US Army Corps of Engineers

New Orleans District
NEPA Alternative Arrangements
Appendices

Appendix A: Project study area maps and fact sheets for the Lake Pontchartrain and Vicinity (LPV), LA Hurricane Protection Project; West Bank and Vicinity (WBV) Hurricane Protection Project, LA; and Borrow Projects.

Appendix B: Copies of Commander's Determinations of Imminent Threat.

Version: February 20, 2007

US Army Corps of Engineers

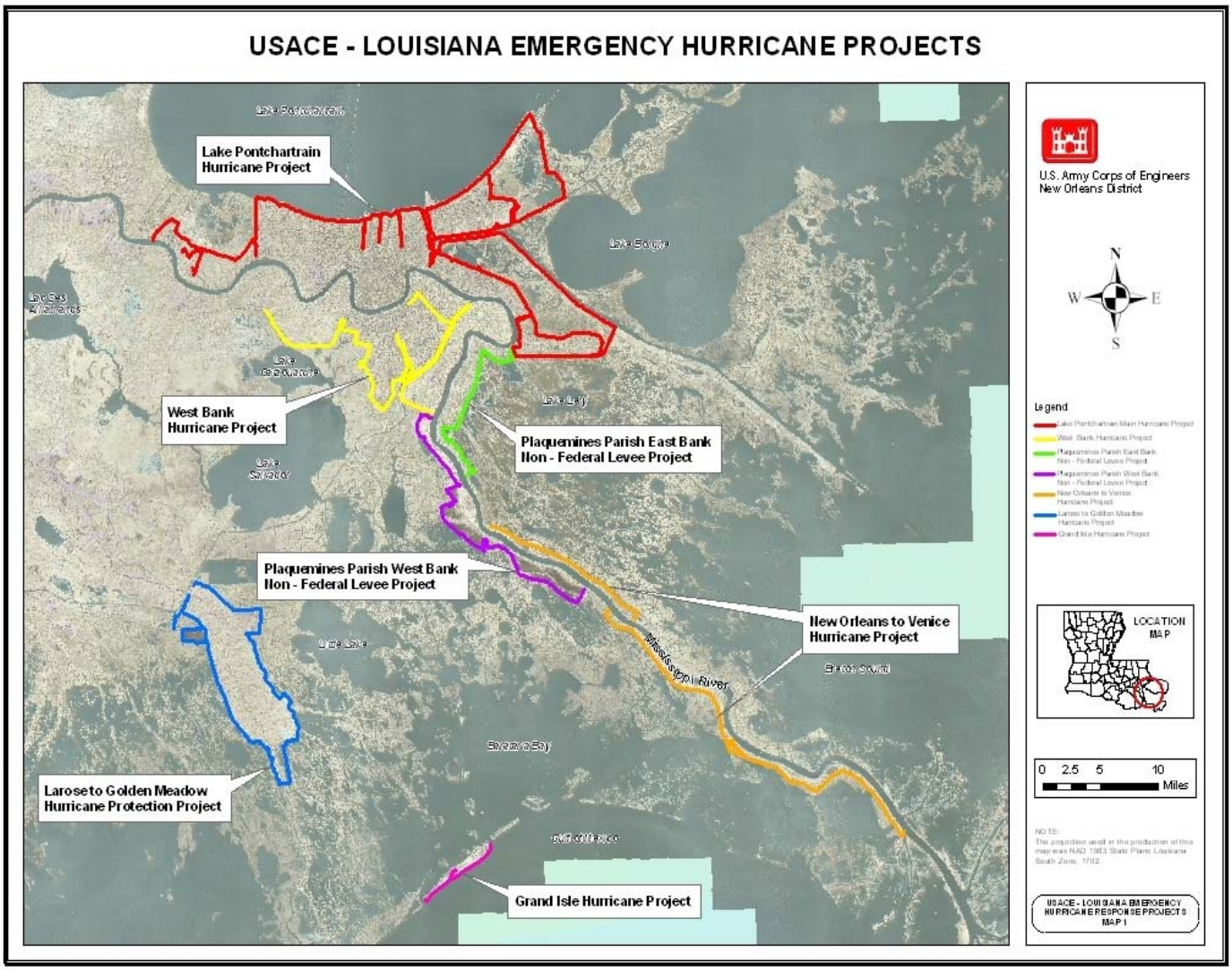
Appendix A

Project Study Area Maps and Fact Sheets

US Army Corps of Engineers

Project Study Area Maps

3rd and 4th Supplemental Hurricane Levee Projects



US Army Corps of Engineers

Sub Basins and Representative Project Groups

Lake Pontchartrain and Vicinity

St. Charles
IER 1

IHNC Structures
IER 11

Jefferson East Bank
IER 2 & 3

Orleans East Bank
IER 4 & 5

New Orleans East
IER 6 & 7

Chalmette Loop
IER 8, 9 & 10

West Bank and Vicinity

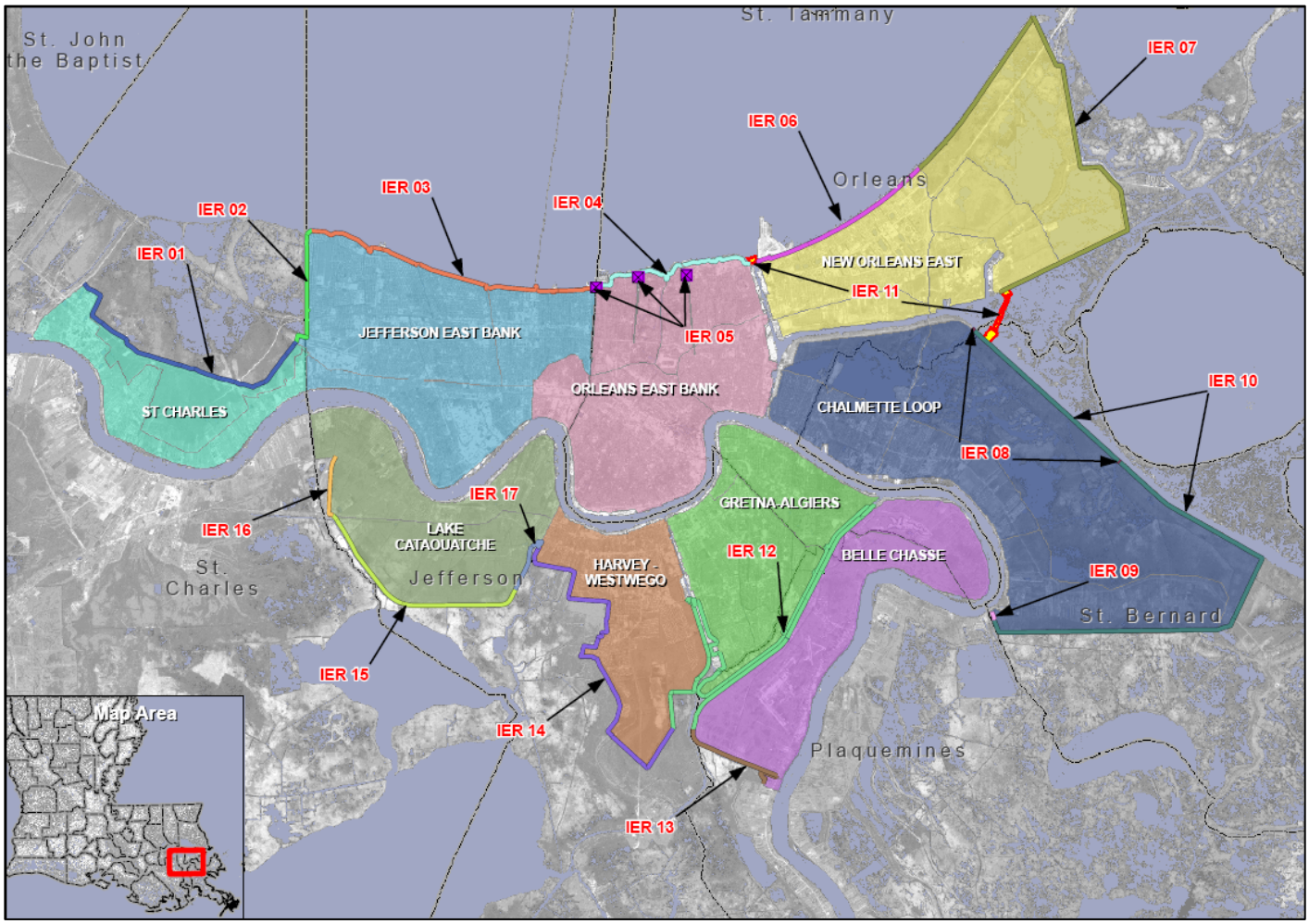
Belle Chasse, Gretna-Algiers, Harvey-Westwego
IER 12

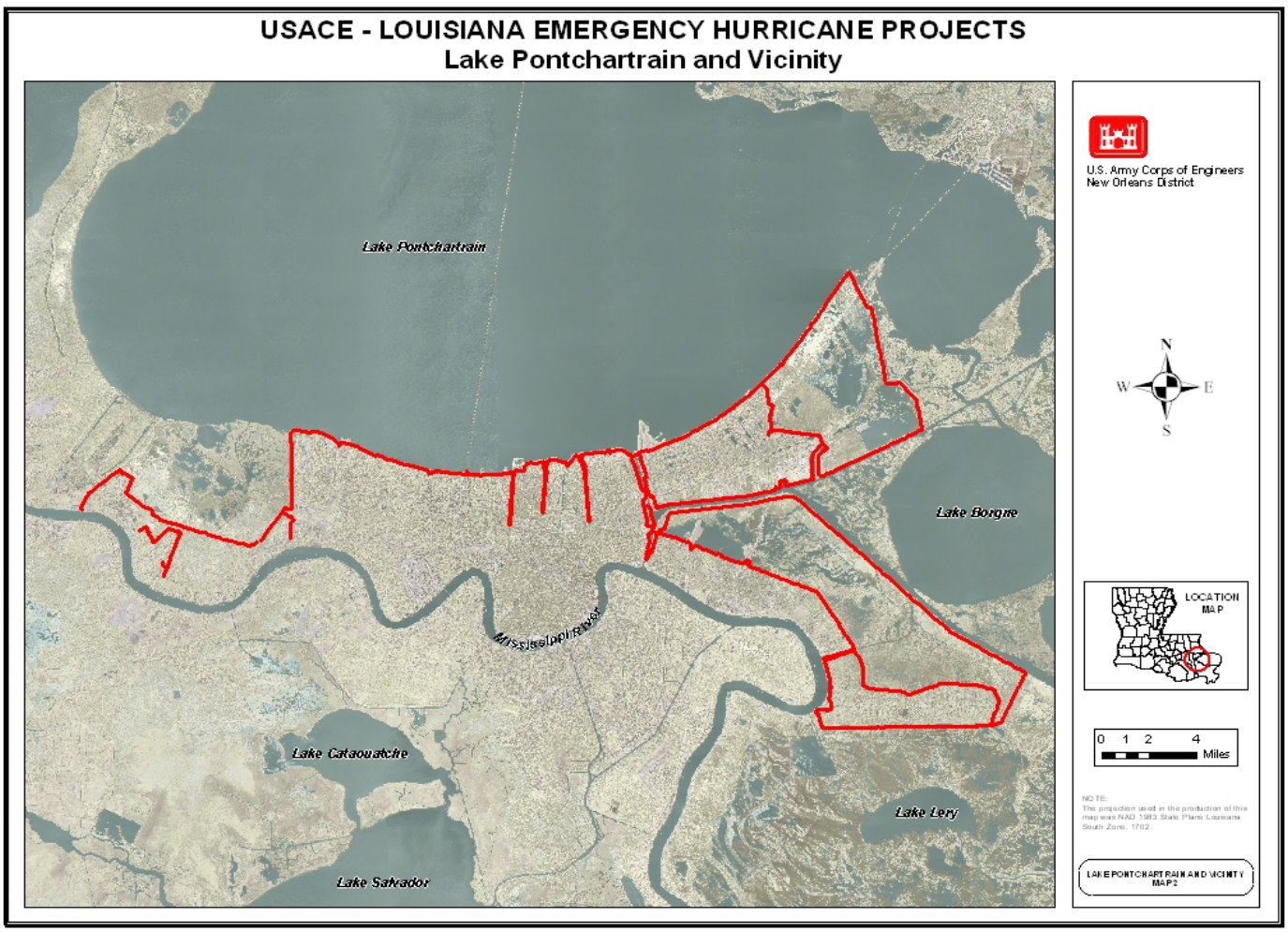
Belle Chasse
IER 13

Harvey-Westwego
IER 14

Lake Cataouatche
IER 15, 16, & 17

Borrow
Multiple IERs in multiple sub-basins




USACE - LOUISIANA EMERGENCY HURRICANE PROJECTS
Lake Pontchartrain and Vicinity
Lake Pontchartrain
Lake Borgne
Mississippi River
Lake Cataouatche
Lake Salvador
Lake Lery
U.S. Army Corps of Engineers
New Orleans District
N
W
E
S
LOCATION MAP
0 1 2 4
Miles
LAKE PONTCHARTRAIN AND VICINITY MAP 2

US Army Corps of Engineers

LAKE PONTCHARTRAIN AND VICINITY HURRICANE PROTECTION PROJECT FACT SHEET

Authority: The Flood Control Act of 1965 (PL 89-298) as amended, authorizes a "project for hurricane protection on Lake Pontchartrain, Louisiana ... substantially in accordance with the recommendations of the Chief of Engineers in House Document 231, Eighty-ninth Congress". The original statutory authorization for the Lake Pontchartrain and Vicinity, Louisiana Project was amended by the Water Resources Development Acts of 1974, 1986, 1990, 1992, 1996 and 2000. The 3rd Supplemental Appropriations Act (P.L. 109-148) authorizes accelerated completion of the project and restoration of project features to design elevations at 100% federal cost. The 4th Supplemental Appropriations Act authorizes construction of a 100 - year level of protection, the replacement or reinforcement of floodwalls, the construction of permanent closures at the outfall canals, the improvement of the Inner Harbor Navigation Canal (IHNC) and the construction of levee armoring at critical locations.

