survey coverage of proposed mitigation area
Saint James	16SJ20; 16SJ21; 16SJ34; 16SJ30	22-0665 - A+R; 22-3017 Ph. I; 22-3693 - Ph. II; 22-3693 - Ph. II; 22-3713 - Ph. III; 22-4669 A+R; 22-3017 - Ph. II; 22-3823 - Ph. III; 22-4043 - Ph. III; 22-0728 - Ph. I; 22-0727 - A+R; 22-3812 - Ph. III	Partial	Multiple previously recorded plantation sites within project area: Wilton Plantation, Helvetia Plantation, St. Rose Plantation, and Columb Plantation (including cemetery within parcel)
Saint John	None	22-2572 - A+R; 22-3779 - Ph. I (negative)	Complete	Good potential for mitigation area
Gravity	None	None	None	Unassessed
Ascension SB	None	None	None	Requires additional assessment
GBRPC	16EBR72 (partial); 16EBR74	22-1468 - Ph. I	Sparse	Requires additional assessment
Feliciana	16EF42; 16EF43; 16EF47; 16EF44 (partial); 16EF45 (partial); 16EF48 (partial); 16EF12; 16EF46	22-0774 - A+R	Sparse	Requires additional assessment
Sunset Ridge	None	None	None	Unassessed
TPSB	None	None	None	Unassessed
Rosedale	None	22-2261 - A+R	Only A+R	Requires additional assessment
Krotz	None	None	None	Unassessed
Albania North	None	None	None	Unassessed
Albania South	None	None	None	Unassessed
Cote Blanche	None	None	None	Unassessed

[1] A+R = Assessment + Reconnaissance; Ph. I = Phase I (Identification); Ph. II = Phase II (Evaluation); Phase III (Mitigation).

Mitigation Site	Previously recorded Archaeological Sites within Parcel	Previous Survey within Parcel[1]	Previous Survey Coverage	Other Notes:
Amite MIT	16SH4	22-0801 (partial)	Only partial A+R	Project area largely unassessed. Heavily impacted by gravel mining though still contains some site potential
Joyce	None	None	None	Unassessed

3.2.1.7 Recreational Resources

Recreation areas were examined in and around the LPB, MSRB, and Mississippi Alluvial Plain. These projects are in proximity to 7 National Wildlife Refuges (NWRs), more than 15 LA Wildlife Management Areas, 7 LA State Parks, and 1 National Park, as well as other significant recreation areas. These areas are visited annually for recreational purposes and include miles of trails for hiking and biking, boat ramps, fishing piers, classroom spaces, visitor centers or museums, picnic shelters, and historic sites. These recreation areas provide opportunities for hunting, hiking, biking, boating, bird watching, fishing and crabbing, crawfishing, shrimping, education, camping, picnicking, and playing. Appendix B, Table B-16 lists the state and Federal recreational facilities that are located in the LPB and Mississippi Alluvial Plain and provides information about size and recreational features.

The fishing industry alone is the second largest industry in Louisiana. The study area encompasses over 50% of the State's resident fishing licenses and boat registrations according to the Louisiana Department of Wildlife and Fisheries (LDWF). Appendix B, Table B-15 shows the number of fishing licenses, hunting licenses and boat registrations as well as the percent of state licenses and boat registrations in the LPB and Mississippi Alluvial Plain.

Although fishing and boating marinas are periodically damaged in hurricanes, and some are completely obliterated, because of the high demand of this recreational activity, marinas typically rebuild almost immediately. This industry has proven to be strong, and it is important to maintain the land area surrounding these facilities including the boat launches. People enjoy pleasure boating and fishing in and around these recreational boat launches.

The Louisiana Statewide Comprehensive Outdoor Recreation Plan (SCORP) provides a statewide inventory of recreation resources and identifies recreational needs. While regions defined in the SCORP do not fit perfectly within the LPB and Mississippi Alluvial Plain, SCORP Regions 1 through 3 include the LPB and Mississippi Alluvial Plain. The state- and Federally-managed areas described previously represent just a portion of the recreational facilities inventoried for SCORP Regions 1 through 3. Federal, state, parish, and municipal public recreational facilities inventoried within Regions 1 through 3 provide approximately 341 parks for hunting, boat ramps, picnic areas, beaches, and camping with tent sites and trailer sites. The SCORP-prioritized needs in this region include improving access to enable fishing and boating, funding to support consumptive and non-consumptive activities on all public recreation areas, use of more sustainable building practices, more wilderness or primitive camping areas,

identifying and acquiring large tracts of waterfront lands for large scale parks, and addressing the dwindling state of marine resources.

Other recreational features are provided by parishes and historic communities that attract visitors to a variety of heritage and cultural festivals, historical sites, parks offering opportunities for passive and active recreation that include tennis courts, soccer and softball fields, swimming pools, and golf courses.

Funds from the Land and Water Conservation Fund (LWCF) have supported more than 150 different recreational projects in the area encompassing the LPB and Mississippi Alluvial Plain since 1964. LWCF projects in the LPB and Deltaic Plain have provided numerous boat ramps, other facilities or lands that enhance opportunities for recreation. Actual LWCF expenditures not adjusted for inflation are in the millions in the LPB and Mississippi Alluvial Plain. Appendix B, Table B-17 summarizes the number and cost of projects implemented in parishes in the LPB and Mississippi Alluvial Plain.

3.2.1.8 Aesthetic Resources

Visually, the LPB, MSRB, and Mississippi Alluvial Plain is a complex series of landscapes that vary throughout the full spectrum of eco-regions, ecosystems, habitat types, and topography. From Baton Rouge, east to the Mississippi Sound; and from U.S. Interstate 12, south to the Mississippi River, this large basin has many different visually, culturally and historically significant areas that all add to the flavor and life of southeastern Louisiana.

Public and Institutional Visual significance is derived from the many State Parks and Historic sites, NWRs, LA Wildlife Management Areas, Scenic Byways, and Scenic Streams that dot the landscape. These elements give cultural, recreational, historic, aesthetic, and archeological intrinsic value to the public (locally, statewide, and nationwide). For details on the visual resources found in the LPB, MSRB, and Mississippi Alluvial Plain, please see Appendix A, Figure 4.

Technically Significant Visual interests include those elements of design (be it natural or man-made) that make a place memorable and are of high visual quality. Typically these areas are defined by form, line, texture, color, repetition, or other basic design elements that break down a scenic vista into its constituent parts. By doing this, the scenic vista can be better explained and quantified for basin. This is the “how” and “why” a resource is visually significant. Man-made elements with superior visual interest may include artistic, architectural and/or engineering marvels; while natural elements may include swamps and marsh where texture and color are in overabundance, open water framed by stands of cypress, or active habitat areas where flora and fauna create focal points and action for the viewer.

One other important factor to consider for visual resources is access. If no one can access it, then it does not bring any aesthetic or visual value to the public.

3.2.1.9 Air Quality

National Ambient Air Quality Standard Attainment Status

Areas that meet the NAAQS for all criteria pollutants are designated as being "in attainment;" areas where a criteria pollutant level exceeds the NAAQS are designated as being "in nonattainment." Effective December 15, 2016, the Baton Rouge Five-Parish non-attainment area was designated by the Environmental Protection Agency as a maintenance area for ozone under the 8-hour standard. For the purposes of this study, three sites are in the Baton Rouge "maintenance" area (Gravity and Ascension in Ascension Parish and GBRPC in East Baton Rouge Parish) and the remaining six sites are in parishes that are in attainment status for NAAQS.

Table 3-4. National Ambient Air Quality Standards (NAAQS)

Pollutant [links to historical tables of NAAQS reviews]		**Primary/ Secondary**	**Averaging Time**	**Level**	**Form**
Carbon Monoxide (CO)		primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		primary and secondary	Rolling 3 month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_2)		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb (2)	Annual Mean
Ozone (O_3)		primary and secondary	8 hours	0.070 ppm (3)	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	$PM_{2.5}$	primary	1 year	12.0 µg/m^3	annual mean, averaged over 3 years
		secondary	1 year	15.0 µg/m^3	annual mean, averaged over 3 years
		primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years

Pollutant [links to historical tables of NAAQS reviews]	Primary/ Secondary	Averaging Time	Level	Form
Sulfur Dioxide (SO_2)	primary	1 hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

(4) The previous SO2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO2 standards or is not meeting the requirements of a SIP call under the previous SO2 standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

3.2.1.10 Water Quality

Section 305(b) of the Clean Water Act requires each state to monitor and report on surface and groundwater quality, which the Environmental Protection Agency (EPA) synthesizes into a report to Congress. The Louisiana Department of Environmental Quality (LDEQ) produces a Section 305(b) Water Quality Report that provides monitoring data and water quality summaries for hydrologic units (subsegments) throughout the state.

Water quality criteria are elements of state water quality standards that represent the quality of water that will support a particular designated use. These criteria are expressed as constituent concentrations, levels, or narrative statements. There are currently seven designated uses adopted for Louisiana's surface waters: Primary Contact Recreation, Secondary Contact Recreation, Fish and Wildlife Propagation, Drinking Water Supply, Oyster Propagation, Agriculture, and Outstanding Natural Resource Waters. The water bodies in the study area support a variety of the designated uses.

3.2.1.11 Noise

The Noise Control Act of 1972 regulates and promotes an environment for all Americans free from noise that jeopardizes their health or welfare and the Occupational Safety and Health Administration Standards (29 CFR Part 1910) set standards regarding protection against the effects of noise exposure. Noise levels exceeding sound pressure levels are technically significant because noise can negatively affect the physiological or psychological well-being of an individual (Kryter, 1994). These effects can range from annoyance to adverse physiological responses, including permanent or temporary loss of hearing, and other types of disturbance to humans and animals, including disruption of colonial nesting birds. Noise is publicly significant because of the public's concern for the potential annoyance and adverse effects of noise on humans and wildlife.

Noise is generally described as unwanted sound, which can be based either on objective effects (hearing loss, damage to structures, etc.) or subjective judgments (such as community annoyance). Sound is usually represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as sound level. The threshold of human hearing is approximately 0 dB, and the threshold of discomfort or pain is around 120 dB.

Noise levels are computed over a 24-hour period and adjusted for nighttime annoyances to produce the day-night average sound level (DNL). DNL is the community noise metric recommended by EPA and has been adopted by most Federal agencies (USEPA 1974). A DNL of 65 weighted decibels (dBA) is the level most commonly used for noise planning purposes and represents a compromise between community impact and the need for activities like construction. The A-weighted sound level, used extensively in this country for the measurement of community and transportation noise, represents the approximate frequency response characteristic of the average young human ear). Areas exposed to a DNL above 65 dBA are generally not considered suitable for residential use. A DNL of 55 dBA was identified by EPA as a level below which there is no adverse impact (USEPA 1974).

Most parishes in the study area have noise ordinances addressing loud machinery. Noise is typically associated with human activities and habitations, such as operation of commercial and recreational boats, water vessels, air boats, and other recreational vehicles; operation of machinery and motors; and human residential-related noise (air conditioner, lawn mower, etc.). The Corps constructed project areas are remote and uninhabited. The noise from distant urban areas surrounding the uninhabited portions of the project area contributes little, if any, to the natural noise levels of the area.

3.2.1.12 Hazardous, Toxic, and Radioactive Waste (HTRW)

In accordance with ER 1165-2-100 identification and evaluation of all HTRW contamination within the vicinity of the proposed project is required. USACE policy is to avoid the use of project funds for HTRW removal and remediation activities. Costs for necessary special handling or remediation of wastes (e.g., those regulated by the Resource Conservation and Recovery Act), pollutants and other contaminants, which are not regulated under the Comprehensive Environmental Response, Compensation, and Liability Act, would be treated as project costs if the requirement is the result of a validly promulgated Federal, state, or local regulation.

3.2.1.13 Socioeconomics/Land Use, and Commercial Fisheries

Socioeconomics/Land Use
The study area encompasses eleven parishes, the names of the individual parishes are given in the Table 3-5.

Population
Table 3-5 shows the population trend in the eleven-parish area from 1990 to 2010 and projections through 2040. Population is anticipated to grow state wide even though some parishes like St. Helena, East Feliciana, and Iberville Parish are expecting a decrease in their populations.

Table 3-5: Population in the study area

Total Population, (Ths.) *U.S. Census Bureau (BOC); Moody's Analytics (ECCA) Forecast*						
	1990	**2000**	**2010**	**2020**	**2030**	**2040**
East Feliciana Parish	19.19	21.30	20.17	18.84	17.49	16.39
West Baton Rouge Parish	19.42	21.58	23.95	26.69	28.65	30.13
Iberville Parish	31.04	33.32	33.36	32.15	30.14	28.27
St. Tammany Parish	145.07	192.13	234.57	256.26	267.54	274.51
St. James Parish	20.84	21.20	22.01	22.10	23.07	23.67
Ascension Parish	58.41	77.33	107.85	128.73	144.11	156.46
East Baton Rouge Parish	381.20	412.96	440.73	445.44	435.40	422.16
Pointe Coupee Parish	22.48	22.76	22.76	21.63	20.53	19.35
St. Charles Parish	42.47	48.12	52.84	54.12	56.50	57.97
St. John the Baptist Parish	40.06	43.25	45.62	44.70	46.67	47.89
St. Mary Parish	57.99	53.38	54.54	52.63	51.57	50.84
Tangipahoa Parish	85.75	100.72	121.49	130.40	133.06	134.68

Economic Indicators
In the coming figures, key economic indicators will be analyzed to forecast the economic condition of these parishes from past to the present. The data given will be recorded data from 1990 to 2010 and then forecasted to 2040.

Income: Per Capita, ($)
Table 3-6 shows the data collected for income that was generated per individual in these parishes from 1990 to 2010. This data is then used to forecast the future income per capita in the years 2020 to 2040. The forecasts indicate that the income per capita is increasing at almost doubling rate. One distinction that is evident from this data is that the Parishes with the growing population have a higher growing income per capita than the Parishes that have stagnant or decreasing population across the forecasted date.

Table 3-6

Income: Per Capita, ($) *U.S. Census Bureau (BOC); Moody's Analytics (ECCA) Forecast*						
	1990	2000	2010	2020	2030	2040
East Feliciana Parish	12,740.00	20,049.00	33,122.00	44,884.44	63,699.32	90,851.22
West Baton Rouge Parish	14,691.00	22,906.00	37,492.00	52,158.86	72,766.48	104,976.16
Iberville Parish	13,220.00	18,681.00	32,342.00	43,346.98	58,905.83	81,283.46
St. Tammany Parish	18,197.00	29,945.00	46,995.00	72,842.79	128,442.96	233,155.59
St. James Parish	13,920.00	18,722.00	38,421.00	50,757.62	73,417.74	111,556.95
Ascension Parish	14,977.00	24,052.00	39,416.00	52,587.15	70,172.07	98,014.32
East Baton Rouge Parish	18,006.00	27,228.00	39,651.00	52,787.57	68,921.74	91,604.86
Pointe Coupee Parish	12,629.00	21,701.00	34,894.00	48,958.51	67,351.50	95,361.31
St. Charles Parish	16,908.00	24,634.00	39,557.00	53,116.58	77,117.48	117,900.30
St. John the Baptist Parish	14,470.00	20,002.00	33,894.00	47,054.34	70,793.27	110,131.39
St. Mary Parish	12,716.00	21,602.00	35,400.00	43,991.35	59,886.50	82,423.36
Tangipahoa Parish	11,975.00	19,557.00	32,725.00	42,411.89	59,380.72	84,496.62

Unemployment Rate (%)

Although the unemployment rate has seen a statewide increase from 1990 to 2010 however, the future trend is that the unemployment rate will be decreasing statewide in 2030 and 2040. The correlation we can expect with this indicator is that as income per capita increases, individuals will have more potential income that could create employment opportunities in the future.

Table 3-7

Unemployment Rate, (%) *Bureau of Labor Statistics (BLS); Moody's Analytics (ECCA) Forecast*						
	1990	2000	2010	2020	2030	2040
East Feliciana Parish	6.00	5.74	8.35	6.76	7.11	6.87
West Baton Rouge Parish	6.12	5.29	7.87	6.49	6.83	6.59
Iberville Parish	7.85	7.07	10.04	8.09	8.51	8.22
St. Tammany Parish	5.91	4.33	6.30	6.34	6.47	6.06
St. James Parish	7.87	8.59	11.66	9.45	9.64	9.02
Ascension Parish	6.45	5.29	7.45	5.90	6.20	5.99
East Baton Rouge Parish	4.84	4.62	7.60	6.15	6.47	6.25
Pointe Coupee Parish	9.41	6.31	8.67	7.68	8.08	7.80
St. Charles Parish	6.07	5.58	7.41	6.69	6.83	6.39
St. John the Baptist Parish	7.95	6.79	10.60	8.61	8.78	8.22
St. Mary Parish	6.28	7.39	9.41	9.05	8.90	8.49
Tangipahoa Parish	9.29	6.47	9.71	7.39	7.60	7.13

Income: Earnings from Proprietors

In the Tables 3-8 through 3-10, the data on income proprietors is shown across the eleven Parishes studied. This data supports the increasing income per capita in the earlier table by showing that total proprietors income will increase in the forecasted future. The trend spotted in these tables are that both farm and non-farm proprietor's income will be increasing at a similar rate into the future.

Table 3-8

Income: Earnings - Farm Proprietors Profits, (Mil. $)
U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast

	1990	2000	2010	2020	2030	2040
East Feliciana Parish	0.30	2.64	0.29	2.23	3.34	4.38
West Baton Rouge Parish	2.25	11.09	2.66	-0.80	-2.12	-3.39
Iberville Parish	1.04	0.87	6.04	7.25	8.97	11.70
St. Tammany Parish	-1.99	-0.38	-1.13	-0.15	0.58	1.69
St. James Parish	-0.50	0.30	2.94	3.21	3.96	5.08
Ascension Parish	-2.18	-1.33	2.02	3.88	5.99	9.45
East Baton Rouge Parish	-0.67	0.01	-1.67	-0.45	-0.10	0.17
Pointe Coupee Parish	7.74	12.49	9.05	24.85	31.93	39.34
St. Charles Parish	0.14	0.21	-0.53	-0.49	-0.61	-0.75
St. John the Baptist Parish	-0.73	1.10	1.45	2.28	3.28	4.70
St. Mary Parish	-2.40	-0.51	0.14	-1.91	-3.07	-3.81
Tangipahoa Parish	12.98	15.18	-2.26	0.76	1.86	2.71

Table 3-9

Income: Earnings - Nonfarm Proprietors Profits, (Mil. $)
U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast

	1990	2000	2010	2020	2030	2040
East Feliciana Parish	18.69	38.47	30.70	36.88	49.45	64.30
West Baton Rouge Parish	23.10	48.03	78.56	120.89	204.20	330.52
Iberville Parish	25.23	42.99	53.65	63.83	84.49	110.33
St. Tammany Parish	178.59	454.41	1,111.77	2,418.89	5,147.02	10,285.85
St. James Parish	9.74	17.47	102.80	93.03	118.28	152.13
Ascension Parish	74.47	139.53	197.49	326.99	538.42	849.55
East Baton Rouge Parish	435.85	641.50	1,427.62	2,117.47	2,781.80	3,519.58
Pointe Coupee Parish	15.15	28.54	56.47	61.59	77.04	95.11
St. Charles Parish	29.67	57.13	146.23	181.29	237.80	302.28
St. John the Baptist Parish	25.00	45.38	105.21	199.00	302.57	433.89
St. Mary Parish	44.20	72.32	163.80	169.08	214.52	265.34
Tangipahoa Parish	63.97	128.49	407.80	462.34	635.60	876.11

Table 3-10

Income: Earnings - Total Proprietors Profits, (Mil. $) *U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast*						
	1990	**2000**	**2010**	**2020**	**2030**	**2040**
East Feliciana Parish	18.99	41.11	30.99	39.11	52.80	68.68
West Baton Rouge Parish	25.35	59.11	81.22	120.09	202.08	327.13
Iberville Parish	26.28	43.85	59.69	71.08	93.46	122.03
St. Tammany Parish	176.60	454.03	1,110.65	2,418.74	5,147.60	10,287.55
St. James Parish	9.24	17.77	105.74	96.24	122.24	157.21
Ascension Parish	72.29	138.20	199.51	330.88	544.41	859.00
East Baton Rouge Parish	435.18	641.50	1,425.95	2,117.01	2,781.69	3,519.75
Pointe Coupee Parish	22.88	41.03	65.52	86.43	108.97	134.45
St. Charles Parish	29.81	57.35	145.70	180.80	237.19	301.53
St. John the Baptist Parish	24.27	46.48	106.66	201.28	305.85	438.60
St. Mary Parish	41.80	71.81	163.94	167.17	211.45	261.54
Tangipahoa Parish	76.96	143.67	405.54	463.10	637.46	878.82

Farms and usable land (acres)

Table 3-11 indicates the transformation of usable farm land between 2007 and 2017. The trend shows that over the years land acreage was increased to have the highest capacity to increase the utility of the farm land used.

Table 3-11

Farms and Farm Land *U.S. Department of Agriculture (USDA); Census of Agriculture*						
	2007		2012		2017	
	Farms (No.)	**Land (Acres)**	Farms (No.)	**Land (Acres)**	Farms (No.)	**Land (Acres)**
East Feliciana Parish	439.00	128,167.00	399.00	112,529.00	412.00	130,971.00
West Baton Rouge Parish	128.00	25,820.00	106.00	30,300.00	111.00	34,085.00
Iberville Parish	175.00	85,729.00	165.00	163,340.00	151.00	181,624.00
St. Tammany Parish	602.00	45,506.00	604.00	34,113.00	994.00	43,048.00
St. James Parish	64.00	43,251.00	63.00	39,942.00	56.00	50,580.00
Ascension Parish	277.00	45,455.00	250.00	50,456.00	221.00	38,381.00
East Baton Rouge Parish	511.00	72,165.00	432.00	57,542.00	449.00	58,280.00
Pointe Coupee Parish	441.00	190,550.00	393.00	182,214.00	482.00	187,674.00
St. Charles Parish	58.00	D	70.00	16,216.00	67.00	14,337.00
St. John the Baptist Parish	23.00	10,758.00	31.00	13,699.00	22.00	19,885.00
St. Mary Parish	142.00	72,728.00	128.00	76,085.00	98.00	80,168.00
Tangipahoa Parish	1,188.00	123,861.00	1,070.00	106,710.00	967.00	98,090.00

Commercial Fisheries

Economically important fisheries associated with the study area include fisheries of oysters, crawfish, blue crab, blue catfish, shrimp, and channel catfish.

3.2.1.14 Prime and Unique Farmlands

In 1980, the CEQ directed federal agencies to assess the effects of their actions on farmland soils classified as prime or unique by the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS). Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. Appendix B Table 3-11 provides the amount of farmlands in the study area for 2007, 2012, and 2017.

3.2.1.15 Natural and Scenic Rivers

The Louisiana Natural Scenic Rivers Act prohibits certain activities on designated Natural and Scenic Rivers because of their detrimental ecological impacts on streams. These include channelization, clearing and snagging, channel realignment, reservoir construction, and the commercial cutting of trees within 100 feet of the ordinary low water mark. The study area includes many designated natural and scenic rivers. See Appendix K for a complete list of Natural and Scenic Rivers in Louisiana.

3.2.2 MITIGATION FOR BLH-WET (*CZ PROJECTS)

3.2.2.1 Wetlands and other Surface Waters

3.2.2.1.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's

All of these proposed projects are in existing agricultural lands and therefore no wetlands are present.

3.2.2.1.2 Amite - 368.6 Acres, 236 AAHU's
The Amite project area is located along the eastern and western sides of the Amite River. The sites are located in and adjacent to abandoned and active gravel mining pits. Most of these areas were likely impacted by mining operations. The sites are currently cleared areas within forested habitat.

3.2.2.1.3 Krotz - 147.2 Acres, 73 AAHU's

The Krotz project area is currently being managed as low quality scrub shrub habitat to support a migratory waterfowl populations for recreational hunting. Scrub shrub wetlands include such species as willow, button bush, dogwood, and young trees such as red maple.

3.2.2.2 Wildlife

3.2.2.2.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's

Wildlife species that have the potential to be found within all of these project areas when crops are present are skunk, rabbit, deer, various species of birds including eagles and other raptors, the red-winged blackbird, and various species of swallows. When crops are not present the wildlife species would shift to a less diverse and abundant list including mice, raptors, cattle egret, and ibis. There are currently no documented bald eagle nests in any of the project areas. Prior to construction, a nest survey would be conducted to verify no eagle nests are found in the vicinity of the project area. If a nest is found the National Bald Eagle Management Guidelines (Appendix J) would be followed.

3.2.2.2.2 Amite - 368.6 Acres, 236 AAHU's
Wildlife species that have the potential to be found within the Amite project area include skunk; rabbit; deer; squirrel; bobcat; fox; various species of song birds, raptors, reptiles, and amphibians.

3.2.2.2.3 Krotz - 147.2 Acres, 73 AAHU's
The Krotz project site likely includes all of the animal species discussed in section 3.3.3.2.1 but would also include game birds such as woodcock and dove for which it is being managed.

3.2.2.3 Threatened and Endangered Species

3.2.2.3.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's

There are 15 listed threatened and endangered species in these project areas. Based on a parish search conducted on the USFWS endangered species website in March 2019, and verbal communication with USFWS on July 23, 2019, none of the species under USFWS and/or NMFS

jurisdiction are expected to be found in any of these BLH-Wet project sites (https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=22057).

3.2.2.3.2 Amite - 368.6 Acres, 236 AAHU's

Only one T&E species is known to occur in the project area.

Inflated Heelsplitter

The only listed species known to occur in the project area is the inflated heelsplitter. The inflated heelsplitter is a mussel that has an oval, compressed to moderately inflated, thin shell. The shell is brown to black and may have green rays in young individuals. The preferred habitat of this species is soft, stable substrates in slow to moderate currents (Stern 1976) such as is present in the Amite River. Although the species is present in the Amite River it is not expected to be in the proposed project sites as the sites are not located within the river nor connected to the river.

3.2.2.4 Fisheries and Aquatic Resources

3.2.2.4.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's

All of these proposed projects occur on existing agricultural lands and therefore no fisheries or aquatic resources would be present.

3.2.2.4.2 Amite - 368.6 Acres, 236 AAHU's

The Amite project is located adjacent to the Amite River. However, all proposed work would take place on land or within existing shell mining pits. Since the shell mining pits are intermittently connected to the river, there is potential that the same fish species utilizing the Amite River could be in the pits. These species include bass, various species of sunfish and minnows, and gar.

3.2.2.5 Essential Fish Habitat

3.2.2.5.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's, **Amite –** 368.6 Acres, 236 AAHU's

All of these proposed projects occur on existing agricultural lands. Therefore, no essential fish habitat is located in any of these project areas.

3.2.2.6 Cultural Resources

3.2.2.6.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's, **Amite –** 368.6 Acres, 236 AAHU's

See Appendix B, Table 3-4.

3.2.2.7 Recreational Resources

3.2.2.7.1 Ascension - 55.8 Acres, 29 AAHU's

Recreational use of the project area is minimal as no opportunities exist on-site. The occasional opportunity for bird watching and sightseeing exists from nearby roads into the site. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity creating opportunities for both consumptive and non-consumptive forms of recreation.

3.2.2.7.2 Saint John* - 94.7 Acres, 42 AAHU's

Conditions are similar to those discussed for the Ascension project except opportunities exist to a greater extent due to the site's proximity to the Mississippi River levee and the Great River Road. This National Scenic Byway serves as a source of non-consumptive recreation for travelers along the corridor.

3.2.2.7.3 Gravity - 75.2 Acres, 40 AAHU's

Conditions are similar to those discussed for the Ascension project.

3.2.2.7.4 Feliciana - 267 Acres, 156 AAHU's

Recreational use of the project area is moderate as opportunities currently exist on-site with consideration to the Bob R. Jones-Idlewild Research Institute and Idlewild Lake. This Louisiana Agricultural Experiment Station provides science-based solutions to wildlife issues for wildlife enthusiasts, private landowners, corporate landowners and general stakeholders across Louisiana in the area of wildlife and habitat management. The station hosts multiple field days throughout the year to wildlife enthusiasts.

3.2.2.7.5 GBRPC - 134.9 Acres, 54 AAHU's

Recreational use of the project area is moderate as opportunities currently exist on-site with consideration to the adjacent Parish of East Baton Rouge's (BREC) Farr Park Equestrian Center and Recreational Vehicle Campground. The 297-acre Center features indoor and outdoor arenas, 256 horse stalls, a cross-country event course, horse trails, RV campground with 108 sites, and picnic shelters. BREC, with the assistance of a Department of Transportation and Development Transportation Enhancement Grant completed a Bicycle Trailhead in Farr Park near the main entry to the park at River Road. The trailhead includes restroom facilities, bike racks, air compressor, and a water fountains.

This site does have proximity to the Mississippi River levee and the Great River Road. This National Scenic Byway serves as a source of non-consumptive recreation for travelers. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity creating opportunities for both consumptive and non-consumptive forms of recreation.

3.2.2.7.6 Saint James - 1,246 Acres, 676 AAHU's

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to the Mississippi River levee and the Great River Road. This National Scenic Byway serves as a source of non-consumptive recreation for travelers along the corridor.

3.2.2.7.7 Amite - 368.6 Acres, 236 AAHU's

Recreational use of the project area is abundant as opportunities currently exist on-site with consideration to the Amite River, This Louisiana Natural and Scenic River provides habitat around the project area which exhibits moderate plant species diversity and moderately high animal diversity creating ample opportunities for both consumptive and non-consumptive forms of recreation. Birding, hiking, kayaking, fishing, and hunting are the more prevalent forms of recreation in this area.

3.2.2.7.8 Krotz - 147.2 Acres, 73 AAHU's

Recreational use of the project area is abundant as opportunities currently exist on-site with consideration to the Atchafalaya National Wildlife Reserve and Sherburne Wildlife Management Area that encompasses the project area. This wildlife haven provides habitat around the project area which exhibits moderate plant species diversity and moderately high animal diversity creating ample opportunities for both consumptive and non-consumptive forms of recreation. Game birds currently frequent the management area where hunting is permitted.

3.2.2.7.9 TPSB - 483.8 Acres, 248 AAHU's

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to the nearby Erwinville Recreation Center and Community Center. Overall, the habitat around the project area exhibits moderate plant species diversity and

moderately high animal diversity creating opportunities for both consumptive and non-consumptive forms of recreation.

3.2.2.7.10 Rosedale - 224.8 Acres, 113 AAHU's

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to Bayou Grosse Tete.

3.2.2.7.11 Sunset Ridge - 324 Acres, 168 AAHU's

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to Bayou Des Allemands.

3.2.2.7.12 Albania South* - Up to 192.1 Acres, up to 96 AAHU's,

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to the Bayou Teche Paddle Trail. This 135 mile long paddle trail serves as a source of both consumptive and non-consumptive recreation opportunities for paddlers and boaters along the waterway.

3.2.2.7.13 Albania North* - Max of 657 Acres, max of 343 AAHU's

Conditions are similar to those discussed for the Ascension project except to a greater extent due to the site's proximity to the Bayou Teche Paddle Trail. This 135 mile long paddle trail serves as a source of both consumptive and non-consumptive recreation opportunities for paddlers and boaters along the waterway.

3.2.2.7.14 Cote Blanche* - max of 176 Acres, max of 102 AAHU's

Conditions are similar to those discussed for the Ascension project.

3.2.2.8 Aesthetic Resources

3.2.2.8.1 Ascension - 55.8 Acres, 29 AAHU's

The vicinity of the project area is characteristic of the Mississippi Valley Loess Plains ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations. Small storage barns for equipment and feed with livestock holding areas dot the southern end of the site.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Small, manmade retention areas are located to the northwest of the project area.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of

deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area

- Access: Public visual access to the project site can be taken from Louisiana State Highway 941 to the south, State Highway 44 or S. Burnside Avenue to the west, and Interstate 10 to the North. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.2 Saint John* - 94.7 Acres, 42 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations. Overhead transmission lines border the north perimeter.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of the Mississippi River.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential, including industry fronting River Road and the Mississippi River corridor.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas and the Mississippi River Levee, which acts as the dominant landform feature in the area. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 44, River Road, and US Highway 61. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm, industry, and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.3 Gravity - 75.2 Acres, 40 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. 1 small, manmade retention area is located on the east side of the project area.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.

- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas and the Mississippi River Levee, which acts as the dominant landform feature in the area. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 22 to the south. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.4 Feliciana - 267 Acres, 156 AAHU's

The vicinity of the project area is characteristic of the Mississippi Valley Loess Plains ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations. Small storage barns for equipment and feed with livestock holding areas are located along Idlewild Road and include the Bob R. Jones-Idlewild Research Institute.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Idlewild Lake is located on the south side of the project area.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity.
- There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 67, Plank Road, to the west and State Highway 63 to the northeast. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters. The Bob R. Jones-Idlewild Research Institute, a Louisiana Agricultural Experiment Station, provides science-based solutions to wildlife issues for wildlife enthusiasts, private landowners, corporate landowners and general stakeholders across Louisiana in the area of wildlife and habitat management. The station hosts multiple field days throughout the year to wildlife enthusiasts.

3.2.2.8.5 GBRPC - 134.9 Acres, 54 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features the existing Mississippi River Levee (MRL -East Bank) as a primary structure to the northwest. The levee is a typical earthen berm, covered in turf on both the protected and river sides. Other structures in the area include barns, shops, and trails related to the nearby BREC Farr Park Equestrian Center and RV Campground.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of the Mississippi River.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
  Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas and the Mississippi River Levee, which acts as the dominant landform feature in the area. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 327. The drive along this thoroughfare is scenic and visually interesting. The project site is also accessible via 15 foot wide multi-use greenway path on top of the levee. This non-motorized path is used by bicyclists, walkers, and joggers.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.6 Saint James - 1,246 Acres, 676 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations. Small storage barns for equipment and feed with livestock holding areas dot the southern end of the site.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of the Mississippi River.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas and the Mississippi River Levee, which acts as the dominant landform feature in the area. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 44, River Road, and State Highway 3125. The drive along this thoroughfare is scenic and visually interesting.

- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.7 Amite - 368.6 Acres, 236 AAHU's

The vicinity of the project area is characteristic of the Mississippi Valley Loess Plains ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for mining operations along the Amite River.
- Water: In 1970, the Louisiana Legislature created the Louisiana Natural and Scenic Rivers System. The System was developed for the purpose of preserving, protecting, developing, reclaiming, and enhancing the wilderness qualities, scenic beauties, and ecological regimes of certain free-flowing Louisiana streams. These rivers, streams and bayous, and segments thereof, are located throughout the state and offer a unique opportunity for individuals and communities to become involved in the protection, conservation and preservation of two of Louisiana's greatest natural resources; its wilderness and its water. The Amite River from the Louisiana-Mississippi state line to La. Hwy. 37 in East Feliciana Parish is designated a Louisiana Natural and Scenic River (RS 56:1857).
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open mining pits fronting the Amite River, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 63 through the sites and Weiss Road to the south. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic related to mining operations, though includes a small percentage of residential commuters.

3.2.2.8.8 Krotz - 147.2 Acres, 73 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of the Atchafalaya River.
- Land Use: Land use in the area is surrounded by the Atchafalaya National Wildlife Reserve and Sherburne Wildlife Management Area, where an abundance of game birds may be observed.
- Landform and Vegetation: The surrounding habitat is surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species

diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: There is limited public visual access to the project site.
- Other Factors that Affect Visual Resources: User activity is minimal in this region, and is primarily relegated camps and recreational users that frequent the area.

3.2.2.8.9 TPSB - 483.8 Acres, 248 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.
- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations. Other structures in the area include ballfields, ballcourts, and concessions related to the nearby Erwinville Recreation Center.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of the Mississippi River.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas and the Mississippi River Levee, which acts as the dominant landform feature in the area. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 620 to the south and State Highway 984 to the west. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is minimal in this region, and is primarily relegated to farm and truck traffic related to farming operations.

3.2.2.8.10 Rosedale - 224.8 Acres, 113 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.
- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main river channel of Bayou Grosse Tete.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.

- Access: Public visual access to the project site can be taken from Louisiana State Highway 77 to the northeast and State Highway 76 to the southeast. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is minimal in this region, and is primarily relegated to farm and truck traffic related to farming operations.

3.2.2.8.11 Sunset Ridge - 324 Acres, 168 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams save for Bayou Des Allemands to the west and south of the project area.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 632 to the west. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.12 Albania South* - Up to 192.1 Acres, up to 96 AAHU's

Conditions are similar to those discussed for Albania North below.

3.2.2.8.13 Albania North* - Max of 657 Acres, max of 343 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: The Bayou Teche Paddle Trail is a 135 mile long trail through 4 parishes and 13 towns along one of the most historically and culturally significant bayous in the state. Other major water resources Lake Fausse Pointe to the northeast.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.

- Access: Public visual access to the project site can be taken from Louisiana State Highway 87 to the south. The drive along this thoroughfare is scenic and visually interesting and is designated a Louisiana Scenic Byway by the Louisiana Department of Culture, Recreation and tourism.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.2.8.14 Cote Blanche* - Max of 176 Acres, max of 102 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main channel of the Intracoastal Waterway to the south.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of industrial.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 83 through the site. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is limited in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of industry commuters.

3.2.2.9 Air Quality

3.2.2.9.1 Ascension - 55.8 Acres, 29 AAHU's

The project site is located in Ascension Parish which is in a maintenance area for ozone.

3.2.2.9.2 Saint John* - 94.7 Acres, 42 AAHU's

The project site is located in St. John the Baptist Parish which is currently in attainment of all NAAQS.

3.2.2.9.3 Gravity - 75.2 Acres, 40 AAHU's

The project site is located in Ascension Parish which is in a maintenance area for ozone.

3.2.2.9.4 Feliciana - 267 Acres, 156 AAHU's

The project site is located in East Feliciana Parish which is currently in attainment of all NAAQS.

3.2.2.9.5 GBRPC - 134.9 Acres, 54 AAHU's

The project site is located in East Baton Rouge Parish which is in a maintenance area for ozone.

3.2.2.9.6 Saint James – 1,246 Acres, 676 AAHU's

The project site is located in St. James Parish which is currently in attainment of all NAAQS.

3.2.2.9.7 Amite - 368.6 Acres, 236 AAHU's

The project site is located in St. Helena Parish which is currently in attainment of all NAAQS.

3.2.2.9.8 Krotz - 147.2 Acres, 73 AAHU's

The project site is located in Pointe Coupee Parish which is currently in attainment of all NAAQS.

3.2.2.9.9 TPSB - 483.8 Acres, 248 AAHU's

The project site is located in West Baton Rouge Parish which is in a maintenance area for ozone.

3.2.2.9.10 Rosedale - 224.8 Acres, 113 AAHU's

The project site is located in Iberville Parish which is in a maintenance area for ozone.

3.2.2.9.11 Sunset Ridge - 324 Acres, 168 AAHU's

The project site is located in St. Charles Parish which is currently in attainment of all NAAQS.

3.2.2.8.12 Albania South* - Up to 192.1 Acres, up to 96 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.2.9.13 Albania North* - Max of 657 Acres, max of 343 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.2.9.14 Cote Blanche* - Max of 176 Acres, max of 102 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.2.10 Water Quality

3.2.2.10.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's

None of these projects are located in or near any state water bodies and therefore no water quality standards or designated uses apply.

3.2.2.10.2 Amite - 368.6 Acres, 236 AAHU's

The water quality of the hydrologic unit which this project is in supports several designated uses including: fish and wildlife propagation, primary and secondary contact recreation, and outstanding natural resource waters.

3.2.2.11 Noise

3.2.2.11.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's, **Amite –** 368.6 Acres, 236 AAHU's

There are commercial and residential housing units located within 1,000 feet of most of these project areas. Most of these areas are located within agricultural communities where noise is produced by consistent and sporadically heavy traffic on adjacent and nearby roadways as well as agricultural operations.

3.2.2.11.2 Saint James – 1,246 Acres, 676 AAHU's **and Cote Blanche* -** Max of 176 Acres, Max of 102 AAHU's

These projects are surrounded by agricultural land and industry where noise is produced by consistent and sporadically heavy traffic on adjacent and nearby roadways as well as industrial plant and agricultural operations.

3.2.2.12 Hazardous, Toxic, and Radioactive Waste

The proposed mitigation sites were surveyed via aerial photographs, topographic maps, and database searches in the four Zone Improvement Plan (ZIP) code areas where they would be located. Although there were numerous small incidents recorded in the database searches, none of the recorded incidents, either individually or cumulatively, would have any adverse effects within the proposed mitigation areas. The proposed sites are all on property that has not been

developed within historic times. The probability of encountering HTRW on any of the sites is very small. Prior to use of any site a Phase 1 Environmental Site Assessment would be completed for the project area.

3.2.2.12.3 Gravity - 75.2 Acres, 40 AAHU's

This mitigation project area is located on agricultural land with one petroleum product pipeline crossing the site. No oil/gas wells are present on site, no data base issues were noted within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.4 Feliciana - 267 Acres, 156 AAHU's

This project is located on agricultural land with no petroleum product pipelines on site, no oil/gas wells on site, no database issues within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.5 GBRPC - 134.9 Acres, 54 AAHU's
This mitigation project is located on agricultural land with no petroleum product pipelines, no oil/gas wells on site. Some database issues were noted within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW.

3.2.2.12.6 Saint James - 1,246 Acres, 676 AAHU's

This project is located on agricultural land with several petroleum product pipelines and several plugged and abandoned oil/gas wells on site. Several data base issues were noted within one mile of the proposed site but no RECs were identified on site. There is a low probability of encountering HTRW on the site.

3.2.2.12.7 Amite - 368.6 Acres, 236 AAHU's

This proposed site is in a rural area and contains several gravel pits. There are no petroleum product pipelines, no oil/gas wells on site, no data base issues within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.8 Krotz - 147.2 Acres, 73 AAHU's

This project is located on the Sherburne Wildlife Management Area in the Atchafalaya National Wildlife Refuge with no petroleum product pipelines, no oil/gas wells on site, no data base issues within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.9 TPSB - 483.8 Acres, 248 AAHU's

This project is located on agricultural land with two petroleum product pipelines crossing the site. No oil/gas wells are present on site, some data base issues were noted within one mile of

the site, but no RECs were identified. There is a low probability of encountering HTRW on this site.

3.2.2.12.10 Rosedale - 224.8 Acres, 113 AAHU's

This project is located on agricultural land with no petroleum product pipelines, no oil/gas wells on site, no data base issues within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.11 Sunset Ridge - 324 Acres, 168 AAHU's

This project is located on agricultural land with no petroleum product pipelines. Two plugged and abandoned oil/gas wells are on site, but no data base issues were noted within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.12.12 Albania South* - Up to 192.1 Acres, up to 96 AAHU's

This project is located on agricultural land with one petroleum product pipeline and no oil/gas wells on site. Some data base issues were noted within one mile of the proposed site, but no RECs were identified. There is a low probability of encountering HTRW.

3.2.2.12.13 Albania North* - Max of 657 Acres, max of 343 AAHU's

This project is located on agricultural land with three petroleum product pipelines and four plugged and abandoned oil/gas wells on site. Some data base issues were noted within one mile of the proposed site but no RECs were identified on site. There is a low probability of encountering HTRW on the site.

3.2.2.12.14 Cote Blanche* - Max of 176 Acres, max of 102 AAHU's

This project is located on agricultural land with two petroleum product pipelines on site. No oil/gas wells are present on site, some data base issues were noted within one mile of the site, but no RECs were identified. There is a low probability of encountering HTRW on the site.

3.2.2.13 Socioeconomics/Land Use and Transportation

3.2.2.13.1 Ascension - 55.8 Acres, 29 AAHU's

This project is located in Ascension Parish. Ascension Parish has had a steady increase in its population. According to the 1990 and 2000 census, this increase was recorded at 32%. As the population increases, the margin of percentage increase is lower for the forecasted future. With this forecasted increase in population, income per capita also increases but not as much as other parishes with similar population increase rates. Another distinction that can be made for Ascension Parish is that farming activities are growing at a faster rate than other parishes even though the contribution of the farming practices are minimal to the total proprietor profits.

Farming income increases even with a decreasing amount of farm land acreage. With this in mind, analysts are able to assume that farms are being more efficient and productive with their farm land. The potential haul road for this area would be via LA-941.

3.2.2.13.2 Saint John* - 94.7 Acres, 42 AAHU's

This project is located in St. John Parish. St. John had a population of 40,000 in 1990 and this number increased by 14% by 2010. For the future, St. John is expecting a close to 2.3% increase in population from 2010 to the year 2030. Income per capita is expected to have a steady increase from 2010 to 2030. Income increased from 1990 to 2010 134% and income is predicted to continue to increase 94% from 2010 to 2030. This income increase is mainly focused on non-farm proprietor profits. The potential haul roads for this area would be US 61 and/or LA 44. Annual Average Daily Traffic (AADT) for these roadways in 2017 was 37,552 and 7,787 respectively.

3.2.2.13.3 Gravity - 75.2 Acres, 40 AAHU's

This project is located in Ascension Parish. See Ascension above. The potential haul road for this area would be LA 22. Annual Average Daily Traffic (AADT) for this roadway in 2016 was 2,257.

3.2.2.13.4 Feliciana - 267 Acres, 156 AAHU's

This project is located in East Feliciana Parish. East Feliciana Parish is predicted to see migration out of its borders in the near future. In the 2010 Census, the Parish had 20,000 citizens inhabiting Parish, however this number is forecasted to decrease to 16,000 thousand by the year 2040. The income per capita for this Parish is 33,122 in the 2010 census and this number is projected to increases to 90,851 by 2040. Even though the Parish is forecasted to see a decrease in population, East Feliciana Parish is still having steady healthy growth in its economy. East Feliciana Parish will see an increase in its agriculture activities to help earnings in the forecasted future. The Parish is expected to earn 6.45% of its total income from farm activities in 2040 compared to earning less than 1% in 2010. The potential haul road for this area would be Par Rd. 5-118. Annual Average Daily Traffic (AADT) for this roadway in 2018 was 8,878.

3.2.2.13.5 GBRPC - 134.9 Acres, 54 AAHU's

This project is located in East Baton Rouge Parish. East Baton Rouge Parish is unique in that this parish is expected to have fluctuations in its population in the future. It is forecasted to have a slight population increase from 2010 to 2020 and then a more stagnant/decreasing trend for the future. The income per capita in this parish increased by 120% from 1990 to 2010 and is forecast to increase 74% from 2010 to the year 2030. The total Proprietor profits increased by 228% from 1990 to 2010 for Baton Rouge and are expected to increase by 90% from 2010 to 2030. This is a generous increase for a Parish considering it will not have a drastic increase in its population. The potential haul road for this area would be LA 325. Annual Average Daily Traffic (AADT) for this roadway in 2017 was 25,280.

3.2.2.13.6 Saint James - 1,246 Acres, 676 AAHU's

This project is located in the St. James Parish. St. James Parish has a stagnant population with a little increase expected in the near future. The per capita income is expected to increase at $12,000-$20,000 per 10 years and is expected to be at around $111,556 in the year 2040. The income increase may also be explained by the expected steady increase in the total proprietor profits which consist mostly of non-farm profits. The unemployment in this parish is around 9% which is around 4-5% higher than the national average. The potential haul roads for this area would be LA3125 and/or LA 44. Annual Average Daily Traffic (AADT) for these roadways in 2018 was 5,252 and 1,527 respectively.

3.2.2.13.7 Amite - 368.6 Acres, 236 AAHU's

This project is located in East Feliciana Parish. See Feliciana above. The potential haul roads for this area would vary among sites but would include LA-960, Boeneke Road, LA-37, and LA-448.

3.2.2.13.8 Krotz - 147.2 Acres, 73 AAHU's

This project is located in the Pointe Coupee Parish. Pointe Coupee parish is not expected to experience much change in its population in the future. The population increased by 1% from 1990 to 2010 and is expected to decrease from 2010 to the year 2030 by a little less than 1%. The income per capita saw a drastic increase of 176% from 1990 to 2010 and is expected increase by 93% from 2010 to 2030. This increase could be spotted on the total proprietor profit earnings and from the increasing profits from farming. Pointe Coupee Parish has seen a 17% increase in farming profits from 1990 to 2010. This Parish is another example of a Parish that is increasing the efficiency and utilization of the existing farms. The potential haul roads for this area would be LA 1 and/or LA 418. Annual Average Daily Traffic (AADT) for these roadways in 2017 was 3,448 and 482 respectively.

3.2.2.13.9 TPSB - 483.8 Acres, 248 AAHU's

This project is located in West Baton Rouge Parish. West Baton Rouge Parish is expected to see a steady increase in population. Recorded for the census in 1990, 19,190 people lived in this Parish. In the 2010 Census, this number increased to 23,950 people and is expected to rise to around 30,130 by the year 2040. According to the 1990 and the 2000 census, this parish increased its income per capita by 56% in 10 years. With the given data, the income per capita is expected to increase to $104,876 per person in 2040. West Baton Rouge Parish has a small percentage of farm earnings that contributes to the total income. Farming activity was less than 4% of the total income in the 2010 census and this number is expected to decrease. The potential haul road for this area would be LA 984. Annual Average Daily Traffic (AADT) for this roadway in 2016 was 2,725.

3.2.2.13.10 Rosedale - 224.8 Acres, 113 AAHU's

This project is located in the Iberville Parish. In terms of population, Iberville Parish has more of a stagnant/declining trend according to the 1990, 2000 and 2010 census. The 2010 census states that there are 33,360 citizens residing in Iberville and this number is forecasted to be 28,270 in the year 2040. Analyzing the 1990 and 2000 census shows that Iberville Parish had a 67% increase in total proprietors profits up to the year 2000, which is expected to grow at a similar rate until 2040. In 2007, Iberville had 85,729 acres of farm land and 181,624 acres of usable farm land. This is indicator shows the impact that farmland will have on income earned in the future. The potential haul roads for this area would be LA 77 and/or LA 76. Annual Average Daily Traffic (AADT) for these roadways in 2015 and 2018 was 2,072 and 566 respectively.

3.2.2.13.11 Sunset Ridge - 324 Acres, 168 AAHU's

This project is located in the St. Charles Parish. The population of the St. Charles community increased from 42,470 in 1990 to 52840 in 2010 and is expected to increase at a similar rate through 2030 and 2040. The income per capita in St. Charles Parish was at around $16,908 in 1990 and increased by 134% in 2010. This income per capita is also expected to increase by 94% from 2010 to 2030. This increase is nominal; we would have to factor in the rate of inflation and adjust accordingly to show a real increase in income per capita. Almost all of the income of this Parish is earned through non-farm proprietor profits and this is projected remain unchanged in the future. The potential haul road for this area would be Bayou Gulch Road. Annual Average Daily Traffic (AADT) for this roadway in 2016 was 2,970.

