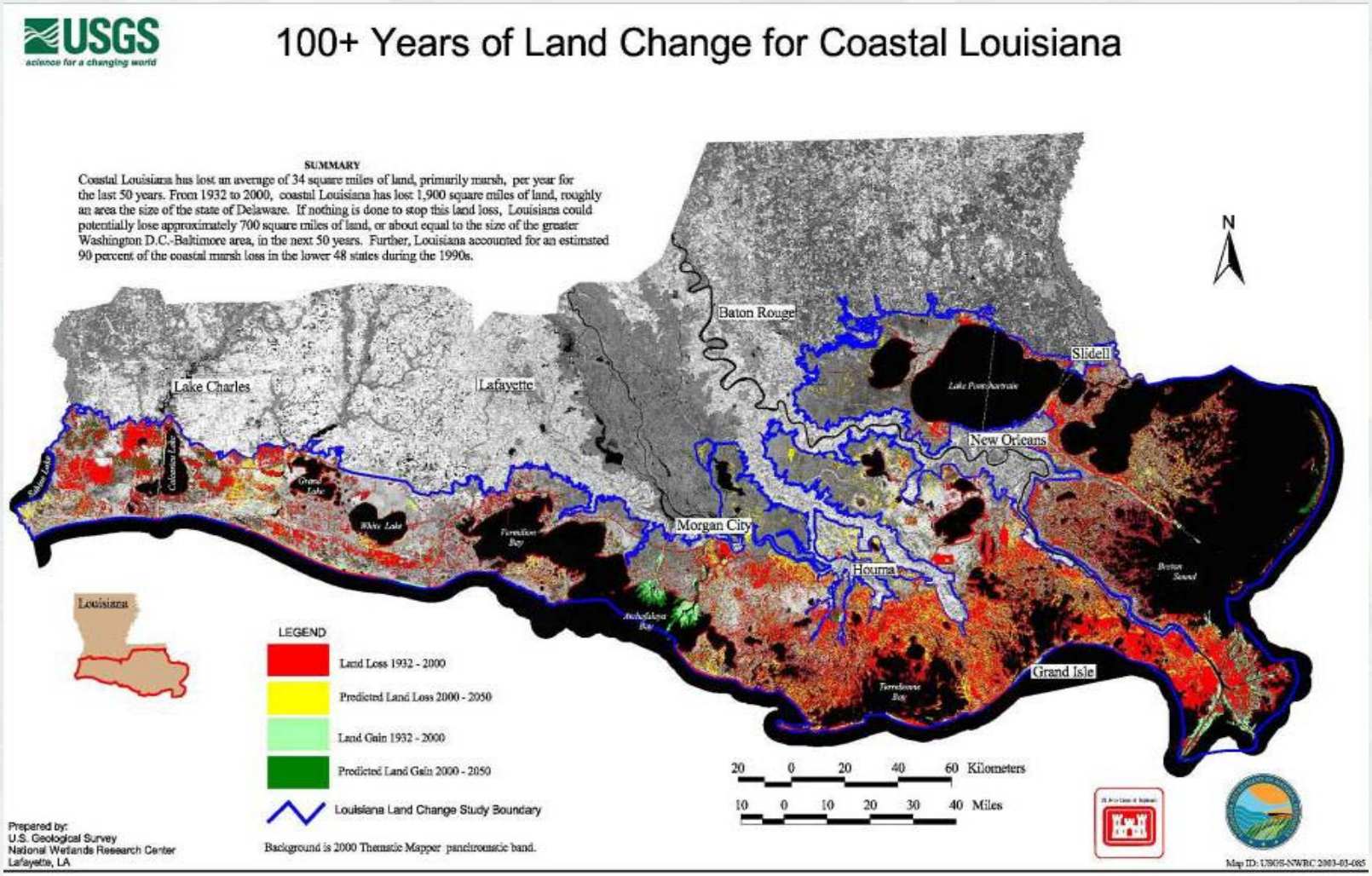
Louisiana Coastal Area

WRDA 2007 Section 7006 (e)(3) Projects

Presentation to the
Civil Works Review Board
27 August 2010

COL Edward R. Fleming
District Commander
New Orleans District
US Army Corps of Engineers

Need for Action



Bottom Line Up Front

- Request approval from this Board to release report for State & Agency review on 1 Oct, conditioned on the completion of pending actions
- Six plan recommendations
- Two plan recommendations require additional Congressional action
- Total recommended plan first cost $1,422,089,000

Authority

Water Resource Development Act (WRDA) of 2007
Section 7006(e)(3) - Public Law 110-114

SEC. 7006 CONSTRUCTION.
(e) ADDITIONAL PROJECTS

(3) PROJECTS SUBJECT TO REPORTS.—

(A) FEASIBILITY REPORTS.—Not later than December 31, 2008, the Secretary shall submit to Congress feasibility reports on the following projects referred to in the restoration plan:

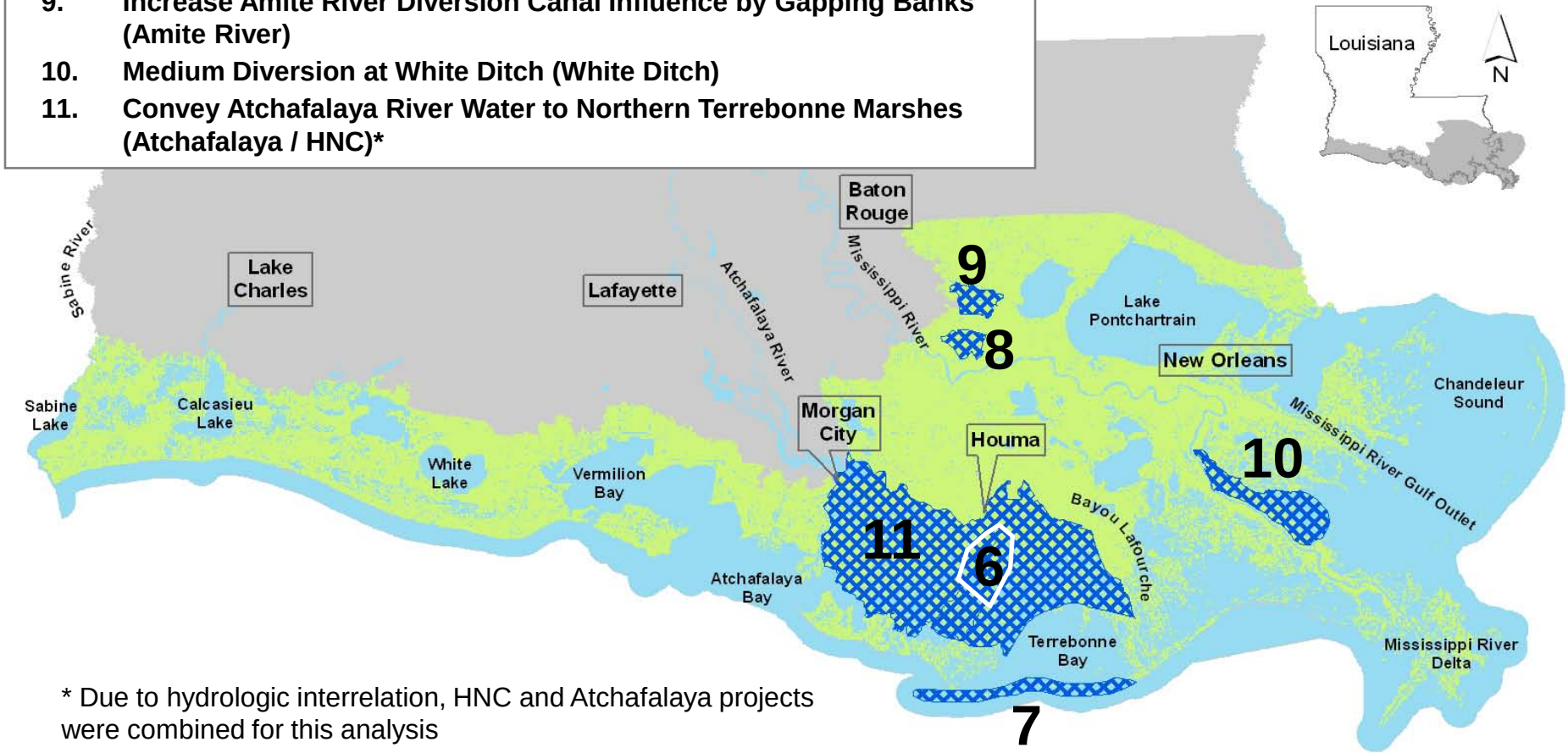
(i) Multipurpose Operation of Houma Navigation Lock at a total cost of $18,100,000*
(ii) Terrebonne Basin Barrier Shoreline Restoration at a total cost of $124,600,000 #
(iii) Small Diversion at Convent/Blind River at a total cost of $88,000,000 #
(iv) Amite River Diversion Canal Modification at a total cost of $5,600,000 #
(v) Medium Diversion at White's Ditch at a total cost of $86,100,000
(vi) Convey Atchafalaya River Water to Northern Terrebonne Marshes at a total cost of $221,200,000*

(B) CONSTRUCTION.—The Secretary may carry out the projects under subparagraph (A) substantially in accordance with the plans and subject to the conditions, recommended in a final report of the Chief of Engineers if a favorable report of the Chief is completed by not later than December 31, 2010.