Description: Project features include: A 120 mile long levee system crossing through four Louisiana parishes which protects the New Orleans metropolitan area from storm surges occurring in Lake Pontchartrain, Lake Borgne, and Breton Sound due to a tropical event. At the western terminus of the levee system in St. Charles Parish (Bonnet Carré Spillway East Guide Levee), there is an earthen levee that proceeds east along the north side of Airline Highway (US Hwy. 61) to the Jefferson-St. Charles Parish boundary. In Jefferson Parish, there is a concrete floodwall along the Jefferson-St. Charles Parish line and an earthen levee along the Jefferson Parish Lakefront. In Orleans Parish the levee is an earthen levee along the Orleans Parish Lakefront with parallel protection (levees, floodwalls, and flood proofed bridges) along three outfall canals (17th St., Orleans Avenue, and London Avenue), and a series of earthen levees/floodwalls from the New Orleans Lakefront to the Gulf Intracoastal Waterway (GIWW). In St. Bernard Parish the levee ties into the Mississippi River Levee (MRL) at the western end of the segment and then runs parallel to the Mississippi River-Gulf Outlet (MR-GO) and around the Chalmette area back to the MRL. The project includes a mitigation area on the west shore of Lake Pontchartrain.

US Army Corps of Engineers

LAKE PONTCHARTRAIN AND VICINITY HURRICANE PROTECTION PROJECT FACT SHEET (Continued)

Existing Environmental Compliance:

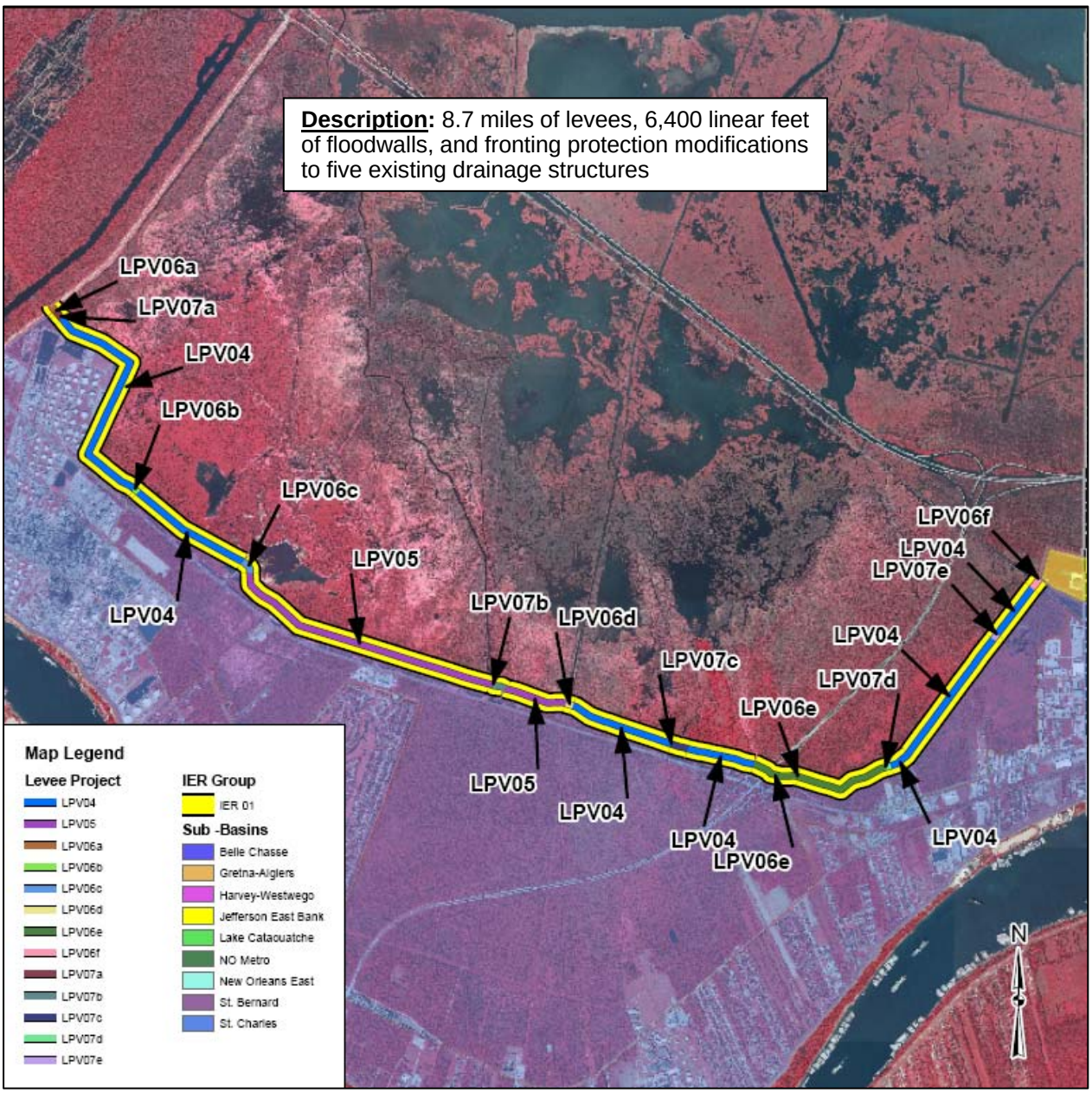
Final EIS, Lake Pontchartrain, Louisiana , and Vicinity Hurricane Protection Project, dated August 1974	Statement of Findings 2 December 1974
Final Supplement I to the EIS, Lake Pontchartrain, Louisiana , and Vicinity Hurricane Protection Project, dated July 1984	Record of Decision (ROD) February 7, 1985
Final Supplement II to the EIS, Lake Pontchartrain, Louisiana, and Vicinity, Mitigation Plan, dated August 1994	ROD November 3, 1994
Supplemental Information Report #10. Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection, Bonnet Carre Spillway Borrow	September 3, 1985
Supplemental Information Report #30. Lake Pontchartrain Louisiana and Vicinity Hurricane Protection Project Jefferson Lakefront	October 7, 1987
EA #102. Lake Pontchartrain and Vicinity Hurricane Protection – 17th Street Canal Hurricane Protection	Finding of No Significant Impact (FONSI) March 12, 1990
EA #163. Lake Pontchartrain and Vicinity Hurricane Protection – Alternate Borrow Area for Jefferson Parish Lakefront Levee, Reach III	FONSI August 30, 1990
EA #169. Lake Pontchartrain, Louisiana, and Vicinity, Hurricane Protection Project, East Jefferson Parish Levee System, Jefferson Parish, Louisiana, Gap Closure	FONSI July 2, 1992
EA #279. Lake Pontchartrain Lakefront, Breakwaters, Pump Stations 2 and 3	FONSI October 30, 1998
EA #282. Lake Pontchartrain and Vicinity, Jefferson Parish Lakefront Levee, Landside Runoff Control: Alternate Borrow	FONSI October 2, 1998

US Army Corps of Engineers

IER 1 – LPV, St. Charles

IER Duration: March 2007 to June 2007

- **LPV 04 Levee - Reach 1A, 1B & 2A**
- **LPV 05 Levee - Reach 2B**
- **LPV 06a Bonnet Carre Floodwall**
- **LPV 06b Shell Pipeline Floodwall**
- **LPV 06c Good Hope Floodwall**
- **LPV 06d Koch - Gateway Floodwall**
- **LPV 06e Floodwall Under I-31**
- **LPV 6f Canadian National Railroad Gate**
- **LPV 07a Bayou Trepagnier Drainage Structure**
- **LPV 07b Cross Bayou Drainage Structure**
- **LPV 07c St. Rose Drainage Structure**
- **LPV 07d Almedia Drainage Structure**
- **LPV 07e Walker Drainage Structure**



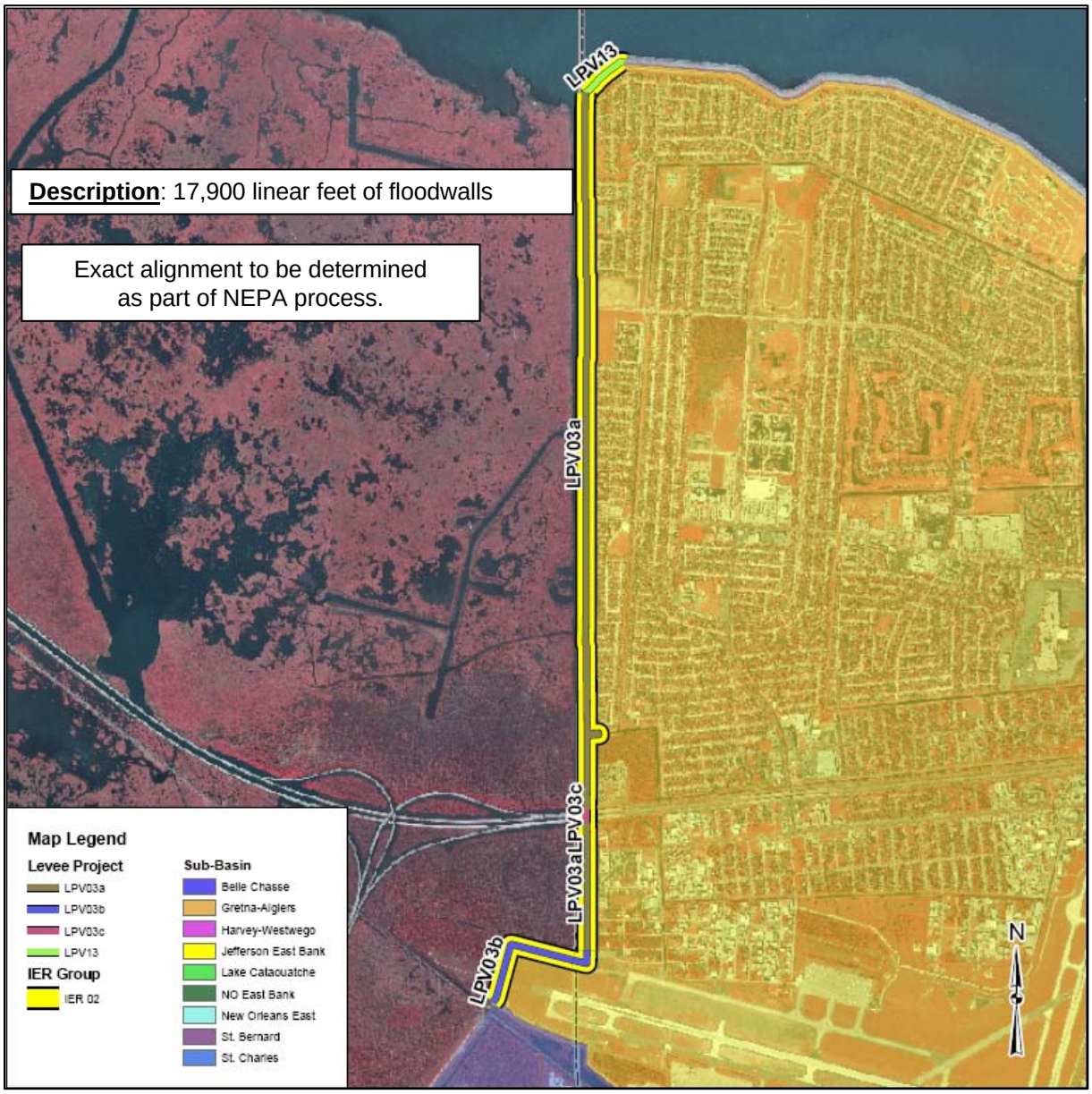
All dates are approximate

US Army Corps of Engineers

IER 2 – LPV, Jefferson East Bank

IER Duration: March 2007 to January 2008

- **LPV 03 West Return Floodwall**
- **LPV 13 Recurve I-Wall in Northwest Kenner**

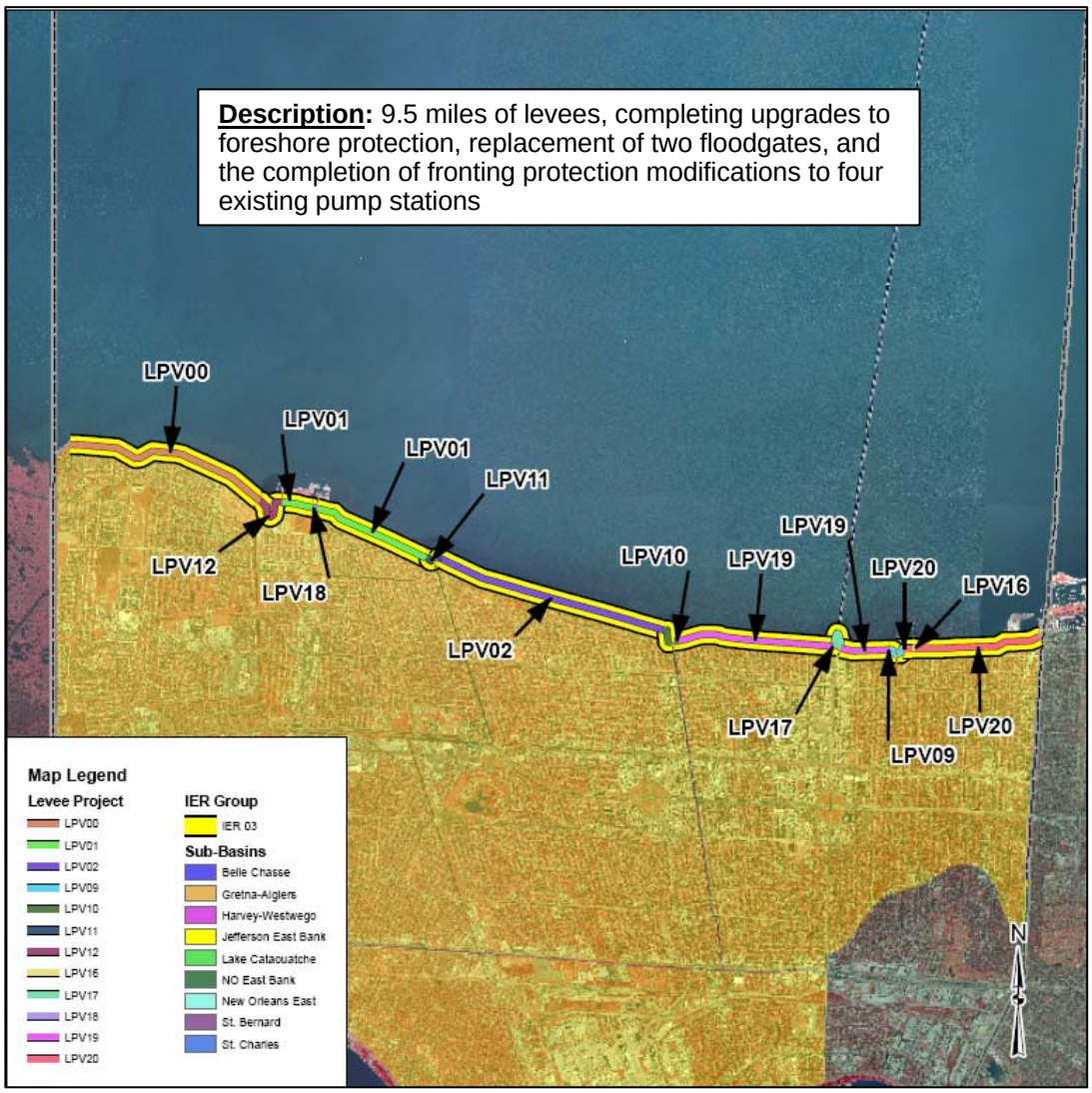


All dates are approximate

IER 3 – LPV, Jefferson East Bank

IER Duration: March 2007 to August 2007

- **LPV 16 Floodwall and Gate at Bonnabel Boat Launch**
- **LPV 17 Bridge Abutment and Floodwall Tie-ins at Causeway Bridge**
- **LPV 18 Floodwall and Gate at Williams Blvd. Boat Launch**
- **LPV 00 Reach 1 Lakefront Levee**
- **LPV 01 Reach 2 Lakefront Levee**
- **LPV 02 Reach 3 Lakefront Levee**
- **LPV 19 Reach 4 Lakefront Levee**
- **LPV 20 Reach 5 Lakefront Levee**
- **LPV 9 Pumping Station #1 (Bonnabel) Modification, Fronting Protection, Positive Cutoff, and Floodwall Tie-ins**
- **LPV 10 Pumping Station #2 (Suburban) Modification, Fronting Protection, Positive Cutoff, and Floodwall Tie-ins**
- **LPV 11 Pumping Station #3 (Elmwood) Modification, Fronting Protection, Positive Cutoff, and Floodwall Tie-ins**
- **LPV 12 Pumping Station #4 (Duncan) Modification, Fronting Protection, Positive Cutoff, and Floodwall Tie-ins**