3.2.2.13.12 Albania South* -Up to 192.1, up to 96 AAHU's

This project is located in St. Mary Parish. See Bayou Vista above. The potential haul roads for this area would be US 90 and LA 182. Annual Average Daily Traffic (AADT) for these roadways in 2014 was 22,496 and 4,229, respectively.

3.2.2.13.13 Albania North* - Max of 657 Acres, max of 96 AAHU's

This project is located in the St. Mary Parish. St. Mary Parish recorded the highest percentage increase in their income per capita even despite a decreasing population. In 1990, St. Mary had 58,000 citizens which decreased 6% in 2010 and is expected to decrease 5% by2030. The potential haul road for this area would be LA 84. Annual Average Daily Traffic (AADT) for this roadway in 2017 was 484.

3.2.2.13.14 Cote Blanche* - Max of 176 Acres, max of 102 AAHU's

This project is located in the St. Mary Parish. See Albania North above. The potential haul road for this area would be LA 83. Annual Average Daily Traffic (AADT) for this roadway in 2017 was 540.

3.2.2.14 Prime and Unique Farmlands

3.2.2.14.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres,

54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's

All of these projects are located on agricultural fields and contain prime or unique farmlands.

3.2.2.14.1 Amite - 368.6 Acres, 236 AAHU's

The Amite project is located in existing BLH forest and does not contain any prime or unique farmlands.

3.2.2.15 Natural and Scenic Rivers

3.2.2.15.1 Ascension - 55.8 Acres, 29 AAHU's**, Saint John* –** 94.7 Acres, 42 AAHU's**, Gravity –** 75.2 Acres, 40 AAHU's, **Feliciana** 267 Acres, 156 AAHU's, **GBRPC –** 134.9 Acres, 54 AAHU's, **Saint James –** 1246 Acres, 676 AAHU's**, TPSB –** 483.8 Acres, 248 AAHU's, **Rosedale –** 224.8 Acres, 113 AAHU's, **Sunset Ridge –** 324 Acres, 168 AAHU's, **Albania South* -** Up to 192.1 Acres, up to 96 AAHU's, **Albania North* –** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche*-** max of 176 Acres, max of 102 AAHU's, **Krotz –** 147.2 Acres, 73 AAHU's

These projects contain no Natural and Scenic Rivers.

3.2.2.15.2 Amite - 368.6 Acres, 236 AAHU's

The Amite project is located adjacent to the Amite River which is listed as a natural and scenic river from the Louisiana-Mississippi state line to La. Hwy. 37.

3.2.3 MITIGATION FOR SWAMP

3.2.3.1 Wetlands and other Surface Waters

3.2.3.1.1 Pine Island - 1,965 Acres, 775 AAHU's
The Pine Island project area is located along the northern shoreline of Lake Pontchartrain. The project area, consisting of the borrow site and the swamp restoration site, is located along the northern shoreline of Lake Pontchartrain in water depths of approximately nine feet and two feet respectively. Historically, the shorelines of the lake were bordered by cypress/tupelo gum swamps, fresh to intermediate marshes, and bands of bottomland hardwood forests bordering natural drainages and the lake rim in some areas. Historic agricultural use of the project area, including diking and pumping, contributed to the conversion of the site to open water.

The lake shoreline near the project area is a mixture of low density residential development and undeveloped wetlands, including second-growth swamp and bottomland hardwood forest, scrub/shrub wetlands and fresh to intermediate marshes.

3.2.3.1.2 Joyce - 1,126.1 Acres, 195 AAHU's
The Joyce project area is located within the Joyce Wildlife Management Area which is adjacent to the northwestern shore of Lake Pontchartrain. Historically the area was healthy cypress/tupelo gum swamp. In the early 20th century much of this historic swamp habitat was logged. A number of factors including subsidence, saltwater intrusion and herbivory by nutria has affected regeneration of the area. Currently the area is comprised of degraded swamp habitat with second-growth swamp species.

3.2.3.1.3 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs
See section 3.2.2.1.1. No wetlands are present.

3.2.3.2 Wildlife

3.2.3.2.1 Pine Island - 1,965 Acres, 775 AAHU's

The coastal wetlands in the LPB and MSRB provide important and fish and wildlife habitats, especially transitional habitat between estuarine and marine environments, used for shelter, nesting, feeding, roosting, cover, nursery, and other life requirements. Emergent fresh and intermediate wetlands are typically used by many different wildlife species, including: Seabirds; wading birds; shorebirds; dabbling and diving ducks; raptors; rails; coots and gallinules; nutria; muskrat; mink; river otter; and raccoon; rabbit; white-tailed deer; and American alligator (LCWCRTF & WCRA, 1999). All of these species are likely to be found in or near the project area.

The Louisiana Department of Wildlife and Fisheries has records of a wading bird nesting colony within one mile of the project site. The birds occasionally move their nesting sites so it is possible that a nesting site could be located in the vicinity of the project area.

Open water habitats such as Lake Pontchartrain provide wintering and multiple use functions for brown pelicans, various seabirds, and other open water residents such as laughing gulls and least terns, and migrants such as lesser scaup and double crested cormorants. (LCWCRTF & WCRA, 1999). Open water areas within the project area provide suitable habitat for many of these species, especially dabbling ducks, coots, and gallinules, which feed primarily on submerged aquatic vegetation.

3.2.3.2.2 Joyce - 1,126.1 Acres, 195 AAHU's

Degraded swamp habitats still provide some multiple use functions for many terrestrial and semi-aquatic species such as nutria, muskrat, mink, river otter, and raccoon, and reptiles including the American alligator, western cottonmouth, water snakes, speckled king snake, rat snake, and eastern mud turtle. There is potential for bald eagle nests and wading bird nesting colonies within the project area.

3.2.3.2.3 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

See section 3.2.2.2.1

3.2.3.3 Threatened and Endangered Species

3.2.3.3.1 Pine Island - 1,965 Acres, 775 AAHU's

Of the listed animal and plant species occurring in St. Tammany Parish, the West Indian manatee; Gulf sturgeon; and Kemp's ridley, loggerhead, and green sea turtles have the potential to be found in the proposed borrow area in Lake Pontchartrain. It would be highly unlikely that any of the listed species would be found in the proposed project area due to its shallow depths (around 2 ft.) and extremely limited access. All of these species are typically found in deeper water where they are able to maneuver and forage effectively.

West Indian Manatee

The West Indian manatee is Federally and state-listed as endangered and also is protected under the Marine Mammal Protection Act of 1972, under which it is considered depleted (USFWS 2001). Critical habitat for the manatee has been designated in Florida, but not in Louisiana (USFWS 1977). The manatee is a large gray or brown aquatic mammal that may reach a length of 13 ft. and a weight of over 2,200 pounds. It occurs in both freshwater and saltwater habitats within tropical and subtropical regions. The primary human-related threats to the manatee include watercraft-related strikes (impacts and/or propeller strikes), crushing and/or entrapment in water control structures (flood gates, navigation locks), and entanglement in fishing gear, such as discarded fishing line or crab traps (USFWS 2007).

The manatee can occur throughout the coastal regions of the southeastern United States and may travel greater distances during warmer months; it has been sighted as far north as Massachusetts and as far west as Texas. However, the manatee is a subtropical species with little tolerance for cold, and it returns to and remains in the vicinity of warm-water sites in peninsular Florida during the winter (USFWS 2001, USFWS 2007). Thus, the manatee is not a year-round resident in Louisiana, but it may migrate there during warmer months. Manatees prefer access to natural springs or manmade warm water and waters with dense beds of submerged aquatic or floating vegetation. Manatees prefer to forage in shallow grass beds that are adjacent to deeper channels. They seek out quiet areas in canals, creeks, lagoons, or rivers and use deeper channels as migratory routes (USFWS 1999).

There have been 110 reported sightings of manatees in Louisiana since 1975 (LDWF 2005). Sightings in Louisiana, which have been uncommon and sporadic, have included occurrences in Lake Pontchartrain as well as the Amite, Blind, Tchefuncte, and Tickfaw Rivers. Between 1997 and 2000, there were approximately 16 sightings in the Lake Pontchartrain area and a general increase in the number of manatees per sighting (Abadie et al. 2000). Sightings of the manatee in the LPB have increased in recent years, and in late July 2005, 20 to 30 manatees were observed in the lake from the air (Powell and Taylor 2005). In order to minimize the potential

for construction activities to cause adverse impacts to manatees, the following standard manatee protection measures would be implemented when activities are proposed that would impact habitat where manatees could occur:

All contract personnel associated with the project would be informed of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel would be responsible for observing water-related activities for the presence of manatees. Temporary signs would be posted prior to and during all construction/dredging activities to remind personnel to be observant for manatees during active construction/dredging operations or within vessel movement zones (i.e., the work area), and at least one sign would be placed where it is visible to the vessel operator. Siltation barriers, if used, would be made of material in which manatees could not become entangled and would be properly secured and monitored. If a manatee is sighted within 100 yards of the active work zone, special operating conditions would be implemented, including: moving equipment would not operate within 50 ft of a manatee; all vessels would operate at no wake/idle speeds within 100 yards of the work area; and siltation barriers, if used, would be re-secured and monitored. Once the manatee has left the 100-yard buffer zone around the work area of its own accord, special operating conditions would no longer be necessary, but careful observations would be resumed. Any manatee sighting would be immediately reported to the U.S. Fish and Wildlife Service (337/291-3100) and the Louisiana Department of Wildlife and Fisheries (LDWF), Natural Heritage Program (225/765-2821).

Gulf Sturgeon

The Gulf sturgeon was listed as threatened throughout its range on 30 September 1991. The Gulf sturgeon is an anadromous fish that migrates from salt water into coastal rivers to spawn and spend the warm summer months. Subadults and adults typically spend the three to four coolest months of the year in estuaries or Gulf waters foraging before migrating into the rivers. This migration typically occurs from mid-February through April. Most adults arrive in the rivers when temperatures reach 21 degrees Celsius and would spend eight to nine months each year in the rivers before returning to estuaries or the Gulf of Mexico by the beginning of October. Thus, the Gulf sturgeon spends the majority of its life in fresh water (USFWS and Gulf States Marine Fisheries Commission [GSMFC] 1995). Spawning takes place in upper river reaches and appears to be river-specific. After spawning, most adults move downstream to summer holding or resting areas. Eggs are demersal and adhesive, tending to sink and adhere to the bottom (USFWS and GSMFC 1995). Spawning areas require clean cobble substrate or gravel to which eggs can adhere and in which developing larvae can find shelter (USFWS and NMFS 2003).

Subadult and adult Gulf sturgeon do not feed significantly in freshwater; instead, they rely almost entirely on estuarine and marine areas for feeding. Young-of-the-year and juveniles feed mostly in the riverine environment (USFWS and NMFS 2003). The diet of the Gulf sturgeon consists predominantly of invertebrates; the types and sizes consumed vary with life history stage and annual migration. Juveniles consume amphipods, isopods, annelid worms, aquatic insects, small bivalves, and small shrimp. Subadults also consume mud or ghost shrimp. Adults in estuaries and coastal waters consume mainly amphipods, isopods, gastropods, brachiopods, polychaete worms, lancelets, and shrimp (USACE 2006a).

Critical habitat identifies specific areas that have been designated as essential to the conservation of a listed species. Critical habitat units (areas) designated for the Gulf sturgeon in Louisiana include the eastern half of Lake Pontchartrain east of the causeway, Lake Catherine, Lake Borgne, out into the Mississippi Sound (USACE 2006a). Studies conducted by the LDWF have shown the presence of Gulf sturgeon in Lake Pontchartrain during the winter and during periods of migration between marine and riverine environments. Most records of Gulf sturgeon from Lake Pontchartrain have been located east of the causeway, particularly on the eastern north shore. Gulf sturgeon have also been documented west of the causeway, typically near the mouths of small rivers (USFWS and NMFS 2003).

Kemp's Ridley, Loggerhead, Green and Sea Turtles

Sea turtles are air-breathing reptiles with large flippers and streamlined bodies. They inhabit tropical and subtropical marine and estuarine waters around the world. Of the seven species in the world, six occur in waters of the U.S., and all are listed as threatened or endangered. The three species potentially occurring in Lake Pontchartrain and Lake Borgne in the vicinity of the mitigation projects have a similar appearance, though they differ in maximum size and coloration. The Kemp's ridley sea turtle is the smallest sea turtle – adults average about 100 pounds with a carapace length of 24 to 28 inches and a shell color that varies from gray in young individuals to olive green in adults. The loggerhead sea turtle is the next largest of these three species – adults average about 250 pounds with a carapace length of 36 inches and a reddish brown shell color. The green sea turtle is the largest of these three species – adults average 300 to 350 pounds with a length of more than 3 feet and a brown coloration (its name comes from its greenish colored fat). The Kemp's Ridley has a carnivorous diet that includes fish, jellyfish, and mollusks. The loggerhead has an omnivorous diet that includes fish, jellyfish, mollusks, crustaceans, and aquatic plants. The green has a herbivorous diet of aquatic plants, mainly sea grasses and algae, which is unique among sea turtles. All three species nest on sandy beaches, which are not present near Lake Pontchartrain. The life stages that may occur in Lake Pontchartrain and Lake Borgne range from older juveniles to adults.

3.2.3.3.3 Joyce - 1,126.1 Acres, 195 AAHU's**, Albania South –** up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

See section 3.2.2.3.1

3.2.3.4 Fisheries, Aquatic Resources and Water Quality

3.2.3.4.1 Pine Island - 1,965 Acres, 775 AAHU's

The NMFS has determined that Lake Pontchartrain and adjacent wetlands provide nursery and foraging habitats which support varieties of economically important marine fishery species, including striped mullet, Atlantic croaker, Gulf menhaden, spotted and sand sea trout, southern flounder, black drum, and blue crab. Some of these species also serve as prey for other fish species managed under the MSFCMA by the Gulf of Mexico Fishery Management Council (e.g.,

mackerel, snapper, and grouper) and highly migratory species managed by NMFS (e.g., billfish and shark).

The existing submerged aquatic vegetation and shallow open water within the project area, and adjacent wetlands, provide important estuarine fisheries habitat, including transitional habitat between estuarine and marine environments used by migratory and resident fish, as well as other aquatic organisms for nursery, foraging, spawning, and other life requirements. Historically and currently, the area provides valuable recreational and commercial fishing opportunities a wide variety of finfish and shellfish (Rounsefell, 1964; Penland et al., 2002).

The assemblage of species in the proposed project area is largely dictated by salinity levels and season. During low-salinity periods, species such as Gulf menhaden, blue crab, white shrimp, blue catfish, largemouth bass and striped mullet are present in the project area. During high-salinity periods, more salt-tolerant species such as sand seatrout, spotted seatrout, black drum, red drum, Atlantic croaker, sheepshead, southern flounder, Spanish mackerel, and brown shrimp may move into the project area, especially the borrow area in Lake Pontchartrain. Wetlands throughout the project area also support small resident fishes and shellfish such as least killifish, sheepshead minnow, sailfin molly, grass shrimp and others. Those species are typically found along marsh edges or among submerged aquatic vegetation, and provide forage for a variety of fish and wildlife.

3.2.3.4.2 Joyce - 1,126.1 Acres, 195 AAHU's
The fisheries and aquatic resources in the Joyce project area is very similar to that discussed for Pine Island. See section 3.3.4.4.1

3.2.3.4.3 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

See section 3.2.2.4.1

3.2.3.5 Essential Fish Habitat

3.2.3.5.1 Pine Island - 1,965 Acres, 775 AAHU's, and **Joyce -** 1,126.1 Acres, 195 AAHU's
These projects are located within an area identified as essential fish habitat for postlarval/juvenile brown shrimp; postlarval/juvenile white shrimp; and postlarval/juvenile and adult red drum. The 2005 generic amendment of the FMP for the Gulf of Mexico, prepared by the Gulf of Mexico FMC, identifies EFH in the project area to be estuarine intertidal wetlands, submerged aquatic vegetation, estuarine water column, and mud substrates.

3.2.3.5.2 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

These project areas contain no EFH.

3.2.3.6 Cultural Resources

3.2.3.6.1 Pine Island - 1,965 Acres, 775 AAHU's, **Joyce -** 1,126.1 Acres, 195 AAHU's**, Albania South –** up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

See Table 3-4.

3.2.3.7 Recreational Resources

3.2.3.7.1 Pine Island - 1,965 Acres, 775 AAHU's

Recreational use of the project area is moderate as few opportunities exist on-site. The occasional opportunity for bird watching and sightseeing exists from the single gravel road into the site or by boat from the nearby natural bayous and man-made canals. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity creating opportunities for both consumptive and non-consumptive forms of recreation.

3.2.3.7.2 Joyce - 1,126 Acres, 195 AAHU's

Conditions are similar to those discussed for the Pine Island project to a lesser degree due to access limited to boat traffic only to the surrounding Joyce Wildlife Management Area.

3.2.3.7.3 Albania South - up to 192.1 Acres, 76 AAHU's

This project area has the same conditions as referenced in Albania North.

3.2.3.7.4 Albania North - up to 964.8 Acres, up to 380 AAHU's

Recreational use of the project area is moderate as few opportunities currently exist on-site with consideration to the Bayou Teche Paddle Trail. This 135 mile long paddle trail serves as a source of both consumptive and non-consumptive recreation opportunities for paddlers and boaters along the waterway. Other water based recreation resources come from the nearby Lake Fausse Pointe to the northeast.

3.2.3.7.5 Cote Blanche - up to 446 Acres, up to 180 AAHU's

Conditions are similar to those discussed for the Ascension project in section 3.2.2.7, except to a greater extent due to the site's proximity the Intracoastal Waterway to the south.

3.2.3.8 Aesthetic Resources

3.2.3.8.1 Pine Island - 1,965 Acres, 775 AAHU'sThe vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion as it transitions from the Southern Coastal Plain ecoregion.

- Existing Structures: The proposed site currently features gravel access roads used primarily for access to recreation camps. Pipeline canals and former logging canals dissect the area.

- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include natural bayous and man-made canals connecting to Lake Pontchartrain which is south of the project area.
- Land Use: Land use in the area is primarily swamp, although there are small pockets of cleared land along canals and bayous where a few recreation camps exist.
- Landform and Vegetation: The surrounding habitat is composed of a transitional swamp due to salinity infiltration. Evidence of canopy tree decline is evident and coastal prairie grasses are prominent. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site is limited to a single gravel road and boat traffic.
- Other Factors that Affect Visual Resources: User activity is limited in this region, and is primarily relegated to a small number of camp owners.

3.2.3.8.2 Joyce - 1,126 Acres, 195 AAHU's

The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion as it transitions from the Southern Coastal Plain ecoregion.

- Existing Structures: The proposed site currently features pipeline canals and former logging canals dissecting the area.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include natural bayous and man-made canals connecting to Lake Pontchartrain which is south of the project area.
- Land Use: Land use in the area is primarily swamp and is surrounded by the Joyce Wildlife Management Area.
- Landform and Vegetation: The surrounding habitat is composed of a transitional swamp due to salinity infiltration. Evidence of canopy tree decline is evident and coastal prairie grasses are prominent. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site is limited to boat traffic only.
- Other Factors that Affect Visual Resources: User activity is limited in this region due to access by boat only.

3.2.3.8.3 Albania South - up to 192.1 Acres, 76 AAHU's

This project area has the same conditions as referenced in Albania North.

3.2.3.8.4 Albania North - up to 964.8 Acres, up to 380 AAHU's

- The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.
  Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.

- Water: The Bayou Teche Paddle Trail is a 135 mile long trail through 4 parishes and 13 towns along one of the most historically and culturally significant bayous in the state. Other major water resources Lake Fausse Pointe to the northeast.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of both multi-family and single-family residential.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 87 to the south. The drive along this thoroughfare is scenic and visually interesting and is designated a Louisiana Scenic Byway by the Louisiana Department of Culture, Recreation and tourism.
- Other Factors that Affect Visual Resources: User activity is moderate in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of residential commuters.

3.2.3.8.5 Cote Blanche - up to 446 Acres, up to 182 AAHU's

- The vicinity of the project area is characteristic of the Mississippi Alluvial Plain ecoregion.
  Existing Structures: The proposed site currently features gravel access roads used primarily for farm operations.
- Water: There are no known, State designated scenic rivers or streams remotely near the project area. Other major water resources include the main channel of the Intracoastal Waterway to the south.
- Land Use: Land use in the area is primarily agricultural, although there are significant pockets of industrial.
- Landform and Vegetation: The surrounding habitat is composed of a broad mixture of open fields fronting the major thoroughfares of the region, surrounded by a backdrop of deep, wooded areas. Overall, the habitat around the project area exhibits moderate plant species diversity and moderately high animal diversity. There are no known specifically identified protected trees or other plant materials in the immediate area.
- Access: Public visual access to the project site can be taken from Louisiana State Highway 83 through the site. The drive along this thoroughfare is scenic and visually interesting.
- Other Factors that Affect Visual Resources: User activity is limited in this region, and is primarily relegated to farm and truck traffic, though includes a small percentage of industry commuters.

3.2.3.9 Air Quality

3.2.3.9.1 Pine Island - 1,965 Acres, 775 AAHU's
The project site is located in St. Tammany Parish which is currently in attainment of all NAAQS.

3.2.3.9.2 Joyce - 1,126 Acres, 195 AAHU's

The project site is located in Tangipahoa Parish which is currently in attainment of all NAAQS.

3.2.3.9.3 Albania South - up to 192.1 Acres, 76 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.3.9.4 Albania North - up to 964.8 Acres, up to 380 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.3.9.5 Cote Blanche - up to 446 Acres, up to 182 AAHU's

The project site is located in St. Mary Parish which is currently in attainment of all NAAQS.

3.2.3.10 Water Quality

3.2.3.10.1 Pine Island - 1,965 Acres, 775 AAHU's

The water quality of the hydrologic unit which this project is in does not fully support one of its designated uses: Fish and Wildlife Propagation. The suspected sources of these impairments include loss of wetlands, littoral/shore area modifications, atmospheric deposition of toxins, and habitat modification. Lake Pontchartrain, the project's borrow source, is considered to fully support it designated uses.

3.2.3.10.2 Joyce - 1,126 Acres, 195 AAHU's

The water quality in the Joyce project area is very similar to that discussed for Pine Island. See section 3.2.4.10.1

3.2.3.10.3 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

None of these projects are located in or near any state water bodies and therefore no water quality standards or designated uses apply.

3.2.3.11 Noise

3.2.3.11.1 Pine Island - 1,965 Acres, 775 AAHU's
Pine Island has residential structures within 1,000 feet of the project. The area is adjacent to Lake Pontchartrain which is regularly used by recreational boaters. Noise is produced by occasional boat traffic.

3.2.3.11.2 Joyce - 1,126 Acres, 195 AAHU's

Joyce is located in a remote area surrounded by wetlands. Noise is produced by occasional boat traffic.

3.2.3.11.3 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

See section 3.2.3.11.1 and 3.2.3.11.2

3.2.3.12 Hazardous, Toxic, and Radioactive Waste

3.2.3.12.1 Pine Island - 1,965 Acres, 775 AAHU's

The project area consists of open water with no petroleum product pipelines. No oil/gas wells occur on site, no data base issues have been found within one mile of the proposed site, and no RECs have been identified. There is a low probability of encountering HTRW on this site.

3.2.3.12.2 Joyce - 1,126 Acres, 195 AAHU's
Swamp land with no petroleum product pipelines, no oil/gas wells on site, no data base issues within one mile of the proposed site, and no RECs were identified. There is a low probability of encountering HTRW.

3.2.3.12.3 Albania South - up to 192.1 Acres, up to 76 AAHU's

Agricultural land with one petroleum product pipeline and no oil/gas wells on site. Some data base issues were noted within one mile of the proposed site, but no RECs were identified. There is a low probability of encountering HTRW.

3.2.3.12.4 Albania North - up to 964.8 Acres, up to 380 AAHU's

Agricultural land with three petroleum product pipelines and four plugged and abandoned oil/gas wells on site. Some data base issues were noted within one mile of the proposed site but no RECs were identified on site. There is a low probability of encountering HTRW.

3.2.3.12.5 Cote Blanche - up to 446 Acres, up to 182 AAHU's

Agricultural land with two petroleum product pipelines on site. No oil/gas wells are present on site, some data base issues were noted within one mile of the site, but no RECs were identified. There is a low probability of encountering HTRW.

3.2.3.13 Socioeconomics/Land Use, Transportation, and Commercial Fisheries

3.2.3.13.1 Pine Island - 1,965 Acres, 775 AAHU's

This project is located in St. Tammany Parish. According to the 1990 and 2010 census, St. Tammany Parish had a 62% increase in their total population. For the future forecasted, even though the population grows, the growth is at much lower rate. The per person income in this

Parish was at around $46,995 in the 2010 census and this number is expected to rise to $72,842 by 2020. With higher population and an increasing population, the income per capita increase is also at a higher percentage. The Total proprietor profits increased from 454.03 mil to 1.1 billion by the year 2010 when looked at the 1990 and 2010 census. This rate of change is expected to be similar up to the year 2040. The farm use will continue to be very minimal in the earnings of the St. Tammany Parish. With a high population and steady growth, St. Tammany Parish has a bright future in economics standpoint. Access to this area would be via Guste Island Road, Grand Rue Port Louis Road and South Chenier Drive. Economically important fisheries associated with this project area include fisheries of blue crab, crawfish, blue catfish, and channel catfish.

3.2.3.13.2 Joyce - 1,126 Acres, 195 AAHU's

This project is located in Tangipahoa Parish. In 1990 Tangipahoa Parish had approximately 86,000 citizens residing in the Parish and this number increased by 42% by 2010 to be at 121,000. This Parish is forecasted to have a 10% more growth in their population from 2010 to 2030. With the increasing population, the income per capita also drastically increased. The income per capita was at $12,716 in 1990 and increased by 178% by 2010 and is also forecasted to increase 69% more from 2010 to 2030. Although income generated from Farm profits were around $13 million in 1990, farm activities in this Parish hit an all-time low in 2010 generating a loss of $2.26 million. A 117% decrease of farm profits from 1990 to 2010 and this is why we can contribute the increase in per capita income solely on non-farm proprietor profits in this Parish. Access to this area is unknown at this time.

3.2.3.13.3 Albania South - up to 192.1 Acres, 76 AAHU's

This project is located in St. Mary Parish. See Albania North above. The potential haul roads for this area would be US 90 and LA 182. Annual Average Daily Traffic (AADT) for these roadways in 2014 was 22,496 and 4,229, respectively.

3.2.3.13.4 Albania North - up to 964.8 Acres, up to 380 AAHU's

St. Mary Parish recorded the highest percentage increase in their Income per capita even though they had a decreasing population. In 1990, St. Mary had 58,000 citizens in their Parish and this number was decreased by 6% from 1990 to 2010 and is expected to decrease 5% more from 2010 to 2030. This increase in their income is contributed to the increase in nonfarm proprietor profits. It is projected that their farming practices will turn out to be negative in the future. They will need to alter their farming practices to utilize their usable farmland in a way that generates more profit. The potential haul roads for this area would be US 90 and LA 182. Annual Average Daily Traffic (AADT) for these roadways in 2014 was 22,496 and 4,229, respectively. The potential haul road for this area would be LA 84. Annual Average Daily Traffic (AADT) for this roadway in 2017 was 484.

3.2.3.13.5 Cote Blanche - up to 446 Acres, up to 182 AAHU's

This project is located in St. Mary Parish. See Albania North above. The potential haul road for this area would be LA 83. Annual Average Daily Traffic (AADT) for this roadway in 2017 was 540.

3.2.3.14 Prime and Unique Farmlands

3.2.3.14.1 Pine Island - 1,965 Acres, 775 AAHU's, and **Joyce -** 1,126 Acres, 195 AAHU's

These projects occur in open water and existing wetlands and therefore contain no prime or unique farmlands.

3.2.3.14.2 Albania South – up to 192.1 Acres, up to 76 AAHUs**, Albania North –** up to 964.8 Acres, up to 380 AAHUs**, Cote Blanche –** up to 446 Acres, up to 182 AAHUs

All of these projects contain prime or unique farmlands.

4. ENVIRONMENTAL CONSEQUENCES OF THE FINAL ARRAY OF MITIGATION PROJECTS

4.1 INTRODUCTION

This section describes the direct, indirect and cumulative effects of mitigation projects individually. Chapters 5 and 6 describe the direct, indirect and cumulative effects of the projects, which consist of the combination of projects that fulfill the whole mitigation need incurred by the BBA Construction Projects. Table 4-1 shows those significant resources found within the study area, and notes whether they would be impacted by implementation of the projects. The period of impact analysis begins when project construction is complete and generally extends for 50 years for USACE projects.

Direct impacts are those that are caused by the action taken and occur at the same time and place (40 CFR §1508.8(a)). Indirect impacts are those that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (40 CFR §1508.8(b)). Cumulative impacts are the effects on the environment that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions.

Pine Island, Joyce and Amite are the only projects among the alternatives that would potentially affect fisheries and aquatic resources and Pine Island is the only project that would potentially affect Navigation, commercial fisheries, and Essential Fish Habitat. Since no other projects would include potential impacts to the aforementioned resources, those resources will only be discussed for the Pine Island, Joyce and Amite projects. Amite is the only project that includes Natural and Scenic Rivers and will therefore be the only project that discusses that resource. Water quality will only be discussed for Pine Island, Joyce and Amite as they are the only projects within or adjacent to state water bodies.

The Environmental Justice team analyzed the BBA mitigation sites and determined that the type of construction activities taking place at the mitigation sites would not cause high, adverse impacts to any communities that are in the vicinity of the action nor would there be permanent high, adverse impacts to communities. For these reasons, EJ will not be further discussed.

Construction activities associated with swamp and BLH mitigation projects in rural settings, typically include the construction of new gravel access roads, degrading surface areas to a depth of .5ft to 1.5ft (+/- 0.5ft), backfilling of existing ponds (site specific), minor grading to ensure positive drainage, harrowing soil to receive planting, and planting of canopy and mid-story plant species. Impacts to surrounding communities include noise from equipment that is used to prepare sites for plant materials and the movement of trucks to deliver and remove debris. Noise from construction activities would be temporary. There would be short term impacts to traffic during construction, which are not expected to be significant.

Best Management Practices (BMP) would be implemented during construction to reduce or minimize any potential impacts. Project impacts to air quality are not expected to be high and averse, and for mitigation sites that are in a Parish that has been designated as a NAAQS

maintenance area for ozone or other emissions, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. Otherwise, site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. Beneficial long-term impacts could be felt by the nearby communities and include beneficial impacts to water quality and other resources due to the creations of wetlands as agricultural lands and open water would be converted to forested wetland habitat.

4.2 MITIGATION PROJECTS BY HABITAT TYPES

The mitigation projects examined here are based on their description found in section 2.5 and Appendix G. The use of mitigation banks and constructed mitigation projects are proposed. The mitigation projects are grouped by the type of habitat being mitigated, whether they are in or out of the LPB and/or MSRB and/or in or out of the Coastal Zone.

4.2.1 BLH-WET IN COASTAL ZONE

4.2.1.1 Wetlands and other Surface Waters

4.2.1.1.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wetlands and other surface waters would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of up to 99 AAHUs of BLH-Wet habitat within the LPB if some or all of the mitigation credit purchases take place outside of that basin.

4.2.1.1.2 Saint John - 94.7 Acres, 42 AAHU's

Direct Impacts
There would be a beneficial impact to wetlands as approximately 94.7 acres of agricultural land would be converted to BLH-Wet habitat.

Indirect Impacts and Cumulative Impacts
Implementation of this project would prevent an overall loss in the basin of BLH-Wet habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin would help retard the loss of wetlands.

4.2.1.1.3 Albania South – UP to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Saint John project except to a greater degree. However, this project would result in the permanent loss of 96 AAHUs of BLH-Wet habitat within the LPB as the mitigation would take place outside of that basin. This loss could reduce the overall wetland habitat in the LPB to a degree, but increase it within the Mississippi Alluvial Plain. Implementation of this project would prevent an overall loss in the study area of BLH-Wet habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the study area would help retard the loss of wetlands.

4.2.1.1.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.1.1.5 Cote Blanche – Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project except to a lesser degree.

4.2.1.2 Wildlife

4.2.1.2.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wildlife would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of 99 AAHUs of BLH-Wet habitat within the LPB if the mitigation takes place outside of that basin.

4.2.1.2.2 Saint John - 94.7 Acres, 42 AAHU's

Direct Impacts
Approximately 94.7 acres of agricultural field would be converted back to forested wetlands, its historic condition. Wildlife present at the time of construction would be temporarily displaced to adjacent habitats due to noise, movement and vibration. Some slower moving animals (e.g. moles and snakes) may experience demise during construction. It is anticipated that displaced animals would return once construction is complete and that the construction of high quality forested wetland habitat would provide additional area for the expansion of existing wildlife populations.

Indirect Impacts

With the restoration of approximately 94.7 acres BLH-Wet habitat, species that historically populated the area, and currently populate the adjacent/nearby forested areas, would again utilize the area. Wildlife abundance and diversity would increase in the area as a monoculture of agricultural crops would be replaced by a diversity of BLH-Wet species that would provide a variety of ecological niches for colonization. If bald eagle nests are discovered near the site, the National Bald Eagle Management Guidelines (Appendix J) would be followed during construction to avoid and minimize impacts to this species.

Cumulative Impacts
This project would prevent an overall loss in the basin of BLH-Wet habitat necessary for many wildlife species. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin, would help retard the loss of wetlands and overall decline of wildlife species within the basin and would be beneficial to preserving species bio-diversity.

4.2.1.2.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree. However, the LPB, where the BBA Construction Projects impacts occurred, would suffer from the permanent loss of 96 AAHUs of wildlife habitat as the mitigation would take place outside of that basin. This loss could reduce the overall wildlife populations in the LPB to a degree, but increase them within the Mississippi Alluvial Plain.

4.2.1.2.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.1.2.5 Cote Blanche – Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project except to a lesser degree.

4.2.1.3 Threatened and Endangered Species

4.2.1.3.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to threatened and endangered

species would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.3.2 Saint John - 94.7 Acres, 42 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.1.3.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.1.3.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.1.3.5 Cote Blanche - Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.1.4 Cultural Resources

CEMVN has determined that the proposed action constitutes an Undertaking as defined in 36 CFR § 800.16(y) and has the potential to cause effects on historic properties. Based on the aforementioned identification and evaluation, CEMVN has determined that there are multiple historic properties as defined in 36 CFR 800.16(l) within the APE (Table 3-3). At the present time it remains undetermined if many of the previously identified archaeological deposits are eligible for inclusion in the NRHP. Furthermore, several of the individual proposed TSP mitigation areas possess a high potential to contain additional un-recorded deposits and identification and evaluation for these properties is ongoing. Therefore, CEMVN has determined that that the proposed undertaking includes ground disturbing activities that have the potential to effect historic properties in a way that would directly or indirectly affect the characteristics that make the property eligible for the NRHP. However, no determination of effect under the NHPA pursuant to 36 CFR 800.4(d) is being made at this time. Following the completion of identification and evaluation for each individual property, CEMVN would consider ways to revise the Scope of Work (SOW) to substantially conform to the standards, and/or avoid or minimize adverse effects for NR listed or eligible historic properties and/or sites of religious or cultural Tribal significance.

At the feasibility level, there is insufficient funding and time to fully conduct all required NHPA cultural resources identification and evaluation and to determine any necessary avoidance, minimization, or mitigation measures in consultation with stakeholders and the agency is mandated by law to make a final decision on this undertaking within a timeframe that cannot accommodate the "Standard" Section 106 process described in Section 3.2.1.6. As the federal agency cannot fully determine how the undertaking may affect historic properties, the location of historic properties, or their significance and character at the present time [36 CFR § 800.14(b)(1)(ii)], prior to approving the undertaking, the agency is proposing to develop a project-specific programmatic agreement (PA) pursuant to 36 CFR § 800.14(b) in consultation with stakeholders in furtherance of CEMVN's Section 106 responsibilities for this undertaking (also see Appendix I).

The goal of this Section 106 consultation is to provide a framework for addressing this undertaking and establish protocols for continuing consultation with the LA SHPO, Tribal governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/THPO and other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, outline a standard review process for plans and specifications as they are developed, provide the measures CEMVN would implement to revise the APE in consultation with external stakeholders if necessary, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and determine the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation. The PA will be executed prior to the conclusion of the NEPA process. The PA would then govern CEMVN's subsequent NHPA compliance efforts.

4.2.1.4.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to cultural resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.4.2 Saint John – 94.7 Acres, 42 AAHU's, **Albania South –** Up to 192.1 Acres, up to 96 AAHU's, **Albania North-** Max of 657 Acres, max of 343 AAHU's, **Cote Blanche -** Max of 176 Acres, max of 102 AAHU's

For all proposed mitigation projects, CEMVN would follow its Section 106 procedures, described in Section 4.2.1.4, if this proposed project is carried forward as the TSP plan. Activities associated with this project have the potential to directly impact existing and

previously undocumented cultural resources that may exist within the project area. The CEMVN is developing a Programmatic Agreement with the LA SHPO, the Advisory Council on Historic Preservation, Federally recognized Indian Tribes, and other interested parties outlining the steps needed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects.

4.2.1.5 Recreational Resources

4.2.1.5.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to recreational resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.5.2 Saint John - 94.7 Acres, 42 AAHU's

Direct and Indirect Impacts
Flora and fauna that historically populated the area, and currently populate the adjacent/nearby forested areas, would again be established on the area once construction of this project is complete. Recreational resources such as wildlife viewing would be created as few opportunities for recreation currently exist on this site.

Cumulative Impacts
Recreational opportunities would continue to increase on the site as the habitat matures over time and would be maintained with perpetual conservation of the site. Other similar activities in the vicinity have and would continue to affect recreational quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat which promote recreation opportunities.

4.2.1.5.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.5.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.5.5 Cote Blanche - Max of 176, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.6 Aesthetic Resources

4.2.1.6.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to aesthetics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.6.2 Saint John - 94.7 Acres, 42 AAHU's

Direct and Indirect Impacts
The visual resources of the site would be temporarily impacted by construction activities related to implementing the proposed action and by transport activities needed to move equipment and materials to and from the site. However, this temporary impact would most likely affect visual resources from the immediate roadway. Flora and fauna that historically populated the area, and currently populate the adjacent/nearby forested areas, would again be established on the area. The pastoral and agricultural viewsheds from the immediate roadway would be replaced with native forests rich with biodiversity.

Cumulative Impacts
Visual resources to would continue to increase on the site as the habitat matures over time and would be maintained with perpetual conservation of the site. Other similar activities in the vicinity have and would continue to affect visual quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat in significant contrast to man-made land use patterns that involve stripping natural landscape features.

4.2.1.6.3 Albania South – Up to 192.2, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.6.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.6.5 Cote Blanche - Max of 176, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project except to a greater degree.

4.2.1.7 Air Quality

4.2.1.7.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to air quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.7.2 Saint John - 94.7 Acres, 42 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.1.7.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.1.7.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently

would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.1.7.5 Cote Blanche - Max of 176 Acres, max of 102 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.1.8 Noise

4.2.1.8.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to noise quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.8.2 Saint John - 94.7 Acres, 42 AAHU's

Direct Impacts and Indirect Impacts
Construction equipment necessary for the initial project construction phase would include dump trucks, bulldozers, tractors, graders, and similar equipment. Appendix B, Table B-19 presents the noise emission levels for construction equipment expected to be used during the proposed construction activities. This table shows the anticipated noise levels at various ranges based on data from the Federal Highway Administration (FHWA 2006). Noise levels may result in

wildlife avoiding the project area during construction; however, movement of equipment during construction would result in the same avoidance behaviors from wildlife species. Nearby residences could experience higher than ambient noise levels during construction, however these levels would be temporary during the period of construction and would be limited to daylight hours.

Cumulative Impacts
Construction of this project is not anticipated to add significantly to the cumulative effect of noise in the WBV basin as the construction activities would be temporary during the period of construction, restricted to daylight hours and avoidance of the project area by wildlife normally occurs from the movement of agricultural machinery in the area even without the additional noise.

4.2.1.8.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.1.8.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.1.8.5 Cote Blanche - max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
Noise impacts to wildlife would be the same as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree. Noise levels would not result in impacts to the human environment as the area is surrounded by agricultural land and industry.

4.2.1.9 Hazardous, Toxic, and Radioactive Waste

4.2.1.9.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts due to HTRW would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.9.2 Saint John - 94.7 Acres, 42 AAHU's

Direct, Indirect, and Cumulative Impacts
One petroleum pipeline is located within the mitigation site boundaries. No wells or well pits were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.1.9.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
One pipeline was identified on site. Impacts to pipelines would be avoided. Due to construction methods there is a low probability of encountering HTRW.

4.2.1.9.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
Three pipelines, four abandoned wells, and two well pits were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there would be a slight probability of encountering substances of concern or petroleum products in the soil near these wells. A site investigation would be conducted prior to final design and HTRW would be avoided to the extent practicable.

4.2.1.9.5 Cote Blanche - Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
Two pipelines were identified on site. No wells were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.1.10 Socioeconomics/Land Use and Transportation

4.2.1.10.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to socioeconomics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.10.2 Saint John - 94.7 Acres, 42 AAHU's

Direct, Indirect, and Cumulative Impacts
This project consists of up to approximately 94.7 acres of BLH-Wet creation, located on existing agricultural fields. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by

less than 0.5 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic during construction is expected to be less than 0.3 percent and is not considered significant.

4.2.1.10.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 192.1 acres of BLH-Wet Habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.24 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 2 percent and is not considered significant.

4.2.1.10.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 657 acres of BLH-Wet Habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.45 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 21 percent.

4.2.1.10.5 Cote Blanche - Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 176 acres of BLH-Wet Habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.56 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 19 percent

4.2.1.11 Prime and Unique Farmlands

4.2.1.11.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 99 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to prime and unique farmlands would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.1.11.2 Saint John - 94.7 Acres, 42 AAHU's

Direct Impacts
Approximately 94.7 acres of prime farmland would be impacted by this project. Once the site is developed for mitigation, this area could not be used as productive farmland in the future.

Indirect Impacts
Since the majority of the project area is presently under agricultural use, current agricultural production in the parish would be affected and would be expected to decrease minimally.

Cumulative Impacts
The implementation of this project would affect approximately 94.7 acres of prime farmland. The cumulative impacts to prime farmlands would be the impacts of the proposed project combined with other losses of prime farmland soils resulting from natural processes and development in the project parishes. A negligible adverse effect on agricultural production in the parishes would occur due to the small amount of prime farmland affected.

4.2.1.11.3 Albania South – Up to 192.1 Acres, up to 96 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource, except to a greater degree except to a greater degree.

4.2.1.11.4 Albania North- Max of 657 Acres, max of 343 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource, except to a greater degree except to a greater degree.

4.2.1.11.5 Cote Blanche - Max of 176 Acres, max of 102 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource, except to a greater degree except to a greater degree.

4.2.2 BLH-WET OUT OF COASTAL ZONE

4.2.2.1 Wetlands and other Surface Waters

4.2.2.1.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wetlands and other

surface waters would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of up to 702 AAHUs of BLH-Wet habitat within the LPB/MSRB if some or all of the mitigation takes place outside of those basin.

4.2.2.1.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
There would be a beneficial impact to wetlands within the project area as approximately 147.2 acres of low quality scrub shrub habitat would be replaced with approximately 147.2 acres of

high quality forested wetlands. However, this project would result in the permanent loss of 73 AAHUs of BLH-wet habitat within the LPB/MSRB as the mitigation would take place outside of that basin. This loss could reduce the overall wetland habitat in the LPB/MSRB to a degree, but increase it within the Mississippi Alluvial Plain. Implementation of this project would prevent an overall loss in the study area of BLH-Wet habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the study area would help retard the loss of wetlands.

4.2.2.1.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.1.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2 Wildlife

4.2.2.2.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wildlife would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of up to 702 AAHUs of BLH-Wet habitat within the LPB/MSRB if some or all of the mitigation takes place outside of that basin.

4.2.2.2.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree since the site is larger and being managed to maintain shrub scrub habitat for game birds and would be converted to forested wetlands. Once construction is complete, those species that also utilize forested wetlands would return to the site. Other species would be forced to permanently relocate to adjacent suitable habitat. The LPB/MSRB, where the BBA Construction Projects impacts occurred, would suffer from the permanent loss of 73 AAHUs of wildlife habitat as the mitigation would take place outside of that basin. This loss could reduce the overall wildlife populations in the LPB/MSRB to a degree, but increase them within the Mississippi Alluvial Plain.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Albania South project for this resource in section 4.2.1, except to a greater degree.

4.2.2.3 Threatened and Endangered Species

4.2.2.3.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to threatened and endangered species would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.3.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.4 Amite - 368.6 Acres, 236 AAHU's

Direct Indirect Cumulative Impacts
The only listed species that may be found in the project area is the inflated heelsplitter. However, the Amite sites are located on land and no activities would take place within the river. Consequently, no effects to the inflated heelsplitter are anticipated. Best management practices

would be implemented to prevent or minimize any material due to construction activities from entering the river. Converting the open areas to forested wetlands could reduce erosion which causes sedimentation in the river. This potential reduction in sedimentation could provide an indirect benefit to the heelsplitter.

4.2.2.3.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.3.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts

None of the listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.2.4 Cultural Resources

4.2.2.4.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to cultural resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.4.2 Feliciana – 267 Acres, 156 AAHU's**, GBRPC –** 134.9 Acres, 54 AAHU's**, Amite –** 368.6 Acres, 236 AAHU's**, St. James –** 1,246 Acres, 676 AAHU's, **Ascension** – 55.8 Acres, 29 AAHUs, **Gravity –** 75.2 Acres, 40 AAHUs, **Krotz -** 147.2 Acres, 73 AAHU's**, TPSB -** 483.8 Acres, 248 AAHU's**, Rosedale-** 224.8 Acres, 113 AAHU's**, Sunset Ridge -** 324 Acres, 168 AAHU's

CEMVN would follow its Section 106 procedures, described in Section 4.2.1.4, if this proposed project is carried forward as the TSP plan. Activities associated with this project have the potential to directly impact existing and previously undocumented cultural resources that may exist within the project area. The CEMVN is developing a Programmatic Agreement with the LA SHPO, the Advisory Council on Historic Preservation, Federally recognized Indian Tribes, and other interested parties outlining the steps needed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects.

4.2.2.5 Recreational Resources

4.2.2.5.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the LPB/MSRB to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to recreational resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.5.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.5.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct and Indirect Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree. Existing recreational resources would be enhanced with consideration to the adjacent Parish of East Baton Rouge's (BREC) Farr Park Equestrian Center and Recreational Vehicle Campground.

Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.5.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.5.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree. The site is larger and being managed to maintain shrub scrub habitat for game birds and would be converted to forested wetlands. The wildlife species that currently utilize the area would be forced to relocate to adjacent habitat.

Once construction is complete, those species that also utilize forested wetlands would return to the site. Other species would be forced to permanently relocate to adjacent suitable habitat.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct and Indirect Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree. Existing recreational resources would be enhanced with consideration to the adjacent Parish of West Baton Rouge's Erwinville Community and Recreation Center.

Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.2.6 Aesthetic Resources

4.2.2.6.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to aesthetics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.6.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.6.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct and Indirect Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree. Existing aesthetic resources would be enhanced with consideration to the adjacent Parish of East Baton Rouge's (BREC) Farr Park Equestrian Center and Recreational Vehicle Campground.

Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.6.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.6.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.6 Ascension - 55.8 Acres, 29 AAHU's

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.7 Gravity - 75.2 Acres, 40 AAHU's

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct and Indirect Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree. Existing aesthetic resources would be enhanced with consideration to the adjacent Parish of West Baton Rouge's Erwinville

Community and Recreation Center. The outdoor recreation amenities would be enclosed within a lush forest backdrop, tremendously adding to the visual quality of the area.

Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.7 Air Quality

4.2.2.7.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to air quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.7.2 Feliciana - 267 Acres, 156 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts

There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.7.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem.

The project is in a parish that has been designated as a NAAQS maintenance area for ozone, therefore, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. The total anticipated VOC emissions are less than one ton and the total NOx emissions are approximately five to six tons, all of which are less than CAA *de minimis* emission levels.

Indirect Impacts
The indirect impacts to air quality in the parish due to the construction of the proposed action would be temporary and the air quality would likely return to pre-construction levels shortly after project completion.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.7.4 Amite - 368.6 Acres, 236 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly

after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.7.5 St. James - 1,246 Acres, 676 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.6 Ascension - 55.8 Acres, 29 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

The project is in a parish that has been designated as a NAAQS maintenance area for ozone, therefore, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. The estimated totals of VOC and NOx emissions are each less than one ton respectively and are less than CAA *de minimis* emissions levels.

Indirect Impacts
The indirect impacts to air quality in the parish due to the construction of the proposed action would be temporary and the air quality would likely return to pre-construction levels shortly after project completion.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.7 Gravity - 75.2 Acres, 40 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

The project is in a parish that has been designated as a NAAQS maintenance area for ozone, therefore, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. The estimated total of VOC emissions is approximately one ton and the estimated total of NOx emissions is approximately seventeen tons. Both VOC and NOx emissions would be less than CAA *de minimis* emission levels.

Indirect Impacts
The indirect impacts to air quality in the parish due to the construction of the proposed action would be temporary and the air quality would likely return to pre-construction levels shortly after project completion.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct Impacts

During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

The project is in a parish that has been designated as a NAAQS maintenance area for ozone, therefore, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. The total VOC emissions are approximately three tons and the total NOx emissions are approximately eighty two tons, less than CAA *de minimis* emissions levels.

Indirect Impacts
The indirect impacts to air quality in the parish due to the construction of the proposed action would be temporary and the air quality would likely return to pre-construction levels shortly after project completion.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

The project is in a parish that has been designated as a NAAQS maintenance area for ozone, therefore, a conformity determination has been completed to estimate the amount of VOC and NOx emissions that may be generated during the project. The total VOC emissions are approximately three tons and the total NOx emissions are approximately seventy five tons, less than CAA *de minimis* emissions levels.

