

# Draft Environmental Assessment



St. Charles Parish  
Magnolia Ridge Pump Station  
HMGP-DR-4080-LA Project #3  
St. Charles Parish, Louisiana  
*July 2016*



**U.S. Department of Homeland Security**  
**Federal Emergency Management Agency**  
Region 6  
800 North Loop 288  
Denton, TX 76209

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## List of Acronyms and Abbreviations

AQCR	Air Quality Control Region
BMP	Best Management Practices
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
cfs	Cubic Feet Per Second
C.U.P.	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DNR	Louisiana Department of Natural Resources
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
HMGP	Hazard Mitigation Grant Program
HSDRRS	Hurricane Storm Damage Risk Reduction System
HUD	U.S. Department of Housing and Urban Development
LAC	Louisiana Administrative Code
LDEQ	Louisiana Department of Environmental Quality
LDNROCM	Louisiana Department of Natural Resources Office of Coastal Management
LDWF	Louisiana Department of Wildlife and Fisheries

NAAQS	National Ambient Air Quality Standards
NAVD	North American Vertical Datum, 1988
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OES	Office of Environmental Services
P.L.	Public Law
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Officer
THPO	Tribal Historic Preservation Officer
WBHPL	West Bank Hurricane Protection Levee
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

## **1.0 Introduction**

On August 29, 2012, Hurricane Isaac made landfall in the State of Louisiana as a Category 1 storm, causing high winds, extensive storm surge, and inland flooding over southern Mississippi and southeastern Louisiana, which received greater than 20 inches of rain, producing both flash flooding and river flooding. Hurricane Isaac was declared a major disaster event, Federal Emergency Management Agency (FEMA) 4080, and Hazard Mitigation Grant Program (HMGP) funding was made available to affected areas.

Subsequently, St. Charles Parish submitted an HMGP application for funding to construct the Magnolia Ridge Pump Station, a 500 cubic feet per second (cfs) pump station that will be located in Boutte, Louisiana. The pump station will mitigate the risk of flooding of structures and streets during heavy rainfall and tidal surge events in the Magnolia Ridge watershed area which encompasses portions of Boutte and Paradis. During heavy rainfall and tidal surge events, this area experiences flooding of structures and streets. Currently, there are 231 residences, 41 businesses, 2 public buildings, and 25 school/hospital/church buildings within the AE Flood Zone watershed area, which encompasses parts of Boutte and Paradis, Louisiana. The proposed pump station will be located at the southernmost point in the watershed area in Boutte at coordinates 29.862917 Latitude and -90.409203 Longitude. The site of the proposed pump station is on land currently owned by St. Charles Parish. Site photographs are in Appendix A and location maps are in Appendix B.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed Magnolia Ridge Pump Station. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

## **2.0 Purpose and Need**

Through HMGP, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

The west bank of St. Charles Parish (west side of the Mississippi River) is outside of the U.S. Army Corps of Engineers' Hurricane Storm Damage Risk Reduction System (HSDRRS) and unprotected from storm surges associated with both hurricanes and high tide conditions. Levee projects currently adjacent to this area have the potential to act as a funnel, thereby increasing the storm surge elevations in the project area.

This portion of the Parish is also subject to heavy rainfall, tidal surges from the Gulf of Mexico, and hurricane flooding, often resulting in damages to industrial, commercial, residential, agricultural, and environmental facilities; resulting in multiple federal disaster declarations.

As a result, there is a need in St. Charles Parish to mitigate future damages caused by storm surges and to address both the interior drainage and the encapsulated wetlands ecosystem.

### **3.0 Alternatives**

This section describes the alternatives that were considered in addressing the purpose and need. Two alternatives were evaluated in this EA, the No Action alternative and the Proposed Action alternative. This section also summarizes other action alternatives that were considered and dismissed.

#### **3.1 Alternative No. 1 – No Action**

This alternative consists of conducting no mitigation work at the site. Consideration of the No Action alternative is required as a means of comparison to other mitigation alternatives. This alternative would not provide any type of flood protection against tidal surge and heavy rains.

#### **3.2 Alternative No. 2 – Proposed Action**

This alternative consists of the construction of a new pump station. The proposed pump station will service the watershed area, encompassing portions of Boutte and Paradis, Louisiana, that is currently vulnerable to flooding of structures and streets due to heavy rains and tidal surge.

The Magnolia Ridge Pump Station project includes the construction of a 500 cfs pump station and a detention pond that will serve as an intake basin (sump) for the pump station, in conjunction with an earthen levee built to elevation +7.5 National Geodetic Vertical Datum (NGVD) and perimeter access road. The perimeter access road would be constructed in order to facilitate access to the pump station for operations and maintenance activities.

The sump area would be connected to the existing Magnolia Ridge Canal by two (2) 84” diameter pipes. This intake basin would be excavated to approximately elevation -7.00 (existing ground is approximately elevation 0.00), and its dimensions would be approximately 200’ X 400’. Under normal rain events, the intake basin would be fed by the canal which runs parallel to the Magnolia Ridge Levee. Under high tidal or storm surge events, a closure structure would be constructed in the Paradis Canal as a separate project not included in this application and EA, and would divert additional stormwater via a weir to the intake basin of the pump station. This weir would consist of a concrete-paved depression at the interface of the drainage basin and the sump area to properly convey the stormwater to the pump station.

The pump station would be sized to accommodate both the stormwater from the parallel canal along the Magnolia Ridge Levee as well as the Paradis Canal north of the closure structure during a high storm surge event. The stormwater would be pumped over the proposed elevation +7.5 levee into the Paradis Canal. The dimensional footprint of the pump station would be approximately 135’ X 80’ including truck bays and the equipment building. The depth of

excavation required at the sump of the pump station would be approximately 17 feet below existing grade.

The height of the pump station would be based upon experience with other pump station designs in the Parish's West Bank Hurricane Protection Levee (WBHPL) system, portions of which are currently being constructed. The pump station would discharge over the elevation +7.5 levee. The centerline of the discharge pipes would be 11 feet above existing ground. Additionally, the discharge side of the pump station would be fortified through the installation of a 2-foot thick riprap mat to prevent scouring on the flood side of the station.

The construction of the pump station and the required excavation would require the use of Temporary Retaining Structures (TRS), consisting of steel sheet piling, with associated walers and tiebacks to provide a secure braced excavation. Dewatering would be required in order to provide a dry bottom for the construction of a concrete foundation consisting of footings supported by timber pilings. Structural backfill would be required for the construction of the station foundation and substructure.

The pump station would include equipment consisting of pumps, electric motors, controls and a generator which would sit on an elevated exterior pad equal with the berm height and will have the capability of being operated remotely by the St. Charles Parish Department of Public Works. Pumps would be vertical axial/mix flow driven by diesel engines. Four (4) pumps each with a capacity of 125 cfs would meet the required station capacity of 500 cfs. The influent would be cleaned by catenary type trash screens and cleaners. The mechanical and electrical equipment would be housed inside a metal pre-fabricated building. Fuel for the engines and backup generator would be stored in a double walled tank inside the station footprint.