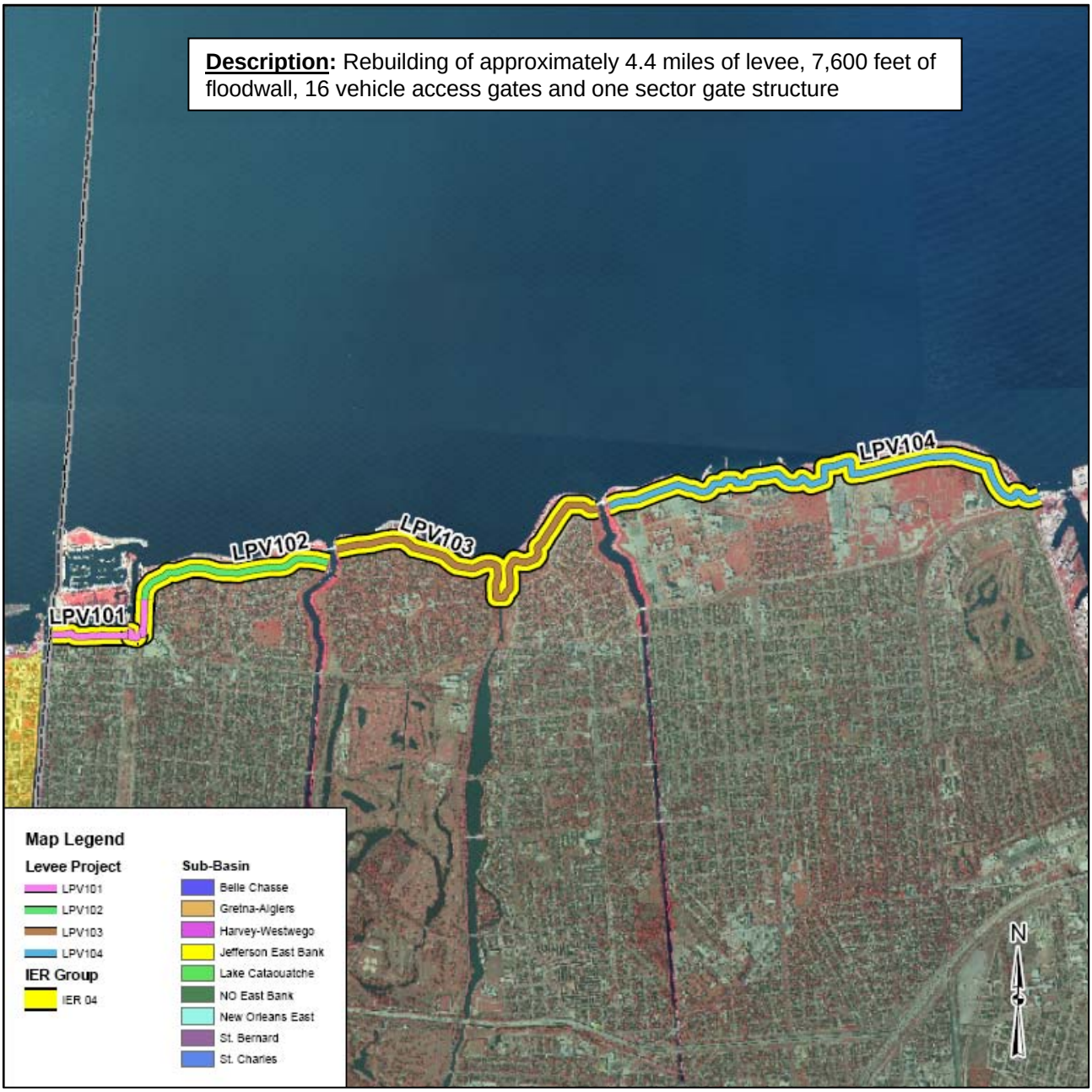
All dates are approximate

US Army Corps of Engineers

IER 4 – LPV, Orleans East Bank

IER Duration: March 2007 to December 2007

- **LPV 101 Lakefront Levee – Orleans East Bank – 17th St. Canal to Topaz**
- **LPV 102 Lakefront Levee – Orleans East Bank – Topaz to Orleans Canal**
- **LPV 103 Lakefront Levee – Orleans East Bank – Orleans Canal to London Ave.**
- **LPV 104 Lakefront Levee – Orleans East Bank – London Ave. Canal to IHNC**

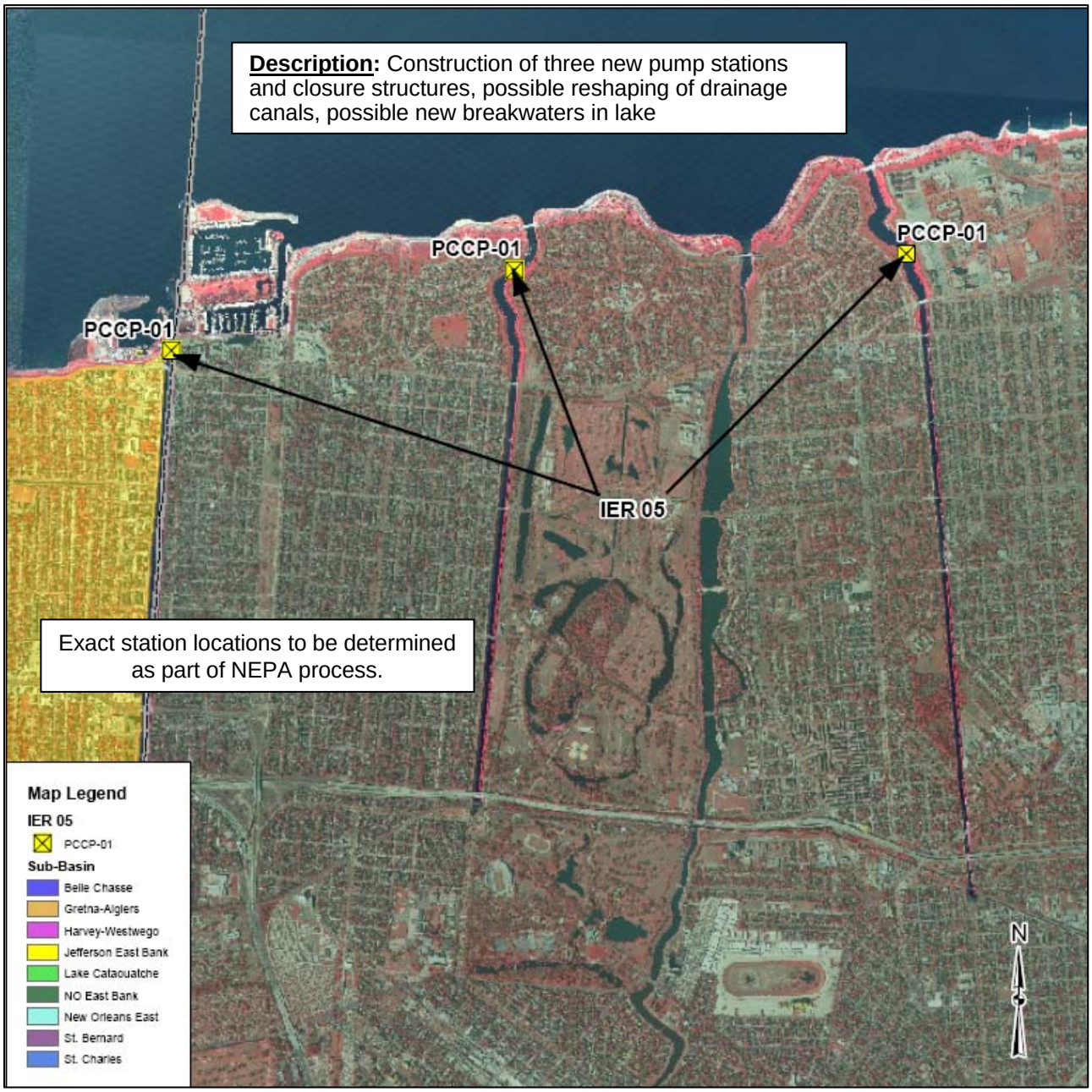


All dates are approximate

IER 5 – LPV, Orleans East Bank

IER Duration: March 2007 to May 2008

- **PCCP-01 Outfall Canal Closures and Permanent Pump Station**



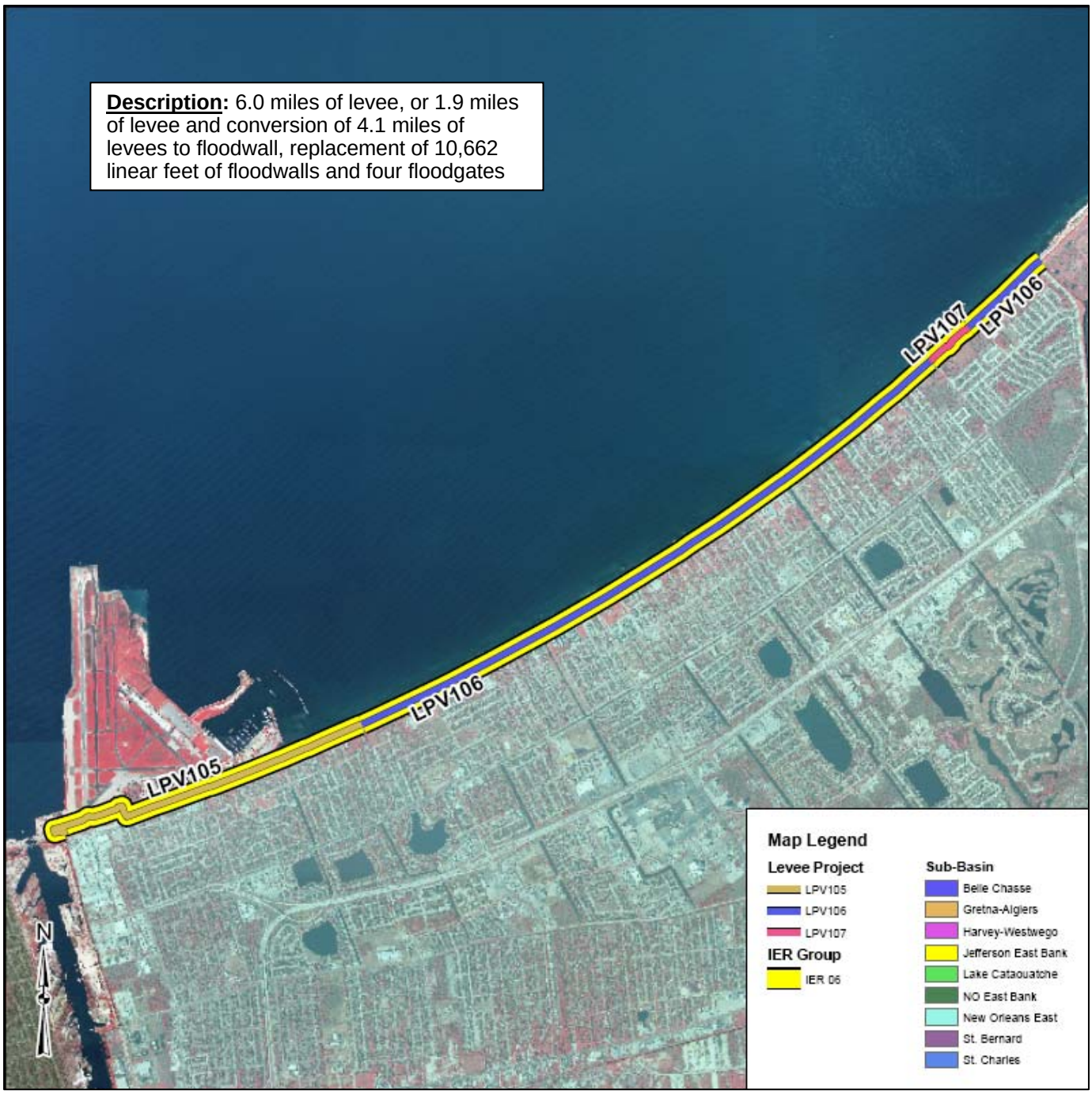
All dates are approximate

US Army Corps of Engineers

IER 6 – LPV, New Orleans East

IER Duration: March 2007 to August 2007

- **LPV 105 Lakefront Airport Floodwalls**
- **LPV 106 Citrus Lakefront Levee**
- **LPV 107 Lincoln Beach Floodwall**