* Due to hydrologic interrelation, HNC and Atchafalaya projects were combined for this analysis
# State acted as technical lead for project

LCA '6' Study Area Map

6. **Multi-purpose Operation of Houma Navigation Canal Lock (Atchafalaya / HNC)***
7. **Terrebonne Basin Barrier Shoreline Restoration (Terrebonne Basin)**
8. **Small Diversion at Convent / Blind River (Blind River)**
9. **Increase Amite River Diversion Canal Influence by Gapping Banks (Amite River)**
10. **Medium Diversion at White Ditch (White Ditch)**
11. **Convey Atchafalaya River Water to Northern Terrebonne Marshes (Atchafalaya / HNC)***



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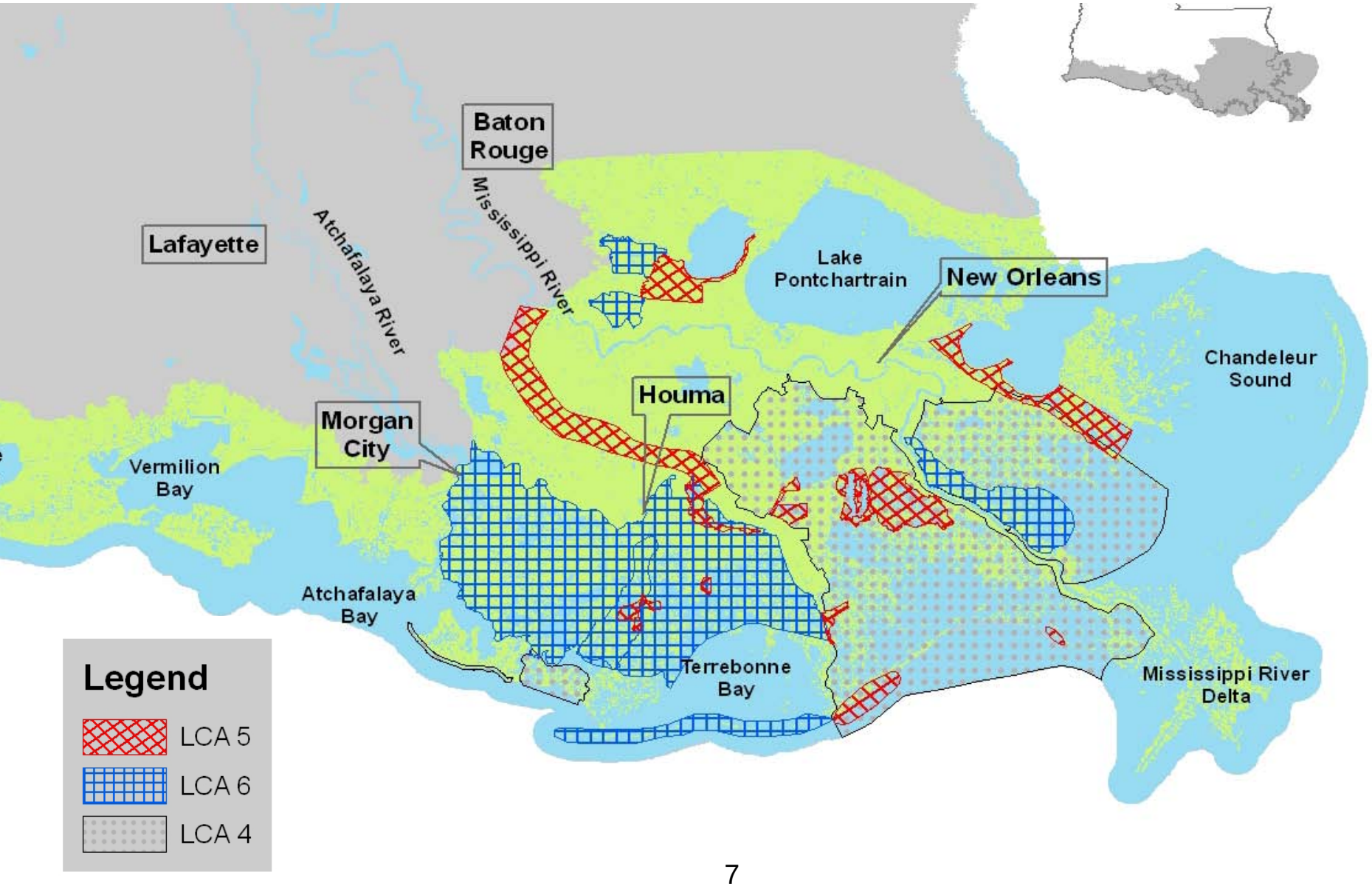
LCA Chronology

1998	**Coast 2050 *Plan completed under Coastal Wetlands Planning Protection & Restoration Act (CWPPRA)***
1999	**Coast 2050 *Plan adopted as 905b study in order to start Louisiana Coastal Area (LCA) feasibility study***
2001	***LCA feasibility study approach modified to consider comprehensive coast-wide restoration plan (Sep)***
2004	**Administration provides guidance to shift focus to identify a "Near-term" LCA restoration plan (Feb)**
2004	**Final LCA plan report recommends 15 critical near-term projects – 5 for conditional authorization & 10 for further study prior to authorization (Nov)**
2005	**LCA Chief of Engineers Report signed on January 31st 2005**
2007	**Water Resources Development Act (WRDA) of 2007 conditionally authorizes all 15 critical near-term projects in three groups of 5, 6, & 4 subject to varying report requirements and deadlines (Nov)**
2008	**Feasibility cost share agreement signed for LCA WRDA Section 7006(e)(3) study (Nov)**
2010	**LCA WRDA Section 7006(e)(3) report submission**