The cost of the proposed action alternative is estimated to be approximately \$11,296,601. This alternative would provide the necessary flood protection and would be cost effective.

### 3.3 Alternatives Considered and Dismissed

This other action alternative consists of the construction of a new 900 cfs pump station to service the watershed area, encompassing portions of Boutte and Paradis, Louisiana, that is currently vulnerable to flooding of structures and streets due to heavy rains and tidal surge. The 900 cfs pump station would be constructed in the same location as the proposed pump station. The cost of the alternative is estimated to be \$15,000,000. However, this alternative would not be cost effective and has been dismissed because it is not feasible. Therefore, this action alternative will not be discussed any further in this EA.

## **4.0 Affected Environment and Potential Impacts**

This section explores the No Action and Proposed Action alternatives effects on the environment and potential impacts. Referenced maps, agency consultation letters, and other documentation such as permits and website results can all be found in Appendix C, unless otherwise stated. These documents are organized in order as discussed below.

## 4.1 Physical Resources

### 4.1.1 Geology, Soils, and Seismicity

The Farmland Protection Policy Act (FPPA) (Public Law (P.L.) 97-98, Sec. 1539-1549; U.S.C. 4201, et seq.) is intended to minimize the impact federal programs have on unnecessary and irreversible conversion of farmland to nonagricultural uses. FPPA assures that federal programs are administered to be compatible with various programs to protect farmland. For the purpose of FPPA, farmland definition includes prime farmland, unique farmland, and land of statewide or local importance; it is important to note that these definitions include land such as forestland, pastureland, or other land that is not in current production.

Under the No Action alternative, there would be no short- or long-term impacts to geologic resources, soils, or seismic features.

Under the Proposed Action alternative, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) State Conservationist reviewed the project and responded in a letter dated August 7, 2013, that the project would not involve any relocation and would not impact prime farmland and therefore would be exempt from the rules and regulations of the Farmland Protection Policy Act.

According to the USDA NRCS's Web Soil Survey online mapping tool (<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>), the proposed site is composed of Barbary muck, 0 to 1 percent slopes, frequently flooded, and Cancienne silty clay loam, frequently flooded. The ground elevation is 2.9 feet. There are no known tectonic faults near the proposed site.

The Proposed Action alternative's ground disturbance would include the driving of timber pilings to support the pump station's 135' X 80' concrete foundation, excavation of the 200' X 400' intake basin to an approximate elevation of -7.00, as well as excavation of the sump of the pump station to a depth of approximately 17 feet below the existing grade. There are no adjacent developed areas to be impacted. The proposed site would be accessed by locked gate. Appropriate signage would be installed as required by local, state and Federal laws.

Appropriate best management practices (BMPs) would be implemented during site development to minimize sediment migration from the site. Following construction, any disturbed soil would be protected with seed or sod in order to decrease the amount of soil eroded by rainfall and runoff. Proper disposal of any hazards would be utilized. Therefore, the Proposed Action alternative would not impact geologic resources and seismicity and would not have significant impacts to soils.

### 4.1.2 Air Quality

The Clean Air Act (CAA) was established in 1970 (42 U.S.C. § 7401 et seq.) to reduce air pollution nationwide. The US Environmental Protection Agency (EPA) has developed primary and secondary National Ambient Air Quality Standards (NAAQS) under the provisions of the CAA. The EPA classifies the air quality within an air quality control region (AQCR) according to whether the region meets or exceeds Federal primary and secondary NAAQS. An AQCR or a

portion of an AQCR may be classified as being in attainment, non-attainment, or it may be unclassified for each of the seven criteria pollutants (carbon monoxide, lead, nitrogen dioxide, coarse particulates, fine particulates, ozone, and sulfur dioxide).

Under the No Action alternative, there would be no short- or long-term impacts to air quality.

Under the Proposed Action alternative, the Louisiana Department of Environmental Quality has reviewed the proposed project and responded in an email dated August 22, 2013, that, “St. Charles Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.”

Short-term impacts to air quality such as exhaust emissions from equipment, and dust from grading activities may occur during site construction activities. Equipment used for these activities would meet local, state, and Federal requirements for air emissions, and dust would be controlled as necessary by wetting the surface of the work areas. Therefore, the Proposed Action alternative would have no significant impact to air quality.

## 4.2 Water Resources

### 4.2.1 Water Quality

The National Pollutant Discharge Elimination System (NPDES) was established under the Clean Water Act and regulates wastewater discharges from point sources. NPDES regulations require that construction sites resulting in greater than one acre of disturbance obtain a permit from the Environmental Protection Agency (EPA), or the corresponding state agency where the permitting role has been assumed by the state. In Louisiana, the Louisiana Department of Environmental Quality is the state agency that has assumed this responsibility.

Under the No Action alternative, there would be no short- or long-term impacts to water quality.

Under the Proposed Action alternative, a Water Quality Certification letter was received for the project from the State of Louisiana Department of Environmental Quality (LDEQ) on March 8, 2016. LDEQ determined that the discharge of fill material under this alternative would not violate water quality standards as provided for in (Louisiana Administrative Code) LAC 33:IX.Chapter 11. As a result, LDEQ issued the St. Charles Parish – West Bank Hurricane Protection Levee – Magnolia Ridge Project Water Quality Certification, WQC 160307-01

Appropriate BMPs would be implemented during site development to minimize sediment migration from the site into nearby water bodies. Surface runoff would be controlled by using siltation controls such as silt fencing around the construction site to minimize erosion of materials into adjacent wetlands and/or waterways. Any disturbed soil would be protected with seed or sod after construction in order to decrease the amount of soil eroded by rainfall and runoff. This would prevent any degradation of water quality as a result of silt-laden runoff from the construction site. Debris that would result from this alternative would be disposed of in approved landfills. Water and wetlands quality would not be adversely affected. No dredging or modifications of streams or waterways would be included within the scope of this alternative. Therefore, the Proposed Action alternative would have no significant impacts to water quality in the area of the site.

#### 4.2.2 Wetlands

The Clean Water Act (CWA) (40 CFR 230.3), and Executive Order 11990, defines wetlands as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated conditions. Wetlands generally include swamps, marshes, bogs and similar areas.”

Under the No Action alternative, there would be no short- or long-term impacts to wetlands.

Under the Proposed Action alternative, based on the U.S. Fish and Wildlife Services (USFWS) National Wetlands Inventory map available online at the National Wetlands Inventory website (<http://fws.gov/wetlands/>) on January 12, 2016, Freshwater Forested/Shrub wetlands were identified in the project area. Under this alternative, efforts would be taken to place all improvements within the existing right of ways in areas of wetland previously authorized by the regulatory agencies to avoid impact to wetlands. In an email dated May 28, 2013, the EPA stated that it would not object to the project as proposed provided that the applicant can satisfy the requirements of the 404(b)(1) Guidelines. This would include providing compensatory mitigation within the project watershed for all unavoidable impacts that should fully offset all lost functions and values.