Indirect Impacts
The indirect impacts to air quality in the parish due to the construction of the proposed action would be temporary and the air quality would likely return to pre-construction levels shortly after project completion.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.
Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts

Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.2.8 Water Quality

4.2.2.8.1 Mitigation Banks

As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to water quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.8.2 Amite - 368.6 Acres, 236 AAHU's

Although this project is adjacent to the Amite River which supports several designated uses, none of the work would take place within the river and therefore would not impact the water quality of state water bodies. Best management practices would be implemented to prevent or minimize any material due to construction activities from entering the river. Wetlands act as filtering systems removing sediment, nutrients and pollutants from water thereby helping sustain the water quality. The Amite project would be of benefit to water quality by restoring these functions to the area and therefore potentially enhancing water quality of the adjacent Amite River.

4.2.2.9 Noise

4.2.2.9.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to noise would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.9.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
Noise impacts to wildlife would be the same as discussed for the Saint John project in section 4.2.1. Noise levels would not result in impacts to the human environment as the project site is surrounded by agricultural land and industry.

4.2.2.9.6 Ascension - 55.8 Acres, 29 AAHU's

Direct and Indirect Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
Noise impacts to wildlife would be the same as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree. Noise levels would not result in impacts to the human environment as the closest residential area is approximately 500 feet from the project site and is buffered by existing forest.

4.2.2.9.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.9.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.10 Hazardous, Toxic, and Radioactive Waste

4.2.2.10.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts due to HTRW waters would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.10.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on the site. No pipelines, wells, or well pits were identified on site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on the site. No pipelines, wells, or well pits were identified on the site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on the site. No pipelines, wells, or well pits were identified on the site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
There are several pipelines and abandoned wells within and near the proposed mitigation area. Due to construction methods, there would be a slight probability of encountering substances of concern or petroleum products in the soil near these wells. An HTRW investigation would be conducted prior to final design and any RECs would be avoided.

4.2.2.10.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
Two petroleum pipelines are located within the mitigation site boundaries. No wells or well pits were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
One petroleum pipeline is located within the mitigation site boundaries. No wells or well pits were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on site. No pipelines, oil wells, or well pits were identified on site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts
Two pipelines were identified on site. No wells or well pits were identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on site. No pipelines, oil wells, or well pits were identified on site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.10.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
No pipelines were identified on site. Two abandoned wells were identified on site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.2.11 Socioeconomics/Land Use and Transportation

4.2.2.11.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be

utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to socioeconomics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.11.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project consists of up to approximately 267.4 acres of BLH-Wet creation located on existing agricultural fields. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.2 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 2 percent and is not considered significant.

4.2.2.11.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
This project consists of up to approximately 134.9 acres of BLH-Wet creation located on existing agricultural fields. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.2 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 0.5 percent and is not considered significant.

4.2.2.11.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of BLH-Wet creation on approximately 368.6 acres. There will be no direct impacts to socioeconomic resources. This project is located within existing degraded BLH habitat and so no impacts to farm production would be incurred. There will be short term impacts to traffic during construction.

4.2.2.11.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project consists of up to approximately 1,246.6 acres of BLH-Wet creation located on existing agricultural fields. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 2.6 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 7 percent and is not considered significant.

4.2.2.11.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts

This work consists of planting of Bottomland Hardwood on a 63-acre agricultural field. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.2 percent and is not considered significant.

4.2.2.11.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project consists of up to approximately 75.1 acres of BLH-Wet creation, located on existing agricultural fields. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.2 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic during construction is expected to be less than 5 percent and is not considered significant.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 147.2 acres of BLH-Wet Habitat in an area currently managed for game bird hunting. There will be no impacts to socioeconomic resources.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 483.6 acres of BLH-Wet habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 1.4 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 5 percent and is not considered significant.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 224.2 acres of BLH-Wet habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.13 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 18 percent.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect, and Cumulative Impacts
This project involves creation of up to approximately 324.1 acres of BLH-Wet habitat on existing agricultural lands. There will be no direct impacts to socioeconomic resources,

however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 2.3 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 4 percent.

4.2.2.12 Prime and Unique Farmlands

4.2.2.12.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to prime and unique farmlands would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.12.2 Feliciana - 267 Acres, 156 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.12.3 GBRPC - 134.9 Acres, 54 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.12.4 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts
This project is located within existing degraded BLH habitat and so no impacts to farmland would be incurred.

4.2.2.12.5 St. James - 1,246 Acres, 676 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.6 Ascension - 55.8 Acres, 29 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.7 Gravity - 75.2 Acres, 40 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.8 Krotz - 147.2 Acres, 73 AAHU's

Direct, Indirect and Cumulative Impacts
This project is located in an area of scrub shrub habitat managed for game bird hunting and therefore there would be no impacts to farmland.

4.2.2.2.9 TPSB - 483.8 Acres, 248 AAHU's

Direct, Indirect and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.10 Rosedale - 224.8 Acres, 113 AAHU's

Direct, Indirect and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.2.11 Sunset Ridge - 324 Acres, 168 AAHU's

Direct, Indirect and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.2.13 Natural and Scenic Rivers

4.2.2.13.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
As the proposed action, the CEMVN would purchase sufficient BLH-Wet credits from a bank within the Mississippi Alluvial Plain to mitigate up to 702 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to Natural and Scenic Rivers would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.2.13.12 Amite - 368.6 Acres, 236 AAHU's

Direct, Indirect, and Cumulative Impacts

Although this project is adjacent to the Amite River which is designated as a natural and scenic river, none of the work would take place within the river and therefore would not require coordination under the Natural and Scenic Rivers Act. Best management practices would be implemented to prevent or minimize any material due to construction activities from entering the river.

4.2.3 SWAMP IN COASTAL ZONE

4.2.3.1 Wetlands and other Surface Waters

4.2.3.1.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wetlands and other surface waters would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of 1,504 AAHUs of BLH-Wet habitat within the LPB if the mitigation takes place outside of that basin.

4.2.3.1.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
There would be a beneficial impact to wetlands as approximately 1,965 acres of open water would be converted back to swamp habitat. Implementation of this project would prevent an overall loss in the study area of swamp habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the study area would help retard the loss of wetlands.

4.2.3.1.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
There would be a beneficial impact to wetlands as approximately 1,126 acres of degraded swamp would be enhanced by planting with swamp species. Implementation of this project would prevent an overall loss in the study area of swamp habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the study area would help retard the loss of wetlands.

4.2.3.1.4 Albania South – Up to 192.1 Acres, up to 76 AAHU's

Direct Impacts
There would be a beneficial impact to wetlands as up to approximately 192.1 acres of agricultural land would be converted to swamp habitat.

Indirect Impacts and Cumulative Impacts

Implementation of this project would prevent an overall loss in the study area of swamp habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in study area and would help retard the loss of wetlands. However, this project would result in the permanent loss of 87.7 AAHUs of swamp habitat within the LPB as the mitigation would take place outside of that basin. This loss could reduce the overall wetland habitat in the LPB to a degree, but increase it within the Mississippi Alluvial Plain.

4.2.3.1.5 Albania North – Up to 964.8 Acres, up to 380 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.1.6 Cote Blanche – Up to 446 Acres, up to 182 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.2 Wildlife

4.2.3.2.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to wildlife would be incurred from the purchase of these credits for the BBA Construction mitigation. However, this project could result in the permanent loss of 1,504 AAHUs of BLH-Wet habitat within the LPB if the mitigation takes place outside of that basin.

4.2.3.2.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
Direct impacts to wildlife would result from the conversion of 1,965 acres of open water habitat within the project area to forested wetlands. This conversion would reduce use and function for brown pelicans, seabirds, dabbling and diving ducks, coots, and gallinules and other species that feed in the shallow open water in this location. Less mobile species would experience demise from dredged material disposal.

The establishment of swamp in the area would provide 1,965 acres of new habitat for terrestrial and semi-aquatic species such as nutria, muskrat, mink, river otter, and raccoon, all of which are commercially important furbearers. Reptiles including the American alligator, western cottonmouth, water snakes, speckled king snake, rat snake, and eastern mud turtle are likely to utilize and populate the proposed swamp area. Amphibians expected to colonize the area include the bullfrog, southern leopard frog, and Gulf coast toad.

The edges and small areas of open water that would form over time would also provide feeding habitat for common wading bird species including great blue heron, green heron, tricolored heron, great egret, snowy egret, yellow-crowned night-heron, black-crowned night-heron, and white ibis.

There is a possibility that colonial nesting wading birds may be located near the project area. The LDWF recommends that the area within a 400 meter perimeter of the project area be surveyed for the presence of nesting bird colonies if construction is to occur during the nesting season. In order to avoid disturbance to colonial nesting birds, a survey would be conducted prior to construction. If nesting birds are found and construction activities are anticipated to occur during the nesting season, avoidance procedures would be implemented (see Appendix J for details).

Indirectly, species that utilize shallow open water habitats would be displaced by the habitat conversion. More mobile species would move into and utilize adjacent shallow open water areas, which are found in abundance. Many species utilizing the current habitat type would thrive with the additional foraging, cover and resting habitat the project would create. A rise in turbidity at the borrow site could immediately reduce water quality in the area; however those effects would be temporary, during the period of construction, and would be reduced by movement of the tides.

This project would prevent an overall loss in the basin of swamp habitat necessary for many wildlife species. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin, would prevent the net loss of forested wetland function and overall decline of wildlife species within the basin. It would be beneficial in both preserving the species bio-diversity and combating the current trend of conversion of coastal wetlands to open water, which could be accelerated due to sea level rise.

4.2.3.2.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
Direct impacts to wildlife would be the temporary avoidance of the area during construction and planting activities. The enhancement of swamp in the Joyce (WMA) area would improve 1,126 acres of existing habitat for terrestrial and semi-aquatic species such as nutria, muskrat, mink, river otter, and raccoon, all of which are commercially important furbearers. Reptiles including the
American alligator, western cottonmouth, water snakes, speckled king snake, rat snake, and eastern mud turtle are likely to utilize and populate the proposed swamp habitat. Amphibians expected to colonize the area include the bullfrog, southern leopard frog, and Gulf coast toad.

There is a possibility that colonial nesting wading birds may be located near the project area. The LDWF recommends that the area within a 400 meter perimeter of the project area be surveyed for the presence of nesting bird colonies if construction is to occur during the nesting season. In order to avoid disturbance to colonial nesting birds, a survey would be conducted prior to construction. If nesting birds are found and construction activities are anticipated to occur during the nesting season, avoidance procedures would be implemented (see Appendix J for details).

This project would prevent an overall loss in the basin of swamp habitat necessary for many wildlife species. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin, would prevent the net loss of forested wetland function and overall decline of wildlife species within the basin. It would be beneficial in both preserving the species bio-diversity and combating the current trend of conversion of coastal wetlands to open water, which could be accelerated due to sea level rise.

4.2.3.2.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct Impacts
Up to approximately 192.1 acres of agricultural field would be converted back to forested wetlands. Wildlife present at the time of construction would be temporarily displaced to adjacent habitats due to noise, movement and vibration. Some slower moving animals (e.g. moles and snakes) may experience demise during construction. It is anticipated that displaced animals would return once construction is complete and that the construction of high quality forested wetland habitat would provide additional area for the expansion of existing wildlife populations.

Indirect Impacts
With the restoration of up to approximately 192.1 acres of swamp habitat, species that historically populated the area, and currently populate the adjacent/nearby forested areas, would again utilize the area. Wildlife abundance and diversity would increase in the area as a monoculture of agricultural crops would be replaced by a diversity of swamp species that would provide a variety of ecological niches for colonization. If bald eagle nests are discovered near the site, the National Bald Eagle Management Guidelines (Appendix J) would be followed during construction to avoid and minimize impacts to this species.

Cumulative Impacts
This project would prevent an overall loss in the study area of swamp habitat necessary for many wildlife species. However, the LPB, where the BBA Construction Projects impacts occurred, would suffer from the permanent loss of 76 AAHUs of wildlife habitat as the mitigation would take place outside of that basin. This loss could reduce the overall wildlife populations in the LPB to a degree, but increase them within the Mississippi Alluvial Plain. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the study area, would help retard the loss of wetlands and overall decline of wildlife species within the study area and would be beneficial to preserving species bio-diversity.

4.2.3.2.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.2.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.3 Threatened and Endangered Species

4.2.3.3.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to threatened and endangered species would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.3.2 Pine Island – 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
No listed species are expected to be directly impacted within the proposed swamp mitigation area since their utilization of the shallow water depths in the site (typically less than two feet) is unlikely and access is extremely limited. However, as a precaution, implementation of standard protection measures and construction conditions for manatees, sturgeon and sea turtles (see Appendix J) would be implemented to ensure any potential impacts are avoided.

The borrow area could potentially be utilized by manatees, sturgeon and sea turtles, however, the presence of construction- related activity, machinery, and noise is expected to cause these species to avoid the project area during the construction period. Additionally, direct impacts to Gulf sturgeon and sea turtles from construction related activities are not anticipated as hydraulic cutterhead dredges are slow moving and use of them is not known to impact these species. Manatee could potentially be affected by dredging operations, but the impacts would be avoided by implementation of standard manatee protection measures developed by the USFWS.

Potential indirect impacts from the proposed action would primarily consist of effects from dredging operations, notably noise and turbidity, and the loss of foraging habitat. Although the rise in turbidity could immediately reduce water quality in the project area, those effects would be temporary and would be reduced by movement of the tides. Any manatees, sturgeon and sea turtles in the area could relocate during construction since the project area encompasses only a small section of Lake Pontchartrain. The indirect impacts resulting from the loss of the borrow area as foraging habitat would be insignificant given the small size of the project area compared to the overall size and similar habitat within Lake Pontchartrain. Additionally, the depth of material being removed from the borrow area is not anticipated to result in exposure of a different substrate type. As such, future recolonization of the forage species used by Gulf sturgeon is anticipated in the borrow site. As such, the indirect impacts to manatees, sturgeon and sea turtles are anticipated to be minimal.

Potential cumulative impacts to the threatened or endangered species from the proposed project are anticipated to minimally increase indirect impacts to manatees, sturgeon and sea turtles in the LPB.

The Corps has determined that the proposed Pine Island project *may affect, but is not likely to adversely affect* Federally-listed species. This determination, along with supporting documentation, was transmitted to the USFWS and NMFS under informal consultation procedures for implementing Section 7 of the Endangered Species Act. Coordination is ongoing with both USFWS and NMFS.

4.2.3.3.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the listed species would be expected to occur within the Joyce project area as the preferred habitats do not exist. Therefore the Corps has made a "no effect" determination.

4.2.3.3.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the species listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.3.3.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the species listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.3.3.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
None of the species listed species are found within the project area. Therefore the Corps has made a "no effect" determination under the ESA for threatened and endangered species.

4.2.3.4 Fisheries, Aquatic Resources

4.2.3.4.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to fisheries, aquatic resources and water quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.4.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
Approximately 1,965 acres of open water and mud substrate would be replaced with swamp increasing spawning, nursery, forage and cover habitat for fisheries resources over the long term. During construction of this project, fish species would be forced to relocate to similar adjacent habitat. Less mobile aquatic species would experience demise. The depth restriction on the borrow pit (- 19 ft. NAVD 88) would minimize the chance that a different substrate would be exposed. Fish species could return to the borrow area and benthic species rebound once construction is complete. Aquatic species access to the mitigation area would be extremely limited until the fill material has consolidated and settled to an elevation conducive to that of a natural swamp. Once target elevations have been achieved and swamp habitat established (in approximately 3 years), this area would once again serve its historic functional role in the local ecosystem.

Aquatic resources and fisheries in the borrow area would be indirectly affected during project construction due to dredging operations. Turbidity during borrow excavation and fill placement would temporarily impair visual predators and impact filter feeders. The depth restriction on the borrow pit would minimize the chance that the area would suffer from low oxygen conditions and a different substrate would be exposed. As such, future recolonization by similar benthic species and the restoration of foraging habitat in the borrow area is anticipated once construction is complete.

Although there would be a loss of 1,965 acres of open water from construction of this project, open water is found in abundance throughout the Lake Pontchartrain Basin. The resulting swamp would provide a cumulative benefit in the form of additional spawning, nursery, forage and cover habitat for important aquatic species in the basin.

Implementation of this project would prevent an overall loss in the basin of swamp habitat in the LPB. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin would help retard the loss of wetlands and combat the current trend of conversion of wetlands to open water.

4.2.3.4.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
Approximately 1,126 acres of degraded swamp habitat would be replaced with high quality swamp species. The enhancement of the existing swamp would provide additional habitat for fisheries and aquatic species that utilize the area.

Implementation of this project would prevent an overall loss in the basin of swamp habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin would help retard the loss of wetlands and combat the current trend of conversion of wetlands to open water.

4.2.3.4.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
Wetlands act as filtering systems removing sediment, nutrients and pollutants from water thereby helping sustain the water quality. Converting crop land to forested wetlands would be of benefit to fisheries and aquatic resources by restoring these functions to the study area and therefore enhancing water quality. Since the area is not adjacent to open water, fish inhabiting it is unlikely. However, amphibians would likely colonize in the area due to the introduction of water and cover.

4.2.3.4.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.4.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

This project would result in the same impacts as discussed for the Albania South project except to a greater degree.

4.2.3.5 Essential Fish Habitat

4.2.3.5.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to essential fish habitat would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.5.2 Pine Island – 1,965 Acres, 775 AAHU's, **Joyce -** 1,126 Acres, 195 AAHU's

Direct, Indirect, Cumulative Impacts
The existing essential fish habitat in the project area includes estuarine water bottom, estuarine water column, and submerged aquatic vegetation. These habitats would be converted to estuarine intertidal forested wetlands (swamp). Benthic resources within the borrow site for Pine Island would be lost until they can re-colonize the borrow area which should occur following project construction. The borrow area would not be excavated more than -20 feet NAVD88 plus a 1-foot allowable overdepth thereby minimizing the possibility of anoxic conditions forming. The adverse impacts to essential fish habitat that would result from the proposed action may affect, but should not adversely affect, managed species considering the small acreage involved relative to Lake Pontchartrain. Indirect impacts to managed species include increased turbidity and disturbance of Lake Pontchartrain in the vicinity of the borrow area. Some species may be temporarily displaced to similar adjacent habitats. The permanent loss of 3,091 acres of EFH would contribute cumulatively to the overall loss of habitat in the basin, but no permanent adverse impacts are anticipated because this habitat is prevalent throughout the basin.

4.2.3.6 Cultural Resources

4.2.3.6.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to cultural resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.6.2 Pine Island - 1,965 Acres, 775 AAHU's**, Joyce -** 1,126 Acres, 195 AAHU's, **Albania South -** up to 192.1 Acres, up to 76 AAHU's**, Albania North -** up to 964.8 Acres, up to 380 AAHU's**, Cote Blanche -** up to 446 Acres, up to 182 AAHU's

CEMVN would follow its Section 106 procedures, described in Section 4.2.1.4, if this proposed project is carried forward as the TSP plan. Activities associated with this project have the potential to directly impact existing and previously undocumented cultural resources that may exist within the project area. The CEMVN is developing a Programmatic Agreement with the LA SHPO, the Advisory Council on Historic Preservation, Federally recognized Indian Tribes, and other interested parties outlining the steps needed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects.

4.2.3.7 Recreational Resources

4.2.3.7.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to recreational resources would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.7.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct and Indirect Impacts
Flora and fauna that historically populated the area, and currently populate the adjacent/nearby forested areas, would again utilize the area. Recreational opportunities such as canoeing and wildlife viewing would be enhanced directly and indirectly with construction of this project as current recreational opportunities are limited due to the shallow open water that encompasses this site.

Cumulative Impacts
Cumulative impacts to recreational resources would continue in the project areas with perpetual conservation of the site. Other similar activities that reclaim open water in the vicinity have and would continue to affect recreational quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat which promote recreation opportunities.

4.2.3.7.3 Joyce - 1,126 Acres, 195 AAHU's

Direct and Indirect Impacts
Recreational resources would be enhanced as a direct and indirect impact. The site has limited access via boat and serves mainly as a consumptive recreation source for those who have camps along the canals and small meandering waterways.

Cumulative Impacts
Recreational opportunities would continue to increase on the site as the habitat matures over time and would be maintained with perpetual conservation of the site. Other similar activities that enhance habitat in the vicinity have and would continue to affect recreational quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat which promote recreation opportunity.

4.2.3.7.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.3.7.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.3.7.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.3.8 Aesthetic Resources

4.2.3.8.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the

FWOP conditions, no new direct, indirect or cumulative impacts to aesthetics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.8.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct and Indirect Impacts
Flora and fauna that historically populated the area, and currently populate the adjacent/nearby forested areas, would again be established on the area. Aesthetic resources would be directly and indirectly impacted enhanced as current view sheds (shallow open water) would be replaced with native forests rich with biodiversity.

Cumulative Impacts
Visual resources to would continue to increase on the site as the habitat matures over time and would be maintained with perpetual conservation of the site. Other similar activities that reclaim open water in the vicinity have and would continue to affect aesthetic quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat which promote recreation opportunity.

4.2.3.8.3 Joyce - 1,126 Acres, 195 AAHU's

Direct and Indirect Impacts
Aesthetic resources would be directly and indirectly enhanced with construction of this project. The site has limited access via boat and is viewed primarily by the few who have camps along the canals and small meandering waterways.

Cumulative Impacts
Visual resources would continue to increase on the site as the habitat matures over time and would be maintained with perpetual conservation of the site. Other similar activities that enhance habitat in the vicinity have and would continue to affect aesthetic quality in the region. Projects of this scope would serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat which promote recreation opportunity.

4.2.3.8.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.8.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.8.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.9 Air Quality

4.2.3.9.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to air quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.9.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is marshland and not populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.3.9.3 Joyce - 1,126 Acres, 195 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust

near the construction area is not anticipated to be a problem as the site is marshland and not populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.3.9.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

4.2.3.9.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts

Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.3.9.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct Impacts
During construction of this project, an increase in air emissions could be expected. These emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment and 2) fugitive dust due to earth disturbance. Emission of fugitive dust near the construction area is not anticipated to be a problem as the site is rural and not highly populated.

Any site-specific construction effects would be temporary and dust emissions, if any, would be controlled using standard BMPs. Air quality would return to pre-construction conditions shortly after the completion of construction activities. The project area is in a parish in attainment of NAAQS, therefore, a conformity determination is not required.

Indirect Impacts
There would be no adverse indirect impacts to air quality in the parish with construction of the proposed action.

Cumulative Impacts
Cumulative impacts to air quality in the project area due to construction of this project in addition to the other construction activities within the area that may be occurring concurrently would be temporary and minimal. After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action.

4.2.3.10 Water Quality

4.2.3.10.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to water quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.10.2 Pine Island – 1,965 Acres, 775 AAHU's **and Joyce –** 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
Wetlands act as filtering systems removing sediment, nutrients and pollutants from water thereby helping sustain the water quality. The Pine Island and Joyce projects would be of benefit to water quality by restoring these functions to the area and therefore potentially enhancing water

quality of the adjacent Lake Pontchartrain. The temporary water quality impacts from turbidity during construction are not anticipated to be substantial enough to cause impairment of the water body's designated uses as defined under the standards of Louisiana Administrative Code, Title 33, Part IX, Chapter 11. Water quality impacts in the fill area of Pine Island would temporarily add to the water quality impairment of this sub-segment, but these impacts would be minimized through best management practices and would diminish to background levels after construction.

4.2.3.11 Noise

4.2.3.11.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to noise quality would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.11.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.11.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
Noise impacts to wildlife would be the same as discussed for the Ascension project in section 4.2.1, except to a greater degree. Noise levels would not result in impacts to the human environment as the area is remote and surrounded by existing wetlands.

4.2.3.11.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.11.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.11.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect and Cumulative Impacts

This project would result in the same impacts as discussed for the Ascension project for this resource in section 4.2.1, except to a greater degree.

4.2.3.12 Hazardous, Toxic, and Radioactive Waste

4.2.3.12.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts due to HTRW would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.12.2 Pine Island – 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on site. The area proposed for mitigation is currently open water. It would be filled with dredged material from a borrow site in Lake Pontchartrain. USACE Engineer Regulation, ER 1165-2-132, Hazardous, Toxic, and Radioactive Waste (HTRW) for Civil Works Projects, states that dredged material and sediments beneath navigable waters proposed for dredging qualify as HTRW only if they are within the boundaries of a site designated by the EPA or a state for a response action (either a removal or a remedial action) under CERCLA, or if they are a part of a National Priority List (NPL) site under CERCLA (NPL is also known as "Superfund"). None of the area proposed for dredging is included in the National Priority List or within the boundaries of a CERCLA site. There is a low probability of encountering HTRW.

4.2.3.12.3 Joyce – 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
No RECs were identified on site. No pipelines, oil wells, or well pits were identified on site. Due to construction methods, there is a low probability of encountering HTRW.

4.2.3.12.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, Cumulative Impacts
One pipeline was identified on site. Impacts to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.3.12.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, Cumulative Impacts
Three pipelines, four abandoned wells, and two well pits were identified. Pipelines would be avoided. Due to construction methods, there would be a slight probability of encountering substances of concern or petroleum products in the soil near these wells. An HTRW

investigation would be completed prior to final design and RECs would be avoided to the extent practicable.

4.2.3.12.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
Two pipelines were identified on site. No wells were identified on site. Impact to pipelines would be avoided. Due to construction methods, there is a low probability of encountering HTRW.

4.2.3.13 Socioeconomics/Land Use, Transportation, and Commercial Fisheries

4.2.3.13.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to socioeconomics would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.13.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of swamp creation mitigation sites within open water. There will be no direct impacts to socioeconomic resources or transportation as all work would be performed on water. It is probable that crab fishermen sometimes place crab traps within the proposed borrow area just like they do throughout Lake Pontchartrain. Shrimp fishermen may venture into the area either pulling trawls or pushing "skimmer" nets. The fishermen and their gear would be temporarily displaced during project construction.

4.2.3.13.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of swamp creation mitigation sites. There will be no direct impacts to socioeconomic resources or commercial fisheries.

4.2.3.13.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of creating up to approximately 192.1 acres of swamp habitat in an existing agricultural site. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.24 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 2 percent and is not considered significant.

4.2.3.13.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of creating up to approximately 964.8 acres of swamp habitat in an existing agricultural site. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.45 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 21 percent.

4.2.3.13.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
This work consists of creating up to approximately 446 acres of swamp habitat in an existing agricultural site. There will be no direct impacts to socioeconomic resources, however, the land use will change. The percent change in agricultural acres in the parish will be decreased by less than 0.56 percent and is not considered significant. There will be short term impacts to traffic during construction. The increase in average daily traffic is expected to be less than 19 percent.

4.2.3.14 Prime and Unique Farmlands

4.2.3.14.1 Mitigation Banks

Direct, Indirect, and Cumulative Impacts
For this project, the CEMVN would purchase sufficient swamp credits from a bank within the Mississippi Alluvial Plain to mitigate up to 1,504 AAHUs. The particular bank to be utilized is unknown at this time. Since permitted banks exist as reasonably foreseeable projects in the FWOP conditions, no new direct, indirect or cumulative impacts to prime and unique farmlands would be incurred from the purchase of these credits for the BBA Construction mitigation.

4.2.3.14.2 Pine Island - 1,965 Acres, 775 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would have no impacts to prime and unique farmlands as it takes place in open water.

4.2.3.14.3 Joyce - 1,126 Acres, 195 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would have no impacts to prime and unique farmlands as it takes place in existing swamp habitat.

4.2.3.14.4 Albania South - Up to 192.1 Acres, up to 76 AAHU's

Direct, Indirect, and Cumulative Impacts

This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.3.14.5 Albania North - Up to 964.8 Acres, up to 380 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

4.2.3.14.6 Cote Blanche - Up to 446 Acres, up to 182 AAHU's

Direct, Indirect, and Cumulative Impacts
This project would result in the same impacts as discussed for the Saint John project for this resource in section 4.2.1, except to a greater degree.

5. ENVIRONMENTAL CONSEQUENCES OF MITIGATION ALTERNATIVES

5.1 INTRODUCTION

This section describes the direct and indirect effects of the mitigation alternatives. For more details on the transition to the mitigation alternative see section 2.

5.2 ALTERNATIVES

5.2.1 NO ACTION ALTERNATIVE

Direct Impacts
Under the No Action alternative, wetlands and other surface waters, wildlife, threatened and endangered species, fisheries, aquatic resources, water quality, EFH, cultural resources, recreational resources, aesthetic resources, air quality, noise, HTRW, socioeconomics/land use, environmental justice, transportation, commercial fisheries, and prime and unique farmlands would not be directly impacted from construction of the mitigation plan. Without construction of a mitigation plan, there would be an overall loss of BLH-Wet and swamp habitat within the system. CEMVN's legal obligation to compensate for habitat losses caused by construction of the Comite, WSLP and EBR projects would not be satisfied. This alternative does not include any CEMVN undertaking; therefore CEMVN has no further responsibilities under Section 106 of the NHPA.

Indirect Impacts
There would be an overall loss of BLH-Wet and swamp within the system that once provided cover, resting, nesting and foraging habitat for wildlife, fisheries, and aquatic species, which would indirectly impact these resources. The loss of these habitats, and the affect such losses would have on wildlife and aquatic species, could cause recreational opportunities in the basin to also suffer loss. The loss of wetlands and the detritus and filtering function they provide would indirectly impact fisheries productivity and water quality.

5.2.2 TENTATIVELY SELECTED ALTERNATIVE (TSA)

The TSA (Table 5-1) is a combination of the TSPs discussed in Sections 2 and 4. Any combination of the TSPs could be used to satisfy the mitigation needs. Although movement outside of the LPB and or MSRB to complete some of the required mitigation would result in a reduction of BLH and swamp habitat in those basins, replacement of the same habitat would occur in the Mississippi Alluvial Plain. With the replacement of this habitat, wildlife populations would have opportunity to expand and increase in the Mississippi Alluvial Plain thereby only resulting in a shift in where these populations reside. Movement from the LPB and/or the MSRB into the Mississippi Alluvial Plain was chosen because similar habitat exists in the Mississippi Alluvial Plain to the impacted habitat in the LPB and MSRB, whereas habitat north of the LPB and MSRB quickly transitions into piney woods (appendix Q, figure 2).

Table 5-1: Tentatively Selected Alternative				
	Projects	**Habitat**	**AAHUs**	**Acres**
BLH-Wet in CZ (WSLP)	Mitigation Bank (LPB)	BLH-wet	TBD	TBD
	Saint John (LPB) BLH-wet	BLH-wet	42	
	Mitigation Bank (OB)	BLH-wet	TBD	TBD
	Albania South (OB)	BLH-wet	up to 96	up to 192.1
	Albania North (OB)	BLH-wet	Max of 343	Max of 657
Swamp in CZ (WSLP)	Mitigation Bank (LPB)	Swamp	TBD	TBD
	Pine Island (LPB)	Swamp	775	1,965.0
	Joyce (LPB)	Swamp	195	1,126.1
	Mitigation Bank (OB)	Swamp	TBD	TBD
	Albania South (OB)	Swamp	up to 76	up to 192.1
	Albania North (OB)	Swamp	up to 380	up to 964.8
	Cote Blanche (OB)	Swamp	up to 182	up to 446
BLH-Wet Out of CZ (Comite, EBR)	Mitigation Bank (LPB, MSRB)	BLH-wet	TBD	TBD
	Ascension (LPB)	BLH-wet	29	55.8
	Feliciana (LPB)	BLH-wet	156	267.0
	GBRPC (LPB)	BLH-wet	54	134.9
	St James (LPB)	BLH-wet	676	1246.0
	Mitigation Bank (OB)	BLH-wet	TBD	TBD

LPB – In Lake Pontchartrain Basin. MSRB – Mississippi River Basin. OB – Outside of Basin.

5.2.2.1 Wetlands and other Surface Waters

Direct and Indirect Impacts
There would be a beneficial impact to wetlands as over 3,000 of acres of agricultural land, 1,126 acres of degraded swamp and 1,965 acres of open water would be converted to forested wetland habitat.

5.2.2.2 Wildlife

Direct and Indirect Impacts
There would be a beneficial impact to wildlife as thousands of over 3,000 acres of agricultural land, 1,126 acres of degraded swamp and 1,965 acres of open water would be converted to forested wetland habitat. Wildlife present at the time of construction would be temporarily displaced to adjacent habitats due to noise, movement, turbidity and vibration. During

construction, the aquatic organisms located in the disposal sites of Pine Island would experience demise as well as some slower moving animals (e.g., moles and snakes) in the agricultural lands. It is anticipated that displaced animals would return once construction is complete and that the construction of high quality forested wetland habitat would provide additional area for the expansion of existing habitat populations. If bald eagle nests are discovered near the project area, the National Bald Eagle Management Guidelines (Appendix J) would be followed during construction to avoid and minimize impacts to this species.

5.2.2.3 Threatened and Endangered Species

Direct and Indirect Impacts
The only project within the TSA with listed species present is Pine Island.

The species that could potentially be affected by the Pine Island project are West Indian manatee; Gulf sturgeon; and Kemp's ridley, loggerhead, and green sea turtles. No listed species are expected to be directly impacted within the proposed swamp mitigation area since they would not be expected there due to shallow water depths (typically less than two feet) and extremely limited access. Still, precautions will be taken during construction to avoid impacts to listed species, particularly Gulf sturgeon and sea turtles. Gulf sturgeon protection measures will be implemented (Appendix J). In order to minimize the potential for construction activities to cause adverse impacts to manatees and sea turtles the standard manatee protection measures, developed by the USFWS, Lafayette, Louisiana Field Office, and the standard sea turtle construction conditions developed by the National Marine Fisheries Service would be implemented (Appendix J).

The borrow area could potentially be utilized by manatees, sturgeon and sea turtles. Direct impacts to listed species in the proposed borrow area are unlikely as the site is located outside of designated critical habitat and the construction activities would be of a nature that are not known to directly injury the species. The indirect impacts resulting from the temporary loss of the area as foraging habitat would be insignificant given the small size of the borrow area compared to the overall area of Lake Pontchartrain. The presence of construction- related activity, machinery, and noise would be expected to cause these species to avoid the project area during the construction period. Dredging for borrow material would occur via hydraulic cutterhead dredge. Entrainment of sea turtles is not expected since hydraulic dredges are slow moving and use of them is not known to impact these species. Manatee could potentially be affected by dredging operations, but the impacts would be mitigated by implementation of standard manatee protection measures developed by the USFWS as a method to minimize the likelihood that CEMVN dredging contracts in coastal Louisiana would adversely affect manatees. Those measures are provided in Appendix J.

Potential indirect impacts from the proposed action would primarily consist of effects from dredging operations, notably turbidity. However, although the rise in turbidity could immediately reduce water quality in the project area, those effects would be temporary and would be reduced by movement of the tides. Any sea turtles in the area would be free to relocate during construction since the project area encompasses only a small section of Lake Pontchartrain. As such, no impacts to sea turtles are anticipated from temporary minor impacts to water quality.

Potential cumulative impacts to the threatened or endangered species that could occur in the vicinity of the project area from construction of the other mitigation projects are minimal.

The Corps has determined that the proposed Pine Island project *may affect, but is not likely to adversely affect Federally-listed species.* This determination, along with supporting documentation, was transmitted to the USFWS and NMFS under informal consultation procedures for implementing Section 7 of the Endangered Species Act. Coordination is ongoing with both USFWS and NMFS.

5.2.2.4 Fisheries and Aquatic Resources

Direct and Indirect Impacts
The only projects within the TSA that could potentially impact fisheries and aquatic resources are Pine Island and Joyce. With the Pine Island project approximately 1,965 acres of open water would be converted back to forested wetlands. 1,965 acres of open water and mud substrate would be replaced with swamp increasing spawning, nursery, forage and cover habitat for fisheries resources over the long term. Turbidity during borrow excavation and fill placement would temporarily impair visual predators and impact filter feeders, but this impact is expected to cease and benthic species rebound once construction is complete.

Aquatic species access to this area would be extremely limited until the material consolidated and settled to an elevation conducive to that of a natural swamp. It is expected this "lag" time would be approximately 3 years. Once the success criteria have been achieved, this area would once again serve its traditional functional role in the local ecosystem.

For Pine Island, the depth restriction on the borrow pit, (- 19 ft NAVD 88) plus a 1-foot allowable overdepth, would minimize the chance that the area would suffer from low oxygen conditions. The borrow pit should revert to productive habitat within a few months of project construction.

Although there would be a loss of 1,965 acres of open water from construction of Pine Island, open water is found in abundance throughout the Lake Pontchartrain Basin.

The Joyce project would result in the enhancement of approximately 1,126 acres of degraded swamp habitat by planting with high quality swamp species. The enhancement of the existing swamp would increase spawning, nursery, forage and cover habitat for fisheries and aquatic species that currently utilize the surrounding area.

5.2.2.5 Essential Fish Habitat

Direct and Indirect Impacts
The only projects within the TSA that contain EFH are Pine Island and Joyce. The existing essential fish habitat at these sites include estuarine water bottom, estuarine water column, and submerged aquatic vegetation. These habitats would be converted to estuarine intertidal forested wetlands (swamp). Benthic resources within the borrow site for Pine Island would be lost until they can re-colonize the borrow area which should take no more than a year or so following

project construction. The borrow area would not be excavated more than -20 feet NAVD88 plus a 1-foot allowable overdepth thereby minimizing the possibility of anoxic conditions forming. The adverse impacts to essential fish habitat that would result from the proposed action may affect, but should not adversely affect, managed species considering the small acreage involved relative to Lake Pontchartrain. Indirect impacts to managed species include increased turbidity and disturbance of Lake Pontchartrain in the vicinity of the borrow area. Some species may be temporarily displaced.

5.2.2.6 Cultural Resources

Direct and Indirect Impacts
CEMVN would follow its Section 106 procedures, described in Section 4.2.1.4, if any of the proposed projects are carried forward as the TSA. Activities associated with the several of the projects in the TSA have the potential to directly impact existing and previously undocumented cultural resources that may exist within the project areas. The CEMVN is developing a Programmatic Agreement with the LA SHPO, the Advisory Council on Historic Preservation, Federally recognized Indian Tribes, and other interested parties outlining the steps needed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects.

5.2.2.7 Recreational Resources

Direct and Indirect Impacts
Flora and fauna that historically populated these mitigation areas, and currently populate the adjacent/nearby forested areas, would again utilize these areas. Recreational resources such as wildlife viewing would be created and enhanced as a direct and indirect impact as limited opportunities for this resource currently exist on these sites prior to mitigation.

5.2.2.8 Aesthetic Resources

Direct and Indirect Impacts
The visual resources of these mitigation sites would be temporarily impacted by construction activities related to implementing the proposed action and by transport activities needed to move equipment and materials to and from the sites. However, this temporary impact would most likely affect visual resources from the immediate roadways. Flora and fauna that historically populated these mitigation sites, and currently populate the adjacent/nearby forested areas, would again utilize the areas. The pastoral and agricultural viewsheds from the immediate roadways would be replaced with native forests rich with biodiversity.

5.2.2.9 Air Quality

Direct and Indirect Impacts
There are 12 sites in the TSA. Six of the sites are located in parishes that are currently in attainment status for all NAAQS. Three of the sites, however, are located in Ascension and East Baton Rouge parishes which are currently in a maintenance status for ozone

During construction of the six attainment area sites, an increase in emissions could be expected. The emissions could include exhaust emissions from the operation of construction equipment such as dozers, graders, excavators, dump trucks, etc. and fugitive dust emissions. Any direct and/or indirect impacts to air quality at the attainment area sites could be considered short-term and minor.

During construction of the three maintenance area sites, an increase in emissions could also be expected. Of the three sites, two are located in Ascension Parish and one is located in East Baton Rouge Parish. The emissions sources would be similar to those in the attainment areas. The construction activities at the two Ascension Parish sites would be expected to produce less than one ton per year of VOC and less than 18 tons per year of NOx. The construction activities at the East Baton Rouge Parish site would be expected to produce less than one ton per year of VOC and less than 6 tons per year of NOx. The total emissions of all three maintenance area mitigation sites would be below *de minimis* levels, therefore, the proposed project would be in compliance with the State's general conformity regulations as promulgated under LAC 33:III.14.A. Appendix O provides additional information on the conformity determination and compliance with the General Conformity Rule (40 CFR Part 93).

Due to the limited duration of the proposed projects, any increases or impacts to ambient air quality are expected to be short-term and minor and are not expected to cause or contribute to a violation of Federal or State ambient air quality standards. Once all construction activities associated with the selected alternative cease, air quality within the vicinity is expected to return to pre-construction conditions.

No long-term direct or indirect impacts are expected.

5.2.2.10 Water Quality

Direct and Indirect Impacts
The only projects within the TSA that would potentially impact water quality are Pine Island, Joyce and Amite. Wetlands act as filtering systems removing sediment, nutrients and pollutants from water thereby helping sustain the water quality. The Pine Island, Joyce and Amite projects would be of benefit to water quality by restoring these functions to the area and therefore potentially enhancing water quality of the adjacent Lake Pontchartrain and Amite River.

Temporary water quality impacts from turbidity during construction of Pine Island and Joyce are not anticipated to be substantial enough to cause impairment of the water body's designated uses as defined under the standards of Louisiana Administrative Code, Title 33, Part IX, Chapter 11. Water quality impacts in the fill area of Pine Island would temporarily add to the water quality impairment of this sub-segment, but these impacts would be minimized through best management practices and would diminish to background levels after construction. Although the Amite project is adjacent to the Amite River which supports several designated uses, none of the work would take place within the river and therefore would not directly impact water quality. Best management practices would be implemented to prevent or minimize any material due to construction activities from entering the river.

5.2.2.11 Noise

Direct and Indirect Impacts
Construction equipment necessary for the initial project construction phase would include dump trucks, bulldozers, tractors, graders, air boats, hydraulic dredge and pump. Appendix B, Table B-19 describes noise emission levels for construction equipment expected to be used during the proposed construction activities. This table shows the anticipated noise levels at various ranges based on data from the Federal Highway Administration (FHWA 2006). Noise levels may result in wildlife avoiding the project area during construction; however, movement of equipment during construction would result in the same avoidance behaviors from wildlife species. Residences could experience higher than ambient noise levels during construction, however these levels would be temporary during the period of construction and would be limited to daylight hours.

5.2.2.12 Hazardous, Toxic, and Radioactive Waste

Direct and Indirect Impacts
None of the sites in the TSA have a high probability of encountering HTRW during the course of constructing the mitigation project. The areas proposed for mitigation are mostly agricultural in nature, either farmland or pastureland. One area is open water and one area is associated with several former gravel pits. The mitigation for the agricultural land and the former gravel pit areas will consist mainly of grading, degrading, and planting of various species of trees and understory plants.

The mitigation for the open water area consists of filling the area with material dredged from Lake Pontchartrain to enhance the swamp habitat. USACE Engineer Regulation, ER 1165-2-132, Hazardous, Toxic, and Radioactive Waste (HTRW) for Civil Works Projects, states that dredged material and sediments beneath navigable waters proposed for dredging qualify as HTRW only if they are within the boundaries of a site designated by the EPA or a state for a response action (either a removal or a remedial action) under CERCLA, or if they are a part of a National Priority List (NPL) site under CERCLA. (NPL is also known as "Superfund.") None of the reaches proposed for dredging is included in the National Priority List or within the boundaries of a CERCLA site.

No direct or indirect impacts from HTRW are anticipated during construction of the mitigation features.

5.2.2.13 Socioeconomics/Land Use, Transportation, and Commercial Fisheries

Direct and Indirect Impacts
There will be no direct impacts to socioeconomic resources, however, the land use will change when agricultural land is converted. There will be some impact to transportation in the short term during construction. See Chapter 4 for impacts to each project area. It is probable that crab fishermen sometimes place crab traps within the proposed borrow area just like they do throughout Lake Pontchartrain. Shrimp fishermen may venture into the area either pulling trawls

or pushing "skimmer" nets. The fishermen and their gear would be temporarily displaced during project construction, and the borrow area may be less productive for a few months after project construction due to loss of benthic animals from the dredging operation.

5.2.2.14 Prime and Unique Farmlands

Direct and Indirect Impacts
All projects within the TSA, with the exception of Pine Island, Joyce and Amite would convert agricultural lands to forested wetlands. This would result in a total of over 3,000 acres of farmland being impacted by the TSA. Once the sites are developed for mitigation, these areas could no longer be used as productive farmland.

5.2.2.15 Natural and Scenic Rivers

Direct and Indirect Impacts
Amite is the only project with potential to impact this resource. Although the Amite project is adjacent to the Amite River which is designated as a natural and scenic river, none of the work would take place within the river and therefore would not require coordination under the Natural and Scenic Rivers Act. Best management practices would be implemented to prevent or minimize any material due to construction activities from entering the river.

6.0 CUMULATIVE IMPACTS

NEPA requires a Federal agency to consider not only the direct and indirect impacts of a proposed action, but also the cumulative impacts of the action. Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7)." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Cumulative impacts were addressed for each project and resource in the preceding sections and include both beneficial and adverse impacts depending on the resource. This section provides an overview of other actions, projects, and occurrences that may contribute to the cumulative impacts previously discussed.

Appendix B, Table B-18 shows the impact of the other past, present and reasonably foreseeable projects in the project area on the significant resources documented in this EA. The ecosystem restoration type projects in the area, made up of diversions; hydrologic restoration projects; habitat enhancement/preservation/restoration projects; and marsh creation, work to enhance and restore historic ecosystem processes within the basin. Although these projects may result in temporal impacts and tradeoffs among the species within the significant resources, their overall effects on the system from a human and natural environmental perspective would be wholly positive. The structural projects, to a large degree, produce socioeconomic benefits (primarily in the form of navigation or flood control) that are the impetus for their construction. Though impacts to the natural environment from construction of these projects have been avoided to the maximum extent practicable, remaining unavoidable impacts would require mitigation.

6.1 NO ACTION

The overall loss of BLH-Wet, and swamp within the system combined with other habitat loss incurred from implementation of projects in the FWOP conditions could have cumulative adverse impacts to wetlands, wildlife, fisheries and aquatic resources, threatened and endangered species, water quality, EFH, aesthetics and recreational resources. This alternative does not include any CEMVN undertaking; therefore CEMVN has no further responsibilities under Section 106 of the NHPA.

6.2 TSA

6.2.1 WETLANDS AND OTHER SURFACE WATERS

The TSA would prevent an overall loss in the project area of BLH-Wet and swamp habitat. This project, when added to other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the basin would help retard the loss of wetlands and combat the current trend of conversion of marsh to open water. Although movement outside of the LPB and/or MSRB to complete some of the required mitigation would result in a reduction of BLH habitat in LPV and/or MSRB and the reduction of swamp habitat in the LPB, replacement of the same habitat would occur in the Mississippi Alluvial Plain.

6.2.2 WILDLIFE

The TSA would prevent an overall loss in the project area of wetland habitat necessary for many wildlife species. This project, in conjunction with other past, present, and reasonably foreseeable ecosystem restoration and mitigation projects in the project area would help retard the overall decline of wildlife species within the area and would be beneficial in preserving species bio-diversity. Although movement outside of the LPB/MSRB to complete some of the required mitigation would result in a reduction of BLH habitat in LPB and or MSRB and swamp habitat in the LPB, replacement of the same habitat would occur in the Mississippi Alluvial Plain. With the replacement of this habitat, wildlife populations would have opportunity to expand and increase in the Plain thereby only resulting in a shift in where these populations reside.

6.2.3 THREATENED AND ENDANGERED SPECIES

Potential cumulative impacts to the threatened or endangered species (manatee, Gulf sturgeon, and sea turtles) that could occur in the vicinity of the project area from construction of the TSA would involve the combined adverse effects on each species from the other projects within the project area. Due to the size of Lake Ponchartrain - 403,200 acres, the size of the designated Gulf sturgeon critical habitat in Lake Pontchartrain (approximately half of the lake), the relatively small size of the borrow areas (2,238 acres in Lake Pontchartrain), the temporary nature of the borrow activities, the sediments in the borrow area, the depth of excavation, the use of cutterhead dredges for borrow procurement, the duration of dredging, the ability of benthic species to quickly re-colonize the borrow areas, the ability of T&E species to avoid the project area during the construction period, and the use of protection measures the TSA would add very little and only temporary impacts to any other impacts resulting from past, present and reasonably foreseeable projects in the project area and would not contribute significantly to cumulative impacts to threatened and endangered species or their habitat in the basin.

6.2.4 FISHERIES, AQUATIC RESOURCES

Although there would be a loss of open water from construction of the TSA, these habitats are found in abundance throughout the project area. The resulting swamp would be cumulatively neutral in the form of additional spawning, nursery, forage and cover habitat for important fish species in the project area.

6.2.5 ESSENTIAL FISH HABITAT

There would be an overall loss of EFH in the project area as shallow open water would be converted to swamp. Impacts to foraging for EFH species are not anticipated to cause significant increases in cumulative impacts to EFH species experienced from the implementation of FWOP condition projects as the borrow area is small in size compared to the available EFH habitat in the project area providing similar habitat.

6.2.6 CULTURAL RESOURCES

Cumulative impacts to cultural resources would be the additive combination of impacts by this and other Federal, state, local, and private restoration efforts. CEMVN would follow its Section 106 procedures,

described in Section 4.2.1.4, if this proposed project is carried forward as the TSA. Activities associated with this project have the potential to directly impact several existing and previously undocumented cultural resources that may exist within the project area. The CEMVN is developing a Programmatic Agreement with the LA SHPO, the Advisory Council on Historic Preservation, Federally recognized Indian Tribes, and other interested parties outlining the steps needed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects.

6.2.7 RECREATIONAL RESOURCES

Restoration/enhancement of fish and wildlife habitat would increase use of the project sites by desirable species which would consequently provide a better recreational experience. Recreational impacts could be considered cumulatively beneficial when added to the recreational opportunities provided at adjacent refuges and other existing recreational areas in the basin. However, since this is mitigation, which replaces impacted habitats, recreational resources dependent on these habitats would merely shift from the area of impact to the area of mitigation, preventing the loss of recreational resources in the basin. The impacts associated with utilization of the borrow sites for construction of the mitigation projects would be short term and not result in a significant increase in cumulative impacts to recreational resources in the basin.

6.2.8 AESTHETIC RESOURCES

Cumulative impacts to the visual character could continue in the project area with implementation of the proposed action. Other similar activities in the vicinity have and will continue to affect visual quality in the region. Projects of this scope will serve to impact the region in a positive way by contributing renewed natural scenery and wildlife habitat in significant contrast to man-made land use patterns that involve striping natural landscape features.

6.2.9 AIR QUALITY

Cumulative impacts to air quality in the project areas due to construction of the BBA Mitigation features, in addition to other construction activities within the area that may be occurring concurrently, would be temporary and minimal. Fugitive dust emissions would be kept to a minimum by the use of best management practices and emissions from construction equipment would be short-term and minor. Although three of the mitigation project areas are in a maintenance area for ozone, the impacts to the ambient air quality would be minimal and the status as a maintenance area would not be altered. The attainment status for air quality in the remaining parishes would also not be altered.