LCA '15' Critical Near-Term Projects



LCA Team Members

Corps Districts

- New Orleans
- St. Louis
- Rock Island
- Norfolk
- New York
- Walla Walla
- Baltimore
- Mobile
- Jacksonville
- Wilmington

Federal Agencies

- U.S. Environmental Protection Agency (EPA)
- Natural Resources Conservation Service (NRCS)
- National Marine Fisheries Service (NMFS)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Geological Survey (USGS)

State Agencies

- Office of the Governor Coastal Activities
- Louisiana Coastal Protection and Restoration Authority (CPRA)
- Louisiana Office of Coastal Protection and Restoration (OCPR)
- Louisiana Department of Wildlife and Fisheries (LDWF)

Academia/Consultants

- Southeastern Louisiana University
- SJB Group, LLC
- GEC, Inc.
- Camp Dresser McKee
- Battelle

Participating Organizations

Partner Agencies

USACE: Department of Army - U.S. Army Corps of Engineers

NRCS: Department of Agriculture - Natural Resources Conservation Service

NMFS: Department of Commerce - National Marine Fisheries Service

USFWS: Department of the Interior - U.S. Fish and Wildlife Service

USEPA: U.S. Environmental Protection Agency

USGS: Department of the Interior – U.S. Geological Survey

State of Louisiana

Office of the Governor Coastal Activities

Coastal Protection and Restoration Authority

Office of Coastal Protection & Restoration

LA Department of Natural Resources

LA Department of Environmental Quality

LA Department of Wildlife & Fisheries

NRCS
Natural Resources Conservation Service

Atchafalaya / HNC

- The study area is an extensive network of estuarine wetlands interlaced by significant natural and manmade channels
- Due to relative isolation from freshwater and sediment sources coupled with fluctuating salinity and tides the area is experiencing an elevated loss rate
- The Recommended Plan will restore or enhance habitats by redistributing freshwater and nutrients into wetlands impacted by high salinities, and by the beneficial use of dredged material where practicable

Atchafalaya / HNC Study Area

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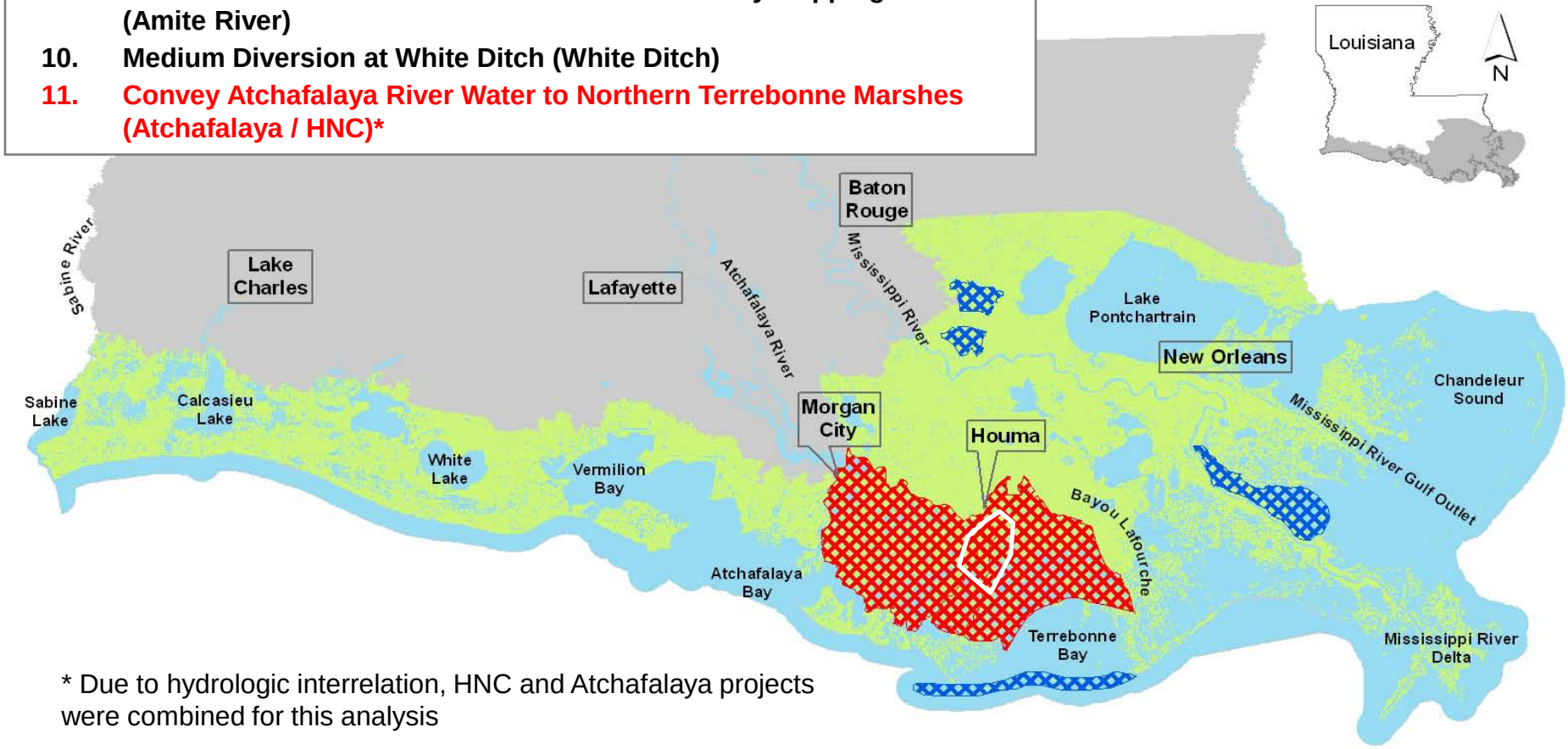