Unavoidable impacts to vegetated wetlands would be mitigated through payments to a Louisiana Department of Natural Resources (DNR) and USACE approved mitigation bank. A Department of the Army Permit (MVN-2000-0722-EOO) under Section 404 of the Clean Water Act was re-authorized for the proposed project on August 12, 2014. The Parish would adhere to the conditions of this permit. Therefore, the Proposed Action alternative would not have a significant impact on wetlands.

#### 4.2.3 Floodplain

The Floodplain Management Executive Order of 1977 (Executive Order 11988) was issued to avoid or minimize long and short- term adverse impacts associated with the occupancy and modification of floodplains.

Under the No Action alternative, there would be no short- or long-term impacts to floodplains.

Under the Proposed Action alternative, the site would be located within a 100-year floodplain. According to FEMA’s preliminary Flood Insurance Rate Map (FIRM), Panel No. 22089C0250D, revised November 9, 2012, retrieved from the FEMA RiskMAP6 website (<http://www.riskmap6.com/>) on April 4, 2016, the proposed pump station site is located in a Zone AE with a Base Flood Elevation of +6 North American Vertical Datum, 1988 (NAVD). The FIRM can be viewed in Appendix B. There is no practicable alternative site location outside of the 100-year floodplain and there is no practicable alternative action outside of the 100-year floodplain that will not affect the floodplain. An eight-step review has been conducted and the decision document is attached to this EA under Appendix D.

A Joint Public Notice for the Magnolia Ridge Phase of the WBHPL, which includes the Proposed Action alternative, was published in the Times-Picayune regional newspaper on May 6,

2013, and has been discussed at numerous public meetings held in St. Charles Parish, during which public hearings were held. The Magnolia Ridge Phase of the WBHPL has not been completed.

In order to reduce the impacts on the proposed ancillary structure and its occupants, the structure and its supporting utilities will be elevated at or above the 100-year elevation. The finished floor of the metal pre-fabricated building, electrical components and generator will be at or above the 100-year flood elevation of 6 feet. In addition, St. Charles Parish has received a letter of approval from the local floodplain administrator and will obtain required permits prior to initiating work (see Appendix C).

St. Charles Parish obtained a Department of the Army Permit (MVN-2000-0722-EOO) under Section 404 of the Clean Water Act issued March 19, 2002 and re-authorized for the proposed project on August 12, 2014 and a Coastal Use Permit (C.U.P. No. P20121273) issued August 8, 2014. The Parish would adhere to the conditions of these permits which seek to minimize potential adverse impacts to and from the floodplain. Furthermore, all coordination pertaining to these activities and applicant compliance with any additional conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

The Proposed Action alternative would be constructed in accordance with applicable floodplain development requirements and adhere to all applicable permit conditions. The project would not expose any segment of the population to flood hazards and would instead afford the population additional protection from future flood hazards. The action would not facilitate development in the floodplains to any greater degree than non-floodplain areas of the community. The project would not aggravate the current flood hazard because the facilities would not impede or redirect flood flows. The project would not disrupt floodplain values, and would not reduce habitat in the floodplain. Therefore, the Preferred Action alternative would not have a significant impact on the floodplain.

#### 4.2.4 Wild and Scenic Rivers

A review of information available through the National Wild and Scenic Rivers website ([www.rivers.gov](http://www.rivers.gov)) indicates that one Wild and Scenic River is located in Louisiana. This Wild and Scenic River is Saline Bayou in the Kisatchie National Forest in northeastern Louisiana. St. Charles Parish is located more than 200 miles southeast of the Kisatchie National Forest.

Under the No Action alternative, there would be no short- or long-term impacts to Wild and Scenic Rivers.

Under the Proposed Action alternative, the proposed pump station will have no impacts to any designated Wild and Scenic River.

#### 4.3 Coastal Resources

The Coastal Zone Management Act (CZMA) was established in 1972 to preserve, protect, and (where possible) restore or enhance the resources of the coastal zones of the United States.

The Coastal Zone in Louisiana runs from the Louisiana/Mississippi Stateline to the Louisiana/Texas Stateline encompassing fifteen thousand (15,000) miles of the Gulf of Mexico. St. Charles Parish is located within the Louisiana Coastal Zone.

Under the No Action alternative, there would be no short- or long-term impacts to coastal resources.

Under the Proposed Action alternative, the Louisiana Department of Natural Resources Office of Coastal Management (LDNROCM) indicated in a letter dated September 28, 2012, that the proposed activity would be consistent with the Louisiana Coastal Resources Program. Additionally, a Coastal Use Permit (C.U.P. No. P20121273) for the Proposed Action alternative was issued on August 8, 2014.

Under the Proposed Action alternative, conditions of the permit would be upheld and therefore, would have no impacts to Coastal Resources.

#### 4.4 Biological Resources

##### 4.4.1 Threatened and Endangered Species and Critical Habitat

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1536a2) directs Federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of listed species or designated critical habitats. In addition, Section 7 of the Act sets out the consultation process, which is further implemented by regulation (50 CFR 402).

According to the Louisiana page of the USFWS Threatened and Endangered Species System website ([http://ecos.fws.gov/tess\\_public/countySearch!speciesByCountyReport.action?fips=22089](http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=22089)), the following species are known to exist in St. Charles Parish:

The Sprague's pipit (*Anthus spragueii*) is listed as a bird species candidate in St. Charles Parish. Sprague's Pipit is a small bird of the open grasslands. It feeds and nests exclusively on the ground and the species performs the longest known flight display of any bird.

The Atlantic Sturgeon – Gulf Subspecies (*Acipenser oxyrinchus (=oxyrinchus) desotoi*) is listed as a threatened fish species in St. Charles Parish. Atlantic Sturgeon spawn in long, spring-fed, free-flowing rivers and migrate into saltwater water in fall and winter.

The Pallid Sturgeon (*Scaphirhynchus albus*) is listed as an endangered fish species in St. Charles Parish. Pallid sturgeon are found in the Mississippi River where they are adapted for living close to the bottom of the swift, silty river in sand flats and gravel bars.

The West Indian Manatee (*Trichechus manatus*) is listed as an endangered mammal in St. Charles Parish. Manatees are found in marine, estuarine, and freshwater environments.

Louisiana Black Bear (*Ursus americanus luteolus*) is listed as a threatened mammal in St. Charles Parish. The Louisiana Black Bear frequents deep woods. Key habitat requirements of black bears include food, water, cover, and denning sites spatially arranged across sufficiently large, relatively remote blocks of land. Louisiana black bears typically inhabit bottomland hardwood forests but also utilize other types of forested habitats. Other documented habitat types

used include brackish and freshwater marshes, salt domes, wooded spoil levees along canals and bayous, and agricultural fields.

A search of the USFWS Critical Habitat Portal website (<http://criticalhabitat.fws.gov/crithab/>) resulted in a finding of no species' critical habitats in St. Charles Parish, Louisiana.

Under the No Action alternative, there would be no short- or long-term impacts to threatened and endangered species or critical habitat.