After the construction period, there would be no incremental contribution to cumulative air quality impacts due to the proposed action in the maintenance area and the areas that are currently in attainment for NAAQS.

6.2.10 WATER QUALITY

The temporary impacts to water quality from construction of this project when added to similar impacts produced by other projects found in the FWOP conditions could result in temporary decreases in water quality throughout the project area. However, those projects in the FWOP conditions which include wetlands restoration as well as the proposed action could have the long-term beneficial impact of increased dissolved oxygen and increased filtration which helps control local turbidity.

6.2.11 NOISE

Construction of the TSA is not anticipated to add significantly to the cumulative effect of noise in the project area as the construction activities would be temporary and restricted to daylight hours. Avoidance of the project areas by wildlife during construction is anticipated despite construction noise due to the movement of machinery in the area.

6.2.12 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

No cumulative impacts are anticipated.

6.2.13 SOCIOECONOMICS/LAND USE, TRANSPORTATION, AND COMMERCIAL FISHERIES

No cumulative impacts are anticipated.

6.2.14 PRIME AND UNIQUE FARMLANDS

The TSA would result in over 3,000 acres of farmland being removed from current and future potential agricultural development. This number rises when added to other past, present, and reasonably foreseeable projects that convert farmlands.

7. COORDINATION AND CONSULTATION

7.1 PUBLIC INVOLVEMENT

The following public meeting was held to obtain public input on the planning process for BBA mitigation, to obtain suggestions on any potential projects to mitigate impacts, and to update the public on the project status:

Industry Day September 7, 2018

Public notices for the meeting ran in local newspapers. The public was able to provide verbal and written comments during the meetings, written comments after each meeting in person, by mail, and via https://www.mvn.usace.army.mil/Environmental/NEPA/. Additional, public comments are accepted anytime during the EA process via https://www.mvn.usace.army.mil/Environmental/NEPA/.

The Draft EA was released for 30 day public review from January 31, 2020 to March 2, 2020.

7.2 AGENCY COORDINATION

This EA has been coordinated with appropriate Congressional, Federal, state, and local interests, as well as environmental groups and other interested parties. The following agencies, as well as other interested parties, have received copies of the draft EA:

U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of the Interior, National Park Service
U.S. Environmental Protection Agency, Region VI
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, NMFS
U.S. Natural Resources Conservation Service
Louisiana Advisory Council on Historic Preservation
Governor's Executive Assistant for Coastal Activities
Louisiana Department of Wildlife and Fisheries
Louisiana Department of Natural Resources, Coastal Management Division
Louisiana Department of Natural Resources, Coastal Restoration Division
Louisiana Department of Environmental Quality
Louisiana State Historic Preservation Officer
Coastal Protection and Restoration Authority Board

Preliminary draft recommendations under the Fish and Wildlife Coordination Act for the EA were provided by the USFWS on December 30, 2019. A Draft CAR was received on February 3, 2020 and a Final CAR was received March 31, 2020 (see appendix I). The USFWS project-specific recommendations for the EA proposed action are listed below:

1. The Service recommends that USACE utilize Section 7(a)(1) of the ESA in concert with mitigation planning to develop mitigation that would aid in the recovery of the threatened inflated heelsplitter.

Response: Acknowledged. If the Amite mitigation project is constructed, CEMVN would endeavor to aid in the recovery of the inflated heelsplitter through design of the mitigation projects and would coordinate design efforts with the USFWS.

2. The Service recommends that future development, evaluation and refinement of any mitigation alternative be fully coordinated with the Service and other natural resource agencies, especially those projects where earthwork/degrading would be required.

Response: Concur. The USACE will fully coordinate with the Service and other natural resource agencies during refinement of mitigation alternatives.

3. The Service recommends that stream mitigation be provided to offset in-water impacts. The Comite River Diversion project includes multiple in-water structures and the East Baton Rouge Flood Risk Management project would improve 66 miles of channels through in-water activities. Those impacts should be mitigated for.

Response: Some of the proposed mitigation sites in the TSA, are located on the banks of open water bodies or rivers. As such, some benefits to lotic habitat may occur with implementation of the mitigation projects, depending on what projects ultimately get implemented. CEMVN is not aware of a in-water impacts to significant ecological resources requiring mitigation. Through coordination with USFWS, impacts from these two BBA 18 Construction projects were assessed to bottomland hardwoods only.

4. The Service recommends that compensation should be provided for any unavoidable losses of stream habitat, wetland habitat, and non-wetland forest caused (directly or indirectly) by project features. All mitigation should be developed/coordinated with the Service and other natural resource agencies. Only after all forest restoration opportunities along the Amite River (abandoned sand and gravel mines) have been implemented to the maximum extent practicable should other mitigation opportunities be pursued.

Response: Through coordination with USFWS, impacts from the BBA 18 Construction projects were assessed to bottomland hardwoods, both upland and wetland, and to swamp. With respect to in-water impacts, CEMVN is not aware of in-water impacts to significant ecological resources. Additionally, ER 1105-2-100, Appendix C requires that the least-cost plan be identified and that an incremental cost analysis be applied to all alternatives to compare their relative cost-effectiveness. The Amite mitigation project, along with multiple other mitigation projects, was considered during the alternative evaluation plan selection process for BBA18 mitigation. The Amite project was not considered cost-effective relative to other alternatives under consideration and did not make it into the bottomland hardwoods (BLH) portion of the TSA. However, it is one of the highest ranking fall-back projects in the final array and could be utilized in the event that projects within the TSA cannot satisfy the BLH mitigation need.

5. Regardless of ownership the Service recommends the following hierarchy be used to located mitigation lands for the BBA 18 planning efforts:
   - Adjacent to the Amite River.
   - Adjacent to the Comite River
   - Within the Amite River floodplains
   - Within the Comite River floodplain
   - Within the Lake Pontchartrain Basin

Response: Consistent with section 906 of WRDA 1986, as amended, mitigation was formulated using a watershed approach and a detailed explanation for undertaking the mitigation outside of the watershed was provided in Appendix Q of the EA. Mitigation opportunities along the Amite are being considered as a potential option to satisfying the mitigation need for the BBA 18 Construction projects.

6. All WVAs prepared by the Service for BBA 18 mitigation alternatives should be considered preliminary drafts and this should be indicated in all text referencing those WVAs. Those WVAs should be refined in future planning documents.

Response: Concur. All reference to the preliminary draft WVAs will read as such and USACE will work closely with the Service to refine the WVAs prior to finalizing the mitigation plan.

7. Of the alternatives proposed the Service does not oppose the use of Feliciana and/or GBRPC for the projects located in the Comite and Amite River Basins.

Response: Acknowledged. Thank you for your support.

8. The Service would not oppose the use of Pine Island, St James, St. John and Joyce to mitigate impacts from the Westshore of Lake Pontchartrain project.

Response: Acknowledged. Thank you for your support.

9. The use of any public lands, e.g., Louisiana Department of Wildlife and Fisheries, should be coordinated with the agency owning those lands. This coordination should continue through all planning, construction and operation stages.

Response: Concur. The USACE will coordinate with Louisiana Department of Wildlife and Fisheries on any use of public lands owned or managed by that agency and if public lands owned or managed by another agency are used, USACE will coordinate with the owner/manager agency of those lands.

10. Boundaries of the mitigation area should be designed such that uneconomic remnants are minimized and management of the area is taken into consideration.

Response: Concur. During design phase, avoidance of uneconomic remnants and accommodations for efficient management will be considered.

11. Impacts to LDWF wildlife management areas should be mitigated on the impacted area or on adjacent lands selected by LDWF that are purchased by USACE and incorporated into the managed area.

Response: Concur. Final mitigation designs will be coordinated with LDWF to ensure impacts to LDWF land would be mitigated on or adjacent to LDWF lands to the extent practicable.

12. The Service does not support the creation of wetlands where it would entail the removal of soil to lower an area down to wetland elevation unless said technique is being utilized to reclaim abandoned sand and gravel mines on impacted basin streams or as part of stream/riparian habitat restoration.

Response: Acknowledged. Agricultural lands identified as mitigation projects would require very minimal removal of soil and would reconnect the areas to the coastal zone. Past projects have proven successful using this method.

13. The Environmental Protection Agency and USACE recently finalized the Navigable Waters Protection Rule to define "waters of the United States". That rule will become effective 60 days after publication in the Federal Register. The USACE should ensure that all of the proposed "wetland" mitigation projects, especially those that would require grading, would be constructed in a location and manner that satisfies the jurisdictional definitions presented in that rule.

Response: Non-concur. Although a particular mitigation site might not qualify as a Clean Water Act Section 404 jurisdictional wetland under the Navigable Waters Protection Rule, all of the proposed mitigation sites would function as wetlands and would ultimately satisfy the three wetland criteria of wetland hydrology, hydrophytic vegetation, and hydric soils. The sites would not need the protection of Clean Water Act Section 404 jurisdiction as all mitigation sites will be purchased in fee and the non-Federal sponsor will be responsible for the protection, operation, maintenance, repair, rehabilitation, and replacement of the mitigation project/site in accordance with its Project Partnership Agreement with CEMVN. Thus, even a mitigation wetland site that does not classify as Section 404 jurisdictional wetland will be protected from future development.

8. COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

There are many Federal and state laws pertaining to the enhancement, management and protection of the environment. Federal projects must comply with a variety of environmental laws, regulations, policies, rules and guidance. Compliance with applicable laws will be accomplished before or concurrent with 30-day public and agency review of this EA #576 and prior to execution of the associated proposed Finding of No Significant Impact.

8.1 ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979

A Federal permit under the Archaeological Resources Protection Act (ARPA) (16 U.S.C 470aa-470mm; 32 CFR Part 229; 43 CFR Part 7; 36 CFR Part 296) will be obtained from the appropriate Federal land manager for any excavation, removal, alteration or destruction of archaeological resources occurring within Federal and Indian lands, including disposition of archaeological resources from such sites.

8.2 CLEAN AIR ACT OF 1972

The Clean Air Act ("CAA") sets goals and standards for the quality and purity of air. It requires the Environmental Protection Agency to set National Ambient Air Quality Standards ("NAAQS") for pollutants considered harmful to public health and the environment. Most of the parishes containing the proposed mitigation sites are in attainment of the NAAQS and no general conformity evaluation for those proposed mitigation measures/sites is necessary. However, Ascension and East Baton Rouge Parishes are in a maintenance area for ozone. CEMVN has completed a general conformity evaluation for the three proposed mitigation measures/sites in those parishes and has determined that emissions in these parishes associated with the proposed construction would not exceed *de minimis* levels. See Section 5.2.2.9 and Appendix O.

8.3 CLEAN WATER ACT OF 1972 – SECTION 401 AND SECTION 404

The Clean Water Act ("CWA") sets and maintains goals and standards for water quality and purity. Section 401 requires a Water Quality Certification from the Louisiana Department of Environmental Quality (LDEQ) that a proposed project does not violate established effluent limitations and water quality standards. State Water Quality Certification CER2019003 was received on September 9, 2019.

As required by Section 404(b)(1) of the Clean Water Act (CWA), an evaluation to assess the short- and long-term impacts associated with the discharge of dredged and fill materials into waters of the United States resulting from this Project has been completed. Section 404(b)(1) public notice was mailed out for public review comment period beginning *January 31, 2020* and ending *March 2, 2020*. The signed Section 404(b)(1) evaluation can be found in Appendix N.

8.4 COASTAL ZONE MANAGEMENT ACT OF 1972

The Coastal Zone Management Act ("CZMA") 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 was prepared for the proposed Project and was coordinated with the Louisiana Department of Natural Resources (LADNR) in a letter dated December 11, 2019. Consistency (C20190208) was received from LADNR on March 4, 2020. (Appendix I)

8.5 ENDANGERED SPECIES ACT OF 1973

The Endangered Species Act ("ESA") is designed to protect and recover threatened and endangered ("T&E") species of fish, wildlife and plants. The USFWS identified in their coordination letter, two T&E species under its jurisdiction, the Gulf sturgeon and West Indian manatee, that are known to occur or believed to occur within the vicinity of the Project area. No plants were identified as being threatened or endangered in the Project Area. CEMVN initiated coordination with the USFWS on Aug 19, 2019. In its letter dated January 28, 2020, the USFWS concurred that "the project, as proposed, is not likely to adversely affect" Federally-listed threatened or endangered species, or their critical habitat, under the jurisdiction of USFWS. CEMVN determined that there would be no effects to the inflated heelsplitter. Several listed species under the jurisdiction of NMFS are known to occur or believed to occur within the vicinity of the project area including the Kemp's Ridley, leatherback and green sea turtles and the Gulf sturgeon. CEMVN initiated coordination with the NMFS on November 15, 2019. NMFS concurred with CEMVN's *may affect not likely to adversely affect* determination by letter dated November 21, 2019. This fulfills the requirements under Section 7(a)(2) of the Endangered Species Act. (Appendix I).

8.6 FARMLAND PROTECTION POLICY ACT (FPPA)

The Farmland Protection Policy Act was passed by Congress as part of the Agriculture and Food Act of 1981 (Public law 97-98). The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. A Farmland Conversion Impact Rating was prepared by CEMVN and submitted to NRCS (see Appendix I). NRCS responded with a letter dated September 24, 2019 stating there would be no expected impacts to NRCS work in the vicinity.

8.7 FISH AND WILDLIFE COORDINATION ACT OF 1934

The Fish and Wildlife Coordination Act ("FWCA") provides authority for the USFWS involvement in evaluating impacts to fish and wildlife from proposed water resource development projects. It requires that fish and wildlife resources receive equal consideration to other project features. It requires Federal agencies that construct, license or permit water resource development projects to first consult with the USFWS, NMFS and state resource agencies regarding the impacts on fish and wildlife resources and measures to mitigate these impacts. Section 2(b) requires the USFWS to produce a Coordination Act Report ("FWCAR") that details existing fish and wildlife resources in a project area, potential impacts due to a proposed project and recommendations for a project. The USFWS reviewed the proposed mitigation features described in EA #576 and provided project specific recommendations on December 30, 2019, a Draft CAR on January 31, 2020 and a Final CAR on March 21, 2020.

8.8 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

Pursuant to USACE policy, potential Hazardous, Toxic and Radioactive Waste concerns are to be identified early and construction in HTRW-contaminated areas is to be avoided to the extent practicable. After an initial HTRW assessment, in the absence of a known HTRW concern, the proposed mitigation site would not require an HTRW investigation.

Engineer Regulation (ER) 1165-2-132 provides that in the Planning, Engineering and Design (PED) Phase that, for proposed project in which the potential for HTRW problems has not been considered, an HTRW initial assessment, as appropriate for a reconnaissance study, should be conducted as a first priority. If the initial assessment indicates the potential for HTRW, testing, as warranted, and analysis similar to a feasibility study should be conducted prior to proceeding with the project design.

The proposed mitigation sites were surveyed via aerial photographs, topographic maps, and database searches in the four Zone Improvement Plan (ZIP) code areas where they would be located. Several small incidents were recorded in the database searches; however, none of the recorded incidents, individually or cumulatively, would have any adverse effects within the proposed mitigation areas. The probability of encountering HTRW for the proposed action is low based on the preliminary site assessments. Prior to use of any site a Phase 1 Environmental Site Assessment would be completed for the project area. If a recognized environmental condition is identified in relation to the Project Area, the U.S. Army Corps of Engineers, New Orleans District would take the necessary measures to avoid the recognized environmental condition so that the probability of encountering or disturbing HTRW would continue to be low.

8.9 MAGNUSON-STEVENS FISHERIES CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended, Public Law 104-208, addresses the authorized responsibilities for the protection of Essential Fish Habitat (EFH) by NMFS in association with regional fishery management councils. The NMFS has a "findings" with the CEMVN on the fulfillment of coordination requirements under provisions of the Magnuson-Stevens Fishery Conservation and Management Act. In those findings, the CEMVN and NMFS have agreed to complete EFH coordination requirements for federal civil works projects through the review and comment on National Environmental Policy Act documents prepared for those projects. EA #576 was provided to the NMFS for review and comment on *January 31, 2020*. CEMVN received no comments from NMFS regarding EFH. EFH coordination is complete.

8.10 MIGRATORY BIRD TREATY ACT

The bald eagle was removed from the List of Endangered and Threatened Species in August 2007 but continues to be protected under the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act of 1918, as amended (MBTA). During nesting season, construction must take place outside of USFWS/LDWF buffer zones. A Corps Biologist and USFWS Biologist will survey for nesting birds prior to the start of construction.

8.11 NATIONAL HISTORIC PRESERVATION ACT OF 1966

The consideration of impacts to historic and cultural resources is mandated under Section 101(b)(4) of NEPA. CEMVN has chosen to address potential impacts to historic properties through and the National Historic Preservation Act (NHPA) Section 106 process (36 CFR Part 800) through development of a Programmatic Agreement (PA). On July 03, 2019, and July 23, 2019, CEMVN submitted Section 106 consultation letters to the State Historic Preservation Officer (SHPO), Affected Tribes (the Alabama-Coushatta Tribe of Texas (ACTT), the Caddo Nation of Oklahoma (CN), the Choctaw Nation of Oklahoma (CNO), the Coushatta Tribe of Louisiana (CT), the Chitimacha Tribe of Louisiana (CTL), the Jena Band of Choctaw Indians (JBCI), the Mississippi Band of Choctaw Indians (MBCI), the Muscogee (Creek) Nation (MCN), the Seminole Nation of Oklahoma (SNO), the Seminole Tribe of Florida (STF), and the Tunica-Biloxi Tribe of Louisiana (TBTL)), the Non-Federal Sponsors for the Comite, EBR and WSLP projects (LA DOTD (Comite), ARBC (Comite), CBR/EBR (Comite & EBR), CPRA (WSLP), and PLD (WSLP)), and the Advisory Council on Historic Preservation (ACHP). The letters provided information regarding CEVMN's proposal to develop a project-specific PA pursuant to 36 CFR § 800.14(b) to fulfill its responsibilities under Section 106 of the NHPA and invited stakeholders to provide input regarding the proposed undertaking and its potential to significantly affect historic properties and/or

sites of religious and cultural significance. On August 08, 2019, CEMVN received a response from the CNO stating "The [CNO] thanks the USACE, New Orleans District, for the correspondence regarding the above referenced project. This project lies in our area of historic interest. The [CNO] Historic Preservation Department requests to be a consulting party on the PA. After reviewing the potential mitigation areas in our GIS database, it doesn't appear that any known Choctaw sites lie nearby. However, there is always the possibility of encountering unknown sites. Therefore, identification through survey is requested." On July 31, 2019, SHPO responded "Thank you for the invitation to participate in the development of this Programmatic Agreement. The Louisiana State Historic Preservation Office will participate in the consultation and development of this PA. We are available on Wednesday, 28 August and look forward to working with your office then." No additional responses were received from any of the other stakeholders consulted (SHPO/Tribal/NFS). Subsequent PA development meetings were held with the aforementioned stakeholders on August 28, 2019, January 08, 2020, and January 29, 2020.

On July 02, 2019, CEMVN posted a NHPA/NEPA Public Notice to its website for a 15-day comment period requesting the public's input concerning the proposed undertaking and its potential to significantly affect historic properties, assistance in identifying any relevant parties who may have an interest in participating in this consultation, and CEMVN's proposal to develop a project-specific PA pursuant to 36 CFR § 800.14(b). No comments were received.

On September 17, 2019, CEMVN provided the ACHP with the documentation specified in § 800.11(e). On September 30, 2019, the ACHP responded that "We have concluded that Appendix A, Criteria for Council Involvement in Reviewing Individual Section 106 Cases, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this Undertaking."

In fulfillment of CEMVN's Section 106 responsibilities, on March, 04, 2020, CEMVN and the Louisiana State Historic Preservation Officer executed the Programmatic Agreement Among the U.S. Army Corps of Engineers, New Orleans District; Amite River Basin Commission; East Baton Rouge Parish; Louisiana Coastal Protection and Restoration Authority; Louisiana Department of Transportation and Development; Pontchartrain Levee District; Louisiana State Historic Preservation Officer of The Department of Culture, Recreation & Tourism; and Choctaw Nation Of Oklahoma; Regarding the Bipartisan Budget Act of 2018 Compensatory Habitat Mitigation Program for the Comite River Diversion, East Baton Rouge Parish Watershed Flood Risk Management, and West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Projects In Louisiana. The Programmatic Agreement (PA) was developed in consultation with the SHPO, Federally-recognized Indian Tribes, and NFS and it outlines the steps that will be followed to identify and evaluate cultural resources and complete the Section 106 process. If significant historic properties are identified within the project area, strategies will be developed to avoid those resources or to minimize or mitigate for adverse effects. Execution and implementation of this PA evidences that CEMVN has afforded SHPO a reasonable opportunity to comment on the Undertaking; that CEMVN has taken into account the effects of the Undertaking on historic properties; and that CEMVN has satisfied its responsibilities under Section 106 of the NHPA and its implementing regulations. To remain in compliance with Section 106, the NHPA stipulations and conditions detailed within the PA and set forth in the FONSI must be carried out.

8.12 NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 1990

CEMVN will ensure that Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), will be followed if Native American human remains and/or funerary items are discovered on federally owned lands, including reservation lands.

Additionally, on February 19, 2020, CEMVN provided Tribes with a NEPA Notice regarding EA #576 - BBA 18 Construction Mitigation EA and on March 20, 2020, the Choctaw Nation of Oklahoma requested that Tribes should be contacted immediately in the event that Native American artifacts or human remains are encountered; this condition is memorialized in the Environmental Design Commitments (see FONSI).

9. CONCLUSION

9.1 RECOMMENDED DECISION

Recommend approval of the BBA Mitigation TSA: the purchase of in-kind mitigation bank credits and the construction of the Corps constructed projects found in table 2.3 until full satisfaction of the BLH-Wet and swamp mitigation requirements is complete.

9.2 PREPARED BY

The point of contact for this EA is Tammy Gilmore, USACE New Orleans District CEMVN-PDN-CEP. Table 9-1 lists the preparers of relevant sections of this report. Ms. Gilmore can be reached at the U.S. Army Corps of Engineers, New Orleans District; Coastal Environmental Planning Section, 7400 Leake Avenue; New Orleans, LA 70118.

Table 9-1
EA Preparation Team

Position/PIER Section	**Team Member**
RPEDS Environmental Reviewer/DQC	Elizabeth Behrens, USACE
Environmental Project Manager	Tammy Gilmore, USACE
Fisheries, Aquatic Resources, EFH, and Water Quality	Tammy Gilmore, USACE
Wetlands and other surface waters, Wildlife, and Threatened and Endangered Species	Tammy Gilmore, USACE
Socioeconomics/Land Use/Environmental Justice, Transportation, Navigation, and Commercial Fisheries	Andrew Perez, USACE Diane Karnish, USACE
Air	Joseph Musso, USACE
Noise	Tammy Gilmore, USACE
Cultural Resources	Jeremiah Kaplan, USACE
Recreation	John Milazzo, USACE
Aesthetics	John Milazzo, USACE
HTRW	Joseph Musso, USACE
Technical Editor	Jennifer Darville, USACE
Mitigation Plan, Success Criteria, Planting Plan	Tammy Gilmore, USACE
Document Organization and Formatting	Piper Bordes, USACE

10. REFERENCES

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WEST SHORE LAKE PONTCHARTRAIN
HURRICANE AND STORM DAMAGE RISK REDUCTION STUDY
INTEGRATED FINAL FEASIBILITY REPORT
AND
ENVIRONMENTAL IMPACT STATEMENT

APPENDIX A
Annex B

Louisiana Coastal Resources Program Consistency Determination

Throughout this Annex the term "nonstructural" is used to describe the following elements; berms, flap gates on the roadway, raising of homes and flood proofing of individual structures. In the main report these elements are identified as localized storm surge risk reduction measures in St. James Parish. There has been no change in the impact area of these element. The name has only changed for this portion of the final recommendation.

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

May 15, 2014

Joan Exnicios
Chief, Environmental Planning Branch
Corps of Engineers- New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

RE: **C20140059,** Coastal Zone Consistency
New Orleans District, Corps of Engineers
Direct Federal Action
West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction System Feasibility Study
St. Charles, St. John the Baptist, and St. James Parishes, Louisiana

Dear Ms. Exnicios:

The above referenced project 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. Although this Office has some reservations about the sustainability of the proposed mitigation features, the project, at the feasibility stage described in this application, is consistent with the LCRP.

The Office of Coastal Management looks forward to continued participation in the planning of this project, and further consistency review when the construction phase is reached. If you have any questions concerning this determination please contact Jeff Harris of the Consistency Section at (225) 342-7949.

Sincerely,

Don Haydel
Acting Administrator
Interagency Affairs/Field Services Division

DH/jdh

cc: Nathan Dayan, COE-NOD
Dave Butler, LDWF
Kirk Kilgen, OCM
Craig Leblanc, OCM

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

March 27, 2014

Regional Planning and
Environment Division South

Mr. Don Haydel
Acting Administrator
Louisiana Department of Natural Resources
Interagency Affairs, Compliance, and Field Services Division
P.O. Box 44487
Baton Rouge, LA 70804-4487

Dear Mr. Haydel:

The U.S. Army Corps of Engineers prepared a draft Environmental Impact Statement (DEIS) for the West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction study. The purpose of this study is to provide, consistent with Congressional authorizations, hurricane and storm damage risk reduction for St. Charles, St. John the Baptist and St. James Parishes that would be economically and environmentally justified. We request your concurrence with the enclosed Consistency Determination, which addresses the applicable Coastal Use Guidelines.

The recommended plan presents potential solutions to reduce damages from hurricane and tropical storm surge for 62,900 residents in St. Charles, St. John the Baptist and St. James Parishes. The proposed action addresses flooding caused by storm surge but does not address rainfall flooding. The tentatively selected risk reduction system for the WSLP study includes the construction of an 18.27-mile (96,481 ft) levee system around the communities of Montz, Laplace, Reserve and Garyville (Alternative C). It also includes the construction of nonstructural components in St. James Parish, including 3 polder berms and 146 flood control culverts under LA Highway 3125. The recommended structural and non-structural features, as well as the associated compensatory mitigation plan are considered constructible at their current level of design.

The structural features were located to minimize, to the maximum extent practicable, project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way to minimize segmentation of wetland areas and systems. However, if the proposed project were implemented, there would be a direct removal of 1,112 acres of swamp and 123 acres of BLH habitats. In addition to the direct removal of habitat with the constructed features, the project would enclose 8,432 acres of swamp and 455 acres of BLH.

These unavoidable impacts would be mitigated through the implementation of the mitigation plan, which proposes to offset 1,189 Average Annual Habitat Units (AAHU) that would be lost due to the implementation of the selected plan. Impacts to swamp habitat would account for approximately 1,089 of these AAHUs and impacts to BLH would account for the remaining 99 AAHUs. Seven mitigation plan components are proposed to compensate for these impacts. These include the mitigation of approximately 99 AAHUs of BLH and 121 AAHUs of swamp in the

Bonnet Carré Spillway, approximately 407 AAHUs of swamp at the Maurepas Crawfish Ponds Restoration site, approximately 339 AAHUs of swamp at the Blind River Swamp Restoration site, approximately 131 AAHUs of swamp at the Milton Island Swamp Restoration site, approximately 20 AAHUs of swamp at the Lutcher Polder Farmlands Swamp Restoration site, and the purchase of sufficient credits to offset 72 AAHUs of swamp mitigation credits from an approved mitigation bank in the Pontchartrain Basin.

Since project impacts were avoided and minimized to the maximum extent practicable, and a mitigation plan is proposed that would compensate for all unavoidable impacts to wetland resources, the proposed action is consistent with the Louisiana's Coastal Resources Program's Consistency Guidelines. Please review the enclosed documents and provide concurrence as soon as possible but within 45 days of the date of this letter. Please contact Daniel Sumerall at 601-631-5428 if questions arise.

Sincerely,

Sandra Stiles

for Joan M. Exnicios
Chief, Environmental Planning Branch

Updated LOUISIANA COASTAL RESOURCES PROGRAM CONSISTENCY DETERMINATION

WEST SHORE LAKE PONTCHARTRAIN HURRICANE AND STORM DAMAGE RISK REDUCTION FEASIBILITY STUDY

St. Charles, St. John the Baptist and St. James Parishes, Louisiana

1.0 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 state approved management programs." In accordance with Section 307, the US Army Corps of Engineers (USACE), New Orleans District (CEMVN) has prepared this Consistency Determination the West Shore Lake Pontchartrain (WSLP) Hurricane and Storm Damage Risk Reduction Study. Coastal Use Guidelines were written to implement the policies and goals of the Louisiana Coastal Resources Program and to 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.

2.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this study is to provide, consistent with Congressional authorizations, hurricane and storm damage risk reduction for St. Charles, St. John the Baptist and St. James Parishes that would be economically and environmentally justified. The U.S. Congress recognized the need for a hurricane and storm damage risk reduction project in the area. Two Congressional resolutions authorize this study. The first was adopted on July 29, 1971 by the U.S. House of Representatives Committee on Public Works.

> *"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE HOUSE OF REPRESENTATIVES, UNITED STATES, that the Board of Engineers for Rivers and Harbors is hereby requested to review the report of the Chief of Engineers on Lake Pontchartrain and Vicinity, Louisiana, published as House Document No. 231, 89th Congress, First Session, and other pertinent reports, with a view to determining whether modifications to the recommendations contained therein are advisable at this time, with particular reference to providing additional levees for hurricane protection and flood control in St. John the Baptist Parish and that part of St. Charles Parish west of the Bonnet Carré Spillway."*

The U.S. Senate Committee on Public Works adopted a resolution on September 20, 1974.

> *"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE, that the Board for Rivers and Harbors is hereby requested to review the report of the Chief of Engineers on Lake Pontchartrain and Vicinity, Louisiana, published as House Document No. 231, 89th Congress, First Session, and other pertinent reports, with a view to determining whether modifications to the recommendations contained therein are advisable at this time, for hurricane protection and flood control in St. James Parish."*

The study was first funded in the 1980s. A 1985 Reconnaissance Report found that there was no justified structural plan suitable for Federal participation. A 1987 reconnaissance report

indicated that under Federal criteria a solution could not be found that would be economically justified or environmentally acceptable. Because of increasing population and economic activity, a 1997 reconnaissance report indicated that the study should proceed into feasibility phase. A Feasibility Cost Share Agreement was executed with the Pontchartrain Levee District (PLD) in 1998. The study stopped in 2002. Following Hurricane Katrina, renewed interest by the levee district led to an amended agreement in 2008. Planning for the project was underway when Hurricane Isaac hit in August 2012. President Obama traveled to Laplace, Louisiana after the storm to view the damage and visit with residents and local leaders (Figure 1-6). The President said, "We're getting on the case to figure out what happened here and what we can do to make sure it won't happen again." The USACE's post-Isaac damage assessment met the first part of the President's commitment. This project would help deliver the second part.

The proposed plan addresses flooding caused by storm surge but does not address rainfall flooding. There have been significant changes over the last 40 years, especially since Hurricane Katrina. Population has grown over the past few decades. Storm surge flooding damages homes, businesses and infrastructure. Surge travels from the Gulf of Mexico into the basin and floods the three study area parishes and beyond. Since 1855, 70 hurricanes have made landfall within 65 nautical miles of Laplace. Hurricanes Betsy (1965), Camille (1969), Juan (1985), Andrew (1992), Katrina and Rita (2005), Gustav and Ike (2008), and Isaac (2012) caused storm surge flooding. Hurricane Isaac's surge, measured from 6 to 8 feet in the area, threatened lives and damaged more than 7,000 homes, closed roads and disrupted the Nationally-significant energy industry. Businesses and workers serving the Port of South Louisiana are located in the area. The port is the largest volume port in the Western Hemisphere and the ninth largest in the world. It stretches 54 miles on the Mississippi River between New Orleans and Baton Rouge. Hurricane Isaac disrupted port logistics. Its storm surge blocked facility access closing the port. Oil refineries, including the Nation's third largest, were shut down. Gasoline production stopped. Regional and National fuel prices spiked. The storm caused extensive agricultural losses due to an inability to drain storm surge water from fields.

3.0 DESCRIPTION OF THE PROPOSED ACTION

The recommended plan includes the construction of an 18.27-mile levee system around the communities of Montz, Laplace, Reserve and Garyville. The plan also includes the construction of nonstructural components in St. James Parish. An overview of the entire risk reduction system is shown on figures 1, 2 and 3.

Levee System

The levee system would begin at the upper guide levee of the Bonnet Carre Spillway, north of an underground utility pipeline right of way and US-61. The levee would head northwest paralleling the pipeline right of way and pass under I-10. Past I-10 the levee would enclose the I-10 and I-55 interchange and cross US-51. It would then track north of I-10 and a pipeline transmission corridor. Past the Belle Terre/I-10 exit, the levee would pass back under I-10 and parallel the pipeline corridor through wetlands until it crosses Hope Canal. The levee would then turn south; cross the pipeline transmission corridor and then extend to the Mississippi River Levee System (MRL)

The levee system would reduce the risk of flooding for over 7,000 structures and four miles of I-10 located in the system. Inclusion of this segment of I-10 could allow for an earlier re-entry

Figure 1: Overview Map Including Mitigation Areas

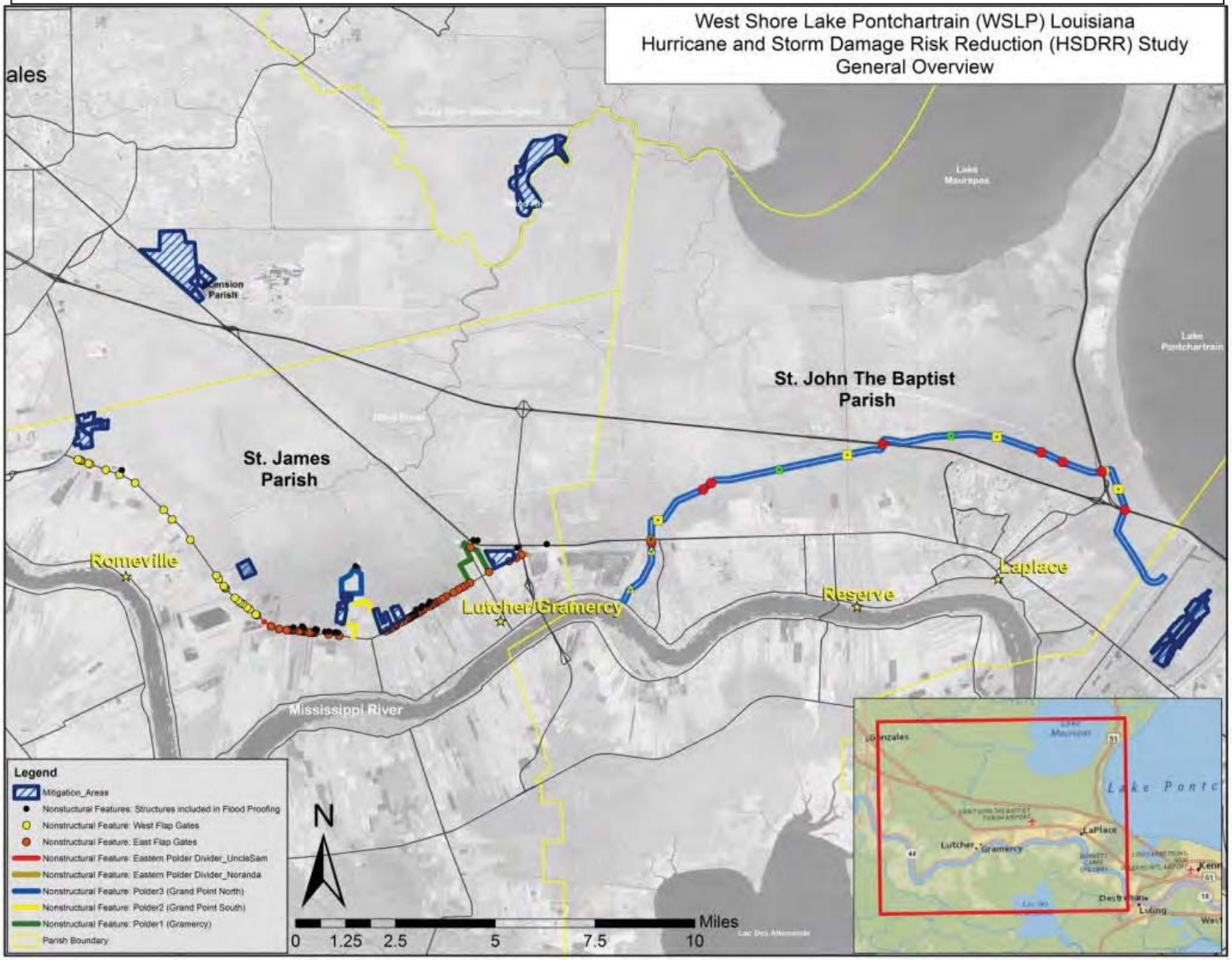


Figure 2: Structural Componet - Levee

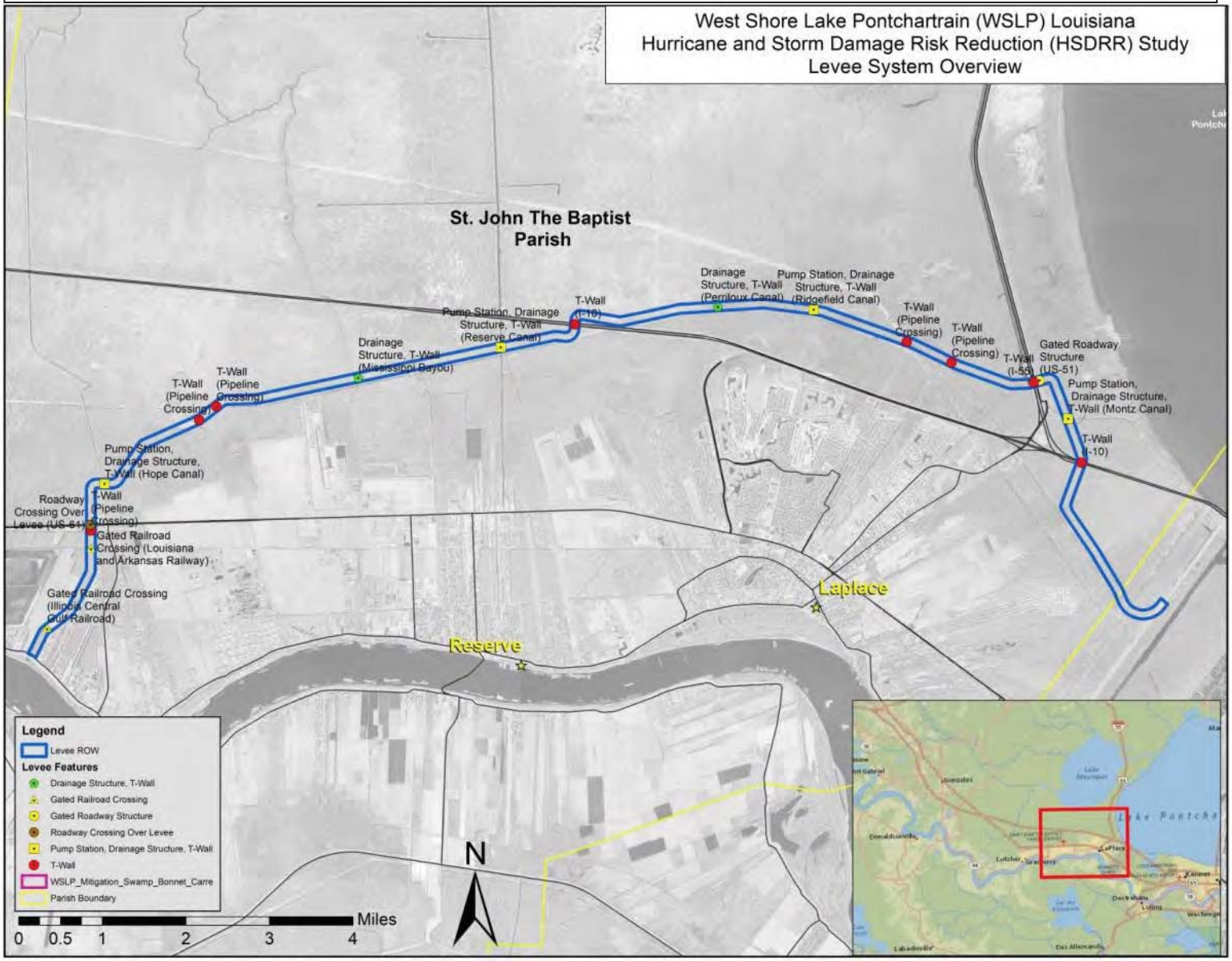
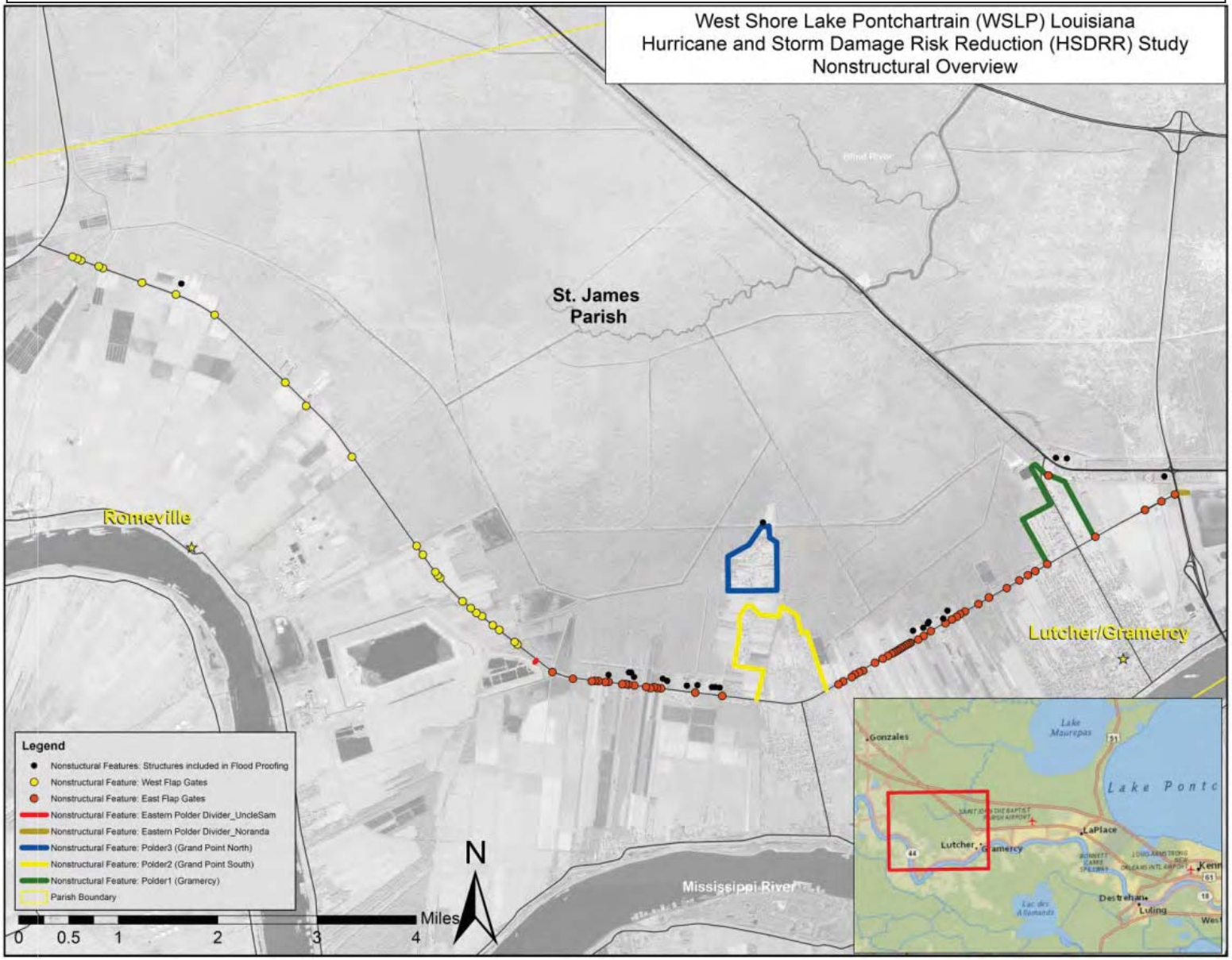


Figure 1: Non-Structural Componet



route for residents and emergency responders in southeast Louisiana, including residents in the New Orleans metropolitan area.

The construction of the structural component of the project, hereafter referred to as the “levee system”, would be based on a 1% probability storm level of risk reduction and a 2020 intermediate RSLR condition. In order to maintain the 1% probability storm level of risk reduction system over the period of evaluation (50 yrs) the levee system would include future levee lifts based on the 2070 intermediate RSLR conditions. For example, at the starting point of the upper guide levee of the Bonnet Carre Spillway the levee would be constructed to a top of levee elevation of 15 ft NAVD 88 in 2020. In the future, the levee at this point would be lifted to a final elevation of 19.5 ft NAVD 88 based on the 2070 intermediate RSLR conditions. This is the highest elevation point of the constructed levee system. The levee would start at this height and taper down to a final top levee elevation of 8.5 ft NAVD 88 near the MRL. The final 2070 top levee elevation near the MRL would be 16 ft NAVD 88.

The system would consist of earthen levees, floodwalls (T-Walls), floodgates, drainage canals, a flood-side ditch for hydraulic connectivity for wetlands north and south of the system, drainage structures and pump stations along the alignment, and mitigation measures (Figure 5-2). Structures through the levee would be built to the 2070 intermediate RSLR condition, to prevent costly future retrofits required for anticipated changing sea levels.

Starting at the upper guide levee of the Bonnet Carre Spillway and heading west along levee the project would construct a 646 linear foot (hereafter “LF”) T-Wall to pass under the existing I-10 overpass. Past this point, an 1100 c.f.s. pump station with three 68" outfalls would be built at Montz Canal, which is very near the I-55 northbound entrance ramp. The pump station, when the system is closed, would mainly remove rainwater flows from the Woodland, the River Forest, and the Prescott Canals. A 267 LF T-Wall and two 6' x 18' x 27' gated drainage structures would also be constructed at this location. This location and all locations with pump stations or drainage structures would be connected to a flood side ditch and a protected side canal that would parallel the entire levee length. The canals would be used to maintain the existing connection between swamps located inside and the swamps outside the levee system. The protected side canal would also serve as a redundancy connection if one of the pump stations failed during an event.

Past the Montz Canal, at the location of US-51, a 188 LF gated structure would be placed through the levee. Directly west of US-51, a 247 LF T-Wall would cross under I-55. The levee would continue to the west until the levee intercepts the first pipeline crossings near Vicknair Canal. Two sections of T-Walls would be used for these pipeline crossing, a 550 LF T-Wall, and a 623 LF T-Wall. Half of the 35 required pipeline relocations would be at these two locations. For purposes of this report, it is expected that all of the pipeline relocations would be compensable. Relocations are expected to take place in the proposed levee right of way (ROW) or existing pipeline ROW. Determination of the compensability of these relocations will be determined during the engineering and design phase of this project if it is authorized.

Continuing west, the levee would then cross Ridgefield Canal. Ridgefield Canal is located between the I-10 LADOT weigh station and the I-10/LA 3188 exit. A 200 c.f.s. pump station with three 30" outfalls would be built at Ridgefield Canal. The pump station, when the system is closed, would mainly remove rainfall flows from Laplace Plantation, Perriloux, Ridgefield, Tebo and Vicknair canals. A 244 LF T-Wall and with two 6' x 18' x 267' gated drainage structures would also be constructed at this location.

West of the Ridgefield Canal, a 100 LF floodgate would be constructed at the location of the Perriloux Canal to allow rainfall flows to flow through the levee when the system is not closed.

West of the I-10/LA 3188 exit, a 247 LF T-Wall would be constructed to cross back under I-10. The levee would continue to parallel the pipeline corridor through wetlands until it reaches Reserve canal. A 400 c.f.s. pump station with three 48" outfalls would be built at this location. The structure at this location would also include two 6' x 20' x 25' drainage structure with a boat bay and 335 LF of T-Walls. Small boats would still be able to pass through the drainage structure when the system is open.

Continuing west, the levee would then cross Mississippi Bayou. A 6' x 10' x 25' drainage structure with a 267 LF T-Wall would be constructed at this location.

The levee would then continue west toward Hope Canal, until it reaches the next major set of pipeline crossings. All of the remaining major pipeline relocations would be at this location. Two sections of T-Walls would be used for these pipeline crossing, a 400 LF T-Wall, and a 300 LF T-Wall. As with the other pipelines, for purposes of this report, it is expected that the pipeline relocations would be compensable. Relocations are expected to take place in the proposed levee ROW or existing pipeline ROW at this location. Determination of the compensability of these relocations will be determined during the engineering and design phase of this project if it is authorized.

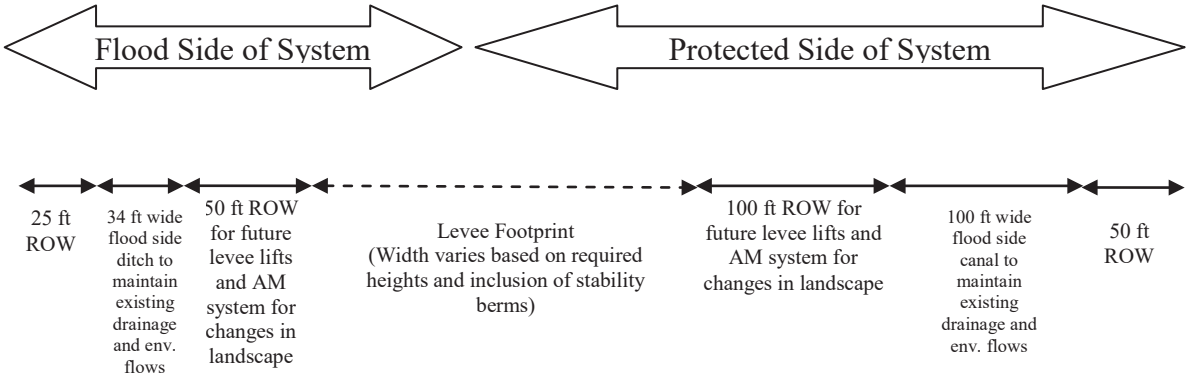
The levee would then continue west until it reaches Hope Canal. A 450 c.f.s pump station with three 54" outfalls would be constructed at this location. Currently the design and cost includes a 6' x 20' x 25' drainage structure and a 247 LF T-Wall, but the Hope Canal location is also the same location of the State of Louisiana's proposed Mississippi Reintroduction into Maurepas Swamp diversion. The WSLP project has been coordinating activities between the project development teams, but for the purposes of the WSLP feasibility design, we do not consider the diversion project as a future landscape feature, since the State has not identified funding and has filed an incomplete permit application to the USACE for construction of the project. The USACE would continue to monitor the status of the diversion project. The team expects that if the diversion project moves forward it would be constructed on the flood side of the levee and would parallel the levee from Hope Canal to the MRL.