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Atchafalaya / HNC

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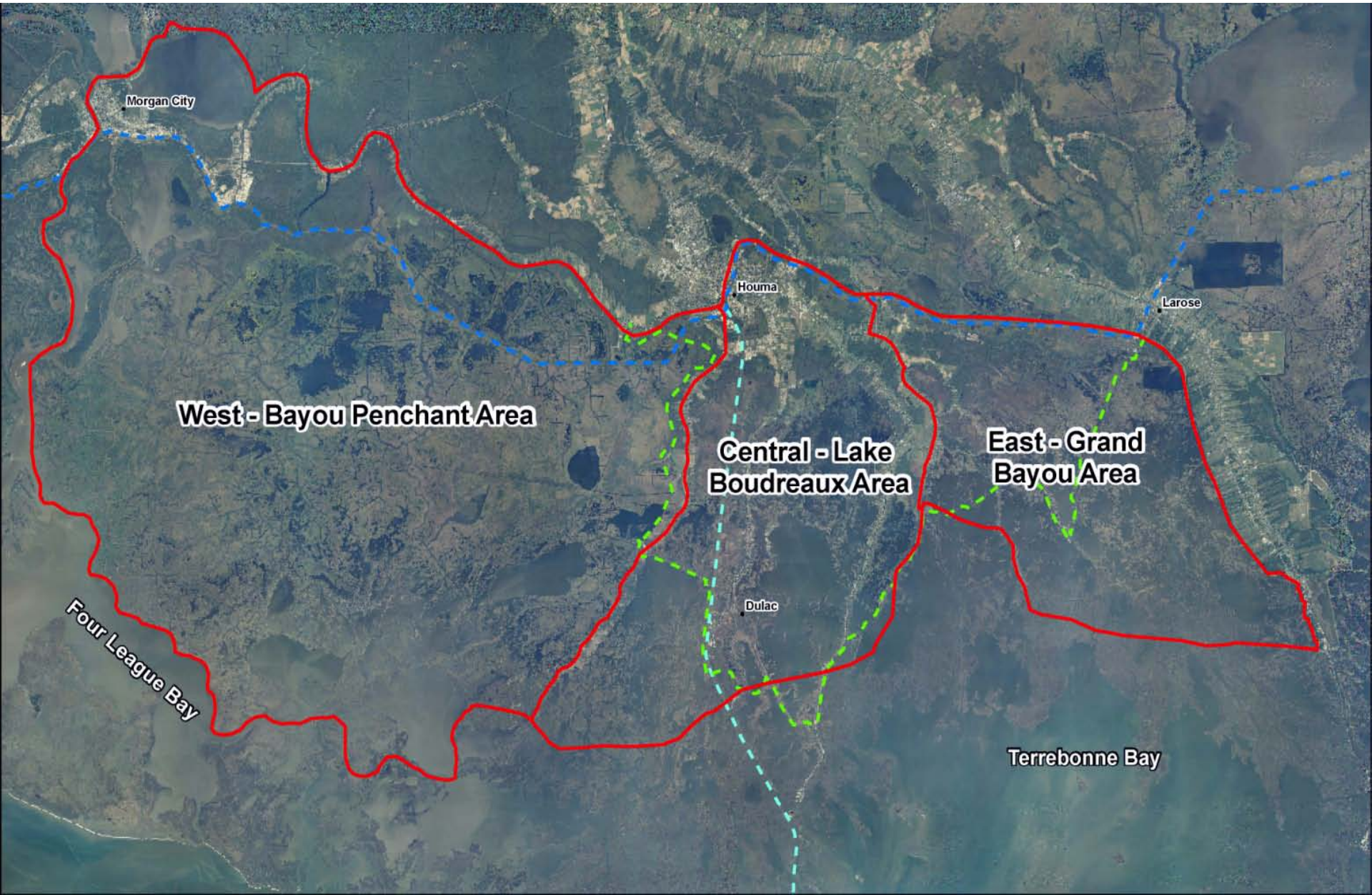
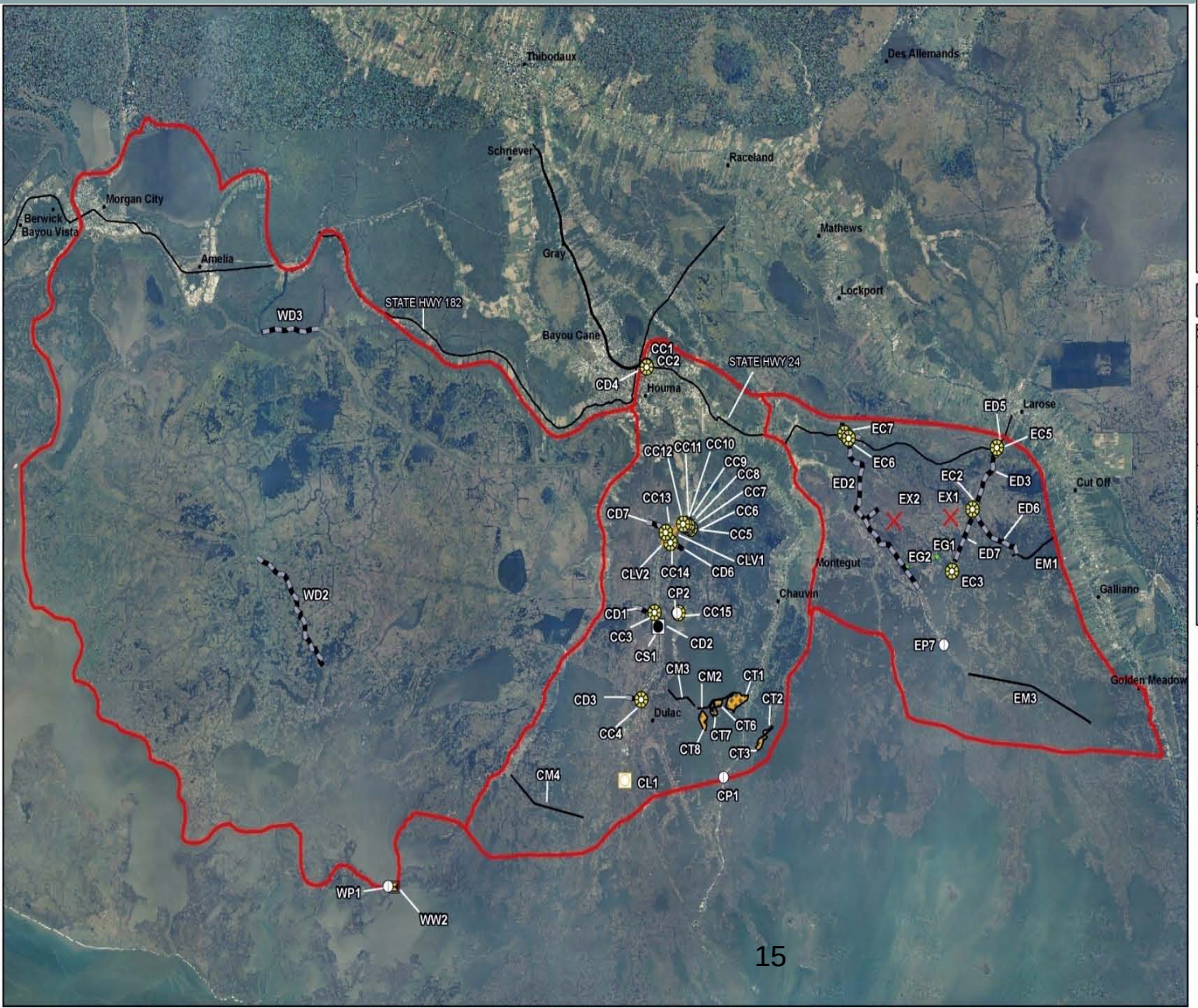
Atchafalaya / HNC Study Area Detail