Under the Proposed Action alternative, in a letter dated July 29, 2013, the USFWS directed the Parish to utilize the USFWS Louisiana Ecological Services Office website (<http://www.fws.gov/lafayette/>) which provides an online ESA Technical Assistance Form (questionnaire). Through the use of the website, it was concluded that the proposed action would not be an activity that would affect a federally listed threatened or endangered species or designated critical habitat.

Based on the scope of work and existing habitat as described in this EA, the Proposed Action alternative would have "No Effect" to listed species documented in St. Charles Parish and therefore, the would not impact threatened and endangered species or their critical habitats.

#### 4.4.2 Wildlife and Fish

The Fish and Wildlife Coordination Act (FWCA; 16 U.S.C. 661 et seq.), as amended in 1964, was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources; take action to prevent loss or damage to these resources; and provide for the development and improvement of these resources.

Under the No Action alternative, there would be no short- or long-term impacts to wildlife and fish.

Under the Proposed Action alternative, the Louisiana Department of Wildlife and Fisheries (LDWF) reviewed the proposed project and had no objection to the project in accordance with provisions of the FWCA per a letter dated May 13, 2013. Therefore, the Proposed Action alternative would not impact wildlife and fish.

#### 4.4.3 Migratory Birds

The Migratory Bird Treaty Act (16 U.S.C. 703) established a Federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, or any part, nest, or egg of any such bird."

St. Charles Parish is located within the Mississippi Flyway for migratory birds.

Under the No Action alternative, there would be no short- or long-term impacts to migratory birds.

Under the Proposed Action alternative, the USFWS Louisiana Ecological Services website does not provide determinations regarding potential impacts to colonial nesting birds and eagles. To determine if those federal trust resources may be potentially affected by the Proposed Action alternative, onsite evidence of nesting occurrences within the following parameters would be evaluated prior to commencing construction:

- Colonial Wading Birds (herons, egrets, etc.) nesting within 1,000 feet
- Brown pelican nesting within 2,000 feet
- Colonial and isolated shorebird nesting (plovers, gulls, terns, black skimmer, etc.) within 650 feet

The proposed project area does not currently meet any of these parameters but the project area would be evaluated again prior to commencing construction. If the project area is found to meet one of these conditions, the Parish would contact the Louisiana Ecological Services Office. Additionally, BMPs would be implemented for avoiding harassment and harm to migratory birds during construction activities. Therefore, the Proposed Action alternative would not impact migratory birds.

#### 4.5 Cultural Resources

##### 4.5.1 Historic Properties

Section 106 of the National Historic Preservation Act of 1966 (NHPA, 16 U.S.C. §470 *et seq.*) and its implementing regulations, “Protection of Historic Properties” (36 CFR Part 800), require Federal agencies to take into account the effects of their undertakings on historic properties. FEMA has defined the Area of Potential Effect (APE) for the proposed undertaking as the maximum horizontal and vertical limits of excavation and construction, as well as all areas of ground disturbance, clearing and grubbing, or equipment operation.

Under the No Action alternative, there would be no short-term impacts to historic properties. However, this alternative would leave the communities of Boutte and Paradis vulnerable to flooding from tidal surge and heavy rains which may impact eligible historic properties or properties within the floodplain which may attain historic significance in the future.

Under the Proposed Action alternative, there would be no short term impacts to historic properties. In St. Charles Parish, there are six (6) historic properties listed to the National Register of Historic Places (NRHP). None of the listed properties are within the APE of the proposed undertaking. A records search revealed that the area has been surveyed and there are no eligible historic properties, including archaeological sites within the APE. FEMA determined that there would be No Historic Properties Affected by the proposed undertaking. On August 5, 2013, St. Charles Parish initiated consultation with the Louisiana Department of Culture, Recreation, and Tourism, Office of Cultural Development State Historic Preservation Officer (SHPO). The SHPO responded on August 16, 2013, indicating that “No known historic

properties will be affected by this undertaking.” Under this alternative, the communities of Boutte and Paradis would be protected from inundation, thus reducing damage and having a positive impact on any listed, eligible, or potential historic properties historic properties.

There are no known above or below-ground historic properties within the APE. Therefore, the Proposed Action alternative would not impact historic properties.

#### 4.5.2 Native American/Religious Sites

Section 106 of the NHPA and its implementing regulation, “Protection of Historic Properties” (36 CFR Part 800), require consultation with Native American tribal groups (Tribes) regarding proposed projects and potential impacts to Native American religious sites FEMA has defined the Area of Potential Effect (APE) for the proposed undertaking as the maximum horizontal and vertical limits of excavation and construction, as well as all areas of ground disturbance, clearing and grubbing, or equipment operation.

Under the No Action alternative, there would be no short or long-term impacts to Native American archaeological or Religious Sites.

Under the Proposed Action alternative, impacts to Native American archaeological or Religious Sites would be limited to the APE. A cultural records search has indicated that the area has been surveyed and no archaeological sites were found within the APE. Therefore, FEMA determined that there would be No Historic Properties Affected by the proposed undertaking.

There are ten (10) Federally Recognized Tribes with an expressed interest in St. Charles Parish, including the Alabama-Coushatta Tribe of Texas, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Eastern Shawnee Tribe of Oklahoma, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida and the Tunica-Biloxi Tribe of Louisiana. FEMA initiated consultation with the Tribes on June 16, 2016. On July 19, 2016, FEMA received an email from The Choctaw Nation of Oklahoma, concurring with a finding of “No Historic Properties Affected.” FEMA did not receive any responses for the request for consultation. Therefore, FEMA determined that there would be no impacts to Native American or Religious Sites as a result of the Proposed Action alternative.

In the event that archaeological deposits, including any Native American pottery, stone tools, bones or human remains, are uncovered, the project shall be halted and St. Charles Parish will stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archaeological findings will be secured and access to the sensitive area restricted. The Parish will inform FEMA immediately, FEMA will consult with the SHPO, Tribal Historic Preservation Officer’s (THPO) and Tribes. Work in sensitive areas will not resume until consultation with appropriate authorities is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.

## 4.6 Socioeconomic Resources

### 4.6.1 Environmental Justice

Executive Order 12898 states, “To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.”

Per EPA’s EJSCREEN Report accessed July 28, 2016, St. Charles Parish falls within the 79<sup>th</sup> percentile for minority populations and the 49<sup>th</sup> percentile for low-income populations when compared against the national average. To this end, 68% of the area’s population is minority and 31% of the population is considered to be low-income therefore, populations within St. Charles Parish are more susceptible to disproportionately high and adverse human health or environmental effects from actions taken within this area.

Under the No Action alternative, there would be short- and long-term impacts to environmental justice as flood protection is needed for this area, which encompasses minority and low-income populations.

Under the Proposed Action alternative, no significant adverse impacts to environmental justice are anticipated. In addition, there would be no adverse effects on minority or low-income populations. The Proposed Action alternative would benefit all populations in the project service area by providing flood protection.

### 4.6.2 Hazardous Material

Two of the main Federal laws that address hazardous and toxic materials issues are the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). CERCLA, commonly known as Superfund, has the major objectives to identify hazardous and toxic material sites, determine liability, and oversee the cleanup.