When the levee turns south, past Hope Canal to tie into the MRL, the levee would cross US-61, a pipeline ROW, and two railroad tracks. US-61 would be raised to hump over the levee at the crossing point. The pipeline crossing would include a 301 LF T-Wall, while the two railroad crossings would include a 150 LF gate structure and a 50 LF gate structure.

In all, there would be a total of 5,001 LF of T-Walls, 4 pump stations with associated drainage structures, 2 drainage structures, one gated road crossing, and 2 gated railroad crossings.

4.69 miles of the upper guide levee of the Bonnet Carre Spillway from the spillway control structure to the WSLP tie-in point would be included in the WSLP levee system, but there would be no construction activities associated with this Bonnet Carre levee. Existing levee heights are high enough to prevent 1% probability storm surge from entering the WSLP system during storms. The construction of the WSLP tie-in point would be to set to elevation of 15 ft NAVD 88 while the current upper guide levee elevation is 15.5 ft NAVD 88. The upper guide levee heights in the future would be monitored to determine if sections of the Bonnet Carre Spillway levee would need future lifts to prevent overtopping of storm surges into the WSLP system.

All levee right of ways would have the following typical dimensions:



The 50 ft and 100 ft right of ways adjacent to the levee footprints would be used for future levee lifts. The levee would be lifted five times overthe period of evaluation.. The first two lifts would be used to obtain a 1% probability storm level of risk reduction system in 2020. Additional levee lifts to maintain a 1% probability storm level of risk reduction system would take place in years 2030, 2045, and in 2060.

9,000,000 million cubic yards (cy) of compacted fill and un-compacted fill would be required to create and maintain the levee over the period of evaluation. A portion of the initial fill material, if suitable, would be obtained from the canals and ditch, approximately 1,678,000 cy. Borings indicate that the top 4 ft of the cross section of these features would not be suitable as levee fill material. The top 4 ft of material; approximately 1,685,000 cy, would be used beneficially at mitigation plan sites, or disposed appropriately by the contractor. The remaining fill for the levee, approximately 7,322,000 cy, would be obtained from the Bonnet Carre Spillway.

The levee footprint would vary based on the designed cross section and required top of levee heights by each levee section. The top of the levee would have a 10’ wide crown and the protected side of the levee system would be based on a 1:3 side slope, with some reaches including a geotechnical stability berm. 3,400,000 square yards of geotextile fabric would be placed under the levee footprint and approximately 80,000 cubic yards of aggregate limestone would be used to build a road on the levee crown.

The total levee construction ROW would be 1,235 acres. RE agreements would be acquired on all features. A perpetual flood protection levee easement would be acquired for the 669 acres of the levee and floodwall features. A perpetual underground piling easement would be acquired for the 33 acres of the T-Walls. For the two canals, a 519 acres perpetual drainage ditch easement would be acquired. The remaining features the 4 pump stations; 9 acres and the 3 gated crossing; 5 acres would be acquired based on fee, excluding minerals. In addition to the permanent easements, 49 acres of temporary access easements and 12 acres of temporary work area easements would be acquired. These temporary access and work access areas would be on existing roadways or developed areas of the project area and would not be in environmentally sensitive areas.

All of the impacts from the constructed features would be to either swamp habitats or BLH. There would be a direct removal of 1,112 acres of swamp habitats and 123 acres of BLH habitats. Using a wetland value assessment under the intermediate sea level scenario the project would be required to mitigate for a direct loss of 595.3 average annual habitats units (AAHUs) of swamp and 95.5 AAHUs of BLH. In addition to the direct removal of acres of habitat due to construction, the project would enclose 8,432 acres of swamp and 89 acres of BLH.

Hydrologic connectivity would be maintained to the extent practicable through water control structures except during closure for hurricanes or tropical storms. When the system is closed, pumps would operate on average for 1.7 storms per year, which equates to a closure of structures on average 8.5 days per year. This expected rate of closure would be the same regardless of the actual rate of RSLR as closure of the system is tied to tropical storm events and the elevation trigger would be adjusted as sea level rises. The risk reduction system is only authorized to address storm surge caused by hurricane and tropical storm events. It is not authorized to mitigate for or reduce impacts caused by higher day-to-day water levels brought about by increases in sea level rise. Any operational changes implemented to address changing SLR conditions or for any other non-project-related purpose would be considered a separate project purpose requiring separate authorization, new NEPA documentation, and/or permit approvals.

The levee is designed to maintain hydrologic connectivity to the extent practicable. In order to minimize a reduction in efficiency of drainage affecting water quality and increased impoundment on the protected side of the system, the levee design includes drainage structures and canals located on both the flood side and protected side of the levee. In order to mitigate for any impacts caused by the potential delay in water movement, the team developed a WVA that accounts for delays in water movement. Because 366 acres of the total 455 acres of enclosed BLH is already impacted by existing roadways and railroad tracks, the BLH indirect impacts were calculated to total 89 acres. Using a WVA under the intermediate RSLR scenario, the project would have to mitigate for the indirect loss of 494.5 AAHUs of swamp and 3.1 AAHUs of BLH. The project would also be required to mitigate for a direct loss of 595.3 AAHUs of swamp and 95.5 AAHUs of BLH. The total required mitigation for both the direct and indirect impacts from the construction of the risk reduction levee system is 1,188.03 AAHUs.

Nonstructural System

The recommended plan includes nonstructural measures for structures in the communities of Gramercy, Lutcher and Grand Point which are located outside of the proposed levee system (Figure 5-2). See Chapter 3 for information concerning plan formulation. The nonstructural measures include nonstructural berms, and flapgates on existing drainage and roadway features. Flood proofing measures (e.g. raising of structures) are limited to a few structures located outside of the larger nonstructural measures. All of the measures focused on providing a risk reduction above the 1% AEP storm stages in 2020. NFS will be required to maintain the non-structural features to their initial design height for so long as the project remains authorized Future level of risk reduction is dependent on the rate of sea level rise.

Gramercy Area

In the Gramercy area, north of Hwy 3125, a 10,100 LF nonstructural berm would be built to provide risk reduction to 275 structures, herein referred to as "**Polder 1 (Gramercy Berm)**." The berm would be constructed to a +6.5' NAVD 88 elevation. The berm in 2020 would provide risk reduction above the 1% AEP storm stages. Storm stages in St. James Parish are below +6.5'

NAVD 88 elevation in 2020. As discussed in Chapter 3, in the future, the berm's effectiveness depends on the RSLR. .

The berm would parallel both sides of HWY 20, and parallel the railroad track along US-61 (Airline Highway). On the south, the berm would tie into Hwy 3125 to close off the system. Hwy 3125 is key feature for all of the nonstructural features. The entire roadway is above a 6.5 ' NAVD 88 elevation and will be used as a tie in point for the berm. The design of the berm is based on with a 4' wide crown and 3:1 side slopes. Using local LIDAR data it was assumed that the existing ground elevation under the berm would be at an elevation of approximately 4.3 ft NAVDD88. Using this assumption, the proposed berm would have an average height of 2.2 ft with an average width of 18 ft, and require 237,000 cy of compacted fill for construction. The berm would also include two floodgates to allow existing drainage to flow through the berm when not under surge events. A pump system to operate and remove rainwaters during tropical/hurricane storm events will be included in the features. The pump system will be approximately 217 cfs. The berm would be placed in a location so as not to interfere with existing local drainage.

In reviewing, the berm footprint there is a risk of affecting approximately 0.29 acres of forested wetlands. Attempts would be made to avoid these areas during construction. Due to the current uncertainty in avoiding these areas, we have included cost for mitigating for these forested wetlands in the total construction cost.

Grand Point Area

In the Grand Point area, north of Hwy 3125, the recommended plan includes two nonstructural berms, "**Polder2 (Grand Point South)**" and "**Polder3 (Grand Point North**)".

Polder2 (Grand Point South) would reduce risk for 190 structures. The berm would be 14,488 LF, and would include a 4' wide crown and 3:1 side slopes. Similar to the Gramercy berm, it would tie into HWY 3125 and be constructed to a 6.5' NAVD 88 elevation. Initially, in 2020 the berm would provide risk reduction above the 1% AEP storm stages. Storm stages St. James Parish are below a 6.5' NAVD 88 elevation in 2020. Future level of risk reduction is dependent on the rate of sea level rise.

Using LIDAR data it was assumed that the existing ground elevation under the berm would be approximately 4.5' NAVD 88. Using this assumption the proposed berm would have an average height of 2 ft with an average width of 16 ft, and require 273,900 cy of compacted fill for construction. The berm would also include one floodgate to allow existing drainage to flow through the berm when not under surge events. A pump system to operate and remove rain waters during tropical/hurricane storm events will be included in the features. The pump system will be approximately 382 cfs. The berm would be placed in a location so as not to interfere with existing local drainage. The berm would also be placed very near the edge of the property owners' parcels where feasible. This would minimize the loss of use of any property.

Polder3 (Grand Point North) would provide risk reduction to 71 structures. The berm would be a complete ring around the structures in the northern portion of Grand Point, near the Grandpoint Boat Lunch. The berm would be 10,400 LF, and would include a 4' wide crown and 3:1 side slopes. The berm would be constructed to a 6.5 ' NAVD 88 elevation. Initially, in 2020 the berm would provide risk reduction above the 1% AEP storm stages. Storm stages St. James Parish are below a 6.5' NAVD 88 elevation in 2020. Future level of risk reduction is dependent on the rate of sea level rise.

Using local LIDAR data it was assumed that the existing ground elevation under the berm would be approximately 4‘ NAVD 88. Using this assumption, the proposed berm would have an average height of 2.5 ft with an average width of 20 ft, and require 286,800 cy of compacted fill for construction. The berm would also include one floodgate to allow existing drainage to flow through the berm when not under surge events. A pump system to operate and remove rain waters during tropical/hurricane storm events will be included in the features. The pump system will be approximately 140 cfs. The berm would be placed in a location so as not to interfere with existing local drainage. The berm would also be placed very near the edge of the property owners’ parcels where feasible. This would minimize the loss of use of any property.

In reviewing, the berm footprint there is a risk of affecting approximately 0.81 acres of forested wetlands. Attempts would be made to avoid these areas during construction. Due to the current uncertainty in avoiding these areas, we have included cost for mitigating for these forested wetlands in the total construction cost.

Flood Risk Reduction Under LA Highway 3125

In addition to the nonstructural berms north of Hwy 3125, the recommended plan is to use 13 miles of Hwy 3125 and its existing foundation as nonstructural feature. Currently the roadway elevation is above a 6.5' NAVD 88 elevation. Currently, the 1% AEP storm stages in 2020 flow through the culverts under the roadway in the opposite direction from natural drainage. By closing off the culverts with one-way flap gates and a drainage canal with a floodgate during surge events, the plan would provide risk reduction to 19,500 acres and 4,295 structures south of Hwy 3125. Although there are a limited number of structures that are impacted by the 1% AEP storm surge stages, this closure reduce the risk of a large portion of the parish’s critical sugarcane crops from flooding from this type of storm surge event. If the parish in the future makes improvements to Hwy 3125, any additional height added to the entire highway would add to the structures risk reduction level behind the hwy. Due to the fact that the roadway is being used as flood risk reduction feature the local sponsor will be required to maintain the system’s initial level of risk reduction. This includes the berm tie in points to the roadway and 13 miles of the roadway. If the roadway requires maintenance and would be degraded below its original elevation, the work should take place outside of hurricane season. If it is not possible to workout side of hurricane season, interim flood risk measures should be set up to maintain the original level of risk reduction provided by the roadway.

The recommended plan includes 145 flap gated closures, two floodgates and two small berms (Noranda and Uncle Sam). The Noranda berm ties the highway into high ground east of Gramercy. The Uncle Sam berm divides the developed area behind Hwy 3125 from an area that is primarily agricultural land. By dividing these two areas, the local community can focus its reduction effort in the future. Future improvements could be focused on sections of the hwy that have structures behind the hwy, approximately 7 miles vs. 13 miles. The area west of the Uncle Sam berm includes an area of 8,175 acres, but only includes one structure that is has a first floor elevation below the 1% the AEP storm stages. The total length of the berms is approximately 645 LF.

Due to the nature of the flooding south of Hwy 3125, it is assumed that the 19,500 acres would have ample storage capacity to hold any rainfall during the surge events. Even if some acres of crops are flooded from rainfall it would be much less than if the surge was allowed to flow under Hwy 3125.

Remaining Structures in St. James Parish

The recommended plan addresses the flooding of structures located outside of the polders north of Hwy 3125. Eighty structures would be outside of the nonstructural berms. Only 23 of the 80 structures have a first floor elevation less than the 1% AEP storm stages in 2020. Based on this evaluation the recommended plan includes 14 residential structures that would be raised to the stage associated with the 2070 1% (100-year) AEP event; 4 non-residential structures would be flood proofed to 3 feet above the ground elevation; and smaller nonstructural berms would be constructed for 5 light industrial/warehouse facilities. The 14 residential structures are being raised to the 2070 height because it is more cost effective to raise a home once.

Mitigation Plan

The objective of the mitigation plan is to restore swamp and bottomland hardwood habitat to fully compensate for unavoidable project-induced impacts. WVA models were run on the recommended WSLP levee and non-structural footprints to determine the functions and values of the impacted habitats, expressed in Average Annual Habitat Units (AAHU). The models predict that approximately 1,189 AAHUs would be lost due to direct and indirect habitat impacts over the 50-year period of analysis. See Mitigation Plan for Details.

Table K-1. Wetland habitat impacts.

Habitat	Direct Impacts		Indirect Impacts		Total Impacts[1]	
	Acres	AAHUs	Acres	AAHUs	Acres	AAHUs
Swamp[2]	1,112	595	8,432	495	9,544	1,090
Bottomland Hardwood	124	96	89	3	213	99
Total	***1,236***	***691.1***	***8,521***	***497.6***	***9757***	***1,189***

Six mitigation plan components will provide the required compensation for habitat impacts.

The first feature mitigates for BLH impacts through the construction of a project that creates BLH in the Bonnet Carré Spillway.[3]Further information about the mitigation measures that are being proposed to offset the unavoidable project-induced impacts from the WSLP project are provided in the attached draft mitigation plan (Attachment 1).

- **Five components collectively compensate for Project swamp impacts. The components are:**
  - **Purchasing credits from a swamp mitigation bank (available at this time High Point Phase 1, Timberton Phase 2 and 3)**
  - **Blind River Diversion Canal Swamp Restoration[4]**

[1] Figures are rounded up.
[2] Includes 1.1 acres of impacts from non-structural features.
[3] This plan was developed as an alternative considered in the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System, Programmatic Individual Environmental Report for mitigation. This alternative was not recommended. U.S. Army Corps of Engineers, 2013. Programmatic Individual Environmental Report #36 for Lake Pontchartrain and Vicinity - Mitigation. See Appendix K. Bonnet Carre BLH-WET Restoration Project.
[4] This plan was originally developed as part of a Louisiana Coastal Area project called the Amite River Diversion Canal Hydrologic Modification. It entailed cutting gaps in a spoil bank and railroad embankment, dredging conveyance channels and planting vegetation. The project was not recommended in the LCA plan. A portion of the plan is being developed by Livingston Parish under the Coastal Impact Assistance Program. The tree plantings

- **Bonnet Carré Swamp Restoration**[5]
- **Maurepas Crawfish Ponds Swamp Restoration**
- **Lutcher Polder Farmlands Swamp Restoration**

Table K-2 lists the mitigation plan components, the acreage of each component, and the net gain in AAHUs from each component over a 50-year period of analysis.

Table K-2. Mitigation plan components.

Mitigation Project ID*	Proposed Components	Acres	Net Gain AAHUs[6]
BLH1	Bonnet Carré Bottomland Hardwood Restoration	156	99
SWMP1	Swamp Mitigation Bank Credit Purchase	n/a	72
SWMP2	Blind River Swamp Restoration	1,040	339
SWMP3	Bonnet Carré Swamp Restoration	310	121
SWMP4	Maurepas Crawfish Ponds Restoration	1,161	407
SWMP6	Lutcher Polder Farmlands Swamp Restoration	348	151
TOTAL		3,015	1,189

**SWMP5 (Milton Island Swamp Restoration) was removed from the plan, the 131 AAHUs from that site will be accomplished by expanding the acres at SWMP6.*

WVA modeling indicates that the total net gain from the proposed mitigation plan will be 1,189 AAHUs, while the total net loss resulting from all Project habitat impacts is 1,189 AAHUs. This indicates that the mitigation plan would fully compensate for the lost functions/values due to constructing and operating the Project.

4.0 GUIDELINES

GUIDELINES APPLICABLE TO ALL USES

Response: Guidelines 1.1-1.6 and 1.8-1.10 have been read in their entirety and are acknowledged. They have been addressed through the preparation of responses to the guidelines contained within the specific use categories.

Guideline 1.7 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:

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

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feature has been expanded to use as a mitigation project. Depending on the final CIAP project, some additional features may be developed during preconstruction engineering and design for the West Shore mitigation plan.

[5] This plan is as an alternative considered in the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System, Programmatic Individual Environmental Report for mitigation. The alternative was not recommended but is currently a backup measure to that project. See U.S. Army Corps of Engineers, 2013. Programmatic Individual Environmental Report #36 for Lake Pontchartrain and Vicinity. Appendix L. Bonnet Carré Swamp Restoration: Mitigation for LPV HSDRRS General Swamp Impacts.

[6] Required acre and AAHU amounts are rounded up.

b) adverse economic impacts on the locality of the use and affected governmental bodies.

c) detrimental discharges of inorganic nutrient compounds into coastal waters.

d) alterations in the natural concentration of oxygen in coastal waters.

e) 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.

f) adverse disruption of existing social patterns.

g) alterations of the natural temperature regime of coastal waters.

h) detrimental changes in existing salinity regimes.

i) detrimental changes in littoral and sediment transport processes.

j) adverse effects of cumulative impacts.

k) detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging.

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

m) discharges of pathogens or toxic substances into coastal waters.

n) adverse alteration or destruction of archaeological, historical, or other cultural resources.

o) fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas.

p) 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.

q) 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.

r) adverse disruptions of coastal wildlife and fishery migratory patterns.

s) land loss, erosion and subsidence.

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

u) reductions in the long-term biological productivity of the coastal ecosystem.

Response: This guideline has been read in its entirety. The proposed project would result in unavoidable adverse impacts to wetlands and would slightly alter current freshwater flows. However, various steps were taken to avoid and minimize these adverse impacts. Further, a mitigation plan is developed that would fully offset these unavoidable impacts. Detailed

discussion of these measures can be found in responses to various guidelines throughout this evaluation.

GUIDELINES FOR LEVEES

Guideline 2.1 The leveeing of unmodified or biologically productive wetlands shall be avoided to the maximum extent practicable.
Response: This guideline has been read in its entirety. The proposed hurricane and storm damage risk reduction system avoided to the maximum extent practicable unmodified and biologically productive wetlands through the following steps: 1) Avoiding-- the Project Delivery Team (PDT) avoided potential impacts to wetlands by designing levee alignments and non-structural berm alignments which followed existing pipeline and utility rights of way to avoid segmentation of wetland areas; developed non-structural measures such as storm damage-proofing, structure raising, acquisitions of structures, and relocation of structures. 2) Minimizing: the PDT screened out measures and alignments that could cause potential adverse impacts but had no additional storm damage risk reduction benefits (e.g., alignments along Lakes Pontchartrain and Maurepas). 3) Rectifying: the PDT developed measures for rectifying adverse impacts of restricting tidal exchange (e.g., culverts under the levee which would provide tidal exchange). 4) Reducing: the PDT developed the levee and non-structural systems to simulate the existing hydrologic connectivity. Pumps are included in the system and would only be operated during the approximately 1.7 storm events per year and would be closed for only approximately 8.5 days per year. Consequently, hydrologic connectivity would be generally maintained with the surrounding swamps and Lakes Maurepas and Pontchartrain, except during the closing of the system for storm events. 5) Providing non-structural risk reduction in the St. James Parish area.

- Alternative D has the greatest habitat impacts (approximately 2,080 AAHUs more than Alternative C), highest mitigation costs, the lowest BC ratio, and lowest net benefits.
- Alternatives A and C are comparable in total impacts. Alternative C has fewer direct impacts, while Alternative A has fewer indirect impacts. Alternative A has a total impact of approximately 151 AAHUs less than Alternative C.
- Both Alternative A and C are considered environmentally acceptable alternatives, and provide benefits to the same number of structures.
- Alternative C has the lowest total cost (including mitigation), the highest BC ratio, and highest net benefits.

Although the PDT attempted to avoid and minimize impacts to wetland habitats, the proposed project would result in the direct removal of approximately 1,112 acres of swamp and approximately 124 acres of bottom-land hardwood habitats (BLH). Additionally, the project would enclose an additional 8,432 acres of swamp and 89 acres of BLH. Total direct and indirect impacts that would result from the implementation of the proposed project are expected to be approximately 1,189 average annual habitat units (AAHUs). These unavoidable impacts would be mitigated through the implementation of the attached mitigation plan. Since project impacts were avoided and minimized to the maximum extent practicable, and a mitigation plan is proposed that would compensate for all unavoidable impacts to wetland resources, the proposed plan is consistent with this guideline.

Guideline 2.2 Levees shall be planned and sited to avoid segmentation of wetland areas and systems to the maximum extent practicable.
Response: This guideline has been read in its entirety. The majority of the proposed levee alignment was developed and located parallel and adjacent to existing oil and gas pipeline rights-of-way to minimize segmentation of wetland areas and systems. Existing wetlands in the area are presently segmented and disrupted by the Interstate 10 (constructed in mid 1970s), as

well as numerous oil and gas pipeline corridors and associated access roads; state and local highways (e.g., US 61--Airline Highway, Hwy 641); Reserve Relief Canal and other drainage canals; numerous remnant logging railroad grades, canals and embankments; and undesignated and unimproved gravel and dirt roads and trails throughout the Maurepas swamp. These measures are consistent with this guideline.

Guideline 2.3 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: This guideline has been read in its entirety. 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. In addition, the structural and non-structural systems are designed to minimize restrictions to tidal exchange through the inclusion of 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. These features allow the includes wetlands to remain in their existing Jursdictional state. These measures are consistent with this guideline.

Guideline 2.4 Hurricane and flood protection levees shall be located at the non-wetland/wetland interface or landward to the maximum extent practicable.
Response: This guideline has been read in its entirety. The structural features were located to minimize to the extent practicable project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way to minimize segmentation of wetland areas and systems.

Guideline 2.5 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: This guideline has been read in its entirety. The proposed levee system was designed and would be constructed for hurricane and storm damage risk reduction. The purpose of the proposed project is to provide increase storm surge protection for the the communities of Montz, Laplace, Reserve and Garyville. Therefore, the proposed project is consistent with this guideline.

Guideline 2.6 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: This guideline has been read in its entirety. The proposed hurricane and storm damage risk reduction system was designed and would be constructed and maintained 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. In addition, the structural and non-structural systems are designed to promote hydraulic exchange with 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. Therefore, the proposed project is consistent with this guideline.

GUIDELINES FOR LINEAR FACILITIES

Guideline 3.1 Linear use alignments shall be planned to avoid adverse impacts on areas of high biological productivity or irreplaceable resource areas.
Response: This guideline has been read in its entirety. The structural and non-structural components of the Proposed Plan (levee,floodwalls, and berms) was planned to avoid, minimize

and reduce potential adverse impacts to significant resources including areas of high biological productivity and irreplaceable resource areas. The structural features of the WSLP were located to minimize to the extent practicable project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way (ROWs) to minimize segmentation of wetland areas and systems. Non-structural measures would have little, if any, significant effects on areas of high biological productivity or irreplaceable resource areas. Unavoidable project-related impacts to areas of high biological productivity would be mitigated through the implementation of the attached mitigation plan. Therefore, the proposed project is consistent with this guideline.

Guideline 3.2 Linear facilities involving the use of dredging or filling shall be avoided in wetland and estuarine areas to the maximum extent practicable.
Response: This guideline has been read in its entirety. Approximately 519 acres would be dredged to create two drainage canals, with one canal occurring on either side of the levee. To the maximum extent practicable, the footprint of these drainage canals would be placed within existing pipeline ROWs to minimize impacts to wetland communities. The material from these canals will be use beneficially either in the levee footprint or as part of the Bonnet Carre mitigation site. Unavoidable project-related impacts to wetland areas would be mitigated through the implementation of the attached mitigation plan. Therefore, the proposed project is consistent with this guideline.

Guideline 3.3 Linear facilities involving dredging shall be of the minimum practical size and length.
Response: This guideline has been read in its entirety. A total of 96,481 linear feet would be dredged along both sides of the proposed levee alignment to provide sufficient drainage and to enhance wetland connectivity. The floodside drainage ditch would be approximately 34 feet wide, while the ditch on the protected side of the proposed levee alignment would be approximately 100 feet wide. Numerous culverts and gated crossings would be featured in the proposed alignment to provide maximum hydrologic exchange and reduce delays in tidal flows. The proposed project is consistent with this guideline.

Guideline 3.4 To the maximum extent practicable, pipelines shall be installed through the "push ditch" method and the ditch backfilled.
Response: This guideline has been read in its entirety. Approximately 35 pipeline and utility relocations are expected to occur as a result of the implementation of the proposed plan. To the maximum extent practicable, these relocations would occur within the proposed levee ROW to minimize additional impacts to wetlands and environmentally sensitive areas. This proposed action would not directly include the construction pipelines. These relocations would be covered under either an existing coastal use permit or a modification of this determination depending on if the linear facilities are found to be Federally compensable or not. Therefore, this guideline is not applicable to the project at this time.

Guideline 3.5 Existing corridors, rights-of-way, canals, and streams shall be utilized to the maximum extent practicable for linear facilities.
Response: This guideline has been read in its entirety. The structural component (levee and floodwalls) of the proposed plan is located adjacent and parallel to existing oil and gas pipeline corridors to avoid multiple crossings and to avoid the potential risks associated with and disruption of services provided by these pipelines if these pipelines where relocated. The proposed non-structural berms would be located along property boundaries and would avoid environmentally sensitive areas to the maximum extent practicable. Therefore, the proposed plan is consistent with this guideline.

Guideline 3.6 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 has been read in its entirety. Federal participation and separable recreation measures is not permitted by current budget policies for hurricane and storm damage reduction projects (source: ER 1105-2-100, Appendix E page 143). Therefore, this guideline does not pertain to the proposed plan.

Guideline 3.7 Linear facilities involving dredging shall not traverse or adversely affect any barrier island.
Response: This guideline has been read in its entirety. This guideline does not pertain to the proposed plan.

Guideline 3.8 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 has been read in its entirety. This guideline does not pertain to the proposed plan.

Guideline 3.9 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: This guideline has been read in its entirety. To the maximum extent practicable, the proposed hurricane and storm damage risk reduction system was designed and would be constructed and maintained 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. In addition, the structural system is designed to reduce restrictions of tidal exchange through the inclusion of 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. Should the trend of increased precipitation and climate change continue, there could be continued increases in runoff associated with increased rainfall events which may affect the total volume of freshwater in the area as well as storm damage peak events. Non-structural measures would have little, if any, significant effects on hydrologic patterns, or the interchange of water, nutrients, or aquatic organisms. Therefore, the proposed plan is consistent with this guideline.

Guideline 3.10 Linear facilities shall be planned, designed, and built using the best practical techniques to prevent bank slumping and erosion, 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: This guideline has been read in its entirety. To the maximum extent practicable, the proposed hurricane and storm damage risk reduction system and the non-structural project features would be designed, constructed, and maintained 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. Therefore, the proposed project is consistent with this guideline.

Guideline 3.11 All non-navigation 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 has been read in its entirety. The proposed plan would not increase tidal exchange or promote the exchange of more saline waters with fresh waters. In fact, the system is designed to minimize impacts to the hydraulic connectivity within the project area through the incorporation of 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. These exchanges are currently occurring, and these project features are only designed to reduce changes to the existing hydrologic patterns in the project area. Therefore, the proposed plan is consistent with this guideline.

Guideline 3.12 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 has been read in its entirety. All existing drainage culverts under I-10 would be connected to adjacent drainage culverts within the levee thereby minimizing changes to the existing hydrology of the system and providing hydrologic connectivity between the enclosed and outside areas. Therefore, the proposed project is consistent with this guideline.

Guideline 3.13 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 La. R. S. 45:408, whichever would require higher standards.
Response: This guideline has been read in its entirety. Approximately 35 pipeline and utility relocations are expected to occur as a result of the implementation of the proposed plan. To the maximum extent practicable, these relocations would occur within the proposed levee ROW to minimize additional impacts to wetlands and environmentally sensitive areas. This proposed action would not directly include the construction pipelines. These relocations would be covered under either an existing coastal use permit or a modification of this determination depending on if the linear facilities are found to be Federally compensable or not. Therefore, this guideline is not applicable to the project at this time.

Guideline 3.14 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 has been read in its entirety. Approximately 3,363,000 cy of material would be dredged during the construction of the proposed pump station canals and drainage ditches that would parallel the levee alignment. It is estimated that approximately 1,678,000 cy of this material would be suitable for levee construction. However, approximately 1,685,000 cy of this material would not be suitable for levee construction and would be used beneficially through the mitigation plan. These dredged canals and ditches are permanent features of the proposed WSLP plan, and would not be backfilled. The proposed project is consistent with this guideline to the maximum extent practicable.

Guideline 3.15 The best practical techniques for site restoration and re-vegetation shall be utilized for all linear facilities.
Response: This guideline has been read in its entirety. Proposed levee features, pump stations, gated structures, ditches, and canals would be maintained in accordance with a published Operations and Maintenance (O&M) Plan for the WSLP Project. Regular

maintenance of these project features would prohibit site restoration and re-vegetation after project construction. However, unavoidable project-related impacts to areas of high biological productivity would be mitigated through the implementation of the attached mitigation plan. Therefore, the proposed project is consistent with this guideline to the maximum extent practicable

Guideline 3.16 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 has been read in its entirety. No confined or dead end canals are proposed in the WSLP plan. In fact, the system is designed to maintain existing hydraulic connectivity within the project area through the incorporation of 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. These exchanges are currently occurring, and these project features are only designed to reduce changes to the existing hydrologic patterns in the project area. Therefore, this project, as proposed, is consistent with this guideline.

GUIDELINES FOR DREDGED MATERIAL DEPOSITION

Guideline 4.1 Spoil shall be deposited utilizing the best practical techniques to avoid disruption of water movement, flow, circulation and quality.
Response: This guideline has been read in its entirety. Approximately 3,363,000 cy of material would be dredged during the construction of the proposed pump station canals and drainage ditches that would parallel the levee alignment. It is estimated that approximately 1,678,000 cy of this material would be suitable for levee construction and would likely be used as embankment material. However, approximately 1,685,000 cy of this material would not be suitable for levee construction and would either be used beneficially through the mitigation plan. Therefore, the proposed project is consistent with this guideline.

Guideline 4.2 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: This guideline has been read in its entirety. See response 4.1 regarding potential beneficial use of dredged material.

Guideline 4.3 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: This guideline has been read in its entirety. Approximately 3,363,000 cy of material would be dredged during the construction of the proposed pump station canals and drainage ditches that would parallel the levee alignment. It is estimated that approximately 1,678,000 cy of this material would be suitable for levee construction and would likely be used as embankment material. However, approximately 1,685,000 cy of this material would not be suitable for levee construction and would be place in a way as not to impound or drain wetlands. Therefore, the proposed project is consistent with this guideline.

Guideline 4.4 Spoil shall not be disposed of on marsh, known oyster or clam reef s or in areas of submersed vegetation to the maximum extent practicable.

Response: This guideline has been read in its entirety. Approximately 3,363,000 cy of material would be dredged during the construction of the proposed pump station canals and drainage ditches that would parallel the levee alignment. It is estimated that approximately 1,678,000 cy of this material would be suitable for levee construction and would likely be used as embankment material. However, approximately 1,685,000 cy of this material would not be suitable for levee construction and would not, to the maximum extent practicable, be disposed of on marsh, known oyster or clam reefs or in areas of submersed vegetation. Therefore, the proposed project is consistent with this guideline.

Guideline 4.5 Spoil shall not be disposed of in such a manner as to create a hindrance to navigation or fishing, or hinder timber growth.
Response: This guideline has been read in its entirety. Spoil would not be disposed of in such a manner as to create a hindrance to navigation or fishing, or hinder timber growth. Therefore, the proposed project is consistent with this guideline

Guideline 4.6 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: This guideline has been read in its entirety. See Response 4.1. Spoil disposal areas would 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. Therefore, the proposed project is consistent with this guideline

Guideline 4.7 The alienation of state-owned property shall not result from spoil deposition activities without the consent of the Department of Natural Resources.
Response: This guideline has been read in its entirety. Concur.

GUIDELINES FOR SHORELINE MODIFICATION

Response: These guidelines have been read in their entirety. These guidelines do not pertain to the proposed plan.

GUIDELINES FOR SURFACE ALTERATIONS

Guideline 6.1 Industrial, commercial, urban, residential, and recreational uses are necessary to provide adequate economic growth and development. To this end, such uses would 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:

a) on lands five feet or more above sea level or within fast lands; or

b) 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

1) the land is already in high intensity of development use, or

2) there is adequate supporting infrastructure, or

3) the vicinity has a tradition of use for similar habitation or development

Response: This guideline has been read in its entirety. The proposed project is not meant to induce further development within the project area. Instead, it is meant as a means to protect existing structures and infrastructure during storm surges. In fact, the structural portion of the proposed WSLP system is designed to maintain current hydraulic connectivity " with 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. These exchanges are currently occurring, and these project features are designed to reduce changes to the existing hydrologic patterns in the project area. The nonstructural component of the WSLP project includes berms that would restrict tidal flow, however, the areas protected by these berms are already developed and they would not likely induced further development. Therefore, the proposed project is consistent with this guideline.

Guideline 6.2 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:

a) they protect or serve those areas suitable for development pursuant to Guideline 6.1; and

b) they are consistent with the other guidelines; and

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

Response: This guideline has been read in its entirety. The WSLP, as proposed, is consistent with this guidline.

Guideline 6.3 BLANK (Deleted)

Guideline 6.4 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: This guideline has been read in its entirety. The structural component of the Proposed Plan (levee and floodwalls) was planned to avoid, minimize and reduce potential adverse impacts to significant resources including areas of high biological productivity and irreplaceable resource areas. The structural features of the WSLP were located to minimize to the extent practicable project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way (ROWs) to minimize segmentation of wetland areas and systems. Non-structural measures would have little, if any, significant effects on areas of high biological productivity or irreplaceable resource areas. BMPs would be implemented during the construction of structural and non-structural features of the project. Unavoidable project-related impacts to wetland areas would be mitigated through the implementation of the attached mitigation plan. Therefore, the proposed project is consistent with this guideline.

Guideline 6.5 Coastal water dependent uses shall be given special consideration in permitting because of their reduced choice of alternatives.

Response: This guideline has been read in its entirety. This guideline is not applicable to the proposed project.

Guideline 6.6 Areas modified by surface alteration activities shall, to the maximum extent practicable, be re-vegetated, refilled, cleaned and restored to their predevelopment condition upon termination of the use
Response: This guideline has been read in its entirety. Proposed levee features, pump stations, gated structures, ditches, and canals would be maintained in accordance with a published Operations and Maintenance (O&M) Plan for the WSLP Project. Regular maintenance of these project features would prohibit site restoration and re-vegetation after project construction. However, unavoidable project-related that would permanently alter surface areas would be mitigated through the implementation of the attached mitigation plan. The proposed project, to the maximum extent practicable, would be consistent with this guideline.

Guideline 6.7 Site clearing shall to the maximum extent practicable be limited to those areas immediately required for physical development.
Response: This guideline has been read in its entirety. The structural and non-structural components of the Proposed Plan (levee and floodwalls) were planned to avoid, minimize and reduce potential adverse impacts to significant resources including areas of high biological productivity and irreplaceable resource areas. The structural features of the WSLP were located to minimize to the extent practicable project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way (ROWs) to minimize segmentation of wetland areas and systems. Non-structural measures would have little, if any, significant effect on areas of high biological productivity or irreplaceable resource areas. Clearing would be limited to only that which would be required for project construction and O&M responsibilities. Unavoidable project-related impacts would be mitigated through the implementation of the attached mitigation plan. The proposed project, to the maximum extent practicable, would be consistent with this guideline.

Guideline 6.8 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: This guideline has been read in its entirety. It is anticipated that there will be approximately 373 acres of swamp impacted on Maurepas Wildlife Management area by the proposed plan, however through the implementation of the mitigation plan, which includes habitat restoration and purchase of mitigation credits, these impacts will be offset. The structural features of the WSLP were located to minimize to the extent practicable project-induced wetland impacts by locating project features parallel and adjacent to existing oil and gas pipeline rights-of-way (ROWs) to minimize segmentation of wetland areas and systems. Non-structural measures would have little, if any, significant effect on areas of high biological productivity or irreplaceable resource areas. Unavoidable project-related impacts to areas of high biological productivity would be mitigated through the implementation of the attached mitigation plan. Therefore, the proposed project is consistent with this guideline.

Guidelines 6.9 - 6.12
Response: These guidelines have been read in their entirety. These guidelines do not pertain to the WSLP project, as proposed..

Guideline 6.13 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: This guideline has been read in its entirety. BMPs would be utilized during all construction and O&M activities associated with the WSLP project to minimize the impacts of these actions to adjacent areas. Therefore the proposed plan is consistent with this guideline.

Guideline 6.14 To the maximum extent practicable only material that is free of contaminants and compatible with the environmental setting shall be used as fill.
Response: This guideline has been read in its entirety. Only material that is free of contaminants and is compatible with the environmental setting would be used as fill for the proposed WSLP project. Therefore the proposed plan is consistent with this guideline.

GUIDELINES FOR HYDROLOGIC AND SEDIMENT TRANSPORT MODIFICATIONS

Response: Guidelines 7.1 – 7.4 and 7.7 – 7.9 have been read in their entirety. The proposed plan would not involve hydrologic or sediment transport modifications and, therefore, these guidelines are not applicable.

Guideline 7.5 Water or marsh management plans shall result in an overall benefit to the productivity of the area.
Response: This guideline has been read in its entirety. Project features including 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts have been designed to provide maximum hydrologic exchange upon project completion. Inclusion of these features would allow normal tidal exchanges while protecting the project area from storm surges. Therefore, it is anticipated that the water management plan is consistent with this guideline.

Guideline 7.6 Water control structures shall be assessed separately based on their individual merits and impacts and in relation to their overall water or marsh management plan of which they are a part.
Response: This guideline has been read in its entirety. Project features including 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts have been designed to provide maximum hydrologic exchange upon project completion. Inclusion of these features would allow normal tidal exchanges while protecting the project area from storm surges. Therefore, it is anticipated that the water management plan is consistent with this guideline.

GUIDELINES FOR DISPOSAL OF WASTES

Response: These guidelines have been read in their entirety. The proposed plan would not involve the disposal of wastes and, therefore, these guidelines are not applicable.

GUIDELINES FOR USES THAT RESULT IN THE ALTERATION OF WATERS DRAINING INTO COASTAL WATERS

Guideline 9.1 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 has been read in its entirety. The WSLP, as proposed, would not include upland or upstream water management programs.

Guideline 9.2 Runoff from developed areas shall to the maximum extent practicable be managed to simulate natural water patterns, quantity, quality and rate of flow.

Response: This guideline has been read in its entirety. The structural and non-structural portions of the proposed WSLP system are designed to maintain tidal exchange through the incorporation of 2 drainage structures, one gated road-crossing, two gated railroad-crossings, and 145 gated-culverts to provide maximum hydrologic exchange that reduces interchange flows by only about 7 percent and, on average, a 10-minute delay in tidal flows. These exchanges are currently occurring, and these project features are designed to reduce changes to the existing hydrologic patterns in the project area. Therefore, the proposed project is consistent with this guideline to the maximum extent practicable.

Guideline 9.3 Runoff and erosion from agricultural lands shall be minimized through the best practical techniques.
Response: This guideline has been read in its entirety. The proposed plan would not involve alteration or management of agricultural lands and, therefore, this guideline is not applicable.

GUIDELINES FOR OIL, GAS, AND OTHER MINERAL ACTIVITIES

Response: These guidelines have been read in their entirety. The proposed plan would not involve oil, gas, and other mineral activities and, therefore, these guidelines are not applicable.

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. A description of how these other authorities are integrated into the LCRP and coordinated during program implementation is presented in Chapter IV. 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 proposed plan would provide, consistent with Congressional authorizations, hurricane and storm damage risk reduction for St. Charles, St. John the Baptist and St. James Parishes that would be economically and environmentally justified. The proposed plan is consistent with the guidelines for all users, levees, linear facilities, dredged material deposition, surface alterations, and hydrologic and sediment transport, and alteration of waters draining into coastal waters. Based on this evaluation and the findings of the Final Environmental Impact Statement (EIS #0901), the U. S. Army Corps of Engineers, New Orleans District, has determined that the

proposed is consistent, to the maximum extent practicable, with the State of Louisiana's Coastal Resources Program.

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX G

UNANTICIPATED DISCOVERIES PLAN

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT

PO-0029/PO-0062

Early Works

APPENDIX H

LDEQ STORM WATER PERMIT COMPLETION REPORT

BID DOCUMENTS
FOR

RIVER REINTRODUCTION INTO MAUREPAS SWAMP AND WEST SHORE LAKE PONTCHARTRAIN FLOOD RISK REDUCTION PROJECT PO-0029

LAGOV No. 4400019214

Early Works Final Submission

APPENDIX H

LDEQ STORM WATER PERMIT COMPLETION REPORT

DEQ
LOUISIANA

STORM WATER GENERAL PERMIT FOR LARGE CONSTRUCTION ACTIVITIES

MASTER GENERAL PERMIT NO. LAR100000
AUTHORIZATION TO DISCHARGE UNDER THE LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, this Louisiana Pollutant Discharge Elimination System (LPDES) General Permit is reissued. This permit authorizes operators of storm water discharges from construction activities of five (5) acres or more, including smaller areas that are part of a larger plan of development or sale that cumulatively disturb at least five acres, and defined dedicated support activities, to discharge to waters of the State, in accordance with the conditions and requirements set forth herein.

Only those operators who obtain coverage in accordance with Parts I and II of this permit are authorized under this general permit.

This permit shall become effective on October 1, 2019

This permit and the authorization to discharge shall expire five years from the effective date of the permit.

Issued on June 21, 2019

Elliott B. Vega
Assistant Secretary

LPDES GENERAL PERMIT
FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES
FIVE (5) ACRES OR MORE
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ADDENDA

A. ENDANGERED SPECIES GUIDANCE
B. HISTORIC PRESERVATION
C. LIST OF ADDRESSES FOR LDEQ OFFICES
D. LIST OF OUTSTANDING NATURAL RESOURCE WATERS

Part I. COVERAGE UNDER THIS PERMIT

A. Applicability

1. This permit authorizes discharges of storm water from construction activities that disturb 5 acres or more of total land area, including the disturbance of less than 5 acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb 5 acres or more, as defined in LAC 33:IX.2511.B.14.j and those construction site discharges designated by the State Administrative Authority as needing a storm water permit under LAC 33:IX.2511.A.1.e, except for discharges identified below under Permit Part I.A.3. Permit coverage is required from the "commencement of construction activities" until "final stabilization" as defined in Permit Part IX.

Construction activities regulated under this permit include clearing, grading, excavation operations, and/or adding fill material that result in the disturbance of five acres of land or more. Construction of residential houses, office buildings, industrial facilities, roadways, and runways are examples of construction activities.

The **clearing of land solely for agricultural purposes is NOT a regulated activity** so it is exempted from Louisiana Pollutant Discharge Elimination System (LPDES) permitting requirements (LAC 33:IX.2315.A). Projects on cultivated croplands are not regulated, as these are already "disturbed" areas.

Construction activities related to oil and gas exploration, production, processing, or treatment, or transmission activities are exempt from regulation under this permit. Section 323 of the Energy Policy Act of 2005 modified paragraph (24) of Section 502 of the Clean Water Act (CWA) to define the term "oil and gas exploration, production, processing, or treatment, or transmission facilities." This term is used in CWA Section 402(1) (2) to identify oil and gas activities for which the Environmental Protection Agency (EPA) shall not require National Pollutant Discharge Elimination System (NPDES) permit coverage for certain storm water discharges. The effect of this statutory change is to make construction activities at oil and gas sites eligible for the exemption established by CWA Section 402(1) (2). The exemption from obtaining LPDES permit coverage for storm water discharges from construction activities at these oil and gas sites is codified in the Environmental Regulatory Code at LAC 33:IX.2511.A.2. Oil and gas exploration, production, processing, or treatment operations or transmission site construction activities are exempt from obtaining permit coverage for discharges of storm water runoff related to construction activities, regardless of the amount of disturbed acreage, which are necessary to prepare a site for drilling and the movement and placement of drilling equipment, constructing access roads, drilling waste management pits, in field treatment plants and the transportation infrastructure (e.g., crude oil and natural gas pipelines, natural gas treatment plants and both natural gas transmission pipeline compressor and oil pumping stations) necessary for the operation of most producing oil and gas fields.

Repaving of roads and reworking of utility lines or pipelines are not regulated under this permit unless five or more acres of underlying and/or surrounding soil are cleared, graded or excavated as part of the operation. **A construction activity does not include routine maintenance that**

is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site/structure. If a construction activity is only performed to maintain its original purpose, then LPDES permit coverage under this general permit is not required to discharge storm water from that construction activity. Such activities include replacing structures that are due for and require maintenance. In order to qualify as a routine maintenance activity, the land disturbance shall not go beyond the footprint of the previous structure. Examples of routine maintenance include:

- Berm Repair or Topsoil Replacement Along Shoulders - placing berm material or topsoilon shoulders adjacent to pavement to eliminate drop-offs;
- Bridge Abutment Repairs, Deck Overlays, and Deck Replacement;
- Bridge Replacement without widening;
- Chip Sealing – placing asphalt or polymer binder and stone on existing roads;
- Culvert Replacement/Repair/Lining – replacing/repairing/relining a culvert with the same line, grade, and hydraulic capacity and within US Army Corps of Engineers Nationwide Permit (NWP) #3 parameters;
- Curb Repairs – repairing existing curbing along a roadway;
- Ditch Cleanout – maintaining or restoring original flow line and cross-section only;
- Fence Repair/Replacement;
- Lighting Maintenance;
- Linear Grading – reshaping of graded shoulders to establish proper drainage away from pavement;
- Loop Detector Repairs – repairing loop detectors in existing pavement;
- Noise Wall Repair;
- Partial Depth Pavement Repairs – isolated repairs of surface courses of pavement;
- Pothole Filling; Resurfacing – replacing several inches of asphalt wearing course by milling existing surface and replacing with new material;
- Road Re-paving with new asphalt provided the activity does not expose soil to storm water;
- Sign Repair/Maintenance – installing or repairing traffic signs and poles/posts;
- Signal Installation/Maintenance – installing or repairing traffic signals and poles/posts; and
- Tree/Brush Removal – when it is considered a road maintenance activity.

The following examples of activities that commonly disturb less than five acres, and if disturbing less than one acre and not part of a common plan of development, do not require a permit:

- Full Depth Pavement Repairs – isolated repairs of pavement build-up down to sub-grade;
- Guardrail Installation/Replacement – installing or repairing with minor grading work to create proper grade for end assemblies; and
- Road Replacement without adding any lanes.

To determine if construction activities at a particular site are regulated under this general permit you shall determine the total amount of land area that will be disturbed during a construction project rather than the total land area owned at a project site. Construction activities which require storm water permit coverage under this general permit are activities that result in the

disturbance of five or more acres of total land area, including smaller areas that are part of a larger plan of development or sale that cumulatively disturb at least five acres.

Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit. Any permittee covered by an individual permit may request that the individual permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written notification by this Office, the individual permit will be terminated and the permittee will be covered by this general permit.

Assistance/additional information about the permit may be obtained by contacting the Water Permits Division General and Municipal Water Permits Section, at (225) 219-5337, or at the address in Part II.C.

2. This permit also authorizes discharges from support activities related to a construction site (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas, etc.) from which there otherwise is a storm water discharge from a construction activity provided:

a. the support activity is directly related to a construction site that is required to have LPDES permit coverage for discharges of storm water associated with construction activity;

b. the support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports;

c. pollutant discharges from the support activity areas located on and off construction sites are minimized to the maximum extent practicable and comply with permit conditions.

3. Limitations on Coverage: The following storm water discharges from construction sites are not authorized by this permit.

a. Post-Construction Discharges

Storm water discharges that originate from the site after construction activities have been completed, and the site, including any temporary support activity at the site, has undergone final stabilization. Industrial post-construction storm water discharges may need to be covered by a separate LPDES permit.

b. Discharges Mixed with Non-storm Water

Discharges that are mixed with sources of non-storm water other than:

(1) discharges which are identified in Parts I.A.2 above (including equipment staging yards and material storage areas), and

(2) non-storm water discharges listed in Part III.A.3 which are authorized under this system, and

(3) discharges of material other than storm water that are in compliance with another LPDES permit issued for that discharge, and which are addressed in the storm water pollution prevention plan in such a manner as to identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge, as required below in Part IV.D.5. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

c. Discharges Covered by Another Permit

Storm water discharges associated with construction activity that have been issued an individual permit or required to obtain coverage under an alternative general permit. As provided in Part I.A.1 above, any permittee covered by an individual permit may request that the individual permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written approval of that request by this Office, the individual permit will be terminated and the permittee will be covered by this general permit.

d. Discharges Threatening Water Quality

Storm water discharges from construction sites that LDEQ determines will cause, or have the reasonable potential to cause or contribute to, violations of water quality standards. Where such determinations have been made, the discharger will be notified by LDEQ that an individual permit application is necessary. However, LDEQ may authorize coverage under this permit after appropriate controls and implementation procedures designed to bring the discharges into compliance with water quality standards have been included in the storm water pollution prevention plan.