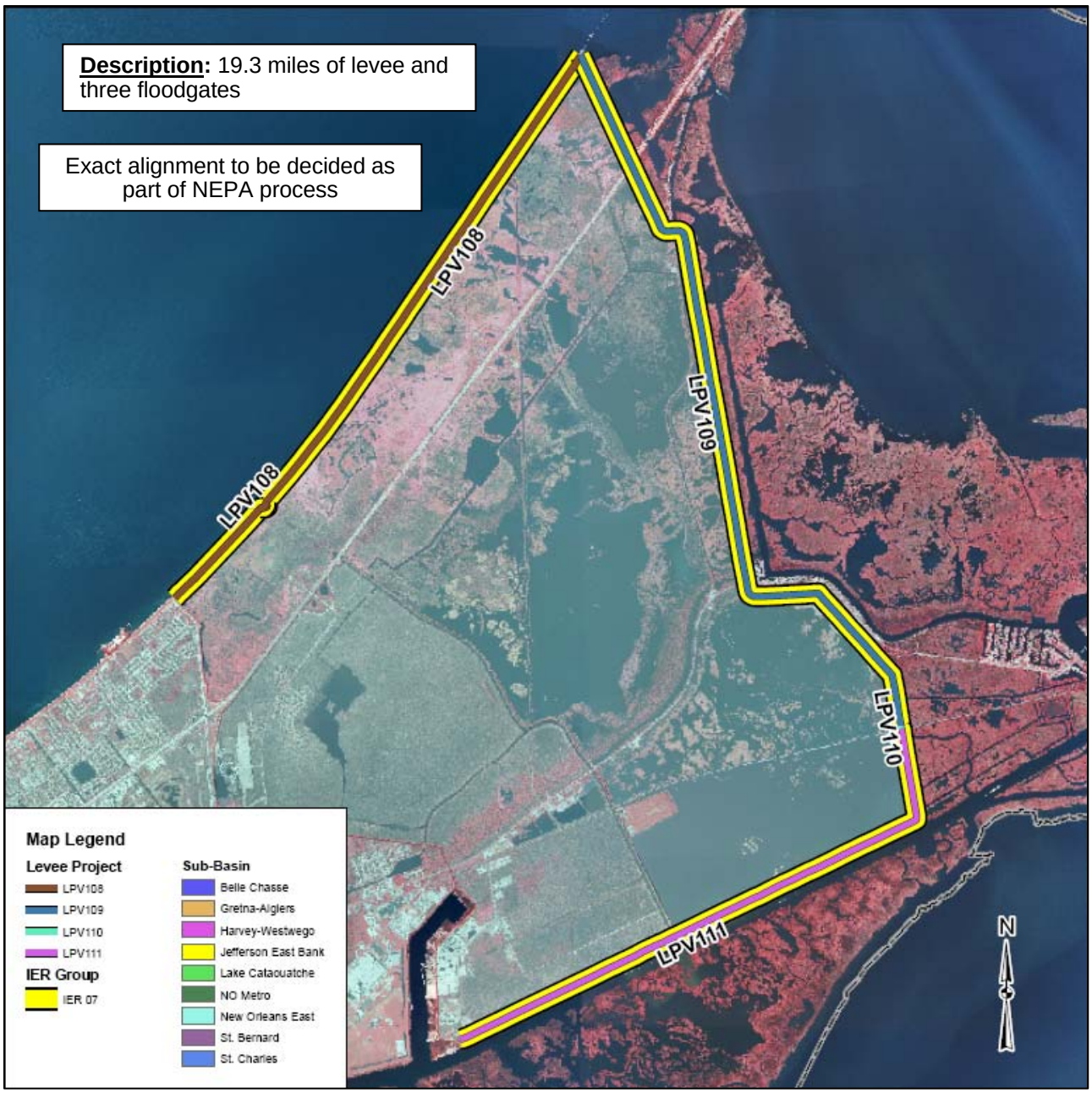
All dates are approximate

US Army Corps of Engineers

IER 7 – LPV, New Orleans East

IER Duration: March 2007 to January 2008

- **LPV 108 New Orleans East Lakefront Levee**
- **LPV 109 New Orleans East Levee – Southpoint to CSX Railroad**
- **LPV 110 New Orleans East Levee – CSX Railroad Gate**
- **LPV 111 New Orleans East Back Levee – CSX Railroad to Michoud Canal**



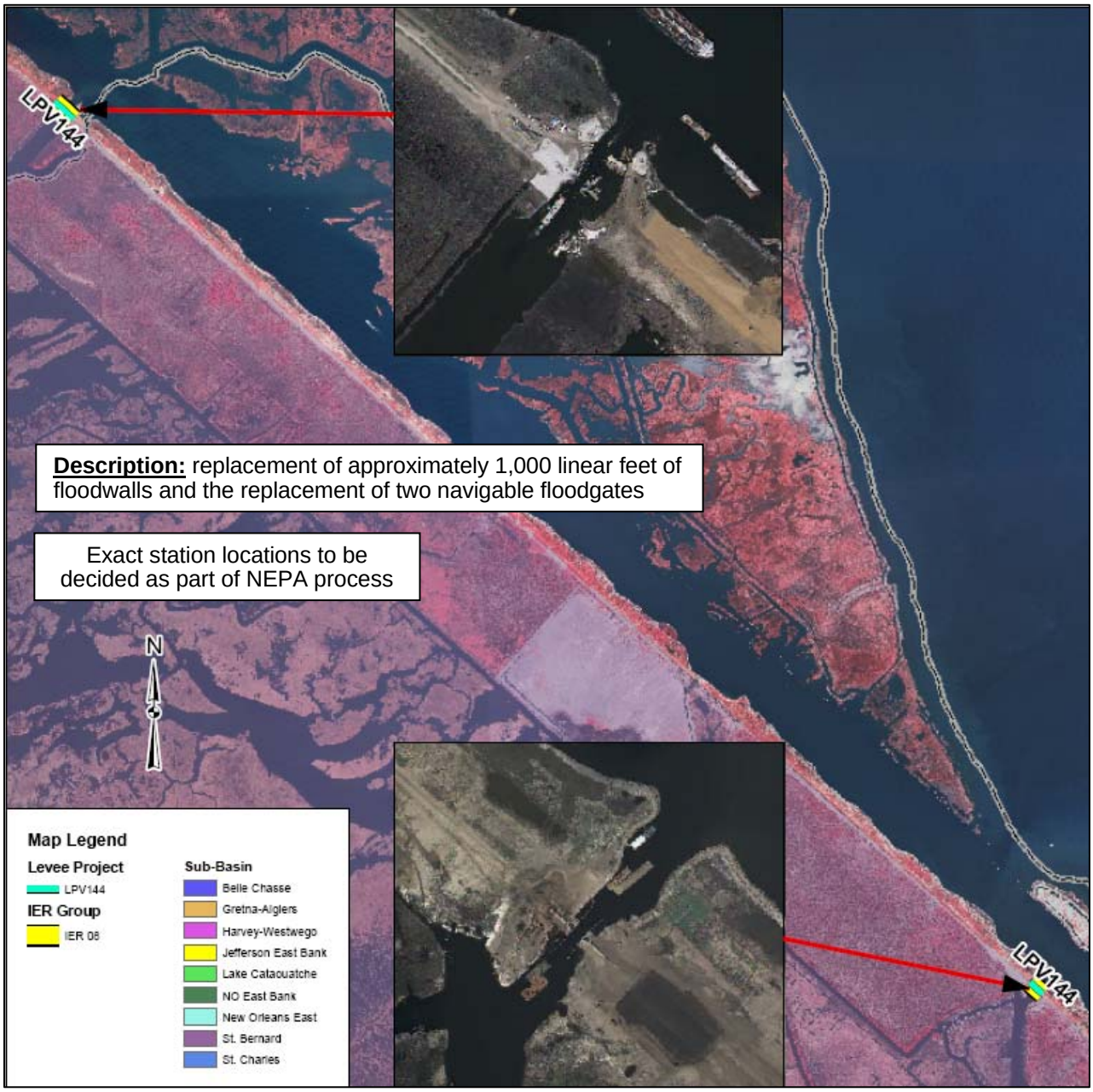
All dates are approximate

US Army Corps of Engineers

IER 8 – LPV, Chalmette Loop

IER Duration: March 2007 to December 2007

- **LPV 144 Chalmette Loop Levee – Bayou Bienvenue and Bayou Dupre Floodgate Structures**

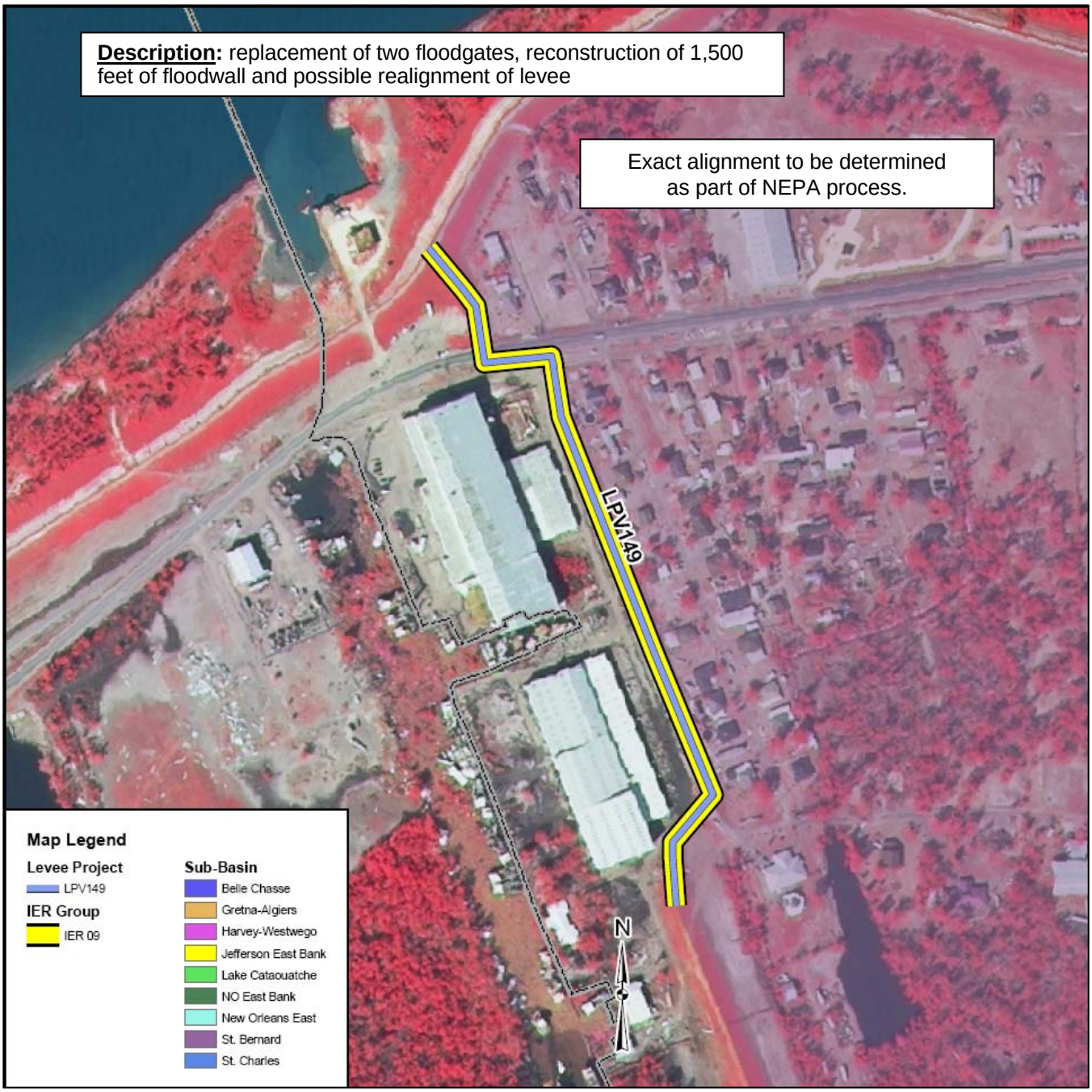


All dates are approximate

IER 9 – LPV, Chalmette Loop

IER Duration: March 2007 to December 2007

- **LPV 149 Chalmette Loop Levee- Verret to Caernarvon Structures**



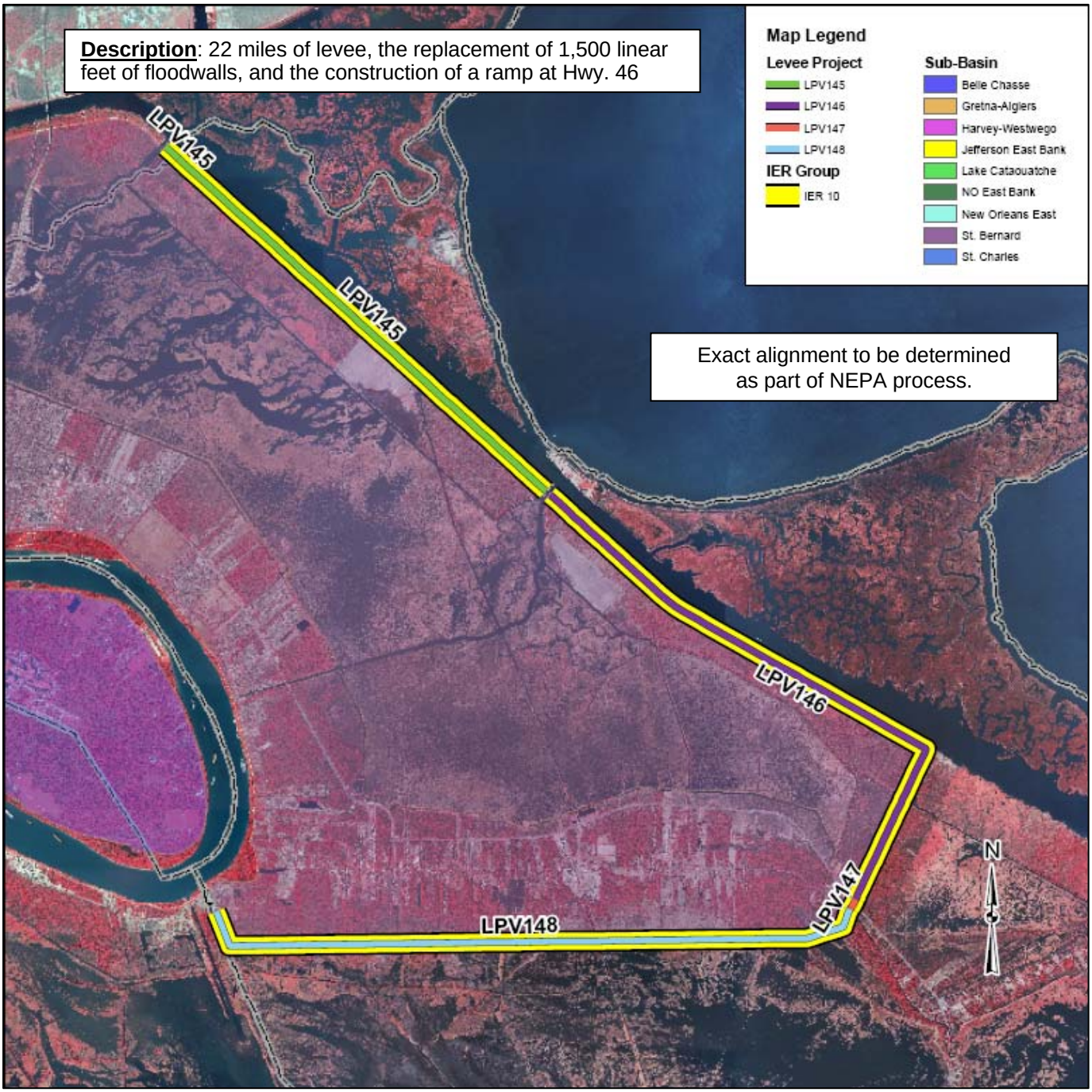
All dates are approximate

US Army Corps of Engineers

IER 10 – LPV, Chalmette Loop

IER Duration: March 2007 to August 2007

- **LPV 145 Chalmette Loop Levee – Bayou Bienvenue to Bayou Dupre**
- **LPV 146 Chalmette Loop Levee- Bayou Dupre to Hwy 46**
- **LPV 147 Chalmette Loop Levee – Bayou Road Floodgate**
- **LPV 148 Chalmette Loop Levee- Verret to Caernarvon**