The RCRA of 1976 addresses the handling, disposal and recycling of debris and solid waste, including hazardous materials. The requirements of RCRA are implemented at the State and local levels and are often included as conditions or best management practices in permits required at those levels. Besides disposal and recycling of waste materials, RCRA is also concerned with the transportation, treatment, and storage of hazardous waste. In addition to health and safety issues, RCRA is closely tied to some of the objectives of the CWA and CAA, relating to potential effects on water and air quality.

NEPA Assist is a tool that facilitates the environmental review process and project planning in relation to environmental considerations and is able to show the proximity of a location to EPA facilities. On April 12, 2016, a NEPA Assist map provided by the tool showed there are no RCRA hazardous waste sites or Superfund sites within 2 miles of the project location. Because

of this, under the No Action and Proposed Action alternatives, impact to hazardous material is not applicable. Furthermore, the Proposed Action alternative would not involve underground storage tanks, hazardous building materials, hazardous waste sites, or sites that were previously commercial sites, such as old gas stations, etc.

#### 4.6.3 Noise

Noise is generally described as unwanted sound. Sound becomes unwanted when it either interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one's quality of life. Chapter 24 of the St. Charles Parish Code of Ordinances contains provisions for noise within St. Charles Parish and declares the following to be in violation:

*The operating of any construction equipment within three hundred (300) feet of any residential or noise sensitive area between the hours of 9:00 p.m. to 7:00 a.m. on weekdays and Saturdays and 9:00 p.m. to 8:00 a.m. on Sundays and holidays, except for emergency work.*

Under the No Action alternative, there would be no short- or long-term impacts to noise.

Under the Proposed Action alternative, short-term noise generation would be result from grading and construction activities. However, the project site would be approximately .4 miles away from any residences. Additionally, site construction would be limited to daytime hours. Therefore, the Proposed Action alternative would not violate the Parish's noise ordinance and would have no significant impact.

#### 4.6.4 Traffic

The project site is located away from any streets, roads, or highways. Traffic to and from the project site is along Louisiana Highway 633, a rural two lane highway. The posted speed limit on this highway is 35 miles per hour and there are no traffic restrictions on this highway.

Under the No Action alternative, there would be no short- or long-term impacts to traffic.

Under the Proposed Action alternative, since the project site would be located away from any streets, roads, or highways, it would not cause any traffic delays or detours due to construction. There may be a slight increase of traffic to and from the pump station during the construction. Following construction, routine traffic to and from the site would be minimal and would be associated with operations, maintenance, and repair of equipment at the site. Therefore, the Proposed Action alternative would have no impact to traffic.

Additionally, Traffic Control and Coordination would be a requirement of the project's specifications. Should special requirements for traffic be needed during construction, the contractor would be required to make arrangements with the appropriate local and state authorities.

## 4.7 Summary Table

Table 1

Proposed Action					
Affected Environment/ Resource Area	No Impact	No Significant Impact	Significant Impact	Agency Coordination/ Permits	Mitigation/Best Practices
Geology, Soils, and Seismicity		X		Per USDA NRCS State Conservationist the project would not involve any relocation and would not impact prime farmland and therefore would be exempt from the rules and regulations of the Farmland Protection Policy Act, dated August 7, 2013.	BMPs would be implemented during site development to minimize sediment migration from the site. Following construction, any disturbed soils would be protected with seed or sod in order to decrease the amount of soil eroded by rainfall and runoff. Proper disposal of any hazards would be utilized.
Air Quality		X		Per LDEQ, "St. Charles Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations," dated August 22, 2013.	Short-term impacts to air quality such as exhaust emissions from equipment, and dust from grading activities may occur during site construction activities. Equipment used for these activities would meet local, state, and Federal requirements for air emissions, and dust would be controlled as necessary by wetting the surface of the work areas.
Water Quality		X		Per LDEQ requirements for a Water Quality Certification would be met under the proposed action and would not violate water quality standards. Water Quality Certification, WQC 160307-01 issued March 8, 2016.	BMPs would be implemented during site development to minimize sediment migration from the site into nearby water bodies. Surface runoff would be controlled by using siltation controls such as silt fencing around the construction site to

					minimize erosion of materials into adjacent wetlands and/or waterways. Any disturbed soil would be protected with seed or sod after construction in order to decrease the amount of soil eroded by rainfall and runoff. Debris that results from project would be disposed of in approved landfills.
Wetlands		X		<p>In an email dated May 28, 2013, the EPA stated that it “does not object to the project as proposed provided that the applicant would satisfy the requirements of the 404(b)(1) Guidelines.”</p> <p>A Department of the Army Permit (MVN-2000-0722-EOO) under Section 404 of the Clean Water Act was re-authorized for the proposed project on August 12, 2014.</p>	<p>Efforts would be taken to place all improvements within the existing right of ways in areas of wetland previously authorized by the regulatory agencies to avoid impact to wetlands. Unavoidable impacts to vegetated wetlands would be mitigated through payments to a DNR and USACE approved mitigation bank.</p> <p>The Parish would adhere to the conditions of the Department of the Army permit.</p>
Floodplain		X		Received letter from the St. Charles Parish Floodplain Administrator on August 29, 2013.	<p>To minimize impacts from the floodplain, the structure and its supporting utilities would be elevated at or above the 100-year elevation.</p> <p>To minimize potential adverse impacts to the floodplain, the Parish would adhere to the action conditions of the CWA Permit (MVN-2000-0722-EOO) and Coastal Use Permit (C.U.P. No. P20121273).</p>
Wild and Scenic Rivers	X			Per National Wild and Scenic Rivers website ( <a href="http://www.rivers.gov">www.rivers.gov</a> ) closest Wild and Scenic River, would be located in northeastern	Not Applicable

				Louisiana, more than 200 miles from St. Charles Parish.	
Coastal Resources	X			The LDNROCM indicated in a letter dated September 28, 2012, that the proposed activity would be consistent with the Louisiana Coastal Resources Program.  Coastal Use Permit (C.U.P. No. P20121273) issued on August 8, 2014.	The Parish would adhere to the conditions of the C.U.P.
Threatened and Endangered Species and Critical Habitat	X			Per the USFWS's online ESA Technical Assistance Form, the proposed project is not an activity that would affect a federally listed threatened or endangered species or designated critical habitat.	Not Applicable
Wildlife and Fish	X			The LDWF reviewed the proposed project and had no objection to the project in accordance with provisions of the FWCA as detailed in a letter dated May 13, 2013.	Not Applicable
Migratory Birds	X			St. Charles Parish is located within the Mississippi Flyway for migratory birds.	BMPs would be implemented for avoid harassment and harm to migratory birds during construction activities. If the project area is found to have a nesting occurrence, the Parish would contact the Louisiana Ecological Services Office.
Historic Properties	X			A records search revealed that the area has been surveyed and there are no eligible historic properties, including archaeological sites within the APE. FEMA determined that there would be No Historic Properties Affected by the proposed undertaking. On August 5, 2013, St. Charles Parish initiated consultation with the Louisiana Department of Culture, Recreation, and Tourism, Office of Cultural Development State	In the event that archaeological deposits, including any historic ceramics, glass bottles, Native American pottery, stone tools, bones or human remains, are uncovered during construction, the project shall be halted and St. Charles Parish will stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All