Furthermore, if a discharge flows into a water body that is listed on the most recent EPA-approved 303(d) list, then the permittee's storm water pollution prevention plan must include specific control measures targeting the pollutant(s) of concern for any impairment(s). The control measures must be designed and implemented to ensure discharges of storm water will not have the reasonable potential to cause or contribute to the impairment. Impaired water bodies (without a TMDL) are listed as Category 5 in Appendix A of LDEQ's most recent Integrated Report (IR), located at: http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d.

e. Discharges That Are Not Protective of Endangered and Threatened Species

(1) Coverage under this permit is available only if the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities will not adversely affect any species that are federally-listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) and will not result in the adverse modification or destruction of habitat that is federally-designated as "critical habitat" under the ESA. All operators must follow the procedures in Addendum A and meet at

least one of the eligibility criteria (Criteria A - E) described in the addendum when determining eligibility for coverage under the permit. Failure to continue to meet one or more of these criteria during the entire term of the permit will result in the storm water discharges associated with construction activity being ineligible for coverage under this permit.

(2) The applicant must comply with any terms and conditions imposed under the eligibility requirements above to ensure that storm water discharges or BMPs to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the applicant's storm water pollution prevention plan.

(3) This permit does not authorize any "take" (as defined under Section 9 of the ESA) of endangered and/or threatened species unless such take is authorized under Section 7 or 10 the ESA.

(4) This permit does not authorize any storm water discharges or require any BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the Endangered Species Act or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.

f. Discharges Adversely Affecting Properties Eligible for Protection Under the National Historic Preservation Act.

Eligibility for coverage under this permit is contingent upon compliance with the National Historic Preservation Act (NHPA). Discharges are authorized under this permit only if:

(1) the site ensures storm water discharges, allowable non-storm water discharges, and discharge-related activities do not have the potential to adversely affect a property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior; or

(2) if historical properties are identified and it is determined there is the potential to adversely affect the property, the site has obtained and is in compliance with a written agreement with the Louisiana State Historic Preservation Officer (SHPO) that outlines all measures to be undertaken to mitigate or prevent adverse effect(s) to the historic property.

Addendum B of this permit provides guidance and references to assist operators with determining permit eligibility concerning this provision.

g. Discharges Not in Compliance with State Water Quality Standards/TMDL Requirements

Covered dischargers shall not cause, have the reasonable potential to cause, or contribute to a violation of a state water quality standard. New or proposed dischargers must evaluate

eligibility by determining compliance with this provision prior to assuming authorization by the permit.

The discharge of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by LDEQ is not authorized unless the discharge is consistent with the requirement(s) of that TMDL. During determination of eligibility for coverage under the permit, **new dischargers** (see LAC 33:IX.2313) to a 303(d) waterbody must determine that their proposed discharges will be in compliance with LAC 33:IX.2317.A.9. In essence, a new discharger is one initiated after August 13, 1979, and not previously permitted. Any discharger (**both existing and new**) to a water body for which there is an impairment and/or an approved or established TMDL must confirm that the impairment and/or TMDL allocated a portion of the load for storm water point source discharges if the proposed discharges will contain the pollutant(s) for which the waterbody is impaired or the TMDL developed. Such discharges are expected to be rare for the wastewater types covered by the reissued permit because the required control/prevention measures are designed to prevent the release of these pollutants in storm water. Permittees located within a regulated Municipal Separate Storm Sewer System (MS4) that has been assigned a WLA may be required to implement additional BMPs in accordance with local ordinances and/or the MS4's Storm Water Management Plan.

In a situation where an LDEQ-approved or established TMDL has specified a general wasteload allocation applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the operator must consult with LDEQ to confirm that adherence to a storm water pollution prevention plan (SWPPP) that meets the requirements of this permit will be consistent with the approved TMDL. The SWPPP must clearly state which BMPs were selected for the site, including on and off-site construction support activities, and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the established TMDL. If the LDEQ-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under this permit.

Where an LDEQ-approved or established TMDL has not specified a wasteload allocation applicable to construction storm water discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of this permit will be considered to be consistent with the approved TMDL. Current TMDL reports are located on the Internet at:
http://deq.louisiana.gov/page/tmld-reports-and-models
and at:
https://iaspub.epa.gov/tmdl_waters10/attains_impaired_waters.tmdls?p_state=LA.

Broadly stated, new or existing discharges of a particular pollutant are prohibited where there is a TMDL unless the discharge meets the requirements established in the TMDL. If a discharge is not/will not meet these requirements, the operator must seek coverage under an alternative permit. Where a discharger is already operating under the permit and is later discovered to cause or have the reasonable potential to cause or contribute to the violation of a state water quality standard, the permitting authority will notify the operator of such

violation(s) and the permittee shall take all necessary actions to ensure that future discharges do not cause, have the reasonable potential to cause, or contribute to the violation of a water quality standard and document these actions in the pollution prevention plan. If violations remain or recur, then coverage under the permit is automatically terminated and alternate coverage must be obtained. Compliance with this requirement does not preclude any enforcement activity as provided by the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.) for the underlying violation.

In order to verify the impaired status of the waterbody and determine if any TMDLs have been established, the permit applicant shall consult the most recent Integrated Report (also referred to as the 305(b) Report) at: http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d or obtain a copy of the report from the Office of Environmental Services, Water Permits Division.

(1) Exclusions

This general permit **shall not** apply to:

a. Storm water discharges associated with industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization as defined in Part IX.

b. Non-storm water discharges (except certain non-storm water discharges specifically listed in this general permit). However, this permit can authorize storm water discharges from construction where the discharges are mixed with non-storm water discharges that are authorized by a different LPDES permit.

c. Storm water discharges from construction activities that are covered by an existing LPDES permit. However, any permittee covered by another permit may request that the other permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written approval of that request by this Office, the permittee will be covered by this general permit, and the other permit terminated.

d. Storm water discharges from construction activities that LDEQ has determined to be causing, or has the reasonable potential to cause, or will contribute to a violation of a water quality standard.

e. Storm water discharges from construction activities, allowable non-storm water discharges, and storm water discharge-related activities, if the discharges are likely to adversely affect a listed endangered or threatened species or its critical habitat (unless in compliance with specific ESA related conditions in the permit).

f. Storm water discharges from construction activities and storm water discharge-related activities, if the discharges are not in compliance with the NHPA.

B. Obtaining Authorization

1. In order for storm water discharges from construction activities to be authorized to discharge under this general permit, an applicant must:

a. meet the Part I.A applicability requirements.

b. develop a SWPPP covering either the entire site or all portions of the site for which they are operators (see definition in Part IX) according to the requirements in Part IV (preparation and implementation of the Plan may be a cooperative effort where there is more than one operator at a site), and then

c. submit payment for the annual maintenance and surveillance fee(s) in accordance with Part I.C of this permit and a complete and accurate NOI in accordance with the requirements of Part II, using an NOI form provided by the State Administrative Authority (or a photocopy thereof). **Only one NOI needs to be submitted to cover all of the permittee's activities on the common plan of development or sale (e.g., you do not need to submit a separate NOI for each separate lot in a residential subdivision or for two separate buildings being constructed at a manufacturing facility, provided your SWPPP covers each area for which you are an operator.)** The SWPPP must be implemented upon commencement of construction activities.

Application for coverage shall be made by:

- a party having operational control over construction plans and specifications; and/or
- a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions.

When operational control over plans and specifications, and control over the day-to-day activities described above, are held by separate parties, each party shall submit an NOI. In cases with only one control party, that party alone is required to submit the NOI.

Operators will commonly consist of the owner or developer of a project (the party with control of project specifications) and the general contractor (the party with day to day operational control of the activities at the project site which are necessary to ensure compliance with the permit).

For subdivisions and commercial developments, an NOI shall be submitted by the owner/developer, the general contractor, and each individual builder within the subdivision or commercial development.

Any party with operational control over only a portion of a larger project (e.g., one of four homebuilders in a subdivision), must submit its own NOI and obtain its own permit authorization number. They may share a SWPPP with other permittees operating in the area of the larger project; however, each permittee is responsible for compliance with all conditions of this permit as it relates to their activities on their portion of the construction site. Each

permittee shall ensure either directly or through coordination with other permittees, that their activities do not render another party's pollutant discharge controls ineffective. Any party with operational control over only a portion of a larger project shall either implement their portion of a common SWPPP or develop and implement their own site specific SWPPP.

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not required to develop separate SWPPPs that cover only their portion of the project provided reference is made to other operators at the site.

In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure storm water discharge control measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

All permitted parties are responsible for compliance with all applicable conditions of this permit as it relates to your activities on your portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP.

Contractors and subcontractors who are under the general supervision of the general contractor are not considered operators and would not need to submit NOIs. The general contractor shall be responsible for submitting the NOI, implementing the SWPPP, and ensuring that contractors and subcontractors actions/activities do not render the general contractor's pollutant discharge controls ineffective.

2. For construction sites where the operator changes, or where a new operator is added after the submittal of an NOI under Part II, a new NOI must be submitted in accordance with Part II.

3. Unless notified by LDEQ to the contrary, all applicants who submit payment for the annual maintenance and surveillance fee(s) and a <u>complete</u> and <u>accurate</u> NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction activities under the terms and conditions of the permit 48 hours after the receipt of the hand-delivered NOI with the payment of the annual maintenance and surveillance fee(s), 48 hours after the submittal of a payment of the annual maintenance and surveillance fee(s) and complete and accurate electronic NOI, or 48 hours after the postmark date on the envelope that contains the correct and accurate NOI with the payment of the annual maintenance and surveillance fee(s) by the Office of Environmental Services, Water Permits Division.

   Operators who submit incomplete NOIs, NOIs without payment of the annual fee(s), or NOIs with errors will be notified and are not authorized to discharge storm water from construction activities until the errors or deficiencies have been corrected and the corrected NOI has been delivered to LDEQ.

   If warranted, LDEQ may deny coverage under this general permit and require submittal of an application for an individual LPDES permit (see Part VI of this permit).

A printed hard copy of this permit may be obtained by contacting LDEQ's Water Permits Division at (225) 219-5337, or a copy can be downloaded from the LDEQ website at http://deq.louisiana.gov/page/lpdes-water-permits. Go through the following links to find the permit: Water – Permits – LPDES Permit Information – LAR100000 –. A printed hard copy of the Notice of Intent (NOI) can be downloaded from the LDEQ website at http://deq.louisiana.gov/page/lpdes-water-permits. Go through the following links to find the NOI form: Water – Permits – LPDES Forms – LPDES Permit Application Forms – CSW-G.

C. Annual Maintenance and Surveillance Fees

An annual maintenance and surveillance fee will be assessed for coverage under the permit. Permittees applying for coverage under the general permit shall select the time frame for which permit coverage is needed, a minimum of one year and up to five years. Prior to receiving coverage, the applicant(s) shall submit payment of the annual maintenance fee(s) for the entirety of the selected coverage (LAC 33:IX.1309.F and N).

1. The annual maintenance and surveillance fee(s) must be submitted with the NOI in accordance with the following time frames:

a. $291.00 – 0 months – 1 year
b. $582.00 – 2 years
c. $873.00 – 3 years
d. $1164.00 – 4 years
e. $1455.00 – 5 years

2. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.

3. Permittees will not receive annual invoices as the annual maintenance and surveillance fee(s) will be paid in advance as described above.

D. Notice of Extension (NOE)

If a continuation of coverage under this permit is needed beyond the selected number of years, permittees must submit a Notice of Extension 30 days before the expiration date of your permit. Please submit two copies (one original and one copy) of the completed and signed NOE Form.

1. The annual maintenance and surveillance fee(s) must be submitted with the NOE in accordance with the following time frames.

a. $291.00 – 0 months – 1 year
b. $582.00 – 2 years
c. $873.00 – 3 years
d. $1164.00 – 4 years
e. $1455.00 – 5 years

Please note that authorizations under this general permit and/or extensions of coverage shall not exceed the 5 year term of the permit. However, the NOE form will be utilized for permittees covered under the previous LAR100000 and who wish to seek coverage under the reissued general permit. See Part I.E.5 for further information regarding permit expiration.

E. Terminating Coverage

1. Termination of coverage under the permit shall be automatic. The termination date shall be determined by the number of years selected by the permittee (see Part I.C above) and the date the NOI is received by the Water Permits Division. To clarify, an NOI that is received and processed on October 1, 2019, and where the applicant selected one year of coverage shall automatically terminate on September 30, 2020. The permittee is not required to submit a Notice of Termination. Permittees will be notified of the automatic termination date in the permit authorization letter.

The automatic termination date is an estimate provided by the owner and/or operator of when construction activities will be completed. The automatic termination date is not intended to allow additional time to comply with final stabilization requirements. If construction activities are completed prior to the termination date, the owner and/or operator must comply with final stabilization deadlines and requirements in Part IV.D.2.a(3) (see definition of final stabilization in Part IX) at the time construction activities have ceased.

2. One or more of the following conditions must be met by the termination date:

a. final stabilization (see definition in Part IX) has been achieved on all portions of the site for which the permittee is responsible (including, if applicable, returning agricultural land to its pre-construction agricultural use);

b. another operator/permittee has assumed control according to Part VI.D.10 over all areas of the site that have not been finally stabilized;

c. coverage under an individual or alternative general LPDES permit has been obtained; or

d. for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.

3. If one or more of the above conditions are not met, the permittee must submit a Notice of Extension in accordance with Part I.D.

4. Enforcement actions may be taken if a permittee does not meet one or more of the above conditions by the termination date.

5. The following conditions apply to owners and/or operators with effective permit authorizations at the time this permit is reissued.

a. If a permittee received authorization to discharge under the previous LAR100000 general permit and the authorization of coverage has an expiration date of September 30, 2019, the

construction activity will be reauthorized under the reissued general permit for a period of 180 days (October 1, 2019-March 28, 2020). **If construction activities, including final stabilization, are expected to continue beyond March 28, 2020, the permittee must submit a Notice of Extension (NOE) by March 1, 2020, with payment of the surveillance and maintenance fee, in order to avoid a lapse in permit coverage.** In accordance with 40 CFR 122.28(b)(2)(vi) and LAC 33:IX.2515.B.2.f, currently permitted owners and/or operators shall be notified in writing of the requirements for continued coverage prior to permit reauthorization.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification

1. Except as provided below in Parts II.A.3 and II.A.4, for parties required to obtain permit authorization, defined above in Part I.B.1, an initial complete and accurate Notice of Intent (NOI) with payment of the annual maintenance and surveillance fee(s) in accordance with the requirements of Part I.C must be received by this Office prior to the commencement of construction activities (i.e., the initial disturbance of soils associated with clearing, grading, excavation activities, or other construction activities).

2. Except as provided in Parts II.A.3 and II.A.4, for parties defined as operators solely due to their day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions (e.g., general contractor, erosion control contractor, etc.), a complete and accurate NOI with payment of maintenance and surveillance fee(s) must be received by this Office prior to commencing work at the site.

3. For storm water discharges from construction sites where the operator changes, (including projects where an operator is added after an NOI has been submitted under Parts II.A.1 or II.A.2), a complete and accurate NOI with payment of the annual maintenance and surveillance fee(s) in accordance with the requirements of this Part I.C must be received by this Office from the new operator prior to when the new operator assumes operational control over site specifications or commences work at the site.

4. Applicants are not prohibited from submitting late completed NOIs. When a late completed NOI is submitted, authorization is only for discharges that occur after permit coverage is granted. The Agency reserves the right to bring appropriate enforcement actions for any unpermitted activities that may have occurred between the time construction commenced and authorization of future discharges is granted.

5. This permit replaces the LPDES General Permit for Storm Water Discharges from Construction Activities, issued September 3, 2014. **Current permitted owners and/or operators**: If a permittee received authorization to discharge under the previous LAR100000 general permit and the authorization of coverage has an expiration date of September 30, 2019, the construction activity will be reauthorized under the reissued general permit for a period of 180 days (October 1, 2019-March 28, 2020). **If construction activities, including final stabilization, are expected to continue beyond March 28, 2020, the permittee must submit a Notice of Extension (NOE) by March 1, 2020, with payment of the surveillance and maintenance fee, in order to avoid a lapse in permit coverage.** In accordance with 40 CFR 122.28(b)(2)(vi) and LAC 33:IX.2515.B.2.f, currently permitted owners and/or operators shall be notified in writing of the requirements for continued coverage prior to permit reauthorization.

B. Contents of Notice of Intent

The Notice(s) of Intent shall be signed in accordance with Part VI.D.10 of this permit and shall include at a minimum:

1. the name, address, and telephone number of the construction site owner or operator filing the NOI for permit coverage and operator status as a Federal, State, Tribal, private, or other public entity;

2. the name (or other identifier), street address (description of location if no street address is available), city, parish, and the latitude and longitude of the approximate center of the construction site/project for which the notification is submitted;

3. whether or not the construction project is located on Indian Lands;

4. a certification that a SWPPP, including both construction and post-construction controls, has been developed, and that the SWPPP is compliant with any applicable state and/or local sediment and erosion plans. (A copy of the plans or permits shall not be included with the NOI submission);

5. the location where the SWPPP may be viewed and the name and telephone number of a contact person for scheduling viewing times;

6. an estimate of project start date and selected number of years for which permit coverage is needed (i.e. the projected completion date is assumed to be "x" number of years after the estimated start date, as indicated by the permit applicant), estimates of the number of acres of the site on which soil will be disturbed, and the type of facility being constructed;

7. the name of the receiving water(s);

8. based on Appendix C of the NOI, whether the storm water runoff from the site will flow directly into a waterbody listed as an Outstanding Natural Resource Water (ONRW); (if the discharge will ultimately enter a Scenic Stream, the applicant is instructed to contact the Louisiana Department of Wildlife and Fisheries (LDWF) at 318-343-4044);

9. based on the instructions in Appendix A of the NOI, whether any listed or proposed threatened or endangered species, or designated critical habitat, are in proximity to the storm water discharges covered by this permit;

10. based on the instructions in Appendix B of the NOI, whether any properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act are located on the construction site and whether the SHPO was involved in your determination of eligibility;

11. the permit number of any LPDES permit(s) for any discharge(s) (including any storm water discharges or any non-storm water discharges) from the site, to the extent available.

12. Should electronic NOIs become available during the term of this permit, the use of paper NOIs may be suspended. However, the applicants will be expected to continue to comply with the above requirements through the electronic submittal process.

C. Where to Submit

NOIs signed in accordance with Part VI.D.10 of this permit, are to be submitted to the State Administrative Authority at the following address:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Permits Division

Current mailing addresses for the different Department offices are posted on the LDEQ web page at http://www1.deq.louisiana.gov/portal/ABOUT/ContactInformation.aspx.

Should electronic NOIs (e-NOIs) become available during the term of this permit, the Department may suspend use of paper NOIs.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. Prohibition on Non-Storm Water Discharges

1. Except as provided in Part I.A.2 and in items 2 and 3 below, all discharges covered by this permit shall be composed entirely of storm water associated with construction activity.

2. Discharges of material other than storm water that are in compliance with an LPDES permit (other than this permit) issued for that discharge may be mixed with discharges authorized by this permit.

3. The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with Part IV.D.5 (Non-storm Water Discharges):

- **a.** discharges from firefighting activities;
- **b.** fire hydrant flushings;
- **c.** waters used to wash vehicles where detergents, soaps, or solvents are not used;
- **d.** waters used to control dust in accordance with Part IV.D.2.c.(2) – minimizing dust from vehicles;
- **e.** potable water sources including uncontaminated waterline flushings;
- **f.** routine external building washdown which does not use detergents, soaps, or solvents;
- **g.** diverted stream flows;
- **h.** pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or other effective control is prohibited;
- **i.** uncontaminated air conditioning or compressor condensate;
- **j.** uncontaminated and/or non-turbid ground water infiltration (as defined at 40 CFR 35.2005(20));
- **k.** uncontaminated and/or non-turbid pumped ground water or spring water;
- **l.** foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater;
- **m.** uncontaminated excavation dewatering if the discharge is managed by an appropriate control; and
- **n.** landscape irrigation.

4. The following dischargers are prohibited:

- **a.** wastewater from washout of concrete, **unless managed by an appropriate control**;
- **b.** wastewater from washout and cleanout of stucco, paint, form release oils, curing, compounds and other construction materials;
- **c.** discharges related to concrete or asphalt batch plant operations located at the construction site. The presence of any such discharges require coverage by an alternative LPDES permit (e.g. LAG110000 or an individual permit);

d. discharges from dewatering activities, including discharges from dewatering of trenches and excavations, **unless managed by an appropriate control**;
e. fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
f. soaps or solvents used in vehicle and equipment washing;
g. storm water discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity, has undergone final stabilization. Industrial post-construction storm water discharges may need to be covered by a separate LPDES permit; and
h. discharges mixed with sources of non-storm water other than the discharges identified in and are in compliance with Part I.B.3. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

B. Requirements for Notification

The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the site. This permit does not relieve the permittee of the reporting requirements of LAC 33:I.3915 and LAC 33:I.3917.

1. Emergency Notification

The permittee shall report any unauthorized discharges which may endanger human health or the environment. As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (Department of Public Safety (DPS) 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (1-877-925-6595 (collect calls accepted 24 hours a day) immediately (reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health, safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. A written submission shall be provided within 7 calendar days after the telephone notification. Please note that discharges in direct noncompliance with LPDES permit conditions must also comply with the reporting requirements in LAC 33:IX.2701.L, which requires written notification within 5 days. The report shall contain information as required in Part VI.D.6 of this permit and compliance with the procedures in this part are required.

2. The LDEQ may waive the written report on a case-by-case basis, if the oral report has been received within 24 hours of the incident.

3. The SWPPP required under Part IV (Storm Water Pollution Prevention Plans) of this permit must be modified within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the recurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

C. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. Spills resulting in an emergency condition or non-compliance under this general permit must be reported in accordance with LAC 33:I.3923 or LAC 33:IX.2701.A.

D. Discharge Compliance with Water Quality Standards

1. You must select, install, implement and maintain control measures at your construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, your storm water controls must be developed, implemented, and updated consistent with the other provisions of Part III. Your storm water controls must be as stringent as necessary to ensure that your discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

2. Operators covered under this permit shall not cause or have the reasonable potential to cause or contribute to a violation of a water quality standard. At any time after authorization, LDEQ may determine that your storm water discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, LDEQ will require you to:

a. Modify your storm water controls in accordance with Part IV.C to address adequately the identified water quality concerns;

b. Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

c. Cease discharge of pollutants from construction activity and submit an individual application.

3. All written responses required under this part must include a signed certification consistent with Part VI.D.10.

4. If violations remain or recur, then coverage under this permit may be terminated by the permitting authority and an alternative permit may be issued. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act and Environmental Quality Act for the underlying violation.

E. Responsibilities of Operators

Permittees may meet one or both of the operational control components in the definition of "operator" found in Part IX (Definitions). Either Part III.E.1 or Part III.E.2 or both will apply depending on the type of operational control exerted by an individual permittee. Part III.E.3 applies to all permittees.

1. Permittee(s) with operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., developer or owner) must:

a. ensure the project specifications that they develop meet the minimum requirements of Part IV (Storm Water Pollution Prevention Plans) and all other applicable conditions;

b. ensure that the SWPPP indicates the areas of the project where they have operational control over project specifications (including the ability to make modifications in the specifications), and ensure all other permittees implementing portions of the SWPPP impacted by any changes they make to the plan are notified of such modifications in a timely manner; and

c. ensure that the SWPPP, for portions of the project for which they are operators, indicates the name and LPDES permit number for parties with day-to-day operational control of those activities necessary to ensure compliance with the SWPPP or other permit conditions. If these parties have not been identified at the time the SWPPP is initially developed, the permittee with operational control over project specifications shall be considered to be the responsible party until such time as the authority is transferred to another party (e.g., general contractor) and the plan updated.

2. Permittee(s) with day-to-day operational control of those activities at a project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions (e.g., general contractor) must:

a. ensure the SWPPP, for portions of the project for which they are operators, meets the minimum requirements of Part IV (Storm Water Pollution Prevention Plans) and identifies the parties responsible for implementation of control measures identified in the plan;

b. ensure that the SWPPP indicates areas of the project where they have operational control over day-to-day activities; and

c. ensure that the SWPPP, for portions of the project for which they are operators, indicates the name and LPDES permit number of the party(ies) with operational control over project specifications (including the ability to make modifications in the specifications).

3. Permittees with operational control over only a portion of a larger construction site (e.g., one of four homebuilders in a subdivision) are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site, including: (1) protection of endangered and/or threatened species and their critical habitat (2) protection of historic sites listed and/or proposed to be listed on national and state registries and (3) implementation of BMPs and other controls required by the SWPPP. Permittees shall ensure either directly or through coordination with other permittees that their activities do not render another party's pollution controls ineffective. Permittees must either implement their portions of a common SWPPP or develop and implement their own SWPPP.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

At least one storm water pollution prevention plan (SWPPP) shall be developed for each construction project or site covered by this permit. For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not required to, develop separate SWPPPs that cover only their portion of the project provided that reference is made to other operators at the site. In instances where there is more than one SWPPP for a site, coordination must be conducted between the permittees to ensure the storm water discharge controls and other measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. The SWPPP shall describe and ensure the implementation of practices which will be used to minimize the pollutants in storm water discharges associated with construction activity at the construction site and to assure compliance with the terms and conditions of this permit. When developing SWPPPs, applicants must follow the procedures in Addendum A of this permit to determine whether listed endangered and/or threatened species or critical habitat would be affected by the applicant's storm water discharges or storm water discharge-related activities. Any information on whether listed species or critical habitat is found in proximity to the construction site must be included in the SWPPP. Any terms or conditions that are imposed under the eligibility requirements of Part I.A.3.e and Addendum A of this permit to protect listed species or critical habitat from storm water discharges or storm water discharge-related activity must be incorporated into the SWPPP. The SWPPP must be implemented upon commencement of construction activities. Permittees must implement the applicable provisions of the SWPPP required under this Part as a condition of this permit. SWPPP templates may be found at: http://deq.louisiana.gov/page/storm-water-protection.

A. Deadlines for Plan Preparation and Compliance

The storm water pollution prevention plan shall:

1. Be completed prior to the submittal of an NOI to be covered under this permit (except as provided in Parts II.A.5) and updated as appropriate; and

2. Provide for compliance with the terms and schedule of the SWPPP beginning with the initiation of construction activities.

B. Signature, Plan Review and Making Plans Available

1. The SWPPP shall be signed in accordance with Part VI.D.10 (Signatory Requirements), and be retained on-site at the site which generates the storm water discharge in accordance with Part V (Retention of Records) of this permit.

2. The permittee shall post a notice near the main entrance of the construction site with the following information:

a. the LPDES permit number for the project or a copy of the NOI if a permit authorization number has not yet been assigned;

b. the name and telephone number of a local contact person;

c. a brief description of the project; and

d. the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

If posting this information near a main entrance is infeasible due to safety concerns, the notice shall be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site, nor does this permit require that permittees allow members of the public access to a construction site.

3. The permittee shall make SWPPPs available upon request to: the LDEQ; the local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; or to the operator of a municipal separate storm sewer receiving discharges from the site. The copy of the SWPPP that is required to be kept on-site (or locally available) must be made available to the LDEQ (or authorized representative) for review at the time of an on-site inspection. Also, in the interest of public involvement, the LDEQ encourages permittees to make their SWPPPs available to the public for viewing during normal business hours.

4. The LDEQ may notify the permittee (co-permittees) at any time that the SWPPP does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of this permit which are not being met by the SWPPP, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this Part. Within 7 calendar days of receipt of such notification from the LDEQ, (or as otherwise provided by the LDEQ), or authorized representative, the permittee shall make the required changes to the plan and shall submit to the LDEQ a written certification that the requested changes have been made. The LDEQ may take appropriate enforcement action for the period of time the permittee was operating under a plan that did not meet the minimum requirements of the permit.

C. <u>Keeping Plans Current</u>

The permittee must amend the SWPPP within 7 calendar days whenever:

1. there is a change in design, construction, operation, or maintenance, which has or may have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in the SWPPP;

2. inspections or investigations by site operators, local, state, or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity; and

3. the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the SWPPP (see Part IV.E). The plan must also be amended to address any measures necessary to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries, if applicable. Amendments to the plan may be reviewed by the LDEQ in the same manner as Part IV.B above.

D. Contents of Plan

The SWPPP shall include the following items:

1. Site Description Each SWPPP shall provide a description of potential pollutant sources and other information as indicated below:

a. a description of the nature of the construction activity and function of the project (i.e., highway, mall, etc.);

b. a description of the intended sequence and timing of major activities (i.e. initial land clearing, installing sewer lines, roads, major buildings) which disturb soils for major portions (i.e. defined phases of a subdivision) of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc);

c. estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities including off-site borrow and fill areas;

d. an estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions and data describing the soil or the quality of any discharge from the site;

e. a general location map (e.g., portion of a city or county map or other map with enough detail to identify the location of the construction site and waters of the United States within one mile of the site);

f. a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which will not be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, locations of off-site material, waste, borrow or equipment storage areas, surface waters

(including wetlands), locations where storm water is discharged to a surface water; the location of areas where stabilization practices are expected to occur;

g. the location and description of any allowable non-storm water discharges covered by the permit;

h. the name of the receiving water(s), and areal extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project;

i. a copy of the permit requirements (may simply attach a copy of this permit);

j. information on whether listed endangered and/or threatened species and/or critical habitat are found in proximity to the construction activity and whether such species or critical habitat may be affected by the applicant's storm water discharges or storm water discharge-related activities;

k. documentation supporting the determination of permit eligibility with regard to Permit Part I.A.3.f (National Historic Preservation Act), including:

(1) information on whether storm water discharges or storm water discharge-related activities would have an effect on a property that is listed or proposed to be listed on the National Register of Historic Places or state registries;

(2) where effects may occur, any written agreements made between the operator and the SHPO to mitigate those effects;

(3) results of the Addendum B historic places screening determinations; and

(4) a description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the National Register of Historic Places, including any terms or conditions that are imposed under the eligibility requirements of Part I.A.3.f of this permit.

l. documentation supporting the determination of documentation supporting the determination of permit eligibility and compliance with Part I.A.3.g with regards to discharges to waters that are impaired and/or have and LDEQ-established or approved TMDL, including:

(1) identification of whether your discharge is identified, either specifically or generally, in an LDEQ-established or approved TMDL and any associated allocations, requirements, and assumptions identified for your discharge;

(2) summaries of consultation with the LDEQ authorities on consistency of SWPPP conditions with the approved TMDL; and

(3) measures taken to ensure that the discharge of pollutants for the site is consistent with Water Quality Standards and the assumption and requirements of the LDEQ-

established or approved TMDL, including any specific wasteload allocation that has been established that would apply to your discharge.

2. Controls

Each SWPPP shall include a description of all appropriate control measures (i.e., structural and non-structural BMPs) that will be installed and implemented as part of the construction activities and construction support activities to control pollutants in storm water discharges. The SWPPP must clearly describe for each major activity identified in Part IV.D.1.b: a) appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented; and b) which permittee is responsible for implementation (e.g., perimeter controls for one portion of the site will be installed by Contractor A after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained by Contractor B until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed by Owner after final stabilization).

In a situation where an LDEQ-approved or established TMDL has specified a general wasteload allocation applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the SWPPP must specifically state which BMPs were selected for the site and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the approved or established TMDL.

The description and implementation of control measures shall address the following minimum components:

a. <u>Erosion and Sediment Controls</u>

(1) Short and Long Term Goals and Criteria:

(a) The construction-phase erosion and sediment controls shall be designed to retain sediment on site to the maximum extent practicable.

(b) All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations (see Part IV.D.3 and 4). For additional guidance, see EPA's recommendations for silt fences (https://www3.epa.gov/npdes/pubs/siltfences.pdf) and SWPPPs (https://www3.epa.gov/npdes/pubs/sw_swppp_guide.pdf).

(c) If sediments escape the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment on the street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

(d) Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

(e) Trapped sediment must be removed from a silt fence before the deposit reaches 50 percent of the above-ground fence height (or before it reaches a lower height based on manufacturer's specifications.)

(f) Off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

(2) Effluent limitations reflecting the best practicable technology currently available (BPT) (40 CFR 450.21 (a)) shall, at a minimum, include the design of effective erosion and sediment controls to minimize the discharge of pollutants installed and maintained to:

(a) Control storm water volume and velocity to minimize soil erosion in order to minimize pollutant discharges.

(b) Control storm water discharges, including both peak flow rates and total storm water volume to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points.

(c) Minimize amount of soil exposed during construction activity.

(d) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

(e) Minimize the disturbance of steep slopes.

(f) Minimize sediment discharge from the site: design, install and maintain erosion and sediment controls to address factors such as the amount, frequency, intensity and duration of precipitation, the nature of the resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

(g) Provide and maintain natural buffers around waters of the state, direct storm water to the vegetated areas and maximize storm water infiltration to reduce pollutant discharges, unless infeasible;

i. A buffer zone of sufficient width to reduce pollutant discharges and minimize erosion shall be maintained between disturbed areas and all waters of the state;

ii. For discharges to waters designated as Outstanding Natural Resource Waters, permittees are required to maintain at a minimum a 100-foot natural buffer

zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. Additional buffer zone/riparian requirements may be imposed through a Louisiana Department of Wildlife and Fisheries Scenic River permit.

iii. For discharges to waters that are listed as impaired (Category 5 or 4a) on the most recent Integrated Report for sedimentation/siltation or turbidity AND where the suspected source is site clearance (land development or redevelopment), permittees are required to maintain at a minimum a 50-foot natural buffer zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. This requirement does not supersede any additional requirements of a waste load allocation, per Part I.A.3.g of this permit. The most recent Integrated Report (also referred to as the 305(b) Report) can be found at: http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d.

iv. If the buffer zone between any disturbance and the edge of the receiving water on all edges of the water body cannot be maintained due to site constraints, an adequately protective alternate practice may be employed, or a combination of alternative practices with a narrower buffer zone. The SWPPP shall explain any alternate practices and how these practices are adequately protective. Such cases include, but are not limited to, redevelopment in an urban setting or construction of water features, such as: docks, bridges, levees, dams, and dredge and fill areas.

(h) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

(i) When discharging storm water from settling basins or impoundments, utilize outlet structures that withdraw water from the surface of the basin or impoundment, unless infeasible.

(3) Stabilization Practices

The SWPPP must include a description of interim and permanent stabilization practices for the site, including a site-specific scheduling of the implementation of the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Final stabilization practices may include, but are not limited to: establishment of permanent self-sustaining perennial vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided.

The following records shall be maintained and attached to the SWPPP: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.

(a) Deadline to Initiate Stabilization Measures**.** Stabilization measures shall be initiated immediately in portions of the site where clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased and will not resume for a period exceeding 14 calendar days. For the purposes of this permit, "immediately" is interpreted to mean no later than the next work day. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, stabilization measures do not have to be initiated on that portion of site.

For the purposes of this permit, the types of activities that constitute the initiation of stabilization include, but are not limited to:

- **i.** prepping the soil for vegetative or non-vegetative stabilization;
- **ii.** applying mulch or other non-vegetative product to the exposed area;
- **iii.** seeding or planting the exposed area;
- **iv.** starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and
- **v.** finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

(b) Deadline to Complete Installation of Stabilization Measures**.** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures, you are required to have completed:

- **i.** For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- **ii.** For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

In extenuating circumstances and per 40 CFR 450.21(b), stabilization must be completed within the time period as follows: in areas experiencing droughts where the completion of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be completed as soon as practicable. These extenuating circumstances must be documented in the SWPPP.

In general, you shall be aware that final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. You must continue routine inspections until you have met the final stabilization requirements of the permit. **"Final stabilization" is defined/described in Part IX of the permit.**

(c) Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization**.** If you are unable to meet the deadlines in sections (a) or (b) above due to circumstances

beyond your control, and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:

i. Immediately initiate, and within 14 calendar days complete, the installation of temporary **non-vegetative** stabilization measures to prevent erosion;

ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and

iii. Document the circumstances that prevent you from meeting the deadlines required in sections (a) and (b) and the schedule you will follow for initiating and completing stabilization.

(4) Structural Practices

The SWPPP must include a description of structural practices to divert flows from exposed soils, retain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Placement of structural practices in floodplains shall be avoided to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(a) For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin providing storage for a calculated volume of runoff from a 2 year, 24 hour storm from each disturbed acre drained, or equivalent control measures, shall be provided where attainable until final stabilization (see Part IX) of the site. The 3,600 cubic feet of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.

In determining whether installing a sediment basin is attainable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin would preclude a safe design. For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps shall be used. Where neither the sediment basin nor equivalent controls are attainable due to site limitations, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual site conditions. LDEQ encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.

(b) For drainage locations serving less than 10 acres, small sediment basins and/or sediment traps shall be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries (and those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2 year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.

b. Storm Water Management

A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWPPP. Structural measures shall be placed on upland soils to the degree attainable. The installation of these devices may also require a separate permit under Section 404 of the CWA. Permittees are only responsible for the installation and maintenance of storm water management measures until final stabilization is achieved, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site. You shall be aware that final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. You must continue routine inspections until you have met the final stabilization requirements of the permit (see Part IX). However, post-construction storm water BMPs that discharge pollutants from point sources once construction is completed may need authorization under a separate LPDES permit.

(1) Such practices may include, but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(2) Velocity dissipation devices may be needed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

c. Other Controls

(1) No solid materials, including building materials, shall be discharged to waters of the State, except as authorized by a permit issued under Section 404 of the CWA. "Solid materials" refers to such items as boards, wrapping materials, bricks and concrete debris, and land clearing debris such as leaves and tree limbs, but does not include total suspended solids.

(2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

(3) The SWPPP shall ensure and demonstrate compliance with applicable state and/or local waste disposal, sanitary sewer or septic system regulations to the extent these are located within the permitted area.

(4) The SWPPP shall include a narrative description of construction and waste materials expected to be stored on site, with updates as appropriate. The SWPPP shall also include a description of controls developed to reduce pollutants from these materials including storage practices to minimize exposure of the materials to storm water runoff and precipitation and spill prevention and response.

(5) The SWPPP shall include a description of pollutant sources from areas other than construction and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(6) The SWPPP shall include a description of measures necessary to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries that are imposed under the eligibility requirements of Part I.A.3.e, Part I.A.3.f, Addendum A, and Addendum B of this permit. Failure to describe and implement such measures will result in the storm water discharges from the construction activities being ineligible for coverage under this permit.

(7) The SWPPP shall identify appropriate controls and measures to minimize discharges from the support activity areas.

(8) Effective pollution prevention measures must be designed, installed, implemented, and maintained to minimize:

i. Discharges of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Prior to discharge wash waters must be treated in a sediment basin or an alternative control that provides equivalent or better treatment;

ii. Trash, construction waste, building materials and products, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials on the site exposed to precipitation and to storm water runoff. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water runoff will not result in a discharge of pollutants, or, where exposure of a specific material or product poses little risk of storm water contamination (such as final products and materials intended for outdoor use); and

iii. Discharges of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

d. <u>Approved State or Local Plans</u>

(1) Permittees which discharge storm water associated with construction activities must include in their SWPPP the procedures and requirements which are specified in

applicable sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by state or local officials.

(2) Permittees which discharge storm water associated with construction activities must include in their SWPPP any measures that result from agreements from the Louisiana State Historic Preservation Officer or tribal historic preservation offices.

(3) SWPPPs must be updated as necessary to reflect any changes which are applicable to protecting surface water resources in the sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State, or local officials for which the permittee receives written notice.

3. Maintenance

A description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures, and other protective measures identified in the site plan are in good and effective operating condition must be provided. Maintenance needs identified in inspections or by other means shall be accomplished before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. Employees and subcontractors as necessary shall be made aware of the applicable control measures implemented at the site so that they follow applicable procedures.

4. Inspections

Except for linear or remote projects as discussed below, qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect the construction site in accordance with one of the two schedules listed below. Areas to be inspected include disturbed areas that have not been finally stabilized; areas used for storage of materials that are exposed to precipitation and storm water runoff; structural and non-structural control measures; and locations where vehicles enter or exit the site. You must specify in the SWPPP which schedule you will follow and the schedule must be adhered to throughout the term of the permit.

- At least once every 7 days, or
- At least once every 14 calendar days, before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours of the end of a storm event of 0.5 inches or greater.

Employees and subcontractors, as necessary, shall be made aware of the applicable control measures implemented at the site so that they follow applicable procedures.

Because linear or remote, unmanned projects often cannot be inspected from stabilized locations without damage to BMPs or re-vegetation efforts, these operators have the option of either 1) conducting regular visual inspections every 14 days, or 2) performing visual inspections within 24 hours following a storm event of 0.5 inches or greater. The option

selected by the operator must be identified in the SWPPP and must be adhered to throughout the term of permit coverage.

a. Disturbed areas and areas used for storage of materials that are exposed to precipitation and storm water runoff shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. All storm water control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in meeting water quality standards and preventing significant impacts to the receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

b. Based on the results of the inspection, the site description identified in the plan in accordance with Part IV.D.1 of this permit and pollution prevention measures identified in the plan in accordance with Part IV.D.2 of this permit shall be revised as appropriate, but in no case later than seven calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan within seven calendar days following the inspection.

c. For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:

1. The inspection date;
2. Names, titles, and qualifications of personnel making the inspection;
3. Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
4. Weather information and a description of any discharges occurring at the time of the inspection;
5. Location(s) of discharges of sediment or other pollutants from the site;
6. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
7. Location(s) of BMPs that need to be maintained;
8. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
9. Corrective action required including implementation dates.

The inspection report which includes the information listed in items 1-9 above and all actions taken in accordance with Part IV.D.4.b of the permit shall be made within 7 calendar days and retained as part of the SWPPP for at least three years from the date that the site is finally stabilized. Such reports shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the site is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part VI.D.10 of this permit.

5. Non-Storm Water Discharges

Except for flows from firefighting activities, sources of non-storm water listed in Parts I.A.2 and III.A.2 and 3 of this permit that are combined with storm water discharges associated with construction activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures to reduce and/ or eliminate the non-storm water component(s) of the discharge.

E. Contractor and Subcontractor Responsibilities

You must either implement your portion of a common SWPPP or develop and implement your own SWPPP. In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure the storm water discharge control measures are consistent with one another (e.g., provisions to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries). You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective.

1. **Contractors and Subcontractors Implementing Storm Water Control Measures.** The SWPPP must clearly identify for each control measure included in the plan, the party that will implement the measure. The permittee(s) shall ensure that all contractors and subcontractors are identified in the plan as being responsible for implementing storm water control measures.

2. **Contractors and Subcontractors Impacting Storm Water Control Measures.** The permittee shall ensure that contractor(s) and subcontractor(s) who will conduct activities which might impact the effectiveness of control measures, but who do not meet the definition of "operator" (Part IX), are identified in the plan and which control measures might be impacted.

3. **Utility Companies.** The SWPPP must clearly identify, for each control measure identified in the plan relating to the installation of utility service, the party that will implement the measure.

F. Wash Water from Concrete Trucks

1. **Concrete wash water from rinsing the chute.** Wash water generated during the rinsing of the chute of a concrete truck at a construction site may be rinsed if managed by an appropriate control structure, such as into a trap on the ground at the construction site. This activity usually generates a *de minimis* quantity of wash water that can be easily managed at the construction site. The rinsing activity must be done in such a manner that there is no runoff of rinse water from the construction site (unless managed by an appropriate control), especially into surface drainage, storm sewers, or surface waters. Contractors may follow EPA guidance (https://www3.epa.gov/npdes/pubs/concretewashout.pdf) for rinsing out the chute of a concrete mixer and hoppers of concrete pumps at a construction site, provided they understand that the wash out structure is temporary and must be cleaned out and removed from the site when the construction project is completed. If a contractor follows the EPA guidance for rinsing out the chute of a concrete mixed and hoppers of concrete pumps at a construction site, he must contact the LDEQ Solid Waste Permits Section to determine if additional

environmental protection regulations govern the containment and storage of the wash out material at the construction site.

2. **Concrete wash out from the drum. The permit does not authorize the discharge of drum washout water at a construction site.** More wash water is generated during the wash out of the drum of a concrete truck than is generated during the rinsing of the chute. The drum of a concrete truck shall be washed out at a ready mix concrete plant that is permitted to discharge the wash water.

Part V. RETENTION OF RECORDS

A. Documents

The permittee shall retain copies of SWPPPs and all records and reports required by this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of LDEQ at any time.

B. Accessibility

The permittee shall retain a copy of the SWPPP required by this permit (including a copy of the permit language) at the construction site (or other local site accessible to LDEQ and the public) from the date of project initiation to the date of final stabilization. The permittees with day-to-day operational control over SWPPP implementation shall have a copy of the plan available at a central location on-site for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. A copy of the plan must be readily available to inspectors during normal business hours.

C. Addresses

All written correspondence concerning discharges in Louisiana from any site covered under this permit, including the submittal of individual permit applications, shall be identified by agency interest number and/or permit number, if one is assigned, and sent to the address below.

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Permits Division

Part VI. STANDARD PERMIT CONDITIONS

A. General Conditions

1. Introduction
   In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to the Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions
   a. La. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. La. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

   b. Any person may be assessed an administrative penalty by the State Administrative Authority under La. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants
   a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply
   a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

   b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action
   This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

   a. Noncompliance by the permittee with any condition of the permit;

   b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

   c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

   d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge;

   e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

   f. Change of ownership or operational control.

   The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights
   This permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private or public property, nor any infringement of federal, state, or local laws or regulations.

8. Duty to Provide Information
   The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability
   Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability
    If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution
    A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies
    In accordance with La. R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Louisiana Department of Health state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La. R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Louisiana Department of Health state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La. R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Louisiana Department of Health.

15. The standards provided in Chapter 11 – Surface Water Quality Standards are official regulations of the state, and any person who discharges pollutants to the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.

B. Proper Operation and Maintenance

1. Need to Halt or Reduce not a Defense
   It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate
   The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance
   a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

   b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities
   a. Bypass. The intentional diversion of waste streams from any portion of a treatment facility.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

c. Notice
   (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.

   (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6 (24-hour notice) and Section D.6.e. of these standard conditions.

d. Prohibition of bypass
   (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

      (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

      (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

   (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions
   a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances
Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal
For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3. Publicly owned treatment works utilizing waste stabilization ponds/oxidation ponds are not subject to the 85 percent removal rate for Total Suspended Solids.

C. Monitoring and Records

1. Inspection and Entry
The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection
   (1) When the inspector announces that samples will be collected, the permittee may be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.
   (2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records
Except for records of monitoring information required by this permit related to the permittee's

sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to ensure accuracy of measurements and shall maintain appropriate records of such activities.

c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982 "U.S. Environmental Protection Agency. This publication is available from the National Service Center for Environmental Publications https://nepis.epa.gov/Exe/ZyNET.exe/30000QSA.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C81thru85%5CTxt%5C00000001%5C30000QSA.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-

&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
https://www.govinfo.gov/content/pkg/GOVPUB-C13-a301a5f6bf6ec378b4fabc9c626c03e2/pdf/GOVPUB-C13-a301a5f6bf6ec378b4fabc9c626c03e2.pdf

b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
Volume 1 - https://www.govinfo.gov/content/pkg/GOVPUB-C13-c0f8a094b9fcc5c32be685edbd48f942/pdf/GOVPUB-C13-c0f8a094b9fcc5c32be685edbd48f942.pdf

Volume 2 - https://www.govinfo.gov/content/pkg/GOVPUB-C13-b3daf36f1cc0f770bc04d66da5cdc937/pdf/GOVPUB-C13-b3daf36f1cc0f770bc04d66da5cdc937.pdf

d. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.
https://nepis.epa.gov/Exe/ZyNET.exe/9101TZLK.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C81thru85%5CTxt%5C00000026%5C9101TZLK.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

7. Prohibition for Tampering: Penalties
   a. La. R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

   b. La. R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance.

8. Additional Monitoring by the Permittee
   If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements
   Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation
    a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
       (1) Submitted on behalf of any facility, as defined in La. R.S.30:2004;
       (2) Required as part of any permit application;
       (3) Required by order of the department;
       (4) Required to be included on any monitoring reports submitted to the department;
       (5) Required to be submitted by contractor
       (6) Otherwise required by department regulations.

    b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

       Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

    c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under LDEQ→About LDEQ→Public Participation and Permit Support→LA Lab Accreditation at

the following link::

http://deq.louisiana.gov/page/la-lab-accreditation

Questions concerning the program may be directed to (225) 219-3247.

D. Reporting Requirements

1. Facility Changes
The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

   c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance
The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

   A permit may be transferred by the permittee to a new owner or operator only if: (1)the permit has been modified or revoked and reissued (under LAC 33:IX.2903.A.2.b) by the permittee and new owner submitting a Name/Ownership/Operator Change Form (NOC-1 Form) and approved by LDEQ (LAC 33:I.Chapter 19); or (2) a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

The NOC-1 form can be found using the pathway LDEQ → Water→ LPDES Application Forms at the following link: **http://deq.louisiana.gov/page/lpdes-water-permits**

4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be submitted through a department-approved electronic document receiving system (NetDMR) in accordance with LAC 33:I.Chapter 21 unless the state administrative authority gives written authorization to the permittee to submit monitoring results in an alternative format such as paper DMRs.

Information about NetDMR and gaining access can be viewed using the pathway LDEQ → Water→ NETDMR on the department's website at: **http://deq.louisiana.gov/page/netdmr**

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) using the format specified in the permit.

If authorized to report using an alternative format such as paper DMRs, then preprinted DMRs will be provided to majors/92-500s and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification

As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (877) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification

As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify DPS by telephone at (877) 925-6595 (collect calls accepted 24 hours a day) within 24 hours after learning of the discharge.

In the event of an unauthorized discharge that requires notification, the DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will notify the Department of Environmental Quality.

In accordance with LAC 33:I.3923, notifications not required by LAC 33:I.3915 or 3917 shall be provided to the department within a time frame not to exceed 24 hours, or as specified by the specific regulation or permit provision requiring the notification, and shall be given to SPOC, as follows:

(1) by the Online Incident Reporting screens found at **http://deq.louisiana.gov/page/file-a-complaint-report-an-incident**;or
(2) by e-mail utilizing the Incident Report Form and instructions found at **http://deq.louisiana.gov/page/single-point-of-contact**;or
(3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:
(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;
(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;
(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;
(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;
(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;
(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, SPOC in accordance with LAC 33:I.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid

permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;

(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;

(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;

(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:

(a) the current permitted limit for the pollutant(s) released; and

(b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;

(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

(8) Written notification reports shall be submitted to the Office of Environmental Compliance, SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Written reports (LAC 33:I.3925) should be mailed to:

Louisiana Department of Environmental Quality
Post Office Box 4312
Baton Rouge, LA 70821-4312
ATTENTION: OFFICE OF ENVIRONMENTAL COMPLIANCE – SPOC
"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

The Written Notification Report may also be faxed to the Louisiana Department of Environmental Quality, Office of Environmental Compliance, Single Point of Contact at: (225)-219-3708.