Atchafalaya / HNC Recommended Plan

- The recommended plan is the National Ecosystem Restoration (NER) plan
- Recommended plan ($305.5 M - Atchafalaya $303.9 /HNC $1.6) does not exceed the WRDA 2007 authorized limit ($349.9 M).
- Involves construction of 56 structures and other water management features
- Includes future operation of the HNC Lock complex to enhance wetlands
- Improves distribution of available freshwater over 700,000 acres
- Provides 3,220 AAHUs (Atchafalaya 2,997 /HNC 243)
- Prevents loss of 9,655 acres of existing wetlands
- Plan provides significant environmental benefits regardless of the implementation of the HNC Lock Complex

Recommended Plan / NER



LCA ARTM

- CULVERT
- LOCK COMPLEX
- PLUG
- REMOVAL
- SIPHON/PUMP/DIVERSION STRUCTURE
- WEIR
- DREDGE CHANNELS
- LEVEE
- SPOIL GAPS
- MARSH BERM
- TERRACING
- PROJECT BOUNDARY

LOCATION MAP

DISCLAIMER - While the United States Army Corps of Engineers, (hereinafter referred to USACE) has made a reasonable effort to insure the accuracy of the maps and associated data, its should be explicitly noted that USACE makes no warranty, representation or guaranty, either express or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. The USACE, its officers, agents, employees, or servants shall assume no liability of any nature for any errors, omissions, or inaccuracies in the information provided regardless of how caused. The USACE, its officers, agents, employees or servants shall assume no liability for any decisions made or actions taken or not taken by the user of the maps and associated data in reliance upon any information or data furnished here. By using these maps and associated data the user does so entirely at their own risk and explicitly acknowledges that he/she is aware of and agrees to be bound by this disclaimer and agrees not to present any claim or demand of any nature against the USACE, its officers, agents, employees or servants in any forum whatsoever for any damages of any nature whatsoever that may result from or may be caused in any way by the use of the maps and associated data.

20,000 10,000 0 20,000 40,000 Feet

Atchafalaya / HNC Review

Agency Technical Review

- All comments resolved, closed and incorporated into the report
- ATR certification on August 24, 2010
- Received CostDX memorandum on May 17, 2010
  - Contingencies reflect CostDX concerns regarding design data

Independent External Peer Review

- 15 comments received
- Teleconference with IEPR panel July 14, 2010
- All comments resolved and incorporated into report
- Final IEPR report delivered on August 23, 2010
- IEPR certification received on August 24, 2010

Atchafalaya / HNC Degraded Marsh

Atchafalaya / HNC Risk & Uncertainty

Risk and uncertainties documented within the report and disseminated to the agencies and the public include:

- Relative Sea Level Rise (RSLR) within the project area
- Design data / Cost estimate
- Accretion
- Tropical Storm and Hurricane Damages
- Implementation of the Houma Navigation Canal Lock Complex

Atchafalaya / HNC Restoration Example

Terrebonne Basin

- The Study Area is a coastal barrier islands chain that helps protect wetlands, inland bays and mainland regions from the direct effects of wind, waves, and storms

- Due to the accelerated rate of loss in the interior wetlands, relative isolation from the Mississippi and Atchafalaya rivers and exposure to tropical events this barrier island chain is suffering from low retention of sediment and a high rate of decay

- The recommended plan increases sediment input to supplement long-shore sediment transport processes along the Gulf shoreline by rebuilding beach, dune & marsh habitat

Terrebonne Basin Study Area

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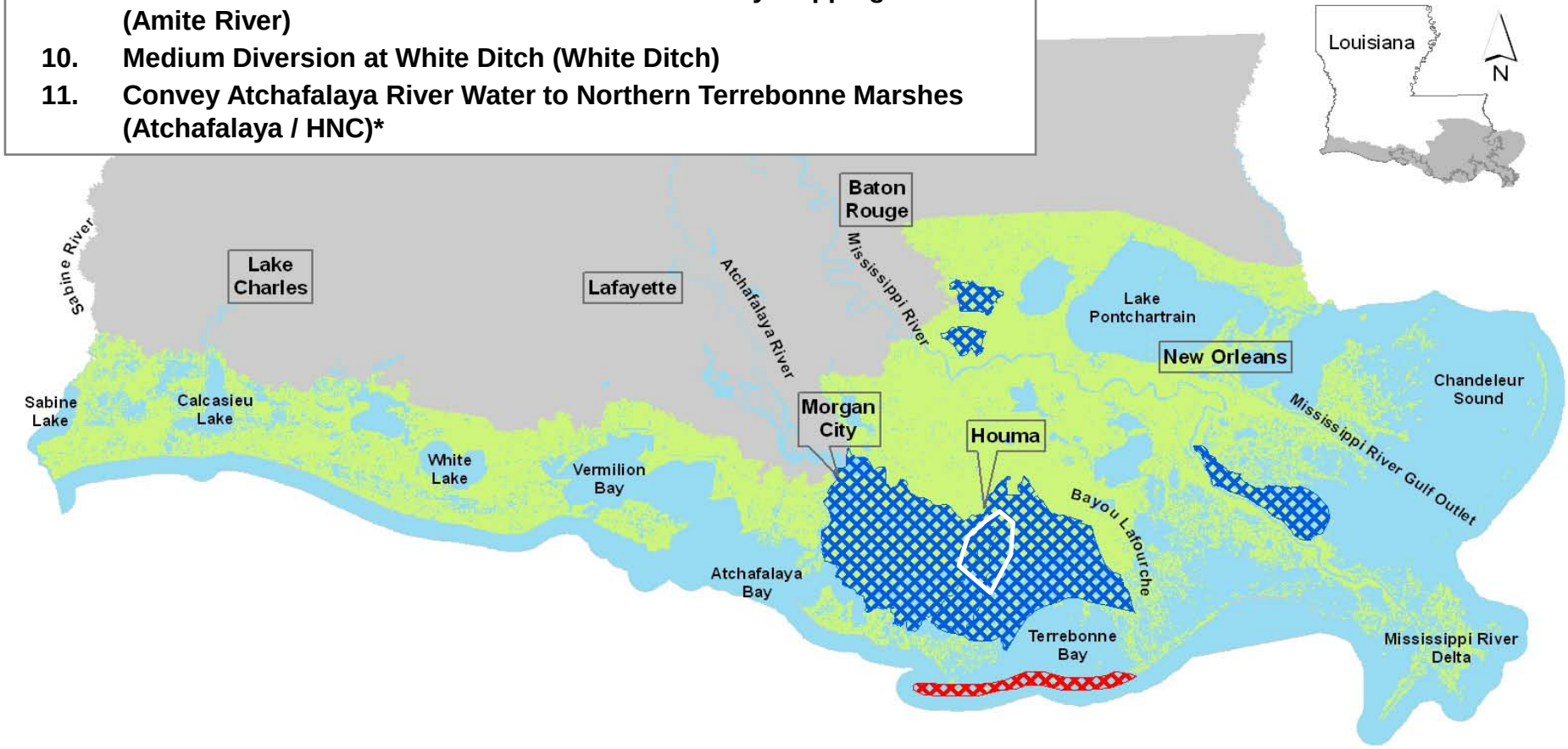