				Historic Preservation Officer (SHPO). The SHPO responded on August 16, 2013, indicating that “No known historic properties will be affected by this undertaking.” Therefore, the Proposed Action alternative would not impact historic properties.	archaeological findings will be secured and access to the sensitive area restricted. The Parish will inform FEMA immediately, FEMA will consult with the SHPO, and any applicable Tribal Historic Preservation Officer’s (THPO) and Tribes. Work in sensitive areas will not resume until consultation with appropriate authorities is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.
Native American/ Religious Sites	X			FEMA initiated consultation with the Tribes on June 16, 2016. FEMA did not receive any responses for the request for consultation. A cultural records search has indicated that the area has been surveyed and no archaeological sites were found within the APE. Therefore, FEMA determined that there would be no impacts to Native American or Religious Sites as a result of the Proposed Action alternative.	In the event that archaeological deposits, including any Native American pottery, stone tools, bones or human remains, are uncovered, the project shall be halted and St. Charles Parish will stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archaeological findings will be secured and access to the sensitive area restricted. The Parish will inform FEMA immediately, FEMA will consult with the SHPO, Tribal Historic Preservation Officer’s (THPO) and Tribes. Work in sensitive areas will not resume until consultation with appropriate authorities is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.
Environmental Justice		X		Project would benefit all populations by providing flood protection.	Not Applicable
Hazardous Materials	X			Per NEPA Assist Tool map no RCRA hazardous waste sites or Superfund sites located within 2 miles of the project location.	Not Applicable

Noise		X		The project site is approximately .4 miles away from any residences.	Construction would be limited to daytime hours.
Traffic	X			Slight traffic increase in the project area may be experienced during construction.	Traffic Control and Coordination would be a requirement of the project's specifications. Should special requirements for traffic be needed during construction, the contractor would make arrangements with the appropriate local and state authorities.

## 5.0 Cumulative Impacts

Cumulative impacts are the impact on the environment which results from the incremental impact of an 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Proposed Action alternative, the proposed Magnolia Ridge Pump Station project, is part of a larger flood protection project, the St. Charles Parish West Bank Hurricane Protection Levee (WBHPL). The WBHPL is a three (3) phased nine (9) mile earthen levee alignment that extends from the Sunset Levee on the western flank in Des Allemands to the Davis Pond West Guide Levee to the east in Luling. Each phase of the WBHPL includes several other separate projects not included in this EA such as: three (3) new drainage pumping stations, numerous T-Walls at pipeline crossings and existing pump stations, and tidal exchange structures which are necessary to address both the interior drainage and the encapsulated wetlands ecosystem. None of the separate projects have been/are being funded by FEMA.

The WBPHL is being constructed to provide residents of the West Bank of St. Charles Parish with flood protection during heavy rain and storm surge events. Should the other phases of the WBHPL be constructed and the No Action alternative be selected, residents of the Magnolia Ridge watershed area would only be protected against storm surge events as a result of south winds. Interior drainage during heavy rain events would have to be drained via the deployment of temporary pumps to prevent the flooding of residences, streets, utilities, etc. The cumulative impacts to the environment (resources) resulting from the flooding would be significant.

The Proposed Action alternative would afford positive cumulative long-term impacts to the environment (resources) by providing a system of levees and pump stations to collectively enhance flood protection for the West Bank of St. Charles Parish.

## 6.0 Agency Coordination, Public Involvement, and Permits

Under the environmental provisions of the HMGP, St. Charles Parish requested written comments from various Federal and State agencies regarding the Proposed Action alternative. Included with Appendix C are the request letters and the agencies' responses. The table below summarizes the comments received:

Agency	Date of Response Letter	Comments
U.S. Department of Agriculture National Resource Conservation Service	8/7/13	“...the proposed project will not involve any relocation and will not impact prime farmland and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)...”

Louisiana Department of Environmental Quality	8/22/13 (email)	"...the Department has no objections based on the information provided in your submittal."
U.S. Environmental Protection Agency	5/28/13	"The EPA does not object to the project as proposed..."
U.S. Army Corps of Engineers	8/12/14 (404 Permit)	Project permit reauthorized (MVN-2000-0722-EOO)
St. Charles Parish Floodplain Administrator	8/29/13	"...the construction of the Magnolia Ridge Pump Station should not have significant environmental impact to the area. The Coastal Zone Management Section therefor (sp) has NO OBJECTION to this project."
Louisiana Department of Natural Resources Office of Coastal Management	9/28/12 letter & 8/8/14 Coastal Use Permit/Consistency Determination	"...fully consistent with the Louisiana Coastal Resources Program."  Coastal Use Permit No. P20121273
U.S. Fish and Wildlife Service	7/29/13 letter & 1/19/16 ESA Technical Assistance Form	"Based on the information provided, the proposed project is not an activity that would affect a federally listed threatened or endangered species or designated critical habitat."
Louisiana Department of Wildlife and Fisheries	5/13/13	"LDWF has no objection" in accordance with the provisions of the FWCA
Department of Culture, Recreation and Tourism (SHPO)	8/16/13	"No known historic properties will be affected by this undertaking."

With regard to Executive Order 11988 Floodplain Management, the Joint Public Notice for the Magnolia Ridge Phase of the WBHPL, which includes the Proposed Action alternative, was published in the Times-Picayune regional newspaper on May 6, 2013, and has been discussed at numerous public meetings held in St. Charles Parish, during which public hearings were held. The Magnolia Ridge Phase of the WBHPL has not been completed.

St. Charles Parish, under a previous regulatory permit, constructed the first lift of the Magnolia Ridge earthen levee. That permit expired and was reauthorized on August 12, 2014; a copy is included along with comment letters from other regulatory agencies in Appendix C. Through the regulatory agencies' environmental review process, the conclusion is that the Proposed Action alternative will have no significant adverse impact on the environment.

## 7.0 Mitigation

### 7.1 Physical Resources

#### 7.1.1 Geology, Soils and Seismicity

To minimize impacts to soils by the Proposed Action alternative, appropriate BMPs would be implemented during site development to reduce sediment migration from the site. Following construction, any disturbed soils would be protected with seed or sod in order to decrease the amount of soil eroded by rainfall and runoff. Proper disposal of any hazards would be utilized.

#### 7.1.2 Air Quality

Short-term impacts to air quality such as exhaust emissions from equipment, and dust from grading activities may occur during site construction activities by the Proposed Action alternative. Equipment used for these activities would meet local, state, and Federal requirements for air emissions, and dust would be controlled as necessary by wetting the surface of the work areas.