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within

24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);
(2) Any upset which exceeds any effluent limitation in the permit;
(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information
Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances
In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:
   i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micro-grams per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
      (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

   ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
   i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification

levels":

(1) Five hundred micrograms per liter (500 µg/L);
(2) One milligram per liter (1 mg/L) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

a. All permit applications shall be signed as follows:
   (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
      (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE:DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a(1)(b) rather than to specific individuals.

   (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
   (3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
      (a) The chief executive officer of the agency, or
      (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;
   (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
   (3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are
   significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under La. R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, La. R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;
b. Permit applications, permits, and effluent data.
c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

E. Penalties for Violation of Permit Conditions

1. Criminal
   a. Negligent Violations
   The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

   b. Knowing Violations
   The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

   c. Knowing Endangerment
   The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

   d. False Statements
   The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate~~,~~ any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties
   The Louisiana Revised Statutes La. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by
   such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

F. Definitions

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health in accordance with La. R.S.49:1001 et seq.

7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with

limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Loading, is presented in the permit and reported in the DMR as the total amount of a pollutant entering the facility or discharged in the effluent. It is calculated by knowing the amount of flow, the concentration, and the density of water. Results should be rounded off and expressed with the same number of significant figures as the permit limit. If the permit does not explicitly state how many significant figures are associated with the permit limit, the permittee shall use two.

    Loading (lbs/day) = Flow (in MGD) x Concentration (mg/L) x 8.34*

    *8.34 is the unit conversion for the weight of water

    Please note that the equations above may not be appropriate for production based effluent guideline limitations.

17. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination

System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

18. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + ... + C_nF_n}{F_1 + F_2 + ... + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

19. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

20. POTW means Publicly Owned Treatment Works.

21. Sanitary Wastewater Term(s):

    a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

    b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

    c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

22. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

23. Sewage sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage, portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.

24. Storm water Runoff—aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.

25. Surface Water: all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.

26. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)

27. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

28. The term MGD shall mean million gallons per day.

29. The term GPD shall mean gallons per day.

30. The term mg/L shall mean milligrams per liter or parts per million (ppm).

31. The term SPC shall mean Spill Prevention and Control. Plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.Chapter 9).

32. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. Plan covering the release of pollutants as defined in 40 CFR Part 112.

33. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

34. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

35. Visible Sheen: a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.

36. Wastewater—liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.

37. Waters of the State: for the purposes of the Louisiana Pollutant Discharge Elimination system, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending there from three miles into the Gulf of Mexico. For purposes of the Louisiana Pollutant Discharge Elimination System, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251 et seq.

38. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + ... + C_nF_n}{F_1 + F_2 + ... + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

Part VII. REOPENER CLAUSE

If there is evidence indicating that the discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part III.D and VI.A.6 of this permit or the permit may be modified to include different requirements and/or limitations.

Part VIII. TERMINATION OF COVERAGE

Termination of coverage is automatic provided the owner and/or operator has complied with the requirements in Part I.E of this permit. Owners and/or operators are responsible for ensuring the elimination of storm water discharges associated with construction activity by the automatic termination date. All disturbed soils at the portion of the construction site where the operator had control shall be finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time to ensure final stabilization is maintained, or that all storm water discharges associated with construction activities from the identified site that are authorized by an LPDES general permit have otherwise been eliminated from the portion of the construction site where the operator had control.

Permittees shall be aware that final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. If final stabilization requirements of the permit (see Part IX) have not been met, a Notice of Extension must be submitted. Termination of permit coverage does not relieve the permittee of any future liabilities associated with environmental damage caused by the permittee's activities.

Where another owner and/or operator has assumed control (see Part III.E and Part IV.E) over all areas of the site that have not been finally stabilized, the previous owner and/or operator must submit a Notice of Termination (NOT). Current permitted owners and/or operators who determine that coverage is no longer needed may also submit an NOT. The NOT shall include the following information:

1. the name (or other identifier), street address (description of location if no street address is available), city, parish, and the latitude and longitude of the approximate center of the construction site/project for which the notification is submitted;

2. the name, address and telephone number of the permittee submitting the Notice of Termination;

3. the LPDES permit authorization number for the storm water discharge identified by the Notice of Termination;

4. an indication of whether the storm water discharges associated with construction activity have been eliminated or the operator of the discharges has changed; and

5. the following certification signed in accordance with Part VI.D.10 (Signatory Requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with construction activity from the portion of the identified site where I was an operator have ceased or have been eliminated or that I am no longer an operator at the construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the State is unlawful under the Clear Water Act where the discharge is not authorized by an LPDES

permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violation of this permit or the Clean Water Act."

6. All NOTs are to be sent, using the forms provided by the State Administrative Authority, to the Water Permits Division at the address specified on the NOT form.

Part IX. ADDITIONAL DEFINITIONS

Aggregate Spray – potable water used to cool aggregate stockpiles and to maintain the specific gravity of light weight aggregate.

Alternative permit means another permit – either an individual permit or a different general permit.

Arid Areas – areas with an average annual rainfall of 0 to 10 inches.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
(https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu)

Bypass – the intentional diversion of waste streams from any portion of a treatment facility.

Control Measure – as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

Commencement of Construction – the initial disturbance of soils associated with clearing, grading, or excavating activities as well as support activities related to a construction site.

Common Plan of Development – a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g., a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools, commercial and industrial development that the developer plans to build or sell to others for development.) All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a Common Plan of Development or Sale:

> If a smaller project is part of a large common plan of development or sale that collectively will disturb five or more acres (e.g., you are building on 6 half-acre residential lots in a 10-acre development or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center) permit coverage is needed.
>
> If a small portion of the original common plan of development remains undeveloped and there has been a period of time where there is no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), you may re-evaluate the original project based on the acreage remaining from the original "common plan." If less than five but more than one acre remains to build out the original "common plan", coverage under this permit may not be required. However, you will need to comply with the terms and conditions of the Small Construction General Permit. If less than one acre remains of the original common plan, your individual project may be treated as a part of a less than one acre development and no permit would be required.

If you have a long-range master plan of development where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time, you may consider the "conceptual" phases of development to be separate a "common plans" provided the periods of construction for the physically interconnected phases will not overlap.

A public entity (a municipality, state or federal agency) need not consider all construction projects within their entire jurisdiction to be part of an overall "common plan." Only the interconnected parts of a project would be considered to be a "common plan."

Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Discharge of Storm Water Associated with Construction Activity – as used in this permit, refers to storm water point source discharges from areas where soil disturbing activities (e.g., clearing, grading, or excavation, etc.), support activities related to a construction site, or construction materials or equipment storage or maintenance (e.g., fill piles, fueling, etc.) are located.

Drought-Stricken Area – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely".
See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

Final Stabilization – means that:

(i) all soil disturbing activities at the site have been completed, and that a **uniform** (e.g., evenly distributed, without large bare areas) **perennial vegetative cover** with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geo-textiles) have been employed. Establishing at least 70% of the natural cover of self-sustaining native vegetation meets the vegetative cover criteria for final stabilization. For example, if the native vegetation covers 50% of the ground prior to commencement of construction activities, 70% of 50% would require 35% total cover for final stabilization.

A site does not meet the final stabilization permit requirement until self-sustaining native vegetation is established uniformly over each disturbed area on the site. Stabilizing seven of ten slopes or leaving an area equivalent to 30 percent of the disturbed area completely destabilized will not satisfy the **uniform vegetative cover** standard.

(ii) In arid and semi-arid areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by you.

b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

(iii) For individual lots in residential construction, final stabilization means that either:
a. The homebuilder has completed final stabilization as specified above, or

b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

(iv) For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.) final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the State, and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria (i) or (ii) or (iii) above.

Infeasible – not technologically possible, or not economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) – refers to a publicly-owned conveyance or system of conveyances that discharges to waters of the U.S. and is designed or used for collecting or conveying storm water, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW)(see LAC 33:IX.2511.B.4, B.7, and B.16 or 40 CFR 122.26(b)(4), (b)(7), and (b)(16)).

Natural Buffer – as used in this permit, an area of undisturbed natural cover surrounding surface waters. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities at the site

New Source – any building, structure, site, or installation from which there is or may be discharge of pollutants, the construction of which commenced:

a. after promulgation of standards of performance under Section 306 of the CWA which are applicable to such source; or

b. after proposal of standards of performance in accordance with Section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

Non-turbid – for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of turbidity-related water quality standards.

NOE – notice of extension to continue coverage or to reauthorize under the reissued LAR100000 (see Part I.D of this permit).

NOI – notice of intent to be covered by this permit (see Part II of this permit).

NOT – notice of termination of permit coverage (see Part VII of this permit).

Operator – any party associated with the construction project that meets either of the following two criteria: (1) the party has operational control over project plans and specifications (including the ability to make modifications in those specifications), or (2) the party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the storm water pollution prevention plan or other permit conditions (e.g., they are authorized to direct workers at the site to carry out activities identified in the storm water pollution prevention plan or comply with other permit conditions).

Permittee - an operator with permit authorization to discharge storm water associated with construction activity in Louisiana under the terms and conditions of this permit.

Person – an individual, association, partnership, corporation, municipality, state or federal agency, or any agency thereof, or an agent or employee thereof.

Point Source – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Process Wastewater – any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater may include interior or exterior washing of plant trucks or product receptacles.

Qualified Personnel – a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

Runoff Coefficient – the fraction of total rainfall that will leave the site as runoff.

Semi-Arid Areas – areas with an average annual rainfall of 10 to 20 inches.

Site – the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

State Administrative Authority – the Secretary of the Department of Environmental Quality or his designee, or the appropriate assistant secretary or his designee.

Storm Water Associated
with Industrial Activity – defined at LAC 33:IX.2511.B.14 and incorporated here by reference.

Storm Water Discharge Associated with Large Construction Activity – this includes discharges of storm water from construction activities including clearing, grading excavating, and support activities

related to a construction site that results in land disturbance greater than five acres. Also included is construction activity that disturbs less than five acres of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb greater than five acres.

Total Suspended Solids (TSS) – the amount of solid material suspended in water commonly expressed as a concentration in terms of mg/L.

Uncontaminated – for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of applicable water quality standards.

ADDENDUM A

ENDANGERED SPECIES GUIDANCE

ENDANGERED SPECIES GUIDANCE

I. INSTRUCTIONS

A list of endangered and threatened species that the US Fish and Wildlife Service (FWS) has determined may be affected by the activities covered by the Construction General Permit is available in the Fish and Wildlife Service Memorandum of Understanding (MOU) letter at http://deq.louisiana.gov/page/lpdes.

The species listing by parish is found using the link labeled Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA) Project Review. In order to be eligible for coverage under this permit, operators must:

- Determine whether any species listed in this Guidance or critical habitat are in proximity to the site,

- Pursuant to Permit Part I.A.3.e follow the procedures found in this Guidance to protect listed endangered and/or threatened species and designated critical habitat and determine that the storm water discharges and BMPs to control storm water runoff covered under this permit meet one or more of the eligibility requirements of Part I.A.3.e.(1) of this permit. Signature and submittal of the Notice of Intent form is deemed to constitute the Operator's compliance with eligibility requirements for permit coverage.

To determine permit eligibility and to avoid unauthorized impacts upon listed threatened or endangered species or on the critical habitat for those species, the operator must follow this Guidance's Steps 1 through 4 (and 5 if applicable) when developing the SWPPP.

> NOTE: At any step in the determination operators may contact the FWS for guidance. That request should be in writing and should include a description of the facility and a topographic map depicting the locations of the facility, the proposed construction activities, and the associated storm water discharges.

U.S. Fish and Wildlife Service
646 Cajundome Blvd.
Suite 400
Lafayette, LA 70506
(337) 291-3108

STEP 1: DETERMINE IF THE CONSTRUCTION SITE OR ASSOCIATED STORM WATER DISCHARGES ARE WITHIN THE VICINITY OF FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR THEIR DESIGNATED CRITICAL HABITAT.

If either the proposed site or the path of storm water from the site to the receiving stream is in a parish included on the Endangered Species List, the applicant shall proceed to Step 2 below. If, however, neither is located in a listed parish, then the applicant shall enter "no" in Section I.D.3 of the NOI, and move on to the next item.

If no species are listed in the site's parish or if a site's parish is not found on the list, the applicant is eligible for permit coverage and may indicate in the Notice of Intent that no species are found in the project area

and certify that it is eligible for permit coverage by marking “No” on the NOI. Where a project is located in more than one parish, the lists for all parishes shall be reviewed.

STEP 2: DETERMINE IF ANY SPECIES MAY BE FOUND "IN PROXIMITY" TO THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES:

A species is in proximity to a construction activity's storm water discharge when the species is:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from construction activities to the point of discharge into the receiving water; or

- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters; or

- Located in the area of a site where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size and structure of the construction activity, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of construction activities potentially covered by the permit, no specific method to determine whether species are in proximity is required for permit coverage. Instead, operators should use the method or methods which best allow them to determine to the best of their knowledge whether species are in proximity to their particular construction activities. These methods may include:

- Conducting visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal storm water collection systems.

- Contacting the nearest State or Tribal Wildlife Agency or U.S. Fish and Wildlife Service (FWS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to State, Tribal, or Federal wildlife agencies.

- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.

- Conducting a formal biological survey. Larger construction sites with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.

- Conducting an Environmental Assessment Under the National Environmental Policy Act (NEPA). Some construction activities may require environmental assessments under the NEPA. Such assessments may indicate if listed species are in proximity. (Construction General Permit coverage does not trigger the NEPA because it does not regulate any dischargers subject to New Source Performance Standards under Section 306 of the Clean Water Act. See CWA 511(c). However, some construction activities might require review under the NEPA because of federal funding or other federal nexus.)

- Using the ESA and MBTA project review application at the FWS Louisiana Ecological Services website (http://www.fws.gov/lafayette/pdc/).

If no species are in proximity and there is no likelihood of any BMPs to control storm water causing adverse effects on species identified in in this addendum, an operator is eligible for Construction General Permit

coverage based upon this **Criterion A**.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If listed species are found in proximity to a facility, operators must indicate the location and nature of this presence in the storm water pollution prevention plan (SWPPP) and follow Step 3.

STEP 3: **DETERMINE IF SPECIES OR CRITICAL HABITAT COULD BE ADVERSELY AFFECTED BY THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES OR BY BMPs TO CONTROL THOSE DISCHARGES.**

Scope of Adverse Effects: Potential adverse effects from storm water include:

- Hydrological. Storm water may cause siltation, sedimentation or induce other changes in the receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a storm water discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.

- Habitat. Storm water may drain or inundate listed species habitat.

- Toxicity. In some cases, pollutants in storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each site. Operators must also consider the likelihood of adverse effects on species from any BMPs to control storm water. Most adverse impacts from BMPs are likely to occur from the construction activities. However, it is possible that the operation of some BMPs (for example, larger storm water retention ponds) may affect endangered and threatened species.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If adverse effects are likely, operators should follow step 4 below.

STEP 4: DETERMINE IF MEASURES CAN BE IMPLEMENTED TO AVOID ANY ADVERSE EFFECTS:

If it is determined that adverse effects cannot be ruled out or are likely, the operator can receive coverage if appropriate measures are undertaken to avoid or eliminate any actual or potential adverse effects prior to applying for permit coverage. These measures may involve relatively simple changes to construction activities such as re-routing a storm water discharge to bypass an area where species are located, relocating BMPs, or limiting the size of construction activity that will be subject to storm water discharge controls.

At this stage, operators must contact the FWS [or the National Marine Fisheries Service (NMFS) if referred to that Service by the FWS] to see what appropriate measures might be suitable to avoid or eliminate adverse impacts to listed species and/or critical habitat. This can entail the initiation of informal coordination with the FWS (and/or NMFS, if appropriate) which is described in more detail in Step 5.

If operators adopt measures to avoid or eliminate adverse effects they must continue to abide by them during the course of permit coverage. These measures must be described in the SWPPP and may be enforceable as permit conditions.

If appropriate measures to avoid the likelihood of adverse effects are not available, then the operator must follow Step 5.

STEP 5: CONSULTATION WITH FWS TO DETERMINE IF THE ELIGIBILITY REQUIREMENTS CAN BE MET

Where adverse effects are likely, the operator must contact the FWS. The operator may still be eligible for permit coverage if any likelihood of adverse effects is addressed by meeting at least one of the following criteria, as required by Part I.A.3.e.(1)(b)-(e), if:

- **Criterion B**. The operator's activity has received previous authorization through an earlier Section 7 consultation or issuance of a ESA Section 10 permit (incidental taking permit) and that authorization addressed storm water discharges and/or BMPs to control storm water runoff (e.g., developer included impact of entire project in consultation over a wetlands dredge and fill permit under Section 7 of the ESA).

OR

- **Criterion C.** The operator's activity was previously considered part of a larger, more comprehensive assessment of impacts on endangered and threatened species and/or critical habitat, under Section 7 or Section 10 of the ESA, which accounts for storm water discharges and BMPs to control storm water runoff (e.g., where an area-wide habitat conservation plan and the ESA's Section 10 permit is issued which addresses impacts from construction activities, including those from storm water, or a NEPA review is conducted which incorporates the ESA Section 7 procedures).

OR

Criterion D. Consultation with the USFWS (or NMFS, if appropriate) for the operator's storm water discharges and BMPs to control storm water runoff results in either: 1) FWS/NMFS written concurrence with a finding of no likelihood of adverse effects (see 50 CFR 402.13) or 2) issuance of a biological opinion in which USFWS (or NMFS) finds that the action is not likely to jeopardize the continued existence of listed endangered or threatened species or result in the adverse modification or destruction of critical habitat [see 50 CFR 403.14(h)].

Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators must initiate consultation during Step 4 (upon becoming aware that endangered and threatened species are in proximity to the facility).

OR

Criterion E. The operator's activity was considered part of a larger, more comprehensive site-specific assessment of impacts on endangered and threatened species by the owner or other operator of the site when it developed a SWPPP and that permittee met the eligibility requirements stated in Criterion A, B, C, or D [e.g., owner was able to determine there would be no adverse impacts for the project as a whole under Criterion A, so contractor meets the eligibility requirements stated Criterion D]. Utility companies applying for area-wide permit coverage meet the eligibility requirements stated in Criterion D since authorization to discharge is contingent on a principal operator of a construction project having been granted coverage under this or an alternative LPDES permit for the areas of the site where utilities installation activities will occur.

The determination of eligibility of Criteria B - D shall be documented in the facility's SWPPP, and copies of all applicable documents, such as the FWS approval letters, shall be retained with the SWPPP. The operator must comply with any terms and conditions imposed under the all eligibility criteria requirements to ensure that storm water discharges or BMPs used to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's SWPPP.

If the eligibility requirements of Criteria A - D cannot be met, then the operator may not receive coverage under this permit and should consider applying to the LDEQ for an individual permit.

This permit does not authorize any "taking" (as defined under Section 9 of the ESA) of endangered or threatened species unless such takes are authorized under Section 7 or 10 the ESA. Operators who believe their construction activities may result in takes of listed endangered and threatened species should be sure to get the necessary coverage for such takes through an individual consultation or Section 10 permit of the ESA.

This permit does not authorize any storm water discharges or BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of designated critical habitat.

II. ENDANGERED SPECIES PARISH LIST

See: http://deq.louisiana.gov/page/lpdes. Click on **Water**, then **Permits**, then **LPDES Permit Information**, then the "U.S. Fish and Wildlife Service Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA) Project Review" under **LPDES Support Documents**.

ADDENDUM B

HISTORIC PRESERVATION

HISTORIC PROPERTIES GUIDANCE

Operators must determine whether their site's storm water discharge or the construction of best management practices (BMPs) to control such discharges, have potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing operators who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for sites which are new storm water dischargers, and for existing sites which are planning to construct BMPs for permit eligibility, operators shall conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, operators shall first determine whether there are any historic properties or places in the vicinity that are listed on the National Register, or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to the State Historic Preservation Officer to respond to inquiries concerning the location of historic properties, it is suggested that operators first access the "National Register of Historic Places" information listed on the National Park Service's web page at the address listed below. The address for the Louisiana State Historic Preservation Officer is also listed below. Operators may also contact city, parish or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

The following scenarios describe how operators can meet the permit eligibility criteria for protection of historic properties under this permit:

(1) If historic properties are **not identified** in the path of a site's industrial storm water discharge, or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), or

if historic properties **are identified,** but it is determined that they will **not be affected** by the discharge, or construction of BMPs to control the discharge,

then the operator has met the permit eligibility criteria under Part I.A.3.f.

(2) If historic properties **are identified** in the path of a site's industrial storm water discharge, or where construction activities are planned for the installation of BMPs to control such discharges, and it is determined that **there is the potential** to adversely affect the property, the operator can still meet the permit eligibility criteria if he/she obtains and complies with a written agreement with the State Historic Preservation Officer, which outlines measures that the operator will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the site's storm water pollution prevention plan.

In situations where an agreement cannot be reached between an applicant and the State Historic Preservation Officer, applicants shall contact the Advisory Council on Historic Preservation listed below in this addendum for assistance.

The term “adverse effects" includes, but is not limited to, damage, deterioration, alteration, or destruction of the historic property or place. LDEQ encourages operators to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Operators are reminded that they must comply with all applicable State and local laws concerning the protection of historic properties and places.

I. Internet Information on the National Register of Historic Places

An electronic listing of the “National Register of Historic Places," as maintained by the National Park Service on its National Register Information System (NRIS), can be accessed on the Internet at https://www.nps.gov/nr/research/.

II. Louisiana State Historic Preservation Officer (SHPO)

Louisiana, SHPO, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804-4247. For questions contact the Section 106 Review Coordinator, Telephone: (225) 342-8170.

III. Louisiana Tribes and Their Historic Preservation Officers

For questions related to identifying and protecting tribal cultural resources, operators shall contact tribal leaders. A list of Louisiana Tribes and Their Historic Preservation Officers can be found at:
https://www.crt.state.la.us/Assets/OCD/archaeology/nativeamericancontacts/NatAmContacts.pdf. LDEQ does not have the authority to issue LPDES permits for activities on federal Native American lands.

ADDENDUM C

LIST OF ADDRESSES FOR LDEQ OFFICES

CURRENT ADDRESSES

Enforcement Division
Office of Environmental Compliance
Department of Environmental Quality
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312
Telephone: (225) 219-3715

Mailing Addresses For Regional Offices	Jurisdictional Parishes For Each Regional Office
Acadiana Regional Office Inspections Division Office of Environmental Compliance 111 New Center Drive Lafayette, Louisiana 70508 (337) 262-5584	Acadia, Avoyelles, Catahoula, Concordia, Evangeline, Grant, Iberia, Lafayette, LaSalle, Rapides, St. Landry, St. Martin, St. Mary, Vermilion
Capital Regional Office Inspections Division Office of Environmental Compliance P.O. Box 4312 Baton Rouge, Louisiana 70821-4312 (225) 219-3600	Ascension, Assumption, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, St. James, St. Martin, Tangipahoa, West Baton Rouge, West Feliciana
Northeast Regional Office Inspections Division Office of Environmental Compliance 508 Downing Pines Road West Monroe, Louisiana 71292 (318) 362-5439	Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, , Richland, Tensas, Union, West Carroll, Winn
Northwest Regional Office Inspections Division Office of Environmental Compliance 1525 Fairfield Avenue, Room 520 Shreveport, Louisiana 71130 (318) 676-7476	Bienville, Bossier, Caddo, Claiborne, De Soto, Natchitoches, Red River, Sabine, Webster
Southeast Regional Office Inspections Division Office of Environmental Compliance 201 Evans Road, Bldg. 4, Suite 420 New Orleans, LA 70123-5230 (504) 736-7701	Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. John the Baptist, St. Charles, St. Tammany, Terrebonne, Washington
Southwest Regional Office Inspections Division Office of Environmental Compliance 1301 Gadwall Street Lake Charles, Louisiana 70615-5176 (337) 491-2667	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis, Vernon

ADDENDUM D

LIST OF OUTSTANDING NATURAL RESOURCE WATERS

Outstanding Natural Resource Waters

ATCHAFALAYA RIVER BASIN:

None

BARATARIA BASIN:

Bayou Des Allemands – from Lac Des Allemands to old US 90
Bayou Des Allemands – fro Hwy. 90 to Lake Salvador

CALCASIEU RIVER BASIN:

Calcasieu River – from LA Highway 8 to the Rapides/Allen Parish line
Calcasieu River – from Rapides-Allen Parish line to Marsh Bayou
Calcasieu River – from Marsh Bayou to saltwater barrier
Whiskey Chitto Creek – from the southern boundary of Fort Polk Military Reservation to the Calcasieu River
Six Mile Creek – East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek
Ten Mile Creek – from headwaters to Whiskey Chitto Creek

LAKE PONTCHARTRAIN BASIN:

Comite River – from Wilson-Clinton Highway to White Bayou
Amite River – from Mississippi State Line to LA Highway 37
Blind River – from the Amite River Diversion Canal to the mouth at Lake Maurepas
Blind River – from headwaters to Amite River Diversion Canal
Tickfaw River – from the Mississippi State Line to LA Highway 42
Tangipahoa River – from the Mississippi State Line to I-12
Chappepeela Creek – from Louisiana Highway 1062 to Tangipahoa River
Tchefuncte River – from headwaters to Bogue Falaya River, includes tributaries
Lower Tchefuncte River – from Bogue Falaya River to LA Highway 22
Bogue Falaya River – from headwaters to Tchefuncte River
Bayou Lacombe – from headwaters to Interstate Highway 12
Bayou Lacombe – from CDM Ecoregion boundary to Lake Pontchartrain
Bayou Lacombe – from Interstate Highway 12 to US Highway 190
Bayou Lacombe – from US Highway 190 to CDM Ecoregion boundary
Bayou Cane – from the headwaters to U.S. Highway 190
Bayou Cane – from CDM Ecoregion boundary to Lake Pontchartrain
Bayou Labranche – from headwaters to Lake Pontchartrain
Bayou Trepagnier – from Norco to Bayou Labranche
Bayou St. John
Bayou Chaperon
Bashman Bayou – from headwaters to Bayou Dupre
Bayou Dupre – from Lake Borgne Canal to Terre Beau Bayou
Lake Borgne Canal – from the Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal
Pirogue Bayou – from Bayou Dupre to New Canal
Terre Beau Bayou – from Bayou Dupre to New Canal
Bayou Bienvenue – from Bayou Villere to Lake Borgne

MERMENTAU RIVER BASIN:

None

VERMILION-TECHE RIVER BASIN:

Spring Creek – from headwaters to Cocodrie Lake
Bayou Cocodrie – from U.S. Highway 167 to the Bayou Boeuf-Cocodrie Diversion Canal

MISSISSIPPI RIVER BASIN:

None

OUACHITA RIVER BASIN:

Bayou Bartholomew – from Arkansas State Line to Ouachita River
Bayou de L'Outre – from the Arkansas State Line to the Ouachita River
Bayou D'Arbonne – from Bayou D'Arbonne Lake to the Ouachita River
Corney Bayou – from the Arkansas State Line to Corney Lake
Corney Bayou – from Corney Lake to Bayou D'Arbonne Lake
Middle Fork of Bayou D'Arbonne – from headwaters to Bayou D'Arbonne Lake
Little River – from Bear Creek to Catahoula Lake
Fish Creek – from headwaters to Little River
Trout Creek – from headwaters to Little River
Big Creek – from the headwaters to Little River

PEARL RIVER BASIN:

Holmes Bayou – from Pearl River to West Pearl River
West Pearl River – from headwaters to Holmes Bayou
West Pearl River – from Holmes Bayou to The Rigolets; includes the east and west mouths)
Morgan River – from Porters River to West Pearl River
Wilson Slough – from Bogue Chitto to West Pearl River
Bradley Slough - from Bogue Chitto to West Pearl River
Pushepatapa Creek – from headwaters and tributaries at Mississippi State Line to Pearl River flood plain
Bogue Chitto River – from Mississippi State Line to Pearl River Navigation Canal

RED RIVER BASIN:

Bayou Dorcheat – from Arkansas State Line to Lake Bistineau
Black Lake Bayou – from one mile north of Leatherman Creek to Black Lake
Saline Bayou – from headwaters near Arcadia to Saline Lake
Kisatchie Bayou – from its Kisatchie National Forest to Old River
Saline Bayou – from Larto Lake to Saline Lake
Bayou Cocodrie – from Little Cross Bayou to Wild Cow Bayou

SABINE RIVER BASIN:

Pearl Creek – from headwaters to Sabine River

TERREBONNE BASIN:

Bayou Penchant – from Bayou Chene to Lake Penchant

DEQ
LOUISIANA

OFFICE OF ENVIRONMENTAL SERVICES
Water Discharge Permit

FINAL

STORM WATER GENERAL PERMIT FOR SMALL CONSTRUCTION ACTIVITIES

MASTER GENERAL PERMIT NUMBER LAR200000

AUTHORIZATION TO DISCHARGE UNDER THE LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, this Louisiana Pollutant Discharge Elimination System (LPDES) General Permit is issued. This permit authorizes the discharge of storm water from small construction activities (equal to or greater than one acre but less than five acres) to Waters of the State, in accordance with the conditions and requirements set forth herein.

This permit shall become effective on March 20, 2018

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on March 20, 2018

Elliot B. Vega
Assistant Secretary

GALVEZ BUILDING □ 602 N. FIFTH STREET □ P.O. BOX 4313 □ BATON ROUGE, LA 70821-4313 □ PHONE (225) 219-3181

LPDES GENERAL PERMIT
FOR STORM WATER DISCHARGES FROM SMALL CONSTRUCTION ACTIVITIES

TABLE OF CONTENTS

Part I. COVERAGE UNDER THIS PERMIT

A. Applicability

This storm water general permit for small construction activities authorizes storm water discharges from construction activities as defined in LAC 33:IX.2511.B.15 (ground disturbance equal to or greater than one acre and less than five acres, including smaller areas that are part of a larger common plan of development or sale that cumulatively disturb at least one acre) and those construction site discharges designated by the State Administrative Authority (LDEQ) as needing a storm water permit under LAC 33:IX.2511.A.1.e and A.9.a, except for discharges identified under Part II of the permit. Permit coverage is required from the "commencement of construction activities" until "final stabilization" as defined in Permit Part VII.

B. Authorized Discharges

1. Construction activities regulated under this permit include clearing, grading, and excavation operations. Road and pipeline building, construction of residential houses, office buildings, industrial buildings, and runways are examples of construction activities.

Repaving of roads and reworking of utility lines or pipelines are not regulated under this permit unless one or more acres of underlying and/or surrounding soil are cleared, graded, or excavated as part of the operation. **A small construction activity does not include routine maintenance that is performed to preserve the original line and grade, hydraulic capacity, or original purpose of the facility/structure.** If a construction activity involves less than five acres of land disturbance and that activity is performed only to maintain the original purpose of the facility/structure, then its construction storm water discharge does not require coverage under this LPDES general permit. Such activities include replacing structures that are due for and require maintenance. In order to qualify as a routine maintenance activity, the land disturbance shall not go beyond the footprint of the previous structure. Examples of routine maintenance activities include the following:

- Berm Repair or Topsoil Replacement Along Shoulders - placing berm material or topsoil on shoulders adjacent to pavement to eliminate drop-offs;
- Bridge Abutment Repairs, Deck Overlays, and Deck Replacement;
- Bridge Replacement without widening;
- Chip Sealing – placing asphalt or polymer binder and stone on existing roads;
- Culvert Replacement/Repair/Lining – replacing/repairing/relining a culvert with the same line, grade, and hydraulic capacity and within US Army Corps of Engineers Nationwide Permit (NWP) #3 parameters;
- Curb Repairs – repairing existing curbing along a roadway;
- Ditch Cleanout – maintaining or restoring original flow line and cross-section only;
- Fence Repair/Replacement;
- Lighting Maintenance;
- Linear Grading – reshaping of graded shoulders to establish proper drainage away from pavement;

- Loop Detector Repairs – repairing loop detectors in existing pavement;
- Noise Wall Repair;
- Partial Depth Pavement Repairs – isolated repairs of surface courses of pavement;
- Pothole Filling; Resurfacing – replacing several inches of asphalt wearing course by milling existing surface and replacing with new material;
- Road Re-paving with new asphalt, provided the activity does not expose soil to storm water;
- Sign Repair/Maintenance – installing or repairing traffic signs and poles/posts;
- Signal Installation/Maintenance – installing or repairing traffic signals and poles/posts; and Tree/Brush Removal – when it is considered a road maintenance activity.

The following examples of activities that commonly disturb less than one acre, and if disturbing less than one acre and are not part of a common plan of development, do not require a permit:

- Full Depth Pavement Repairs – isolated repairs of pavement build-up down to sub-grade;
- Guardrail Installation/Replacement – installing or repairing with minor grading work to create proper grade for end assemblies;
- Road Replacement without adding any lanes.

2. This permit also authorizes discharges from support activities related to a construction site (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas, etc.) from which there otherwise is a storm water discharge from a construction activity provided:

a. the support activity is directly related to a construction site that is required to have LPDES permit coverage for discharges of storm water associated with construction activity;

b. the support activity is not a commercial operation serving multiple unrelated construction projects by different operators and does not operate beyond the completion of the construction activity at the last construction project it supports.

c. pollutant discharges from the support activity areas located on and off construction sites are minimized to the maximum extent practicable and comply with permit conditions.

3. Allowable Non-Storm Water Discharges

Discharges of material other than storm water that are in compliance with an LPDES permit (other than this permit) issued for that discharge may be mixed with discharges authorized by this permit. Subject to the terms and conditions of Part III.D.5 of the permit, the following discharges are authorized by this permit:

a. discharges from fire-fighting activities;
b. fire hydrant flushings;
c. water used to wash vehicles where detergents, soaps, or solvents are not used;
d. water used to control dust in accordance with Part III.D.2.c.(ii) – minimizing dust from vehicles;

e. potable water sources, including uncontaminated water line flushings;
f. routine external building wash down which does not use detergents, soaps, or solvents;
g. landscape irrigation;
h. pavement wash water where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used. Directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or other effective control is prohibited;
i. uncontaminated air conditioning or compressor condensate;
j. uncontaminated and/or non-turbid ground water infiltration [as defined at 40 CFR 35.2005(20)];
k. uncontaminated and/or non-turbid pumped ground water or spring water;
l. foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater; and
m. uncontaminated excavation dewatering if the discharge is managed by an appropriate control.

C. Prohibited Discharges

1. Except as provided in Part I.B.2 and 3, all discharges covered by this permit shall be composed entirely of storm water associated with construction activity.

2. Prohibited Discharges

a. wastewater from washout of concrete, **unless managed by an appropriate control**.
b. wastewater from washout and clean-out of stucco, paint, form release oils, curing, compounds and other construction materials.
c. discharges related to concrete or asphalt batch plant operations located at construction site. The presence of any such discharges require coverage by an alternative LPDES permit.
d. discharges from dewatering activities, including discharges from dewatering of trenches and excavations, **unless managed by an appropriate control**.
e. fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and;
f. soaps or solvents used in vehicle and equipment washing.
g. storm water discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity, has undergone final stabilization. Industrial post construction storm water discharges may need to be covered by a separate LPDES permit.
h. discharges mixed with sources of non-storm water other than the discharges identified in and are in compliance with Part I.B.3. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

D. Discharges/Activities Exempted From Coverage

1. The **clearing of land solely for agricultural purposes is NOT a regulated activity**, so it is exempted from Louisiana Pollutant Discharge Elimination System (LPDES) permitting requirements (LAC 33:IX.2315.A). Projects on cultivated croplands are not regulated since they are already "disturbed" areas.

2. Construction activities related to oil and gas exploration, production, processing, or treatment, or transmission activities are exempt from regulation. Section 323 of the Energy Policy Act of 2005 modified paragraph (24) of Section 502 of the Clean Water Act (CWA) to define the term "oil and gas exploration, production, processing or treatment operations, or transmissions facilities." This term is used in CWA Section 402(l)(2) to identify oil and gas facilities/activities for which the Environmental Protection Agency (EPA) does not require National Pollutant Discharge Elimination System (NPDES) permit coverage for certain storm water discharges. The effect of this statutory change is to make construction activities at oil and gas sites eligible for the exemption established by CWA Section 402(l)(2). The exemption from obtaining LPDES permit coverage for storm water discharges from construction activities at these oil and gas sites is codified in the Environmental Regulatory Code at LAC 33:IX.2511.A.2. Regardless of the amount of acreage disturbed, the construction activities of oil and gas exploration, production, processing or treatment operations, or transmissions facilities are exempt from obtaining permit coverage for storm water runoff discharges related to construction activities necessary for preparation of a site for drilling, movement and placement of drilling equipment, construction of access roads, drilling waste management pits, in field treatment plants, and the transportation infrastructure (e.g., crude oil and natural gas pipelines, natural gas treatment plants, and both natural gas transmission pipeline compressor and oil pumping stations) necessary for the operation of most producing oil and gas fields.

E. Requirements for Notification

The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented or minimized in accordance with the applicable SWPPP for the facility. This permit does not relieve the permittee of the reporting requirements of LAC 33:I.3915 and LAC 33:I.3917.

1. Emergency Notification

The permittee shall report any unauthorized discharges which may endanger human health or the environment. As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. A written submission shall be provided within 7 calendar days after the telephone notification. Please note that discharges in direct noncompliance with the LPDES permit conditions must also comply with the reporting requirements in LAC 33:IX.2701.L, which requires written notification within 5 days. The report shall contain the information as required in Part V, Section D.6 of this permit, and compliance with the procedures in this part are required.

2. The LDEQ may waive the written report, on a case-by-case basis, if the oral report has been received within 24 hours of the incident.

3. The SWPPP that is required in Permit Part III must be modified within 14 calendar days of the permittees's knowledge of the release to provide the date and description of the release and the circumstances leading to the release. The plan must be reviewed to identify measures to respond to and to prevent the recurrence of such releases, modifying the plan where appropriate.

F. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. Spills resulting in an emergency condition or noncompliance under this general permit must be reported in accordance with LAC 33:I.3923 or LAC 33:IX.2701.A.

G. Automatic Coverage

1. Unless otherwise notified by the LDEQ, operators who meet the applicability requirements in Part I.A and the conditions of Parts I.B and I.C have automatic permit coverage and are authorized to discharge storm water from construction activities under the terms and conditions of this general permit. The operator's effective date of permit coverage begins upon completion of the SWPPP and at the commencement of earth-disturbing activities. No fee is required by the LDEQ for coverage by this permit. A printed hard copy of this permit (LAR200000) must be downloaded from the following link: http://deq.louisiana.gov/page/lpdes or obtained by contacting the LDEQ Water Permits Division at (225) 219-9371. Coverage under this permit is not transferrable. If warranted, the LDEQ may deny coverage under this general permit and require submittal of an application for an individual LPDES permit.

2. Notification Requirements:

Written notification of intent to be covered under this general permit is not required. The SWPPP defined in Part III must be implemented upon commencement of construction activities.

Coverage is required for and is granted to:

a. a party having operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; and/or

b. a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP for the site or other permit conditions; or

c. each party having separate control over the responsibilities described above in a and b.

3. For construction sites where the operator changes or a new operator is added, the new operator(s), upon assuming operational control over site specifications or commencing work on-site, must comply with the terms and conditions imposed in this general permit.

H. Small Construction Activity Completion Report

When a construction project is complete and final stabilization, including construction support activities located on and off-site, has occurred in accordance with Part III.D.2.a(iii)(2), the permittee shall submit a completed, signed, and dated Small Construction Activity Completion Report (SCACR) form (see Addendum B of this permit) to the following address within 60 days after completion of the covered activities:

Louisiana Department of Environmental Quality
Office of Environmental Services
Water Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313

Should electronic SCACRs become available during the permit term, submission of a paper SCACRs may no longer be required.

Part II. DISCHARGE LIMITATIONS

A. Limitations on Coverage

Discharges of non-storm water, other than those specifically listed in Part I.B, are not authorized by this permit and must either be eliminated or covered under another LPDES permit. The following storm water discharges from construction sites are not authorized by this permit:

1. Storm Water Discharges Associated with Post Construction Activity

Storm water discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity, has undergone final stabilization. (See Part VII.). Industrial post construction storm water discharges may need to be covered by a separate LPDES permit.

2. Discharges Mixed with Non-storm Water

Discharges that are mixed with sources of non-storm water other than the discharges identified in and are in compliance with Part I.B.3 are not covered by this permit. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

3. Discharges Covered by Another Permit

Storm water discharges associated with construction activity that have been issued an individual permit or are required to obtain coverage under an alternative general permit. Any permittee covered by an individual permit may request that it be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written approval of that request by this Office the individual permit will be terminated, and the permittee will be covered by this general permit

4. Discharges Threatening Water Quality

Storm water discharges from construction sites that the LDEQ determines will cause or have the reasonable potential to cause or contribute to violations of water quality standards. Where such determinations have been made the discharger will be notified by the LDEQ that an individual permit application is necessary. However, the LDEQ may authorize coverage under this permit after the appropriate controls and implementation procedures designed to bring the discharges into compliance with water quality standards have been included in the SWPPP.

B. Discharges that are not Protective of Endangered and Threatened Species

Coverage under this permit is available only if the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities will not adversely affect any species that are federally-listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) and will not result in the adverse modification or destruction of habitat that is federally-designated as "critical habitat" under the ESA. All operators must follow the procedures in Addendum A and meet at least one of the eligibility criteria (Criteria A - E) described in the addendum when determining eligibility for coverage under the permit. Failure to continue to meet one or more of these criteria during the entire term of the permit will result in the storm water discharges associated with construction activity being ineligible for coverage under this permit.

C. Historic Properties Preservation

Eligibility for coverage under this permit is contingent upon compliance with the National Historic Properties Preservation Act (NHPA). Discharges are authorized under this permit only if the facility's storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities meet one of the eligibility criteria found in the procedures in Addendum C of this permit.

Compliance with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility criteria in this section is required to maintain eligibility under this permit.

D. Water Quality Standards/TMDL Requirements

Covered dischargers shall not cause or have the reasonable potential to cause or contribute to a violation of a state water quality standard. New or proposed dischargers must evaluate eligibility by determining compliance with this provision prior to assuming authorization by the permit.

The discharge of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by the LDEQ is not authorized unless the discharge is consistent with the requirements of that TMDL. During determination of eligibility for coverage under the permit, **new dischargers** (see LAC 33:IX.2313) to a 303(d) water body must determine that their proposed discharges will be in compliance with LAC 33:IX.2317.A.9. In essence, a new discharger is one initiated after August 13, 1979, and not previously permitted. Any discharger (**both existing and new**) to a water body for which there is an impairment and/or an approved or established TMDL must confirm that the impairment and/or TMDL allocated a portion of the load for storm water point source discharges if the proposed discharges will contain the pollutant(s) for which the water body is impaired or the TMDL is developed. Such discharges are expected to be rare for the wastewater types covered by the reissued permit because the required control/prevention measures are designed to prevent the release of these pollutants in storm water. Dischargers located

within a regulated Municipal Separate Storm Sewer System (MS4) that has been assigned a waste load allocation (WLA) may be required to implement additional BMPs in accordance with local ordinances and/or the MS4's storm water management plan.

In a situation where an LDEQ-approved or established TMDL has specified a general WLA applicable to construction storm water discharges but no specific requirements for construction sites have been identified in the TMDL, the operator shall consult with the LDEQ to confirm that adherence to a SWPPP that meets the requirements of this permit will be consistent with the approved TMDL. The SWPPP must clearly state which BMPs were selected for the site, including on and off-site construction support activities, and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the established TMDL. If the LDEQ-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under this permit.

Where an LDEQ-approved or established TMDL has not specified a WLA applicable to construction storm water discharges but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of this permit will be assumed to be consistent with the approved TMDL. Current TMDL Reports may be found at:
http://deq.louisiana.gov/page/tmld and
https://iaspub.epa.gov/tmdl_waters10/attains_impaired_waters.tmdls?p_state=LA.

Broadly stated, new or existing discharges of a particular pollutant are prohibited where there is a TMDL unless the discharge meets the requirements established in the TMDL. If a discharge is not/will not meet these requirements, the operator must seek coverage under an alternative permit. Where a discharger is already operating under the permit and is later discovered to cause or have the reasonable potential to cause or contribute to the violation of an applicable state water quality standard, the permitting authority will notify the operator of such violation(s), and the permittee shall take all necessary actions to ensure that future discharges do not cause or contribute to the violation of a water quality standard and document these actions in the pollution prevention plan. If violations remain or recur, then coverage under the permit is automatically terminated and alternate coverage must be obtained. Compliance with this requirement does not preclude any enforcement activity as provided by the Louisiana Environmental Quality Act (LEQA) (La. R.S. 30:2001, et seq.) for the underlying violation.

In order to verify the impaired status of the water body and determine if any TMDLs have been established, the permittee shall consult the most recent Integrated Report (also referred to as the 305(b) Report) at: http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d or obtain a copy of the report from the Office of Environmental Services, Water Permits Division.

Part III. STORM WATER POLLUTION PREVENTION PLANS

At least one SWPPP shall be developed for each construction project or site covered by this permit. For more effective coordination of BMPs and opportunities for cost-sharing, the different operators at a site are encouraged to make a cooperative effort to prepare and participate in a comprehensive SWPPP. Individual operators at a site may, but are not required to, develop separate SWPPPs that cover only their portion of the project, provided that reference is made to the other operators at the site. In instances where there is more than one SWPPP for a site, there must be coordination between the permittees to ensure that the storm water discharge controls and other measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

SWPPPs shall be prepared in accordance with good engineering practices; shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site; and shall describe and ensure the implementation of practices which will be used to minimize the pollutants in storm water discharges associated with construction activity at the construction site to assure compliance with the terms and conditions of this permit. When developing SWPPPs, operators must follow the procedures in Addendum A of this permit to determine whether listed endangered and/or threatened species or critical habitat would be affected by the operator's storm water discharges or storm water discharge-related activities. Any information regarding whether listed species or critical habitats are found in proximity to the construction site must be included in the SWPPP. Any terms or conditions imposed in the permit requirements of Part II.B and Addendum A to protect listed species or critical habitat from storm water discharges or storm water discharge-related activity must be incorporated into the SWPPP. The SWPPP must be implemented upon commencement of construction activities. Permittees must implement the applicable provisions of the SWPPP required in Part III as a condition of this permit. SWPPP templates may be found at: http://deq.louisiana.gov/page/storm-water-protection.

A. Deadlines for Plan Preparation and Compliance

The SWPPP shall:

1. be completed prior to initiating construction activities and updated as appropriate; and

2. provide for compliance with the terms and schedule specified in Permit Part III, beginning with the initiation of construction activities.

B. Signature, Plan Review and Making Plans Available

1. The SWPPP shall be signed in accordance with Permit Part V, Section D.10 and retained on-site at the site which generates the storm water discharge in accordance with Permit Part IV (Retention of Records).

2. The permittee shall post a notice near the main entrance of the construction site with the following information:

a. LPDES permit number (LAR200000) and effective date of permit coverage (the date of commencement of construction activities);

b. name and telephone number of a local contact person;

c. brief description of the project; and

d. SWPPP's location if the site is inactive or lacks an on-site location to store the plan.

If posting this information near a main entrance is infeasible due to safety concerns, the notice shall be posted in a local public building. For a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly-accessible location in close proximity to where the construction is actively underway, and it must be moved as necessary. This permit does not require permittees to allow the public's access to a construction site for any reason, including inspection of a site, nor does it provide the public with any right to trespass on a construction site.

3. The permittee shall make SWPPPs available upon request to: the LDEQ; the local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; or the operator of a MS4 receiving discharges from the site. The copy of the SWPPP that is required to be kept on-site (or locally available) must be made available to the LDEQ (or authorized representative) for review at the time of an on-site inspection. Also, in the interest of public involvement, the LDEQ encourages permittees to make their SWPPPs available to the public for viewing during normal business hours.

4. The LDEQ may notify the permittee (co-permittees) at any time that the SWPPP does not meet one or more of the minimum requirements in Part III. Such notification shall identify those provisions of the permit that are not being met by the SWPPP and those provisions of the SWPPP requiring modifications necessary to meet the minimum requirements. Within 7 calendar days of receipt of the notification from the LDEQ (or authorized representative), the permittee shall make the required changes to the SWPPP and shall submit to the LDEQ a written certification that the changes have been made. The LDEQ may take appropriate enforcement action for the period of time the permittee was operating under a SWPPP that did not meet the minimum requirements of the permit.

C. Keeping Plans Current

The permittee must amend the SWPPP whenever:

1. there is a change in design, construction, operation, or maintenance which has or may have a significant effect on the discharge of pollutants to the Waters of the State and which has not otherwise been addressed in the SWPPP;

2. inspections or investigations by site operators or local, state, or federal officials indicate the SWPPP's proven ineffectiveness in the elimination or significant minimization of pollutants from the sources identified in Part III .D.1 or the SWPPP is not otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity; and

3. identifying any new contractor and/or subcontractor that will implement a measure of the SWPPP (See Part III.E.) and addressing any measures necessary to protect endangered and threatened species and their critical habitat or historic properties. Amendments to the plan may be reviewed by the LDEQ in the same manner as referenced in Part III.B.

D. Contents of Plan

The SWPPP shall include the following items:

1. Site Description

Each SWPPP shall provide a description of potential pollutant sources and other information as indicated below:

a. a description of the nature of the construction activity and function of the project (i.e., highway, mall, etc.);

b. a description of the intended sequence and timing of major activities (i.e. initial land clearing, installing sewer lines, roads, major buildings) which disturb soils for major portions (i.e. defined phases of a project) of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc);

c. estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities, including off-site borrow and fill areas;

d. an estimate of the runoff coefficient of the site for both the pre- and post-construction conditions and data describing the soil or the quality of any discharge from the site;

e. a general location map (e.g., portion of a city or county map or other map with enough detail to identify the location of the construction site and Waters of the State within one mile of the site);

f. a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which will not be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, locations of off-site material, waste, borrow or equipment storage areas, and surface waters (including wetlands), locations where storm water is discharged to a surface water; and the location of areas where stabilization practices are expected to occur;

g. the location and description of any allowable non-storm water discharges covered by the permit;

h. the name of the receiving water(s), and aerial extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or will receive discharges from disturbed areas of the site;

i. a copy of the permit requirements (attaching a copy of this permit is acceptable);

j. information regarding whether listed endangered or threatened species and/or critical habitat are found in proximity to the construction activity and whether such species and its critical habitat may be affected by the operator's storm water discharges or storm water discharge-related activities;

k. documentation supporting the permittee's determination of permit eligibility and compliance related to the historic places criteria found in Addendum C.

l. documentation supporting the permittee's determination of permit eligibility and compliance with Part II.D with regard to waters that are impaired and/or have an LDEQ-established or -approved TMDL, including:

(i) identification of the permittee's discharge, either specifically or generally, in an LDEQ-established or -approved TMDL and any associated allocations, requirements, and assumptions identified for the permittee's discharge;

(ii) summaries of consultation with the LDEQ authorities regarding consistency of SWPPP conditions with water quality standards and any approved or established TMDL; and

(iii) measures taken to ensure that the discharge of pollutants for the site is consistent with water quality standards and the assumptions and requirements of the LDEQ-established or -approved TMDL, including any specific WLA that has been established that would apply to the permittee's discharge.