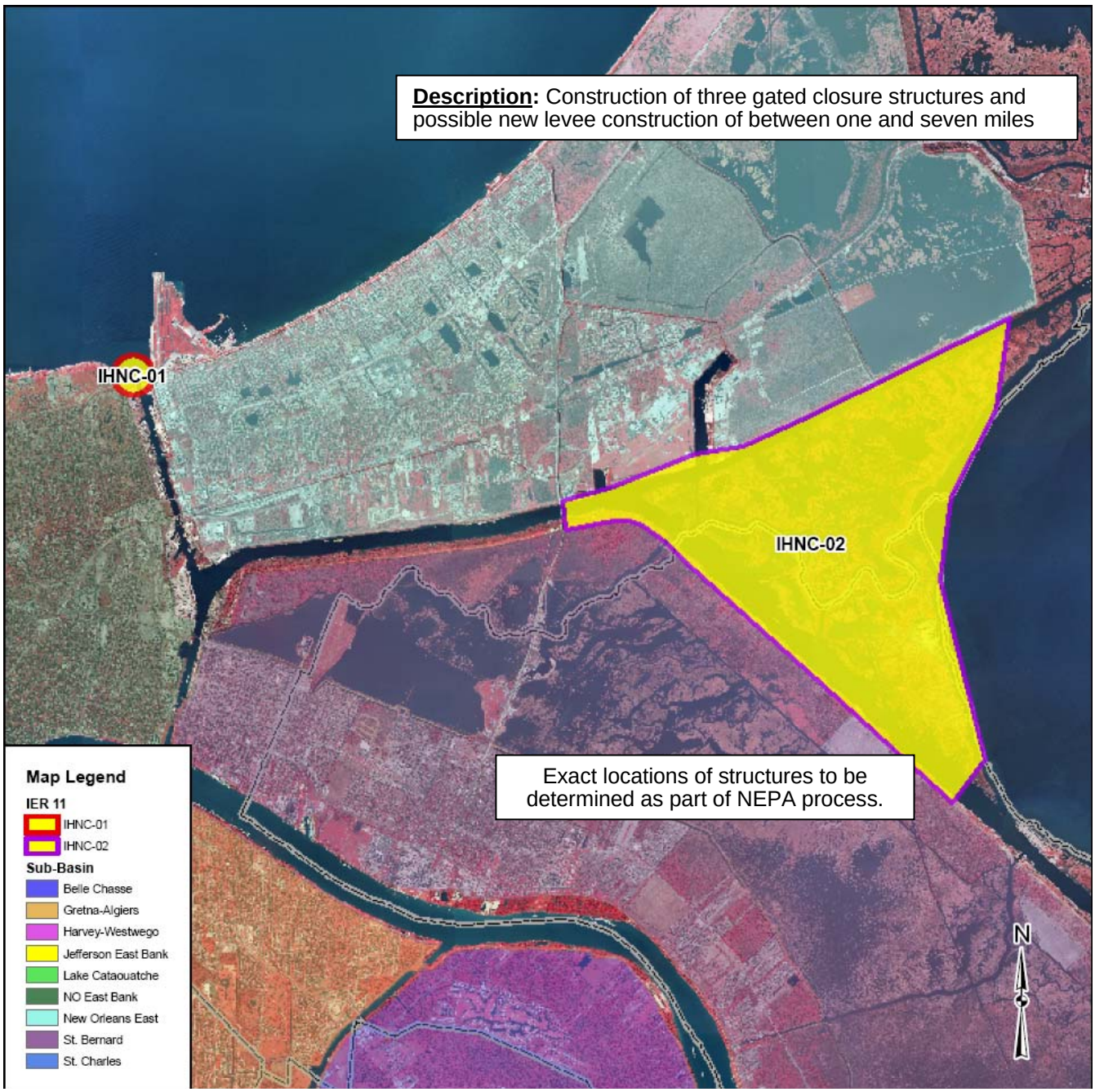


All dates are approximate

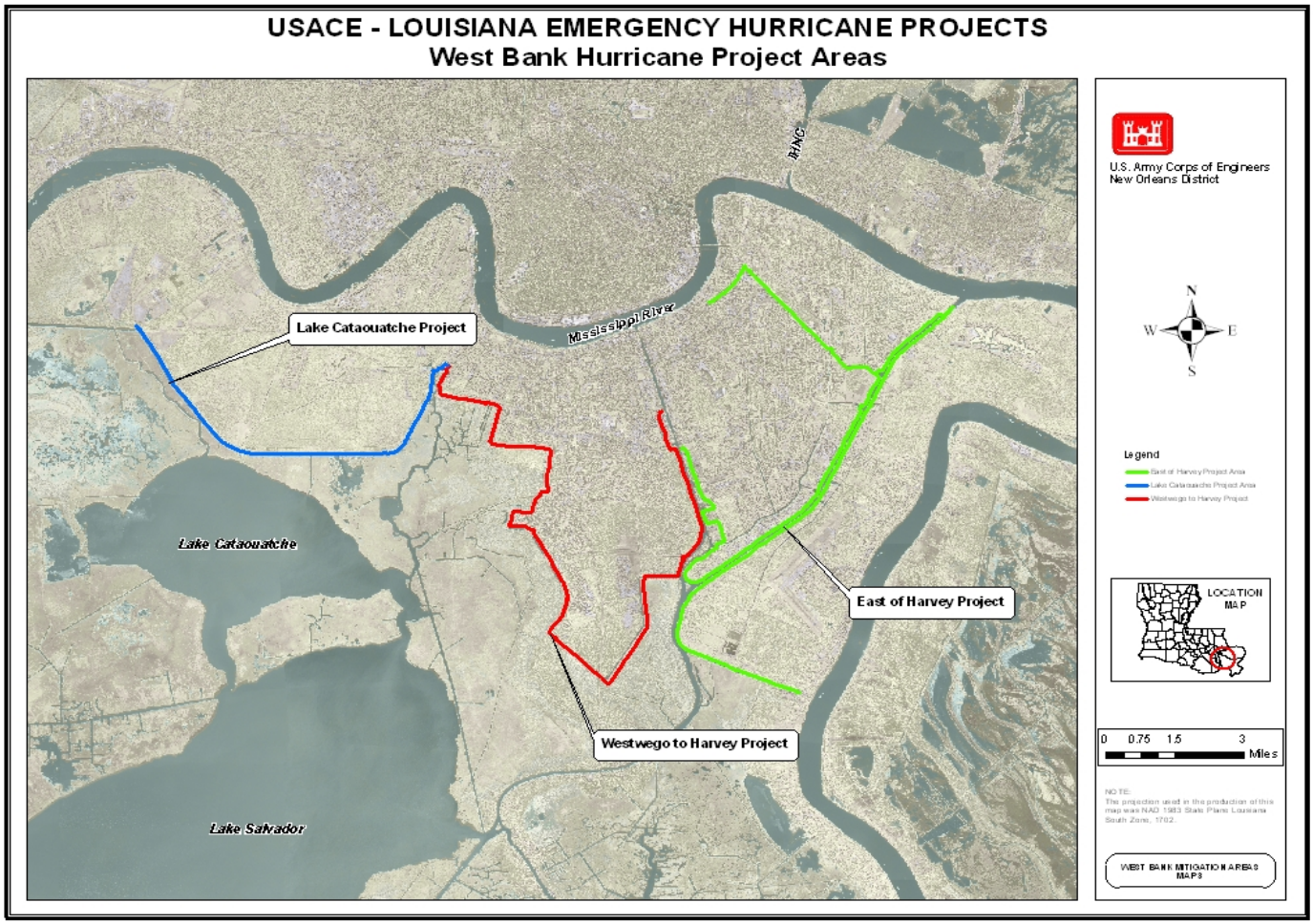
IER 11 – LPV, Inner Harbor Navigational Canal Navigable Floodgates

IER Duration: March 2007 to May 2008

- **IHNC-01 IHNC at Seabrook Floodgate Structure**
- **IHNC-02 GIWW Floodgate Structure**



All dates are approximate


USACE - LOUISIANA EMERGENCY HURRICANE PROJECTS
West Bank Hurricane Project Areas
Lake Cataouatche Project
Mississippi River
Lake Cataouatche
East of Harvey Project
Westwego to Harvey Project
Lake Salvador
U.S. Army Corps of Engineers
New Orleans District
N
W
E
S
Legend
LOCATION MAP
0 0.75 1.5 3
Miles
WEST BANK MITIGATION AREAS MAPS

US Army Corps of Engineers

WEST BANK AND VICINITY
HURRICANE PROTECTION PROJECT
PROJECT FACT SHEET

Authority: The West Bank and Vicinity project was authorized under two Water Resources Development Acts (WRDA). The Westwego to Harvey Canal Hurricane Protection Project was authorized by the WRDA of 1986 (PL 99-662). The WRDA of 1996 (PL 104-303) modified the project and added the Lake Cataouatche Project and the East of Harvey Canal Project. WRDA 1999 (PL 106-53) combined the three projects into one project under the current name. The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act, 2006 (3rd Supplemental - PL 109-148) appropriated funds to restore and repair portions of the levee already built, and to accelerate completion of the unconstructed portions of the project. An additional Emergency Supplemental Appropriation for Defense, the Global War on Terror, and Hurricane Recovery (4th Supplemental - PL 109-234) appropriated funds to raise levee heights where necessary and otherwise enhance the existing project to provide the levels of protection necessary to achieve the certification required for participation in the National Flood Insurance Program under the base flood elevations, to armor critical elements of the system, and to reinforce or replace floodwalls, as necessary.

Description: The project provides 66 miles of hurricane protection to an urban area from Lake Cataouatche to Oakville, Louisiana, in the vicinity of New Orleans, Louisiana. The project area is an area of high-density residential and commercial development. Projects consist of a continuous system of earthen levees, floodwalls, and a sector gate.

US Army Corps of Engineers

WEST BANK AND VICINITY HURRICANE PROTECTION PROJECT FACT SHEET (continued)

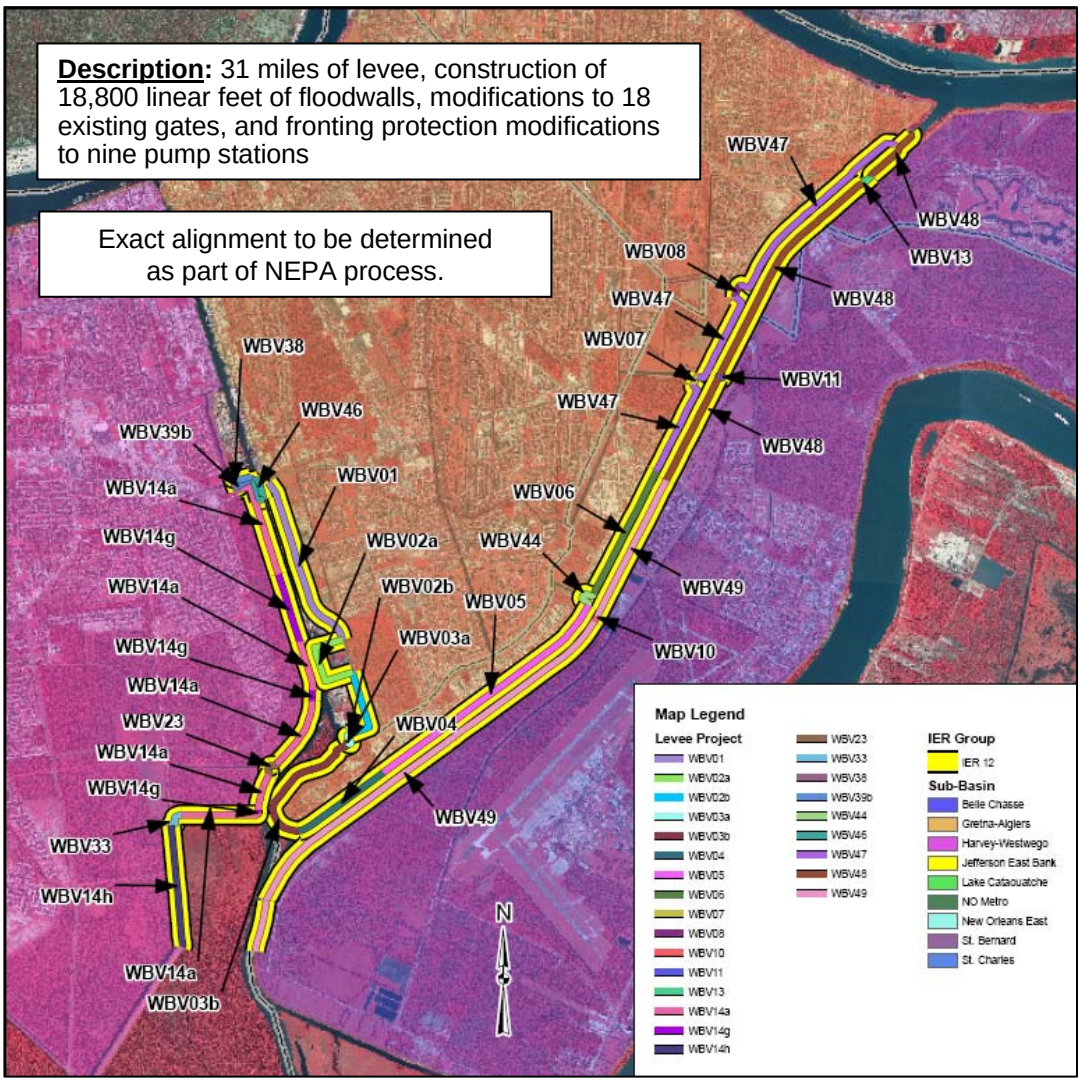
Existing Environmental Compliance:

Final EIS West Bank Hurricane Protection, Westwego to Harvey Canal	Record of Decision March 1989
Final EIS West Bank Hurricane Protection, East of Harvey Canal	Record of Decision September 1998
Final EIS West Bank Hurricane Protection, Lake Cataouatche	Record of Decision September 1998
EA #121 West Bank Westwego to Harvey Changes to EIS	Finding of No Significant Impacts (FONSI) March 15, 1990
EA#136 West Bank Additional Borrow Site between Hwy 45 and Estelle PS	FONSI June 3, 1991
EA #165 Westwego to Harvey Canal Disposal Site	FONSI March 20, 1992
EA #198 Westwego to Harvey Alternative Borrow Sources	FONSI Jan 12, 1994
EA #320 West Bank Hurricane Protection Features	FONSI August 30, 2000
EA #306: West Bank Hurricane Protection Harvey Canal Sector Gate	FONSI May 16, 2002
EA #337 Algiers Canal Alternative Borrow Site	FONSI May 5, 2003
EA #373 Lake Cataouatche Levee Enlargement	FONSI June 19, 2003
EA #306A Supplement to EA 306 Harvey Canal Sector Gate	FONSI February 22, 2005

IER 12: WBV, Multi Sub Basin: Belle Chasse, Gretna-Algiers, Harvey-Westwego

IER Duration: March 2007 to May 2008

- **WBV 10 Belle Chasse PS #1 (Plaquemines PS) Fronting Protection and Modifications**
- **WBV 11 Belle Chasse PS #2 Fronting Protection and Modifications**
- **WBV 13 S&WB PS #11 Fronting Protection and Modification**
- **WBV 48 Belle Chase Hwy to Algiers Lock (East)**
- **WBV 49 Hero Levee to Belle Chase Hwy (East)**
- **WBV 38 Cousins PS**
- **WBV 39b Cousins Discharge Channel Floodwalls**
- **WBV 46 Sector gate complex**
- **WBV 47 Algiers Lock to Belle Chasse Hwy (West)**
- **WBV 04 Belle Chasse Hwy to Hero Cutoff – Reach 1**
- **WBV 05 Belle Chase Hwy to Hero Cutoff**
- **WBV 06 Belle Chase Hwy to Hero Cutoff – Reach 3&4**
- **WBV 44 Whitney Barataria PS Fronting Protection and Modification**
- **WBV 07 Planters PS Fronting Protection and Modifications**
- **WBV 08 S&WB PS#13 Fronting Protection and Modifications**
- **WBV 01 Sector Gate to Boomtown Floodwall**
- **WBV 02a Boomtown Floodwalls**
- **WBV 02b Boomtown to Hero PS Floodwalls**
- **WBV 03a Hero PS to Algiers Canal Floodwall**
- **WBV 03b Hero PS to Algiers Canal Floodwall**
- **WBV 14a Estelle PS to Vicinity of Lapalco Overpass**
- **WBV 14g Estelle PS Vicinity Floodwalls**
- **WBV 23 New Estelle PS Fronting Protection**
- **WBV 33 Old Estelle PS Fronting Protection**



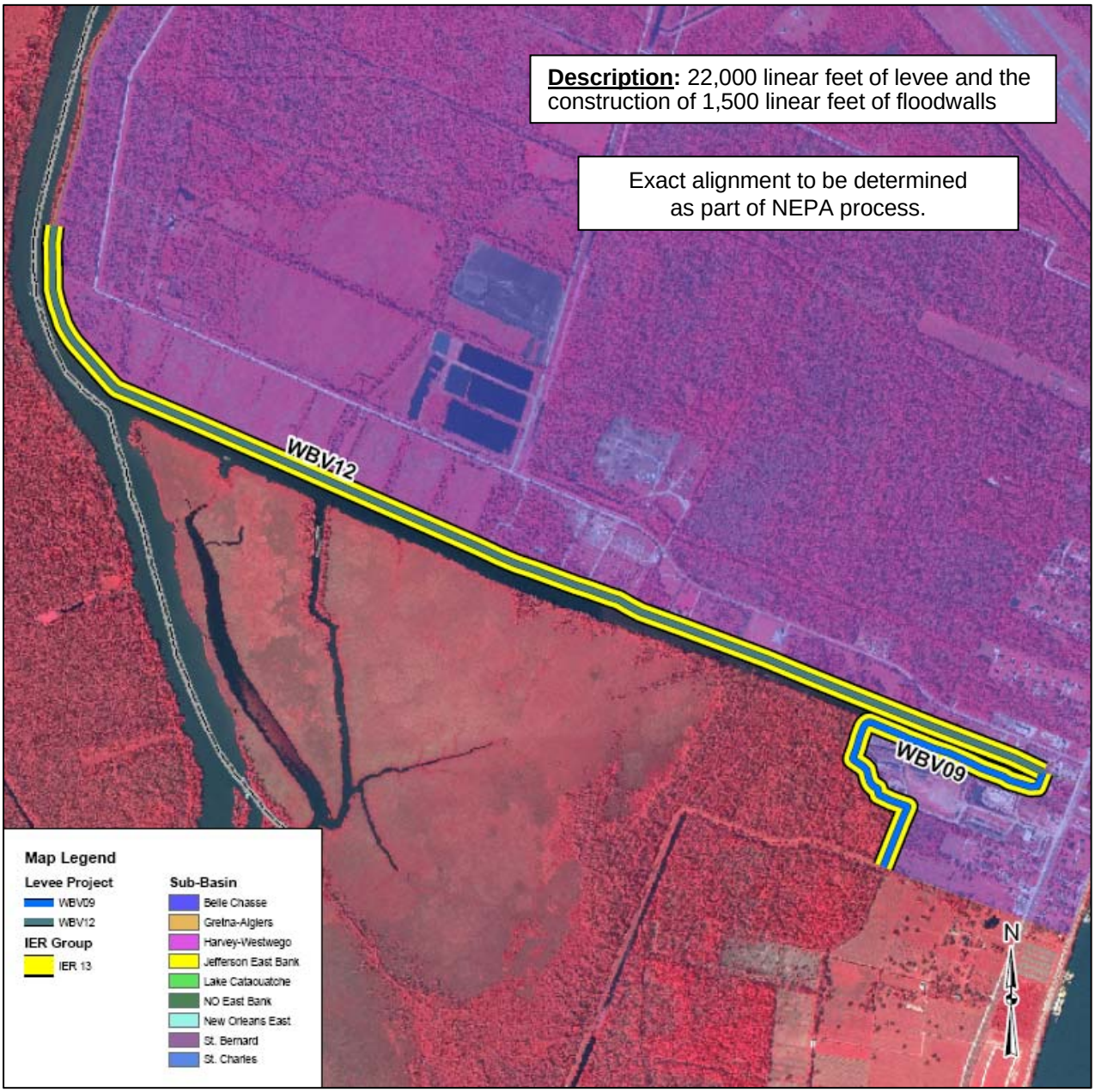
All dates are approximate

US Army Corps of Engineers

IER 13 – WBV, Belle Chasse

IER Duration: March 2007 to September 2007

- **WBV 12 Hero Canal – Reach 1**
- **WBV 09 Hero Canal to Oakville**



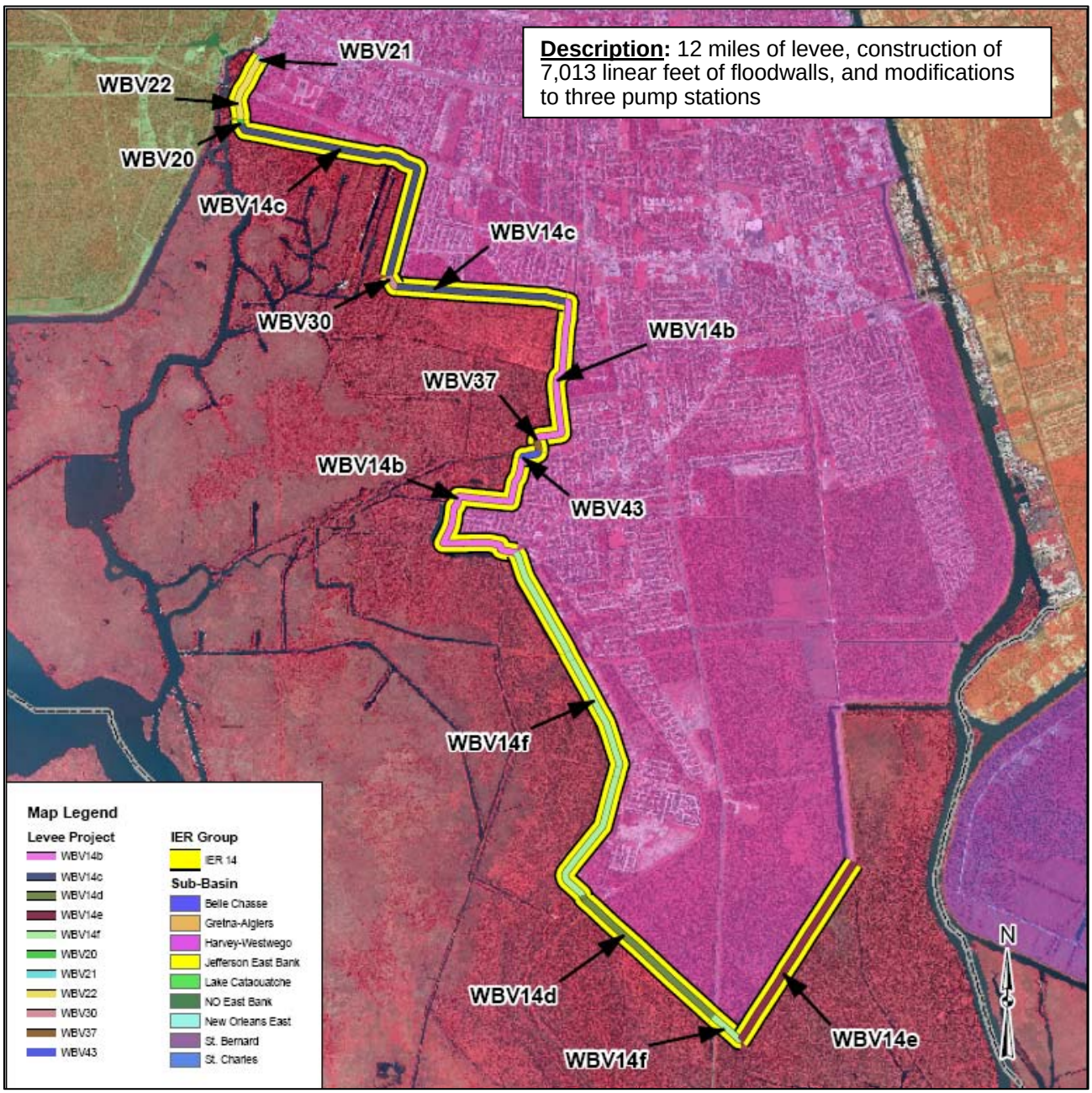
All dates are approximate

IER 14: WBV, Harvey-Westwego

IER Duration: March 2007 to September 2007

US Army Corps of Engineers

- **WBV 30 Westminster PS Fronting**
- **WBV 37 Ames PS Fronting Protection**
- **WBV 43 Mt. Kennedy PS Fronting Protection**
- **WBV 14b Orleans Village to Hwy 45 Levee**
- **WBV 14c New Westwego PS to Orleans Village**
- **WBV 14d V-line Floodwall**
- **WBV 14e V-line Levee east of Vertex**
- **WBV 14f Hwy 45 Levee**
- **WBV 20 New Westwego PS Fronting Protection**
- **WBV 21 Old Westwego PS Fronting Protection**



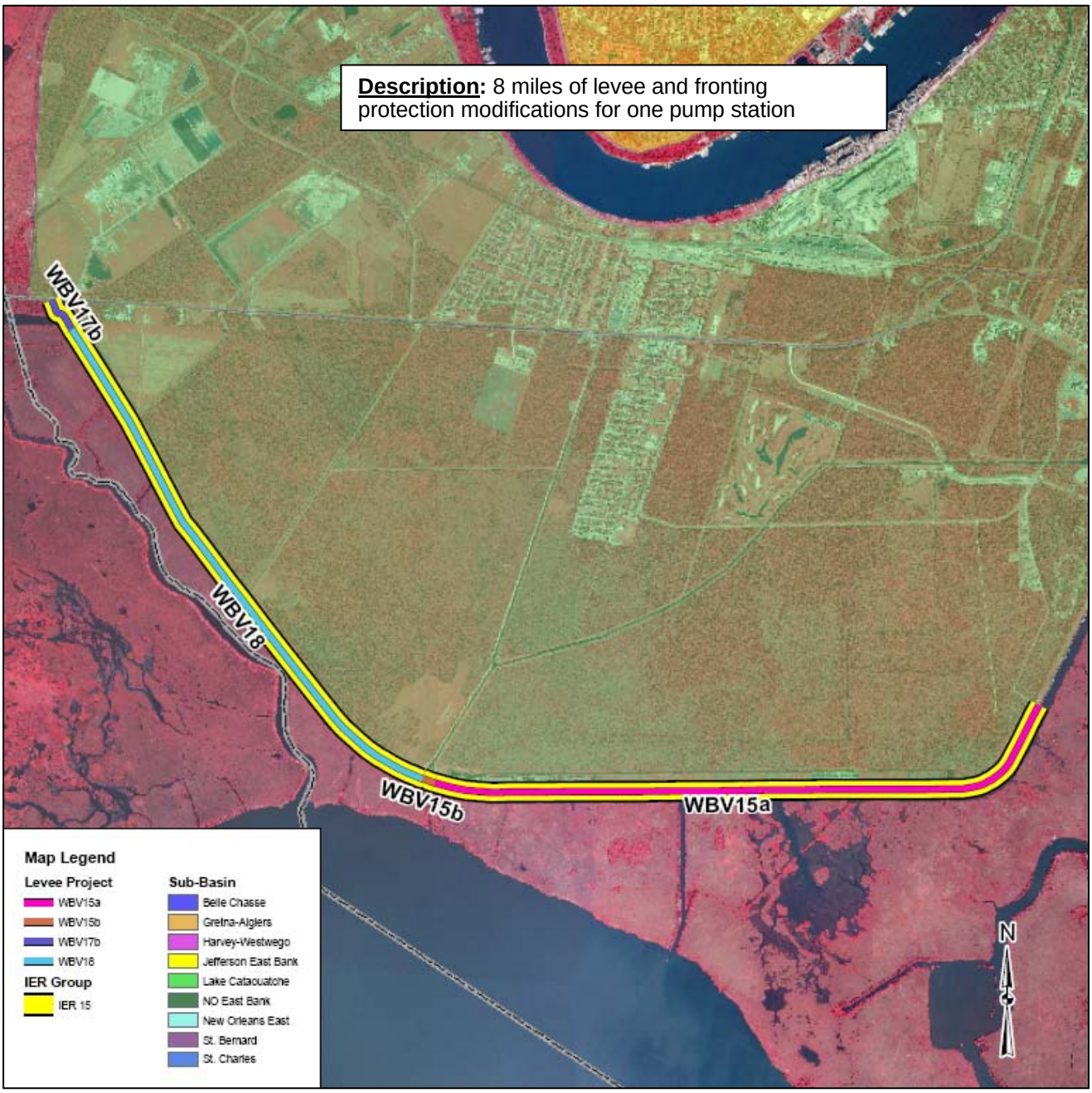
All dates are approximate

US Army Corps of Engineers

IER 15 – WBV, Lake Cataouatche

IER Duration: March 2007 to August 2007

- **WBV 15a Lake Cataouatche PS to Segnette State Park**
- **WBV 15b Lake Cataouatche PS Fronting Protection**
- **WBV 17b Station 160+00 to Hwy 90**
- **WBV 18 Hwy 90 to Lake Cataouatche PS**