### 7.2 Water Resources

#### 7.2.1 Water Quality

To minimize impacts to water quality by the Proposed Action alternative, appropriate BMPs would be implemented during site development to reduce sediment migration from the site into nearby water bodies. Surface runoff would be controlled by using siltation controls such as silt fencing around the construction site to minimize erosion of materials into adjacent wetlands and/or waterways. Any disturbed soil would be protected with seed or sod after construction in order to decrease the amount of soil eroded by rainfall and runoff. This would prevent any degradation of water quality as a result of silt-laden runoff from the construction site. Debris that results from project would be disposed of in approved landfills.

#### 7.2.2 Wetlands

To avoid impact to wetlands, efforts would be made in the Proposed Action alternative's design to place all improvements within the existing right of ways in areas of wetland previously authorized by the regulatory agencies. Unavoidable impacts to vegetated wetlands would be mitigated through payments to a DNR and USACE approved mitigation bank.

A Department of the Army Permit (MVN-2000-0722-EOO) under Section 404 of the Clean Water Act was issued March 19, 2002 and re-authorized on August 12, 2014. The Parish would adhere to the conditions of the permit which include but are not limited to:

*As mitigation for project related unavoidable loss of 29.7 acres of bald cypress/tupelo swamp and 37.3 acres of bottomland hardwoods, the permittee agrees to purchase 37.7 acres of cypress tupelo swamp wetlands and 56.2 acres of bottomland hardwood wetlands from the Riverside Coastal Mitigation Lands. The permittee shall provide the Corps of Engineers, Regulatory Branch with written verification from Riverside Coastal Mitigation Lands that the financial*

*arrangements have been made within 10 days of payment. This verification shall be provided by August 1 following permit issuance or prior to commencement of the work authorized by this permit, whichever comes first.*

*The extent of clearing shall not exceed right-of-way limits.*

*The permittee shall employ siltation controls around all construction sites that require earthwork (clearing, grading, dredging and/or deposition of fill material) such that eroded material is prevented from entering adjacent wetlands and/or waterways.*

*The permittee shall assure that all material used during construction shall be pollutant free in accordance with the EPA Guidelines for the Discharge of Dredged or Fill Material, found in 40 CFR 230. The material may be obtained offsite or on-site (as a result of the permitted activity). Offsite material shall not be obtained from wetlands or from other areas that may adversely affect adjacent wetlands. Any excess material shall be placed in an upland area and properly contained or stabilized to prevent entry into adjacent wetlands or other waters.*

### 7.2.3 Floodplains

To minimize potential adverse impacts and support to or within floodplains, efforts would be made in the Proposed Action alternative's design to incorporate at a minimum those mitigation or resiliency measures included in the permit conditions required by the regulatory agencies.

A Department of the Army Permit (MVN-2000-0722-EOO) under Section 404 of the Clean Water Act was issued March 19, 2002 and re-authorized for the proposed project on August 12, 2014. The Parish would adhere to the conditions of the permit.

### 7.2.4 Wild and Scenic Rivers

The Proposed Action alternative would have no impacts to any designated Wild and Scenic River.

### 7.3 Coastal Resources

The Proposed Action alternative would have no impacts to Coastal Resources. A Coastal Use Permit (C.U.P. No. P20121273) for the proposed project was issued on August 8, 2014. The Parish would adhere to the permit condition which include but are not limited to:

- *All logs, stumps and other debris encountered during dredging activities shall be removed from the site during or immediately after the activity and disposed of in accordance with all applicable laws and regulations.*
- *That permittee shall ensure that all sanitary sewage and/or related domestic wastes generated during the subject project activity and at the site, thereafter, as may become necessary shall receive the equivalent of secondary treatment (30 mg/l BOD5) with disinfection prior to discharge into any of the streams or adjacent waters of the area or, in the case of total containment, shall be disposed of in approved sewerage and sewage treatment facilities, as is required by the State Sanitary Code. Such opinion as may be served by those comments offered herein shall not be construed to suffice as any more*

*formal approval(s) which may be required of possible sanitary details (i.e. provisions) scheduled to be associated with the subject activity. Such shall generally require that appropriate plans and specifications be submitted to the Department of Health and Hospitals for purpose of review and approval prior to any utilization of such provisions.*

- *All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.*
- *All fill material shall be clean and free of contaminants and shall not contain hazardous materials such as asbestos or asbestos residue, shingles, tires, oil/grease residue, exposed rebar, protruding objects, etc.*
- *All fill/spoil material to be hauled off-site shall be disposed of at a State approved facility.*

## 7.4 Biological Resources

### 7.4.1 Threatened and Endangered Species and Critical Habitat

Based on the scope of work and existing habitat as described in this EA, the conclusion is appropriate that the Proposed Action alternative would have "No Effect" to listed species documented for St. Charles Parish.

### 7.4.2 Wildlife and Fish

The Proposed Action alternative would not impact wildlife and fish.

### 7.4.3 Migratory Birds

Currently, the Proposed Action alternative would not impact migratory birds. BMPs would be implemented for avoiding harassment and harm to migratory birds during construction activities. The project area does not show signs of migratory birds nesting currently and would be reevaluated prior to commencing construction for any evidence of nesting occurrences. If the project area is found to have a nesting occurrence, the Parish would contact the Louisiana Ecological Services Office.

## 7.5 Cultural Resources

### 7.5.1 Historic Properties

The Proposed Action alternative would not impact historic properties. Therefore, no mitigation measures are required. In the event that archaeological deposits, including any historic ceramics, glass bottles, Native American pottery, stone tools, bones or human remains, are uncovered during construction, the project shall be halted and St. Charles Parish would stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize

harm to the finds. All archaeological findings would be secured and access to the sensitive area restricted. The Parish would inform FEMA immediately, FEMA would consult with the SHPO, and any applicable Tribal Historic Preservation Officer's (THPO) and Tribes. Work in sensitive areas would not resume until consultation with appropriate authorities is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.

#### 7.5.2 Native American/Religious Sites

The Proposed Action alternative would not impact Native American/Religious Sites. In the event that archaeological deposits, including any Native American pottery, stone tools, bones or human remains, are uncovered during construction, the project shall be halted and St. Charles Parish would stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archaeological findings would be secured and access to the sensitive area restricted. The Parish would inform FEMA immediately, FEMA would consult with the SHPO, Tribal Historic Preservation Officer's (THPO) and Tribes. Work in sensitive areas would not resume until consultation with appropriate authorities is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.

### 7.6 Socioeconomic Resources

#### 7.6.1 Environmental Justice

No significant adverse impacts to environmental justice are anticipated. The Proposed Action alternative would benefit all populations by providing flood protection.

#### 7.6.2 Hazardous Material

Impact to hazardous material by the Proposed Action alternative is not applicable.

#### 7.6.3 Noise

To minimize impacts to noise by the Proposed Action alternative, site construction would be limited to daytime hours.

#### 7.6.4 Traffic

The Proposed Action alternative would not impact traffic. Traffic Control and Coordination is a requirement of the project's Specifications. Should special requirements for traffic be needed during construction, it would be the responsibility of the contractor to make arrangements with the appropriate local and state authorities.