2. Controls

Each SWPPP shall include a description of all control measures (i.e., structural and non-structural BMPs) that will be installed and implemented as part of the construction activities and construction support activities to control pollutants in storm water discharges. The SWPPP must clearly describe for each major activity identified in Part III.D.1.b: a) appropriate control measures and the general timing (or sequence) during the construction process that the measures will be

implemented, b) which permittee is responsible for implementation (e.g., perimeter controls for one portion of the site will be installed by Contractor A after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained by Contractor B until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed by Owner after final stabilization.)

In a situation where an LDEQ-approved or established TMDL has specified a general WLA applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the SWPPP must specifically state which BMPs were selected for the site and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the established TMDL.

The description and implementation of control measures shall address the following minimum components:

a. Erosion and Sediment Controls

(i) Short and Long Term Goals and Criteria:

(1) The construction-phase erosion and sediment controls shall be designed to retain sediment on-site to the maximum extent practicable.

(2) All control measures must be properly selected, installed, and maintained in accordance with the manufacturers' specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations in accordance with Parts III.D.3 and III.D.4.

(3) If sediments escape the construction site off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment on the street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

(4) Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

(5) Trapped sediment must be removed from a silt fence before the deposit reaches 50 percent of the above-ground fence height (or before it reaches a lower height based on manufacturer's specifications.).

(6) Off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

(ii) Effluent limitations reflecting the best practicable technology currently available (BPT) [40 CFR 450.21 (a)] shall, at a minimum, include the design of effective

erosion and sediment controls to minimize the discharge of pollutants installed and maintained to:

(1) Control storm water volume and velocity to minimize soil erosion in order to minimize pollutant discharges.

(2) Control storm water discharges, including both peak flow rates and total storm water volume, to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points.

(3) Minimize amount of soil exposed during construction activity.

(4) Minimize the disturbance of steep slopes.

(5) Minimize sediment discharge from the site: design, install and maintain erosion and sediment controls to address factors such as the amount, frequency, intensity and duration of precipitation, the nature of the resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

(6) Provide and maintain natural buffers around Waters of the State, direct storm water to the vegetated areas or buffers to increase sediment removal, and maximize storm water infiltration to reduce pollutant discharges, unless infeasible;

(a) A buffer zone of sufficient width to reduce pollutant discharges and minimize erosion shall be maintained between disturbed areas and all Waters of the State;

(b) For discharges to waters designated as Outstanding Natural Resource Waters, permittees are required to maintain at a minimum a 100-foot natural buffer zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. Additional buffer zone/riparian requirements may be imposed through a Louisiana Department of Wildlife and Fisheries Scenic River permit.

(c) For discharges to waters that are listed as impaired (Category 5 or 4a) on the most recent Integrated Report for sedimentation/siltation or turbidity AND where the suspected source is site clearance (land development or redevelopment), permittees are required to maintain at a minimum a 50-foot natural buffer zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. This requirement does not supersede any additional requirements of a WLA per Part II.D of this permit. The most recent Integrated Report can be found at: http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d.

(d) If the buffer zone between any disturbance and the edge of the receiving water on all edges of the water body cannot be maintained due to site constraints, an adequately protective alternate practice may be employed, or a combination of alternative practices with a narrower buffer zone. The SWPPP shall explain any alternate practices and how these practices are adequately protective. Such cases include but are not limited to redevelopment in an urban setting or construction of water features, such as docks, bridges, levees, dams, etc. and dredge and fill areas.

(7) Unless infeasible preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

(8) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

(9) When discharging storm water from settling basins or impoundments, where feasible, utilize outlet structures that withdraw water from the surface of the basin or impoundment.

(iii) Stabilization Practices

The SWPPP must include a description of interim and permanent stabilization practices for the site, including a site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Final stabilization practices may include, but are not limited to: establishment of permanent self-sustaining perennial vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided.

The following records shall be maintained and attached to the SWPPP: the dates when major grading activities occur, construction activities temporarily or permanently cease on a portion of the site, and stabilization measures are initiated.

(1) <u>Deadline to Initiate Stabilization Measures</u>

Stabilization measures shall be initiated immediately in portions of the site where clearing, grading, excavating, or other earth-disturbing activities have permanently ceased on any portion of the site or temporarily ceased and will not resume for a period exceeding 14 calendar days. For the purposes of this permit, "immediately" is interpreted to mean no later than the next work day. Where construction activity on a portion of the site has temporarily ceased and earth-disturbing activities will be resumed within 14 days, stabilization measures

do not have to be initiated on that portion of site. For the purposes of this permit, the types of activities that constitute the initiation of stabilization include, but are not limited to, the following:

(a) prepping the soil for vegetative or non-vegetative stabilization;
(b) applying mulch or other non-vegetative product to the exposed area;
(c) seeding or planting the exposed area;
(d) starting any of the three activities described in Part II.D.2 (a)(iii)(1)(a - c) on a portion of the area to be stabilized, but not on the entire area; and
(e) finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

(2) Deadline to Complete Installation of Stabilization Measures

As soon as practicable, but, no later than 14 calendar days after the initiation of soil stabilization measures, permittees are required to have completed:

(a) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
(b) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

In extenuating circumstances and per 40 CFR 450.21(b), stabilization must be completed within the time period as follows: In areas experiencing droughts where the completion of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be completed as soon as practicable. These extenuating circumstances must be documented in the SWPPP.

Permittees should be aware that generally, final stabilization, as defined/described in Part VII of the permit, often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. Permittees must continue routine inspections until the final stabilization requirements of the permit are met.

(3) Deadlines for Projects Affected by Circumstances Beyond the Permittee's Control that Delay the Vegetative Stabilization's Initiation and/or Completion

If permittees are unable to meet the stabilization deadlines in (1) or (2) above due to circumstances beyond their control and they are using vegetative cover for temporary or permanent stabilization, they may comply with the following stabilization deadlines instead:

(a) Immediately initiate, and within 14 calendar days complete, the installation of temporary **non-vegetative** stabilization measures to prevent erosion;

(b) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and

(c) Document the circumstances that prevent the previous stabilization deadlines required in (1) or (2) from being met and the schedule for initiating and completing stabilization that will be followed.

(iv) Structural Practices

The SWPPP must include a description of structural practices to divert flows from exposed soils, retain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil- retaining systems, gabions, and temporary or permanent sediment basins. Placement of structural practices in floodplains should be avoided to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

b. Storm Water Management

A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWPPP. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may also require a separate permit under Section 404 of the CWA. Permittees are only responsible for the installation and maintenance of storm water management measures until final stabilization is achieved and the completion report required under Part I.H has been submitted, not maintenance after storm water discharges associated with construction activity have been eliminated from the site. However, post-construction storm water BMPs that discharge pollutants from point sources once construction is completed may need authorization under a separate LPDES permit.

(i) Such practices may include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(ii) Velocity dissipation devices may be needed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

c. Other Controls

(i) No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a permit issued under Section 404 of the CWA. "Solid materials" refers to such items as boards, wrapping materials, bricks and concrete debris, and land-clearing debris, such as, leaves and tree limbs, but does not include total suspended solids.

(ii) Off-site vehicle-tracking of sediments and the generation of dust shall be minimized.

(iii) The SWPPP shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer, or septic system regulations to the extent these are located within the permitted area.

(iv) The SWPPP shall include a narrative description of construction and waste materials expected to be stored on-site, with updates as appropriate. The SWPPP shall also include a description of controls developed to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to storm water runoff and precipitation and spill prevention and response.

(v) The SWPPP shall include a description of pollutant sources from areas other than construction and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(vi) The SWPPP shall include a description of measures necessary to protect listed endangered and/or threatened species and their critical habitat and historic sites listed and/or proposed to be listed on national and state registries that are imposed under the eligibility requirements of Part II.B and detailed in Addendum A and of Part II.C and detailed in Addendum C of this permit. Failure to describe and implement such measures will result in the storm water discharges from the construction activities being ineligible for coverage under this permit.

(vii) The SWPPP shall identify appropriate controls and measures to minimize discharges from the support activity areas.

(viii) Effective pollution prevention measures must be designed, installed, implemented, and maintained to minimize:

(1) Discharges of pollutants from equipment and vehicle washing, wheel wash water, and other wastewaters. Prior to discharge wash waters must be treated in a sediment basin or an alternative control that provides equivalent or better treatment;

(2) Trash, construction waste, building materials and products, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials on the site exposed to precipitation and to storm water runoff. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water runoff will not result in a discharge of pollutants, or, where exposure of a specific material or product poses little risk of storm water contamination (such as final products and materials intended for outdoor use); and

(3) Discharges of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

d. Approved State or Local Plans

(i) Permittees which discharge storm water associated with construction activities must include in their SWPPP the procedures and requirements which are specified in applicable sediment and erosion site plans or site permits or the storm water management site plans or site permits approved by State or local officials.

(**ii)** Permittees which discharge storm water associated with construction activities must include in their SWPPP any measures that result from agreements from the LSHPO or tribal historic preservation offices.

(iii) SWPPPs must be updated as necessary to reflect any changes which are applicable to protecting surface water resources in the sediment and erosion site plans or site permits or the storm water management site plans or site permits approved by State or local officials for which the permittee receives written notice.

3. Maintenance

A description of procedures to ensure the timely maintenance of vegetation, erosion, and sediment control measures, and other protective measures identified in the site plan that are in good and effective operating condition must be provided. Maintenance needs that are identified in inspections or by other means shall be accomplished before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance is impracticable prior to the next anticipated storm event then it must be scheduled and accomplished as soon as practicable.

4. Inspections

Except for linear or remote projects discussed below, qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect the construction site in accordance with one of the two schedules listed below. Areas to be inspected include disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation and to storm water runoff, structural and non-structural control measures, and locations where vehicles enter or exit the site. It must be specified in the SWPPP which schedule will be followed and must be adhered to throughout the term of the permit:

- At least once every 7 days, or
- At least once every 14 calendar days, before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours of the end of a storm event of 0.5 inches or greater.

Employees and subcontractors shall be made aware of the applicable control measures implemented at the site as necessary so that they follow applicable procedures.

Because linear or remote, unmanned projects often cannot be inspected from stabilized locations without damage to BMPs or re-vegetation efforts, their operators have the option of either 1) conducting regular visual inspections every 14 days or 2) performing visual inspections within 24 hours following a storm event of 0.5 inches or greater. The option selected by the operator must be identified in the SWPPP and must be adhered to throughout the term of permit coverage.

a. Disturbed areas and areas used for storage of materials that are exposed to precipitation and storm water runoff shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment, storm water management, and other control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Accessible discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in meeting water quality standards and preventing significant impacts to the receiving waters. Where discharge locations or points are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment-tracking.

b. Based on the results of the inspection, the site description identified in the plan in accordance with Part III.D.1 of this permit and the pollution prevention measures identified in the plan in accordance with Part III.D.2 of this permit shall be revised as appropriate, but in no case later than seven calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan within seven calendar days following the inspection.

c. For each inspection required above an inspection report must be completed, which, at a minimum, must include the following:

- The inspection date;
- Names, titles, and qualifications of personnel making the inspection;
- Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
- Weather information and a description of any discharges occurring at the time of the inspection;
- Location(s) of discharges of sediment or other pollutants from the site;
- Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;

- Location(s) of BMPs that need to be maintained;
- Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
- Corrective action required including implementation dates.

The inspection report, which includes all of the actions taken and the information listed in accordance with Part III.D.4.b and c above, shall be made and retained as part of the SWPPP for at least three years from the date that the site is finally stabilized. Such reports shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance it shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part V, Section D.10 of this permit.

5. Documentation of Allowable Non-storm Water Discharges

Except for flows from fire-fighting activities, sources of allowable non-storm water listed in Part I.B.2 and 3 of this permit that are combined with storm water discharges associated with construction activity must be identified in the plan. The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures to reduce and /or eliminate the non-storm water component(s) of the discharge.

E. Responsibilities of Contractors and Subcontractors

Permittees must either implement their portions of a common SWPPP or develop and implement their own SWPPP. In instances where there is more than one SWPPP for a site, cooperation between permittees is encouraged to ensure the storm water discharge control measures are consistent with one another (e.g., provisions to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries). Permittees must ensure either directly or through coordination with other permittees that their activities do not render another party's pollution controls ineffective.

1. Contractors and Subcontractors Implementing Storm Water Control Measures.

The SWPPP must clearly identify for each control measure included in the plan, the party that will implement the measure. The permittee(s) shall ensure that all contractors and subcontractors are identified in the plan as being responsible for implementing storm water control measures.

2. Contractors and Subcontractors Impacting Storm Water Control Measures.

The permittee shall ensure that contractor(s) and subcontractor(s) who will conduct activities that might impact the effectiveness of control measures but who do not meet the definition of "operator" (Part VII), are identified in the plan and which control measures might be impacted.

3. Utility Companies.

The SWPPP must clearly identify, for each control measure identified in the plan relating to the installation of utility service, the party that will implement the measure.

Part IV. RETENTION OF RECORDS

A. Documents

The permittee shall retain copies of SWPPPs and all records and reports required by this permit for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the LDEQ at any time.

B. Accessibility

The permittee shall retain a copy of the SWPPP required by this permit (including a copy of the permit language) at the construction site (or other local site accessible to the LDEQ and the public) from the date of project initiation to the date of final stabilization. The permittees with day-to-day operational control over pollution prevention plan implementation shall have a copy of the plan available at a central location on-site for the use by all operators and those who are identified as having responsibilities under the plan whenever they are on the construction site. A copy of the plan must be readily available to inspectors during normal business hours.

C. Addresses

All written correspondence concerning discharges in Louisiana from any project covered under this permit shall be identified by the project's agency interest number and permit number LAR200000 and sent to the following address:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Permits Division

Part V. STANDARD PERMIT CONDITIONS

SECTION A. GENERAL CONDITIONS

1. Introduction

In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to the Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the LEQA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions

a. La. R. S. 30:2025 provides for civil penalties for violations of these regulations and the LEQA. La. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

b. Any person may be assessed an administrative penalty by the State Administrative Authority under La. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the LEQA.

4. Toxic Pollutants

a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the CWA. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that

establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply

a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge;

e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

f. Change of ownership or operational control.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private or public property, nor any infringement of federal, state, or local laws or regulations.

8. Duty to Provide Information

The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit, may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.

12. Severability

If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be

given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution

A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies

In accordance with La. R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals (DHH) state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La. R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the DHH state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La. R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the DHH.

15. The standards provided in Chapter 11 – Surface Water Quality Standards are official regulations of the state, and any person who discharges pollutants to the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

a. ***Bypass***. The intentional diversion of waste streams from any portion of a treatment facility.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

c. Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6 (24-hour notice) and Section D.6.e. of these standard conditions.

d. Prohibition of bypass

(1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

(2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal

For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3. Publicly owned treatment works utilizing waste stabilization ponds/oxidation ponds are not subject to the 85 percent removal rate for Total Suspended Solids.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or the LEQA, any substances or parameters at any location.

e. Sample Collection

(1) When the inspector announces that samples will be collected, the permittee may be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures

a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to ensure accuracy of measurements and shall maintain appropriate records of such activities.

c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater", 1982 U.S. Environmental Protection Agency. This publication is available from the National Service Center for Environmental Publications https://nepis.epa.gov/Exe/ZyNET.exe/30000QSA.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C81thru85%5CTxt%5C00000001%5C30000QSA.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.

b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from

the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.

c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties

a. La. R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

b. La. R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance.

8. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Reports (DMRs) or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit

10. Laboratory Accreditation

a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:

(1) Submitted on behalf of any facility, as defined in La. R.S.30:2004;

(2) Required as part of any permit application;

(3) Required by order of the department;

(4) Required to be included on any monitoring reports submitted to the department;

(5) Required to be submitted by contractor

(6) Otherwise required by department regulations.

b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Re-testing of analysis will be required by an accredited commercial laboratory.

Where re-testing of effluent is not possible (i.e. data reported on DMRs for prior month's sampling) the data generated will be considered invalid and in violation of the LPDES permit.

c. Regulations regarding the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under DIVISIONS → PUBLIC PARTICIPATION AND PERMIT SUPPORT → LOUISIANA LABORATORY ACCREDITATION PROGRAM at the following link: **http://deq.louisiana.gov/page/la-lab-accreditation.**

Questions concerning the program may be directed to (225) 219-3247.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes

The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or

character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

In accordance with Permit Part I.G, coverage under this general permit is **non-transferable**.

4. Monitoring Reports

Monitoring reports are not required for this permit.

5. Compliance Schedules

Reports of compliance or noncompliance with or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification

As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (877) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification

As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a RQ specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the DPS by telephone at (877) 925-6595 (collect calls accepted 24 hours a day) within 24 hours after learning of the discharge.

In the event of an unauthorized discharge that requires notification, the DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will notify the LDEQ.

Notification should be made to the Office of Environmental Compliance, Assessment Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, notifications not required by LAC 33:I.3915 or 3917 shall be provided to the department within a time frame not to exceed 24 hours, or as specified by the specific regulation or permit provision requiring the notification, and shall be given to SPOC, as follows:

(1) by the Online Incident Reporting screens found at http://deq.louisiana.gov/page/file-a-complaint-report-an-incident;or

(2) by e-mail utilizing the Incident Report Form and instructions found at http://deq.louisiana.gov/page/file-a-complaint-report-an-incident; or

(3) by telephone at (225) 219-3640 during office hours or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications.

The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;

(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;

(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;

(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;

(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;

(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures.

Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b of these standard permit conditions., or shall be submitted by the discharger to the Office of Environmental Compliance, Assessment Division SPOC in accordance with LAC 33:I.3925 within seven calendar days after the notification required by Section D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;

(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;

(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;

(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:

(a) the current permitted limit for the pollutant(s) released; and

(b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;

(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

(8) Written notification reports shall be submitted to the Office of Environmental Compliance, Assessment Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Written reports (LAC 33:I.3925) should be mailed to:

Louisiana Department of Environmental Quality
Post Office Box 4312
Baton Rouge, LA 70821-4312
ATTENTION: ASSESSMENT DIVISION – SPOC "UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

The Written Notification Report may also be faxed to the Louisiana Department of Environmental Quality, Office of Environmental Compliance, Assessment Division at: (225)-219-3708.

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting.

The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);

(2) Any upset which exceeds any effluent limitation in the permit;

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D.4, 5, and 6 of these standard conditions, at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances

In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

a. That any activity has occurred or will occur, which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:

i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 μg/L);

(2) Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micro-grams per liter (500 μg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or

(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the RQ levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge on a non-routine or infrequent basis, of a toxic pollutant:

i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 μg/L);

(2) One milligram per liter (1 mg/L) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or

(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the RQ levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements

All applications, storm water pollution prevention plans (SWPPPs), reports, certifications, or information submitted to the state administrative authority shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a(1)(a) of these standard conditions. The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a(1)(b) rather than to specific individuals.

(2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or

(3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of the EPA).

b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certifications:

For a Completion Report

"I certify under penalty of law project activities were completed in accordance with the requirements of the Clean Water Act and the Louisiana Environmental Quality Act, and specifically in accordance with the LPDES Small Construction General Permit, LAR200000, under which the storm water discharges related to the construction were authorized. I understand that submittal of this Report does not release an Operator from liability for any

violation of the permit or the Act. I further certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete and that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

For All Other Documents

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the NOI is deemed to constitute my determination of eligibility under one or more of the requirements of the permit, related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under La. R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, La. R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;

b. Permit applications, permits, and effluent data.

c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties

The Louisiana Revised Statutes La. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the CWA shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. EPA, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the CWA, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the CWA.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana DHH in accordance with La. R.S.49:1001 et seq.

7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. EPA Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Loading, is presented in the permit and reported in the DMR as the total amount of a pollutant entering the facility or discharged in the effluent. It is calculated by knowing the amount of flow, the concentration, and the density of water. Results should be rounded off and expressed with the same number of significant figures as the permit limit. If the permit does not explicitly state how many significant figures are associated with the permit limit, the permittee shall use two.

    For Industrial Facilities: Loading (lbs/day) = Flow (in MGD) x Concentration (mg/L) x 8.34*

    For POTWs: Loading (lbs/day) = Design Capacity Flow (in MGD) x Concentration (mg/L) x 8.34*

    *8.34 is the unit conversion for the weight of water

    Please note that the equations above may not be appropriate for production based effluent guideline limitations.

17. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the LEQA and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the CWA in accordance with Section 402 of the CWA and all applicable federal regulations.

18. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge

$$\frac{C_1F_1 + C_2F_2 + ... + C_nF_n}{F_1 + F_2 + ... + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month

19. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA.

20. POTW means Publically Owned Treatment Works.

21. Sanitary Wastewater Term(s):

a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

22. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

23. Sewage sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage,

portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.

24. Storm Water Runoff - aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.

25. Surface Water: all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.

26. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the CWA, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the CWA.)

27. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

28. The term MGD shall mean million gallons per day.

29. The term GPD shall mean gallons per day.

30. The term mg/L shall mean milligrams per liter or parts per million (ppm).

31. The term SPC shall mean Spill Prevention and Control Plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.Chapter 9).

32. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. Plan covering the release of pollutants as defined in 40 CFR Part 112.

33. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

34. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

35. Visible Sheen: a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.

36. Wastewater - liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.

37. Waters of the State: for the purposes of the LPDES, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending there from three miles into the Gulf of Mexico. For purposes of the LPDES, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA, 33 U.S.C. 1251 et seq.

38. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + ... + C_nF_n}{F_1 + F_2 + ... + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

Part VI. REOPENER CLAUSE

If there is evidence indicating that the discharges authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit, or the permit may be modified to include different requirements and/or limitations.

Part VII. ADDITIONAL DEFINITIONS

Alternative permit - either an individual permit or a different general permit.

Arid Areas – areas with an average annual rainfall of 0 to 10 inches.

Best Management Practices ("BMPs") - schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm)

Control Measure - as used in this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

Commencement of Construction Activities - the initial disturbance of soils associated with clearing, grading, or excavating activities, as well as, support activities related to a construction site.

Common Plan of Development - a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple separate and distinct construction activities may occur at different times at different schedules under one plan. Such a plan might consist of small projects (e.g., a common plan of development for a commercial development may include lots that the developer plans to build or sell to others for development.). All these areas would remain part of the common plan of development or sale. The following examples can be used as guidance for deciding what might or might not be considered a "Common Plan of Development or Sale:"

> Coverage under this permit is required if a project is part of a common plan of development or sale that collectively will disturb one acre but less than five acres (e.g., construction of a fast food restaurant on a ¾ acre pad that is part of a 3 acre retail center requires permit coverage).
>
> If a small portion of the original common plan of development remains undeveloped and there has been a period of time in which there has been no occurrence of on-going construction activities (i.e., all areas are either undisturbed or have been finally stabilized), then the remaining acreage of the original common plan of development may be re-evaluated. If one acre but less than five acres of the original common plan of development remains for construction, the project would require coverage under this permit. No permit would be required for the project if less than one acre of the original common plan remained.
>
> A public entity (a municipality, state or federal agency) need not consider all construction projects within its entire jurisdiction part of an overall common plan of development. Only the interconnected parts of a project would be considered a common plan of development.

Discharge of Storm Water Associated with Construction Activity - as used in this permit, refers to storm water "point source" discharges from areas where soil-disturbing activities (e.g., clearing, grading, or excavation, stockpiling of fill material, and demolition), support activities related to a

construction site or construction materials or equipment storage or maintenance (e.g., fill piles, fueling, borrow area, concrete truck washout) are located.

Drought-stricken Area – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought on-going, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely".
See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

Final Stabilization means that:

(i) all soil-disturbing activities at the site have been completed, and that a **uniform** (e.g., evenly distributed, without large bare areas) **perennial vegetative cover** with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geo-textiles) have been employed. Establishing at least 70% of the natural cover of self-sustaining native vegetation meets the vegetative cover criteria for final stabilization. For example, if the native vegetation covers 50% of the ground prior to commencement of construction activities, 70% of 50% would require 35% total cover for final stabilization.

A site does not meet the final stabilization permit requirement until self-sustaining native vegetation is established uniformly over each disturbed area on the site. Stabilizing seven of ten slopes or leaving an area equivalent to 30 percent of the disturbed area completely unstabilized will not satisfy the **uniform vegetative cover** standard.

(ii) In arid and semi-arid areas only all soil-disturbing activities at the site have been completed and both of the following criteria have been met:

a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator.

b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

(iii) For individual lots in residential construction, final stabilization means that either:

a. The homebuilder has completed final stabilization as specified above, or

b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

(iv) For construction activities on land used for agricultural purposes (e.g. pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer stripes immediately adjacent to "Waters of the State" and areas which are not being returned to their pre-construction agricultural use must meet the final stabilization criteria (i) or (ii) or (iii) above.

Infeasible - not technologically possible, or not economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) - refers to a publicly-owned conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that discharges to waters of the U.S. and is designed or used for collecting or conveying storm water, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW). See LAC 33:IX.2511.B.4, B.7, and B.16 or 40 CFR 122.26(b)(4), (b)(7), and (b)(16).

Natural Buffer - as used in this permit, an area of undisturbed natural cover surrounding surface waters. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities at the site.

New Source - any building, structure, facility, or installation from which there is or may be discharge of pollutants, the construction of which commenced:

a. after promulgation of standards of performance under Section306 of the CWA which are applicable to such source; or

b. after proposal of standards of performance in accordance with Section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of ther proposal.

Non-turbid - for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of turbidity-related water quality standards:

Operator - any party associated with the construction project that meets either of the following two criteria: (1) the party has operational control over project plans and specifications (including the ability to make modifications in those specifications), or (2) the party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions (e.g., they are authorized to direct workers at the site to carry out activities identified in the SWPPP or comply with other permit conditions).

Pemittee - an operator with permit authorization to discharge storm water associated with construction activity in Louisiana under the terms and conditions of this permit.

Person - an individual, association, partnership, corporation, municipality, state or federal agency, or any agency thereof, or an agent or employee thereof.

Point Source - any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Process Wastewater - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater may include interior or exterior washing of plant trucks or product receptacles.

Qualified Personnel - a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

Runoff Coefficient - the fraction of total rainfall that will leave the site as runoff.

Semi-Arid Areas – areas with an average annual rainfall of 10 to 20 inches.

Site - the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

State Administrative Authority - the Secretary of the Department of Environmental Quality or his designee, or the appropriate assistant secretary or his designee.

Storm Water Associated with Industrial Activity - defined at LAC 33:IX.2511.B.14 and incorporated here by reference.

Storm Water Discharge Associated with Small Construction Activity - defined at LAC 33:IX.2511.B.15. This includes discharges of storm water from construction activities including clearing, grading, excavating, and support activities related to a construction site that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one or less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

Total Suspended Solids (TSS) - the amount of solid material suspended in water commonly expressed as a concentration in terms of mg/L.

Uncontaminated - for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of applicable water quality standards.

ADDENDUM A

ENDANGERED SPECIES GUIDANCE

ENDANGERED SPECIES GUIDANCE

SMALL CONSTRUCTION GENERAL PERMIT

I. INSTRUCTIONS

A list of endangered and threatened species that the US Fish and Wildlife Service (FWS) has determined may be affected by the activities covered by the Construction General Permit is available in the Fish and Wildlife Service Memorandum of Understanding (MOU) letter at http://deq.louisiana.gov/page/lpdes.

The species listing by parish is found using the link labeled Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA) Project Review. In order to be eligible for coverage under this permit operators must:

- Determine whether any species listed in this Guidance or critical habitat are in proximity to the facility, and

- Pursuant to Permit Part II.B, follow the procedures found in this Guidance to protect listed endangered and threatened species and designated critical habitat and determine that the storm water discharges and BMPs to control storm water runoff covered under this permit meet one or more of the eligibility criteria requirements of Part II.B. Signature and submittal of the Small Construction Activity Completion Report (SCACR) is deemed to constitute the operator's compliance with eligibility requirements for permit coverage.

To determine permit eligibility and to avoid unauthorized impacts upon listed threatened or endangered species or on the critical habitat for those species, the operator must follow this Guidance's Steps 1 through 4 (and 5 if applicable) when developing the SWPPP.

NOTE: At any step in the determination operators may contact the FWS for guidance. That request should be in writing and should include a description of the facility and a topographic map depicting the locations of the facility, the proposed construction activities, and the associated storm water discharges.

U.S. Fish and Wildlife Service
646 Cajundome Blvd.
Suite 400
Lafayette, LA 70506
(337) 291-3108

STEP 1: DETERMINE IF THE CONSTRUCTION SITE OR ASSOCIATED STORM WATER DISCHARGES ARE WITHIN THE VICINITY OF FEDERALLY-LISTED THREATENED OR ENDANGERED SPECIES, OR THEIR DESIGNATED CRITICAL HABITAT.

If either the proposed site or the path of storm water from the site to the receiving stream is in a parish included on the Endangered Species List, the operator should proceed to **Step 2** below. If, however, neither is located in a listed parish, then the operator should proceed directly to **Step 5.**

If no species are listed in the site's parish or if a facility's parish is not found on the list, the applicant is eligible for permit coverage. Where a project is located in more than one parish, the lists for all parishes shall be reviewed.

STEP 2: DETERMINE IF ANY SPECIES MAY BE FOUND "IN PROXIMITY" TO THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES:

A species is in proximity to a construction activity's storm water discharge when the species is:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from construction activities to the point of discharge into the receiving water; or

- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters; or

- Located in the area of a site where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size and structure of the construction activity, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of construction activities potentially covered by the permit, no specific method to determine whether species are in proximity is required for permit coverage. Instead, operators should use the method or methods which best allow them to determine to the best of their knowledge whether species are in proximity to their particular construction activities. These methods may include:

- Conducting visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal storm water collection systems.

- Contacting the nearest State or Tribal Wildlife Agency or U.S. Fish and Wildlife Service (FWS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to State, Tribal, or Federal wildlife agencies.

- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.

- Conducting a formal biological survey. Larger construction sites with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.

- Conducting an Environmental Assessment Under the National Environmental Policy Act (NEPA). Some construction activities may require environmental assessments under the NEPA. Such assessments may indicate if listed species are in proximity. (Construction General Permit coverage does not trigger the NEPA because it does not regulate any dischargers subject to New Source Performance Standards under Section 306 of the Clean Water Act. See CWA 511(c). However, some construction activities might require review under the NEPA because of federal funding or other federal nexus.)

- Using the ESA and MBTA project review application at the FWS Louisiana Ecological Services website (http://www.fws.gov/lafayette/pdc/).

If no species are in proximity and there is no likelihood of any BMPs to control storm water causing adverse effects on species identified in in this addendum, an operator is eligible for Construction General Permit coverage based upon this **Criterion A**.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If listed species are found in proximity to a facility, operators must indicate the location and nature of this presence in the storm water pollution prevention plan (SWPPP) and follow Step 3.

STEP 3: DETERMINE IF SPECIES OR CRITICAL HABITAT COULD BE ADVERSELY AFFECTED BY THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES OR BY BMPs TO CONTROL THOSE DISCHARGES.

Scope of Adverse Effects: Potential adverse effects from storm water include:

- Hydrological. Storm water may cause siltation, sedimentation or induce other changes in the receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a storm water discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.

- Habitat. Storm water may drain or inundate listed species habitat.

- Toxicity. In some cases, pollutants in storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each site. Operators must also consider the likelihood of adverse effects on species from any BMPs to control storm water. Most adverse impacts from BMPs are likely to occur from the construction activities. However, it is possible that the operation of some BMPs (for example, larger storm water retention ponds) may affect endangered and threatened species.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If adverse effects are likely, operators should follow step 4 below.

STEP 4: DETERMINE IF MEASURES CAN BE IMPLEMENTED TO AVOID ANY ADVERSE EFFECTS:

If it is determined that adverse effects cannot be ruled out or are likely, the operator can receive coverage if appropriate measures are undertaken to avoid or eliminate any actual or potential adverse effects prior to applying for permit coverage. These measures may involve relatively simple changes to construction activities such as re-routing a storm water discharge to bypass an area where species are located, relocating BMPs, or limiting the size of construction activity that will be subject to storm water discharge controls.

At this stage, operators must contact the FWS [or the National Marine Fisheries Service (NMFS) if referred to that Service by the FWS] to see what appropriate measures might be suitable to avoid or eliminate adverse impacts to listed species and/or critical habitat. This can entail the initiation of informal coordination with the FWS (and/or NMFS, if appropriate) which is described in more detail in Step 5.

If operators adopt measures to avoid or eliminate adverse effects they must continue to abide by them during the course of permit coverage. These measures must be described in the SWPPP and may be enforceable as permit conditions.

If appropriate measures to avoid the likelihood of adverse effects are not available, then the operator must follow Step 5.

STEP 5: CONSULTATION WITH FWS TO DETERMINE IF THE ELIGIBILITY REQUIREMENTS CAN BE MET.

Where adverse effects are likely, the operator must contact the FWS. The operator may still be eligible for permit coverage if any likelihood of adverse effects is addressed by meeting at least one of the following criteria, as required by Permit Part II.1, if:

- **Criterion B**. The operator's activity has received previous authorization through an earlier Section 7 consultation or issuance of a ESA Section 10 permit (incidental taking permit) and that authorization addressed storm water discharges and/or BMPs to control storm water

runoff (e.g., developer included impact of entire project in consultation over a wetlands dredge and fill permit under Section 7 of the ESA).

OR

- **Criterion C.** The operator's activity was previously considered part of a larger, more comprehensive assessment of impacts on endangered and threatened species and/or critical habitat, under Section 7 or Section 10 of the ESA, which accounts for storm water discharges and BMPs to control storm water runoff (e.g., where an area-wide habitat conservation plan and the ESA's Section 10 permit is issued which addresses impacts from construction activities, including those from storm water, or a NEPA review is conducted which incorporates the ESA Section 7 procedures).

OR

Criterion D. Consultation with the USFWS (or NMFS, if appropriate) for the operator's storm water discharges and BMPs to control storm water runoff results in either: 1) FWS/NMFS written concurrence with a finding of no likelihood of adverse effects (see 50 CFR 402.13) or 2) issuance of a biological opinion in which USFWS (or NMFS) finds that the action is not likely to jeopardize the continued existence of listed endangered or threatened species or result in the adverse modification or destruction of critical habitat [see 50 CFR 403.14(h)].

Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators must initiate consultation during Step 4 (upon becoming aware that endangered and threatened species are in proximity to the facility).

OR

Criterion E. The operator's activity was considered part of a larger, more comprehensive site-specific assessment of impacts on endangered and threatened species by the owner or other operator of the site when it developed a SWPPP and that permittee met the eligibility requirements stated in Criterion A, B, C, or D [e.g., owner was able to determine there would be no adverse impacts for the project as a whole under Criterion A, so contractor meets the eligibility requirements stated Criterion D]. Utility companies applying for area-wide permit coverage meet the eligibility requirements stated in Criterion D since authorization to discharge is contingent on a principal operator of a construction project having been granted coverage under this or an alternative LPDES permit for the areas of the site where utilities installation activities will occur.

The determination of eligibility of Criteria B - D shall be documented in the facility's SWPPP, and copies of all applicable documents, such as the FWS approval letters, shall be retained with the SWPPP. The operator must comply with any terms and conditions imposed under the all eligibility criteria requirements to ensure that storm water discharges or BMPs used to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's SWPPP.

If the eligibility requirements of Criteria A - D cannot be met, then the operator may not receive coverage under this permit and should consider applying to the LDEQ for an individual permit.

This permit does not authorize any "taking" (as defined under Section 9 of the ESA) of endangered or threatened species unless such takes are authorized under Section 7 or 10 the ESA. Operators who believe their construction activities may result in takes of listed endangered and threatened species should be sure to get the necessary coverage for such takes through an individual consultation or Section 10 permit of the ESA.

This permit does not authorize any storm water discharges or BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of designated critical habitat.

II. ENDANGERED SPECIES PARISH LIST

See: http://deq.louisiana.gov/page/lpdes. Click on **Water**, then **Permits**, then **LPDES Permit Information**, then the "U.S. Fish and Wildlife Service Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA) Project Review" under **LPDES Support Documents**.

ADDENDUM B

COMPLETION REPORT

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Environmental Services, Permits Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
PHONE#: (225) 219-9371

SMALL CONSTRUCTION ACTIVITY COMPLETION REPORT (SCACR) LAR200000

(To be submitted within SIXTY (60) DAYS after COMPLETION of covered activities.)

I. OPERATOR INFORMATION

Name: _____
Mail Address: _____
City: _____
State: _____ Zip Code: _____
Phone: _____ DEQ AI# (if known): _____

II. FACILITY/SITE INFORMATION

Name of Project: _____
Location of Project: _____
City: _____ State: _____ Zip Code: _____
Parish: _____
Name of Receiving Water: _____
Total Area of Land Disturbance (in acres): _____
Construction Start Date: _____
Construction Completion/Site Stabilization Date: _____
List existing or prior water discharge permits for the location: _____

III. CERTIFICATION

I certify under penalty of law that project activities were completed in accordance with the requirements of the Clean Water Act and the Louisiana Environmental Quality Act, and specifically in accordance with the LPDES Small Construction General Permit, LAR200000, under which the storm water discharges related to the construction were authorized. I understand that submittal of this Report does not release an Operator from liability for any violation of the permit or the Act. I further certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete and that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____ Date: _____

Signature: _____

ADDENDUM C

HISTORIC PRESERVATION

HISTORIC PROPERTIES GUIDANCE

Operators must determine whether their facility's storm water discharge or the construction of best management practices (BMPs) to control such discharge, have potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing dischargers who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for facilities that are new storm water dischargers and for existing facilities that are planning to construct BMPs for permit eligibility, operators should conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, operators should first determine whether there are any historic properties or places in the vicinity that are listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to the State Historic Preservation Officer (SHPO) to respond to inquiries concerning the location of historic properties, it is suggested that operators first access the "National Register of Historic Places" information listed on the National Park Service's web page at the address listed in this Guidance. The address of the Louisiana State Historic Preservation Officer (LSHPO) is also listed in this Guidance. Operators may also contact city, parish, or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

As referenced in Part II.C of the permit, operators must meet one the following criteria to be eligible for coverage under this permit:

(1) If historic properties are **not identified** in the path of a facility's industrial storm water discharge or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), or

if historic properties **are identified** but it is determined that they will **not be affected** by the discharge or construction of BMPs to control the discharge,

then the operator has met the permit eligibility criteria.

(2) If historic properties **are identified** in the path of a facility's storm water discharge or where construction activities are planned for the installation of BMPs to control such discharges and it is determined that **there is the potential** to adversely affect the property, the operator can still meet the permit eligibility criteria if he/she obtains and complies with a written agreement with the SHPO, which outlines measures that the operator will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the facility's storm water pollution prevention plan (SWPPP).

In situations where an agreement cannot be reached between an operator and the SHPO, the operator should contact the Advisory Council on Historic Preservation (ACHP) listed below in this addendum for assistance.

The term “adverse effects" includes, but is not limited to, damage, deterioration, alteration, or destruction of the historic property or place. The LDEQ encourages operators to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Operators are reminded that they must comply with all applicable State, Tribal, and local laws concerning the protection of historic properties and places.

I. Internet Information on the National Register of Historic Places

An electronic listing of the “National Register of Historic Places," as maintained by the National Park Service on its National Register of Historic Places Program (NRHP), can be accessed on the Internet at https://www.nps.gov/nr/research/.

II. Louisiana State Historic Preservation Officer (LSHPO)

Louisiana, SHPO, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804-4247. For questions contact the Section 106 Review Coordinator, Telephone: (225) 342-8170.

III. Advisory Council on Historic Preservation

Advisory Council on Historic Preservation, 401 F Street NW, Suite 308, Washington, DC 20001-2637, Telephone: (202) 517-0200, Email: achp@achp.gov; Web site: www.achp.gov.

ADDENDUM D

LIST OF ADDRESSES FOR LDEQ OFFICES

CURRENT ADDRESSES

Enforcement Division
Office of Environmental Compliance
Department of Environmental Quality
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312
Telephone: (225) 219-3715

Mailing Addresses For Regional Offices	Jurisdictional Parishes For Each Regional Office
Acadiana Regional Office Surveillance Division Office of Environmental Compliance 111 New Center Drive Lafayette, Louisiana 70508 (337) 262-5584	Acadia, Avoyelles, Catahoula, Concordia, Evangeline, Grant, Iberia, Lafayette, LaSalle, Rapides, St. Landry, St. Martin, St. Mary, Vermilion
Capital Regional Office Surveillance Division Office of Environmental Compliance P.O. Box 4312 Baton Rouge, Louisiana 70821-4312 (225) 219-3600	Ascension, Assumption, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, St. James, St. Martin, Tangipahoa, West Baton Rouge, West Feliciana
Northeast Regional Office Surveillance Division Office of Environmental Compliance 508 Downing Pines Road West Monroe, Louisiana 71292 (318) 362-5439	Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll, Winn
Northwest Regional Office Surveillance Division Office of Environmental Compliance 1525 Fairfield Avenue, Room 520 Shreveport, Louisiana 71130 (318) 676-7476	Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster
Southeast Regional Office Surveillance Division Office of Environmental Compliance 201 Evans Road, Bldg. 4, Suite 420 New Orleans, LA 70123-5230 (504) 736-7701	Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Terrebonne, Washington
Southwest Regional Office Surveillance Division Office of Environmental Compliance 1301 Gadwall Street Lake Charles, Louisiana 70615-5176 (337) 491-2667	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis, Vernon

ADDENDUM E

DESIGNATED OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC STREAMS

DESIGNATED AS OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC STREAMS

ATCHAFALAYA RIVER BASIN: None

BARATARIA BASIN:
Bayou Des Allemands – from Lac Des Allemands to old US Highway 90
Bayou Des Allemands – from Highway 90 to Lake Salvador

CALCASIEU RIVER BASIN:
Calcasieu River – from LA Highway 8 to the Rapides/Allen Parish line
Calcasieu River – from Rapides-Allen Parish line to Marsh Bayou
Calcasieu River – from Marsh Bayou to saltwater barrier
Whiskey Chitto Creek – from the southern boundary of Fort Polk Military Reservation to the Calcasieu River
Six Mile Creek – East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek
Ten Mile Creek – from headwaters to Whiskey Chitto Creek

LAKE PONTCHARTRAIN BASIN:
Comite River – from Wilson-Clinton Highway to entrance of White Bayou
Amite River – from Mississippi State Line to LA Highway 37
Blind River – from the Amite River Diversion Canal to the mouth at Lake Maurepas
Blind River – from headwaters to Amite River Diversion Canal
Tickfaw River – from the Mississippi State Line to LA Highway 42
Tangipahoa River – from the Mississippi State Line to I-12
Chappepeela Creek – from Louisiana Highway 1062 to Tangipahoa River
Tchefuncte River – from headwaters to Bogue Falaya River, includes tributaries
Lower Tchefuncte River – from Bogue Falaya River to LA Highway 22
Bogue Falaya River – from headwaters to Tchefuncte River
Bayou Lacombe – from the headwaters to U.S. Highway 190
Bayou Lacombe – from U.S. Highway 190 to Lake Pontchartrain
Bayou Cane – from the headwaters to U.S. Highway 190
Bayou Cane – from U.S. Highway 190 to Lake Pontchartrain
Bayou Labranche – from headwaters to Lake Pontchartrain
Bayou Trepagnier – from Norco to Bayou Labranche
Bayou St. John
Bayou Chaperon
Bashman Bayou – from headwaters to Bayou Dupre
Bayou Dupre – from Lake Borgne Canal to Terre Beau Bayou
Lake Borgne Canal – from the Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal

Pirogue Bayou – from Bayou Dupre to New Canal
Terre Beau Bayou – from Bayou Dupre to New Canal
Bayou Bienvenue – from Bayou Villere to Lake Borgne

MERMENTAU RIVER BASIN: None

VERMILION-TECHE RIVER BASIN:
Spring Creek – from headwaters to Cocodrie Lake
Bayou Cocodrie – from U.S. Highway 167 to the Bayou Boeuf-Cocodrie Diversion Canal

MISSISSIPPI RIVER BASIN: None

OUACHITA RIVER BASIN:
Bayou Bartholomew – from Arkansas State Line to Ouachita River
Bayou de L'Outre – from the Arkansas State Line to the Ouachita River
Bayou D'Arbonne – from Bayou D'Arbonne Lake to the Ouachita River
Corney Bayou – from the Arkansas State Line to Corney Lake
Corney Bayou – from Corney Lake to Bayou D'Arbonne Lake
Middle Fork of Bayou D'Arbonne – from headwaters to Bayou D'Arbonne Lake
Little River – from Bear Creek to Catahoula Lake
Fish Creek – from headwaters to Little River
Trout Creek – from headwaters to Little River
Big Creek – from the headwaters to Little River

PEARL RIVER BASIN:
Holmes Bayou – from Pearl River to West Pearl River
West Pearl River – from headwaters to Holmes Bayou
West Pearl River – from Holmes Bayou to The Rigolets (includes the east and west mouths)
Morgan River – from Porters River to West Pearl River
Wilson Slough – from Bogue Chitto to West Pearl River
Bradley Slough - from Bogue Chitto to West Pearl River
Pushepatapa Creek – from headwaters and tributaries at Mississippi State Line to Pearl River flood plain
Bogue Chitto River – from Mississippi State Line to Pearl River Navigation Canal

RED RIVER BASIN:
Bayou Dorcheat – from Arkansas State Line to Lake Bistineau
Black Lake Bayou – from one mile north of Leatherman Creek to Black Lake
Saline Bayou – from headwaters near Arcadia to Saline Lake
Kisatchie Bayou – from its Kisatchie National Forest to Old River
Saline Bayou – from Larto Lake to Saline Lake
Bayou Cocodrie – from Little Cross Bayou to Wild Cow Bayou

SABINE RIVER BASIN:
Pearl Creek – from headwaters to Sabine River

TERREBONNE BASIN:
Bayou Penchant – from Bayou Chene to Lake Penchant

NOT DESIGNATED AS OUTSTANDING NATURAL RESOURCE WATERS
OR
AS PRIMARY CONTACT RECREATION WATER BODIES

If discharges from your operation will enter any of the following segments of the specified waterbody then RLP 3 Outfall 003 is applicable to your facility.

ATCHAFALAYA RIVER BASIN: None

BARATARIA BASIN:
Luling Wetland – forested wetland located 1.8 miles south of US Highway 90 at Luling, east of the Luling wastewater treatment pond, bordered by Cousin Canal to the west and Louisiana Cypress Lumber Canal to the south

CALCASIEU RIVER BASIN:
Kinder Ditch – from headwaters of unnamed tributary to confluence with the Calcasieu River
Barnes Creek – from headwaters to the entrance of Little Barnes Creek

LAKE PONTCHARTRAIN RIVER BASIN:
South Slough Wetland – Forested freshwater and brackish marsh located 1.4 miles south of Ponchatoula, directly east of I-55, extending to North Pass to the south and Tangipahoa River to the east
Chinchuba Swamp Wetland – Forested wetland located 0.87 miles southwest of Mandeville, southwast of Sanctuary Ridge, and north of Lake Pontchartrain
East Tchefuncte Marsh Wetland – Freshwater and brackish marsh located just west of Mandeville, bounded on the south by Lake Pontchartrain, the west by Tchefuncte River, the north by LA Highway 22, and the east by Sanctuary Ridge
Poydras-Verret Marsh Wetland – forested and marsh wetland located 1.5 miles north of St. Bernard, south of Violet Canal and northeast of Forty Arpent Canal

MERMENTAU RIVER BASIN: None

VERMILION-TECHE RIVER BASIN:

Irish Ditch and Big Bayou – from unnamed ditch to Irish Ditch No. 1 to Big Bayou to Irish Ditch No. 2 to Bayou Rapides

Cote Gelee Wetland – forested wetland located in Lafayette Parish, two miles east of Broussard, two miles northeast of US Highway 90, and west of Bayou Tortue

Breaux Bridge Swamp – forested wetland in St. Martin Parish, 0.5 miles southwest of Breaux Bridge, southeast of LA Highway 94, west of Bayou Teche, east of the Vermilion River, and north of the Evangeline and Ruth Canals; also called Cypriere Perdue Swamp

Cypress Island Coulee Wetland – forested wetland located in St. Martin Parish, two miles west of St. Martinville, one-half mile north of LA Highway 96, west of Bayou Teche, and east of Vermilion River

MISSISSIPPI RIVER BASIN:

Monte Sano Bayou – from U.S. Highway 61 to its confluence with the Mississippi River

OUACHITA RIVER BASIN:

Turkey Creek – from headwaters to Turkey Creek Cutoff; includes Turkey Creek Cutoff, Big Creek, and Glade Slough

Tisdale Brake/Staulkinghead Creek – from its origin to Little Bayou Boeuf

Deer Creek – from the headwaters to its confluence with Boeuf River

RED RIVER BASIN:

Mahlin Bayou/McCain Creek – from its origin to its confluence with Twelve Mile Bayou

Castor Creek Tributary – from headwaters to Castor Creek

Grand Bayou Tributary – from headwaters to Grand Bayou

Saline Bayou Tributary – from headwaters to Saline Bayou near Arcadia

Bayou Cocodrie – from Highway 15 to Little Cross Bayou

TERREBONNE RIVER BASIN:

Thibodaux Swamp – forested wetland located in Lafourche and Terrebonne Parishes, 6.2 miles southwest of Thibodaux, LA, east of Terrebonne-Lafourche Drainage Canal, and north of Southern Pacific Railroad; also called Pointe Au Chene Swamp

Bayou Ramos Swamp Wetland – forested wetland located 1.25 miles north of Amelia, LA, in St. Mary Parish – south of Lake Palourde