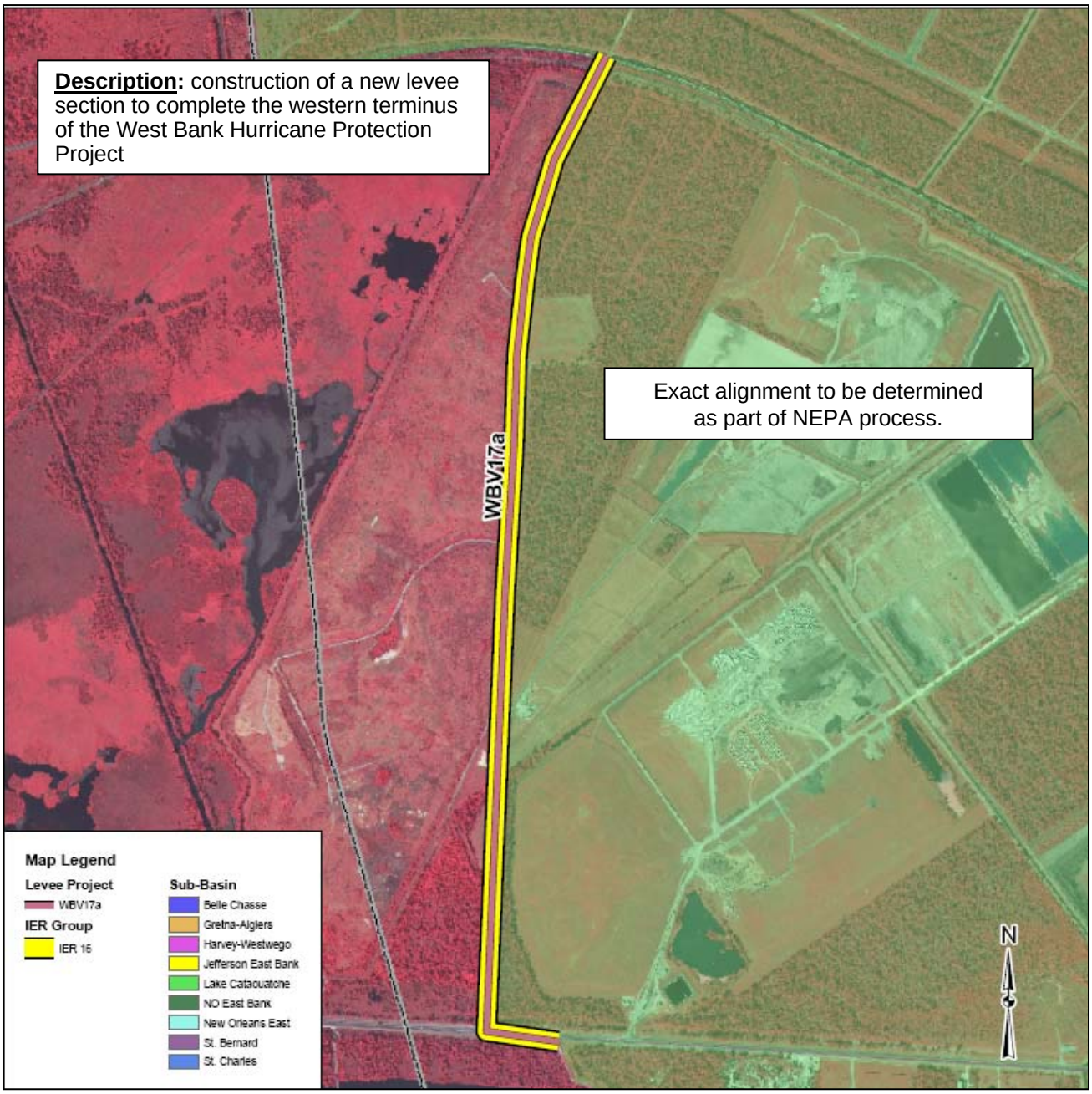
All dates are approximate

US Army Corps of Engineers

IER 16 – WBV, Lake Cataouatche

IER Duration: March 2007 to March 2008

- **WBV 17a Western Tie-in**



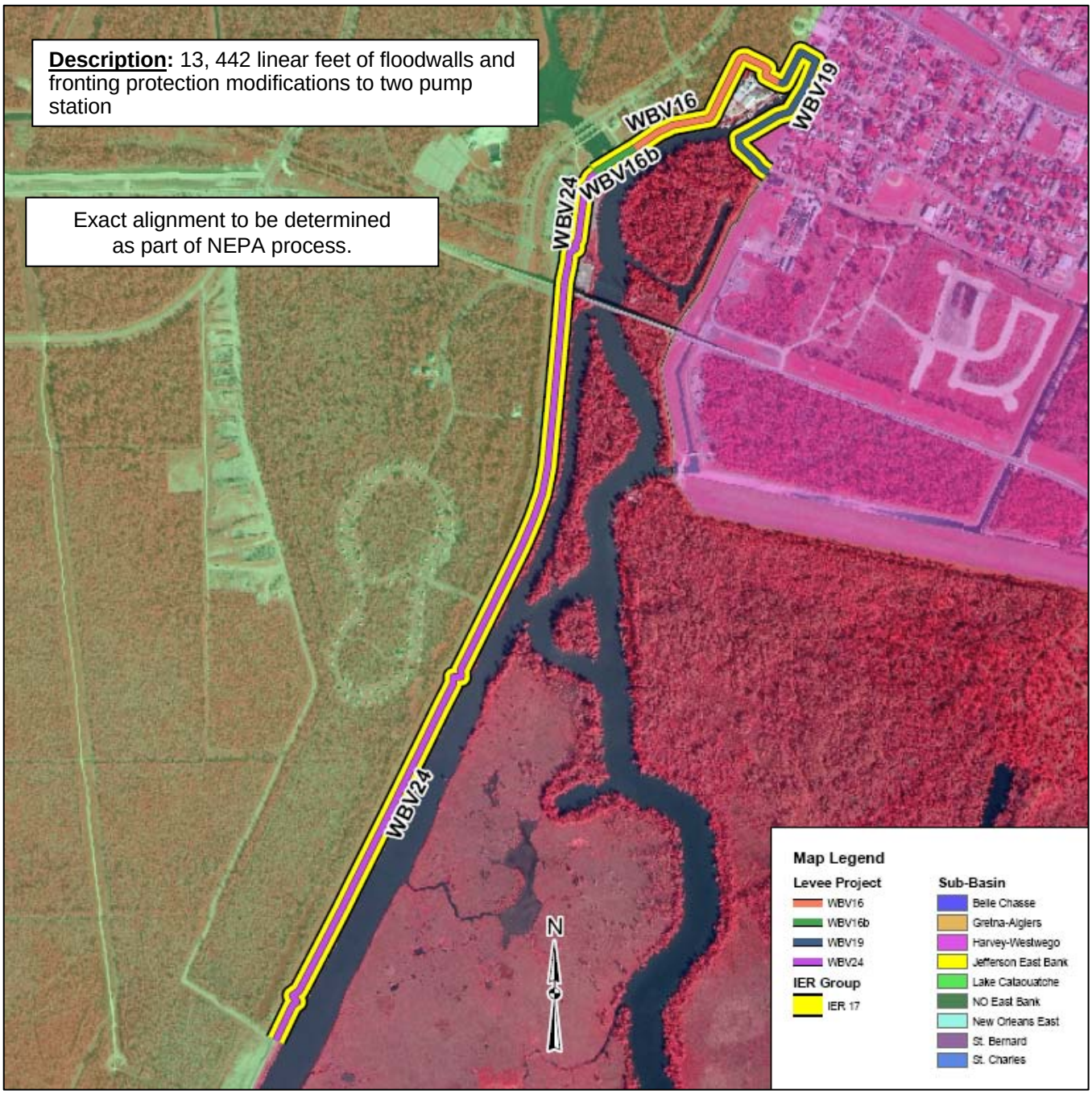
All dates are approximate

US Army Corps of Engineers

IER 17 – WBV, Lake Cataouatche

IER Duration: March 2007 to September 2007

- **WPV 16 Segnette PS to New Westwego PS Floodwall**
- **WBV 16b Segnette PS Fronting Protection and Modification**
- **WBV 19 Company Canal Floodwall**
- **WBV 24 Segnette State Park Floodwall**



All dates are approximate

US Army Corps of Engineers

BORROW MATERIAL PROJECT FACT SHEET

Authority: The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act, 2006 (3rd Supplemental - PL 109-148) appropriated funds to restore and repair portions of the Lake Pontchartrain and Vicinity, LA, Hurricane Protection Project and the West Bank and Vicinity Hurricane Protection Project levees already built, and to accelerate completion of the un-built portions of the projects. Funds were also appropriated for the repair of non-federal levees in the four parish area that compromises the New Orleans metropolitan area. An additional Emergency Supplemental Appropriation for Defense, the Global War on Terror, and Hurricane Recovery (4th Supplemental - PL 109-234) appropriated funds to raise levee heights where necessary and otherwise enhance the existing project to provide the levels of protection necessary to achieve the certification required for participation in the National Flood Insurance Program under the base flood elevations for the Lake Pontchartrain and Vicinity, LA, Hurricane Protection Project and the West Bank and Vicinity Hurricane Protection Project. Authorization was also granted for raising non-Federal levees in Plaquemines Parish and incorporating them into the New Orleans to Venice Hurricane Protection Project. Additionally, funding was provided for repairing non-Federal levees in Terrebonne parish, LA.

Description: A total of approximately 230 miles of levee work is being undertaken as a result of the 3rd and 4th Supplemental Funding Appropriations Acts. Current estimates are that approximately 75 million cubic yards of clay material will be required to complete this work. The amount of material needed is expected to continue to rise as designs are finalized, with some estimates showing that over 100 million cubic yards of material may be required to complete the work.

Based upon a standard design depth of 20 feet for a pit, we estimate that a minimum of 2,475 acres of land will be required to supply 75 million yards of material. If borrow needs reach the 100 million yard level, a total of 3,300 acres of land could be impacted. Since October 2005, approximately five million cubic yards of material has been mined and placed on the levees in the New Orleans metropolitan area.

It is the intent of the USACE to avoid wetland impacts, but as we move into the construction phase for many of these projects there may be some unavoidable impacts to wetlands. Indirect impacts associated with the borrow effort may result in entire urban areas being changed from current uses (residential, agricultural, etc) into open water pits. Cumulative impacts as a result of this effort are going to occur as the USACE takes developable land out of hands of citizens and developers and off the local tax rolls.

Existing Environmental Compliance: There is no current environmental compliance for the future borrow work. It is expected that a series of Interim Environmental Documents would be written to cover groups of borrow areas as they are identified.

US Army Corps of Engineers

IER 18 – Government-furnished Borrow Material, Multiple Parishes

IER Duration: March 2007 to June 2007

IER 19 – Contractor-furnished Borrow Material, Multiple Parishes

IER Duration: March 2007 to August 2007

Additional IERs will be completed as needed as borrow sites are identified. This will be an ongoing effort through 2010.

Grouping of individual borrow sites into IERs will be determined as sites are identified. Construction award and duration is tied to the individual construction contract where the borrow will be used.

US Army Corps of Engineers

IER 20 – Lake Pontchartrain and Vicinity Hurricane Protection Project Mitigation Pool

IER Duration: June 2007 to October 2007

IER 21 – West Bank and Vicinity Hurricane Protection Project Mitigation Pool

IER Duration: June 2007 to October 2007

Additional IERs for mitigation will be completed as needed when unavoidable impacts are identified. This will be an ongoing effort through the life of the alternative arrangements.

Appendix B

Commander's Determinations of Imminent Threat

US Army Corps of Engineers

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO ATTENTION OF:

Planning, Programs and Project Management Division
Environmental Planning and Compliance Branch

MEMORANDUM FOR New Orleans District Staff and All Interested Parties

SUBJECT: Imminent Threat of Flooding Due to Damaged Hurricane Protection Works

1. On August 29, 2005, Hurricane Katrina caused major damage to the hurricane protection system in Orleans, St. Bernard, Plaquemines, and Jefferson Parishes, Louisiana. Since the storm, the U.S. Army Corps of Engineers has been working to restore the hurricane protection system to the level of protection provided prior to the 2005 hurricane season. These efforts have been conducted mainly under the authority provided by Public Law 84-99, Rehabilitation of Damaged Flood Control Works.

2. While significant progress is being made in restoring the hurricane protection system to its pre-storm conditions, the system remains vulnerable to tropical weather systems. It is imperative that all hurricane protection works are restored to their pre-storm conditions as soon as possible to protect life, health, property, and economic losses.

3. Engineering Regulation 200-2-2, Environmental Quality, Procedures for Implementing the National Environmental Policy Act (NEPA) provides for District commanders to respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses without first preparing specific documentation and following the procedural requirements of the NEPA. Engineering Regulation 500-1-1, Emergency Employment of Army and Other Resources - Civil Emergency Management Program, provides that emergency flood control activities performed under Public Law 84-99 are not subject to the NEPA documentation requirements if risk to life, health, property, or severe economic losses is imminent. This regulation defines imminent risk as a subjective, statistically supported evaluation of how quickly a threat scenario can develop, how likely that threat is to develop in a given geographical location, and how likely the threat will produce catastrophic consequences to life and improved property. Implicit in the timing aspect can be considerations of time or season or of known cyclical activities.