## 8.0 References

Completion of this Draft Environmental Assessment included using the following resources:

1. Berg, Robbie. *Tropical Cyclone Report*. Rep. NOAA, 28 Jan. 2013. Web. 12 Jan. 2016. <[http://www.nhc.noaa.gov/data/tcr/AL092012\\_Isaac.pdf](http://www.nhc.noaa.gov/data/tcr/AL092012_Isaac.pdf)>.
2. Hermely, Alan. *Final Environmental Assessment for Saint Charles Parish DHS/EP Emergency Operations Center Communications Tower Project No.2008-EO-T8-0010*. Rep. June 2012.
3. Haymaker, Sarah. "Application for Hazard Mitigation Grant Program; Magnolia Ridge Pump Station." Letter to Holly Fonseca. 7 Aug. 2013. Alexandria, Louisiana.
4. USDA NRCS. Web Soil Survey. 6 Dec. 2013. Web. 12 Jan. 2016. <<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>>.
5. LSU Ag Center. St. Charles Flood Maps Tool. Web. 12 Jan. 2016. <<http://maps.lsuagcenter.com/floodmaps/?FIPS=22089>>.
6. Hardy, Linda M. "St. Charles-Magnolia Ridge Pump Station." Letter to Holly Fonseca. 22 Aug. 2013. Baton Rouge, Louisiana.
7. Givens, J. Dale. "Proposal to construct a ring type levee system to prevent flooding by storm surge from Lakes Cataouatche, Salvador, and Des Allemands. The alignment is configured to connect two existing levee systems, on the westside of the Sunset Drainage District Levee, and on the eastside of the Davis Diversion West Guide Levee, St. Charles Parish, Louisiana Parish, Louisiana." Letter to Shread-Kuyrkendall & Associates, Inc. 14 Feb. 2000. Baton Rouge, Louisiana.
8. Guilliams, Scott. "St. Charles Parish – West Bank Hurricane Protection Levee – Magnolia Ridge Project Water Quality Certification WQC 160307-01..." Letter to Mr. Lucas Lilly. 8 Mar. 2016. Baton Rouge, Louisiana.
9. U.S. Fish & Wildlife Service. National Wetlands Inventory. 13 Dec. 2015. Web. 12 Jan. 2016. <<http://www.fws.gov/wetlands/>>.
10. Lily, Lucas. *Joint Permit Application for Work within the Louisiana Coastal Zone*. Application to Louisiana Department of Natural Resources. 19 Apr. 2013.
11. Gutierrez, Raul. "MVN-2000-722; Magnolia Ridge Phase I modification." Email to Brad LaBorde MVN. 28 May 2013. Dallas, Texas.
12. Mayer, Martin S. "MVN-2000-0722-EOO." Letter to Sam Scholle. 12 Aug. 2014. New Orleans, Louisiana.
13. FEMA RiskMap6. FEMA Preliminary Flood Insurance Rate Map (FIRM). Web. 4 Apr. 2016. <<http://www.riskmap6.com/>>.
14. Matherne, Earl. "Environmental Review; Magnolia Ridge Pump Station." Letter to Holly Fonseca. 29 Aug. 2013. Hahnville, Louisiana.
15. National Wild and Scenic Rivers System. Explore Designated Rivers. Web. 19 Jan. 2016. <<https://www.rivers.gov/louisiana.php>>.
16. Lovell, Keith. Letter to Whom it may concern. 28 Sept. 2012. Baton Rouge, Louisiana.
17. Morgan, Karl L. *Coastal Use Permit/Consistency Determination*. C.U.P. No. P20121273. Department of Natural Resources Office of Coastal Management. 8 Aug. 2014. Baton Rouge, Louisiana.

18. U.S. Fish & Wildlife Service. U.S. FWS Threatened & Endangered Species Active Critical Habitat Report. Web. 14 Jan. 2016.  
<[http://ecos.fws.gov/tess\\_public/countySearch!speciesByCountyReport.action?fips=22089](http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=22089)>.
19. U.S. Fish & Wildlife Service Critical Habitat Report. Web. 19 Jan. 2016.  
<<http://criticalhabitat.fws.gov/crithab/>>.
20. USFWS Louisiana Ecological Services. ESA Technical Assistance Form. 19. Jan 2016. Web. 19 Jan. 2016. <<http://www.fws.gov/lafayette/>>.
21. FEMA. Fish & Wildlife Coordination Act 1956. 6 Nov. 2015. Web. 1 Feb. 2016.  
<<https://www.fema.gov/fish-wildlife-coordination-act-1956>>.
22. Balkum, Kyle F. "Application Number: MVN-2000-0722-EOO (Modification)." Letter to Mr. Martin S. Mayer. 13 May 2013. Baton Rouge, Louisiana.
23. U.S. Fish & Wildlife Service. Flyways. 15 Dec. 2015. Web. 1 Feb. 2016.  
<<http://www.fws.gov/birds/management/flyways.php>>.
24. National Park Service. National Register of Historic Places, 2 Nov. 2013. Web. 1 Feb. 2016. <<http://focus.nps.gov/nrhp>> and  
<<https://irmadev.nps.gov/DataStore/Reference/Profile/2210280>>.
25. Office of Cultural Development. Louisiana Cultural Resources National Register of Historic Places Database. Web. 26 Jan. 2016.  
<<http://crt.louisiana.gov/dataprojects/hp/nhl/index.asp>>.
26. Fonseca, Holly. "Application for Hazard Mitigation Grant Program; Magnolia Ridge Pump Station." Letter to Ms. Pam Breaux with stamped response from Pam Breaux. 5 Aug. 2013. Hahnville, Louisiana.
27. FEMA. Section H Hazardous Materials. 23 Apr. 2015. Web. 20 Jan. 2016.  
<<https://www.fema.gov/section-h-hazardous-materials>>.
28. Environmental Protection Agency. NEPA Assist Tool. Web. 12 Apr. 2016.  
<<https://nepassisttool.epa.gov/nepassist/nepamap.aspx>>.
29. St. Charles Parish. Code of Ordinances. Web. 21 Apr. 2016.  
<[https://www2.municode.com/library/la/st.\\_charles\\_parish/codes/code\\_of\\_ordinances?searchRequest={%22searchText%22:%22noise%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:\[%22CODES%22\],%22productIds%22:\[\]}&nodeId=PTIIPACO\\_CH24NO\\_S24-2SC](https://www2.municode.com/library/la/st._charles_parish/codes/code_of_ordinances?searchRequest={%22searchText%22:%22noise%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:[%22CODES%22],%22productIds%22:[]}&nodeId=PTIIPACO_CH24NO_S24-2SC)>.
30. U.S. Environmental Protection Agency. EJSCREEN. Report. Web. 28 July. 2016.  
<<https://www.epa.gov/ejscreen>>.

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# **Appendix A**

## **Site Photographs**

**Appendix B**  
**Site Location Maps**

**Appendix C**  
**Support Documentation and Agency**  
**Consultation Letters**  
**(Permits and Web Results)**

**Appendix D**  
**Eight-Step Decision Document**