US Army Corps
of Engineers

4. Several words in the above definition are important in determining if there is an imminent threat to flooding within the four parishes listed above. The first is "subjective" which allows decision to be based on sound reasoning. The second and third are "statistically supported evaluation" and "how likely that threat is to develop in a given geographical location." Durin the past four hurricane seasons, New Orleans has had 13 tropical storms or hurricanes pass within 300 miles of the city (three in 2002, two in 2003, three in 2004, and five in 2005), an average of over three storms per hurricane season. The National Hurricane Center has been reporting for the past several years that we have entered a period of more active hurricane seasons. The next key phrase is "how likely the threat will produce catastrophic consequence life and improved property." Nothing demonstrates this better than Hurricane Rita in 2005. Hurricane Rita came ashore along the Louisiana/Texas state line, approximately 250 miles fro New Orleans, yet the impacts of the storm in the Metropolitan New Orleans area were significant. Without a complete rehabilitation of the hurricane protection system to pre-storm levels, the New Orleans area could again be faced with the potential for catastrophic damages from a storm making landfall hundreds of miles away. The last phrase of significance is "kno cyclical activities." As every day passes, the 2006 hurricane season gets closer, and the threat life and property increases without adequate storm surge protection.

5. Based upon applicable regulations and guidance, I consider the Metropolitan New Orleans Area to be under an imminent threat from flooding due to the damaged hurricane protection system. I consider this threat to remain in effect until the hurricane protection system is restor to its pre-storm condition. The District will continue preparing an environmental assessment the impacts associated with restoration of the hurricane protection system, and release the document for public and agency review and comment as soon as possible after all features of t restoration work are determined.

1/5/06
Date

Richard P. Wagenaar
Colonel, U.S. Army
District Engineer

US Army Corps of Engineers

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO ATTENTION OF:

Planning, Programs and Project Management Division
Environmental Planning and Compliance Branch

MEMORANDUM FOR New Orleans District Staff and All Interested Parties

SUBJECT: Imminent Threat of Flooding Due to Damaged non-Federal Levees

1. On August 29, 2005, Hurricane Katrina caused major damage to the hurricane protection system and non-Federal levees in Plaquemines Parish, Louisiana. Since the storm, the U.S. Army Corps of Engineers has been working to restore the hurricane protection systems in the area. These efforts have been conducted mainly under the authority provided by Public Law 84-99, Rehabilitation of Damaged Flood Control Works. The damages to the East Bank Breaches, Plaquemines Parish non-Federal Levees, Flood Protection Project are authorized under Public Law 109-148, Emergency Supplemental Appropriations Act to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza, 2006 (hereinafter "3rd Supplemental.) The 3rd Supplemental directed that the Corps use "Flood Control and Coastal Emergenc[y]" funds (related to Hurricane Katrina) provided in the 3rd Supplemental to restore works such as the breached sections of this non-Federal levee, to the level of protection they were designed, at full Federal expense. Public Law 84-99 and the relevant portions of the 3rd Supplemental are analogous as both relate to repairing damages to flood control works relating to flood control and coastal emergencies (FCCE).

2. The non-Federal levees on the east bank of Plaquemines Parish were severely breached in Braithwaite (1200-foot breach) and Scarsdale (combined 2400-foot breach), Louisiana. Catastrophic damage occurred to property and life and same remains in jeopardy given the current condition of these breached areas. Further, this non-Federal levee provides flood protection to LA Highway 39, which serves as the only hurricane evacuation route for the east bank of Plaquemines Parish. While some progress was made in placement of temporary materials into the breached areas by the National Guard and the Plaquemines Parish Government, those emergency works have proven ineffective. Combined with approximate 16 foot deep scour holes on both sides of the levee the system remains vulnerable to tropical weather systems. It is imperative that these breached sites be restored and rehabilitated to provide the level of protection for which they were designed as soon as possible to reduce imminent risk of life, health, property, or severe economic losses. This is evident in that this flood control levee continuously retains a constant head of 5 to 6 feet of water from the unprotected side.

3. Engineering Regulation (ER) 200-2-2, Environmental Quality, Procedures for Implementing the National Environmental Policy Act (NEPA), at paragraph 8, provides for district commanders to respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses without first preparing specific documentation and following the procedural requirements of the NEPA. This is such an emergency situation. ER 200-2-2, at paragraph 8, does not limit emergency actions but does state that emergency actions include FCCE activities pursuant to Public Law 84-99. Further, a direct analogy exists between the current situation and under Engineering Regulation 500-1-1, Emergency Employment of Army and Other Resources - Civil Emergency Management Program, which provides that emergency flood control activities performed under Public Law 84-99 are not subject to the

US Army Corps of Engineers

NEPA documentation requirements if risk to life, health, property, or severe economic losses is imminent. This regulation defines imminent risk as a subjective, statistically supported evaluation of how quickly a threat scenario can develop, how likely that threat is to develop in a given geographical location, and how likely the threat will produce catastrophic consequences to life and improved property. Implicit in the timing aspect can be considerations of time or season or of known cyclical activities.

4. Several words in the above definition are important in determining if there is an imminent threat to flooding within Plaquemines Parish. The first is "subjective" which allows a decision to be based on sound reasoning. The second and third are "statistically supported evaluation" and "how likely that threat is to develop in a given geographical location." During the past four hurricane seasons, New Orleans (and nearby Plaquemines Parish) has had 13 tropical storms or hurricanes pass within 300 miles of the city (three in 2002, two in 2003, three in 2004, and five in 2005), an average of over three storms per hurricane season. The National Hurricane Center has been reporting for the past several years that we have entered a period of more active hurricane seasons. The next key phrase is "how likely the threat will produce catastrophic consequences to life and improved property." Nothing demonstrates this better than Hurricane Rita in 2005. Hurricane Rita came ashore along the Louisiana/Texas state line, approximately 250 miles from New Orleans, yet the impacts of the storm in Plaquemines Parish were significant. Without a complete rehabilitation of the hurricane protection system to pre-storm or design levels of protection previously constructed, the Plaquemines Parish area could again be faced with the potential for catastrophic damages from a storm making landfall hundreds of miles away. The last phrase of significance is "known cyclical activities." As every day passes, the 2006 hurricane season gets closer, and the threat to life and property increases without adequate storm surge protection.

5. Based upon applicable regulations and guidance, I consider the Plaquemines Parish east bank breaches area to be under an imminent threat from flooding due to the damaged non-Federal levee system. I consider this threat to remain in effect until the non-Federal levee breached areas are restored to its design level of protection previously constructed condition. The District has prepared an draft environmental assessment of the impacts associated with restoration of the east bank breaches to the Plaquemines Parish non-Federal levees, and released the document for public and agency review and comment.

5-5-06
Date

Richard P. Wagenaar
Colonel, U.S. Army
District Commander

US Army Corps of Engineers

REPLY TO ATTENTION OF:

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

Planning, Programs and Project
Management Division
Environmental Planning and
Compliance Branch

MEMORANDUM for New Orleans District Staff and All Interested Parties

SUBJECT: Imminent threat of flooding due to federally authorized hurricane protection projects that are currently being constructed, restored and or rehabilitated

1. On August 29, 2005, Hurricane Katrina caused major damage to the Federal and non-Federal flood control and hurricane protection systems in Southeast Louisiana. Since the storm, the U.S. Army Corps of Engineers (USACE) has been working to restore the Federal and non-Federal flood control and hurricane protection systems in the area. These efforts have been conducted mainly under the authority provided by Public Law 84-99 and, more recently, under the authority of Public Law 109-148, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006 (hereinafter "3rd Supplemental). This letter will address the efforts of the Corps of Engineers pursuant to its authority under the 3rd Supplemental to restore, repair and rehabilitate and to accelerate the completion of certain Federal flood control and hurricane protection projects.

2. The 3rd Supplemental authorizes the acceleration and advancement, at full Federal expense, of the construction of the West Bank and Vicinity, New Orleans, Louisiana, Hurricane Protection Project, Lake Pontchartrain and Vicinity, Louisiana, Hurricane Protection Project, New Orleans to Venice, Louisiana Hurricane Protection Project, Larose to Golden Meadow, Louisiana, Hurricane Protection Project, Grand Isle and Vicinity, Louisiana Project, and the Southeast Louisiana, Louisiana, Flood Control Project. Additionally, the 3rd Supplemental authorizes the repair, restoration, and rehabilitation at full Federal expense, of the referenced Federal flood control and hurricane protection projects to the authorized level of protection. The Corps' restoration, rehabilitation and accelerated completion efforts under the 3rd Supplemental are being implemented with funds from the Flood Control and Coastal Emergency funds (related to Hurricane Katrina). A USACE, Mississippi Valley New Orleans District goal of June 1, 2007, has been set for this work be completed by. This is in accordance with the Administration's schedule of September 30, 2007 as provided to Congress in association with the authorization of the 3rd Supplemental. Work under the 3rd Supplemental to repair, restore and rehabilitate the described Federal flood control and hurricane protection projects and to accelerate construction of said projects represents a part of the continuing Federal response to the impacts of Hurricane Katrina upon South Louisiana, which response commenced with work performed pursuant to P.L. 84-99.

US Army Corps of Engineers

3. Engineering Regulation (ER) 200-2-2, Environmental Quality, Procedures for Implementing the National Environmental Policy Act (NEPA), at paragraph 8, provides that district commanders may respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses in advance of compliance with the documentation and procedural requirements of NEPA. Paragraph 8 of the regulation states that NEPA documentation should be accomplished prior to initiation of emergency work if time constraints render this practicable; however, if appropriate, such documentation may be accomplished concurrently or after completion of the emergency work. Paragraph 8 also states that, when possible, emergency actions considered major in scope with potentially significant environmental impacts shall be referred through the division commanders to HQUSACE (CECW-RE) for consultation with the Council for Environmental Quality (CEQ) regarding the utilization of emergency procedures in a manner that is compliant with NEPA requirements and regulations. Compliance with non-NEPA Federal, state and local environmental statutes and regulations will take place prior to initiating construction activities.

4. A direct analogy exists between the work to be performed pursuant to the 3rd Supplemental and the work addressed in P. L. 84-99 and its regulations, Engineering Regulation and Engineering Pamphlet 500-1-1, Emergency Employment of Army and Other Resources - Civil Emergency Management Program, provides that emergency flood control and hurricane protection project activities performed under Public Law 84-99 are not subject to the established NEPA documentation requirements if risk to life, health, property, or severe economic losses is imminent. This regulation defines imminent risk as a subjective, statistically supported evaluation of how quickly a threat scenario can develop, how likely that threat is to develop in a given geographical location, and how likely it is that the threat will produce catastrophic consequences to life and improved property. Implicit in the timing aspect can be considerations of time or season or of known cyclical activities.

5. Several criteria cited in the above definition are important in determining if there is an imminent threat to flooding within Southeast Louisiana. The first is "subjective" which allows a decision to be based on sound reasoning. The second and third are "statistically supported evaluation" and "how likely that threat is to develop in a given geographical location." During the past four hurricane seasons, Southeast Louisiana has had 13 tropical storms or hurricanes pass within 300 miles of the city (three in 2002, two in 2003, three in 2004, and five in 2005). This represents an average of over three storms per hurricane season. The National Hurricane Center has been reporting for the past several years that we have entered a period of more active hurricane seasons. The National Oceanic and Atmospheric Administration (NOAA) 2006 Atlantic hurricane season outlook is for an 80% chance of an above-normal hurricane season. This outlook is produced by scientists at NOAA's Climate Prediction Center, National Hurricane Center, and Hurricane Research Division. The outlook calls for a very active 2006 season, with 13-16 named storms, 8-10 hurricanes, and 4-6 major hurricanes.

The next key phrase is "how likely the threat will produce catastrophic consequences to life and improved property". Nothing demonstrates this better than Hurricane Rita in September 2005. Hurricane Rita came ashore along the Louisiana/Texas state line, approximately 250 miles from New Orleans, yet the impacts of the storm in Southeast Louisiana were significant. Hurricane Rita caused an estimated five billion dollars worth of damage in Louisiana alone. Approximately 10,000 homes flooded in Louisiana as a result of the storm surge generated by Hurricane Rita.

The last phrase of significance is "known cyclical activities." As every day passes, we move further into the 2006 hurricane season, and the threat to life and property increases without adequate storm surge protection. For example, in Plaquemines Parish, Louisiana approximately 63 percent (17,000) of the residents have returned to the Parish according to a recent Louisiana Tech University report.

US Army Corps of Engineers

Approximately ten percent of the returning residents (approximately 2,000) have moved to the lower Plaquemines Parish area, where most are living in temporary housing. This area is home to four oil refineries, the Port of Plaquemines (ranked as 11th largest port in the United States), and is a contributor to the nation's seafood industry (millions of pounds of shrimp, oysters, crabs, and fish annually). Most of St. Bernard Parish and a large portion of Orleans Parish residents are in the similar situation as that found in Plaquemines Parish with returning residents living in temporary trailers which are more susceptible to storm damages than a residence. Most of Jefferson, Lafourche, and St. Charles Parishes and some parts of Orleans Parish have been repopulated by residents returning to the area after completing repairs to their structures as needed.

6. Much of the environmental compliance process has been completed for the Federal projects detailed above, however, it is likely that alignment changes, additional borrow sources, and other unforeseen events will create a need to change the scope of the project work. The probable environmental consequences of these actions are that some wetlands will be adversely impacted, some wildlife habitat will be destroyed, and some individuals' lifestyles will be disrupted due the expedient nature of this work. NEPA documentation in the form of environmental assessments and findings of no significant impacts will be complete prior to initiation of the emergency when practicable as stated above in item 3 of this memorandum. For a limited numbers of projects it may not be possible to complete the NEPA documentation prior to the work being initiated. In these few cases NEPA documents will be prepared concurrently with the construction process in an expedient manner. It is anticipated that the changes to the Federal projects described above will not have any significant impacts on the human environment and, as such, it is not anticipated that there will be a need to prepare any Environmental Impact Statements. It is the intent of the USACE that every effort will be made to avoid and minimize environmental impacts as a result of these projects. In situations where impacts are unavoidable, appropriate mitigation measures will be incorporated into the project design. Mitigation will then be completed concurrently with the construction of the project.

7. Based upon applicable regulations and guidance and upon the facts and circumstances above set forth, I consider the South Louisiana area to be under an imminent threat from flooding as a result of the current level of protection provided by the Federal flood control and hurricane protection systems, which systems are presently undergoing construction, restoration and rehabilitation that is estimated to be completed on or before September 30, 2007. I consider this threat to remain in effect for South Louisiana until such construction, restoration and rehabilitation efforts achieve and attain the authorized level of protection for South Louisiana in accordance with the provisions of the 3rd Supplemental.

14 Jun 06
Date

Richard P. Wagenaar
Colonel, U.S. Army
District Commander