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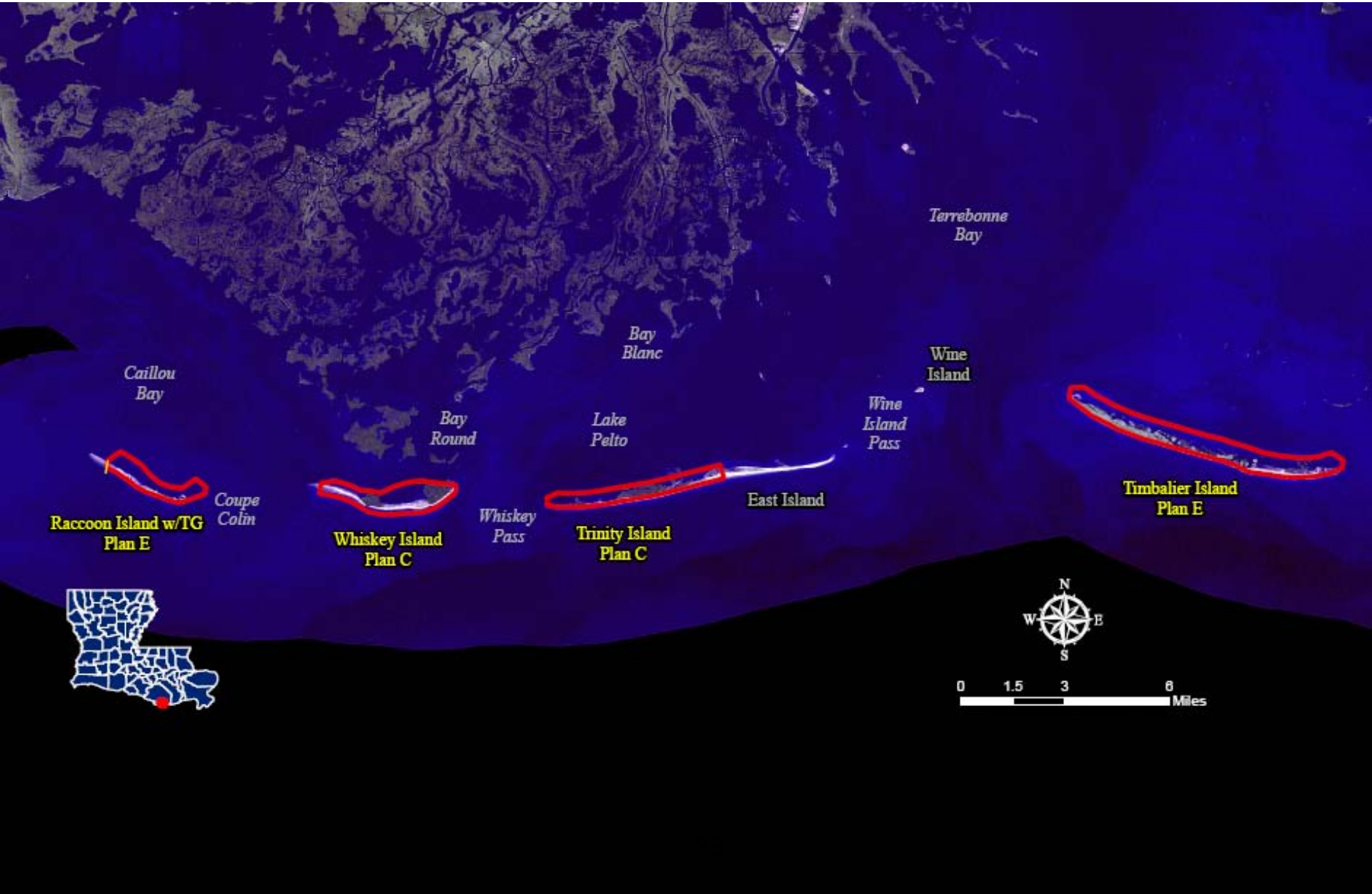
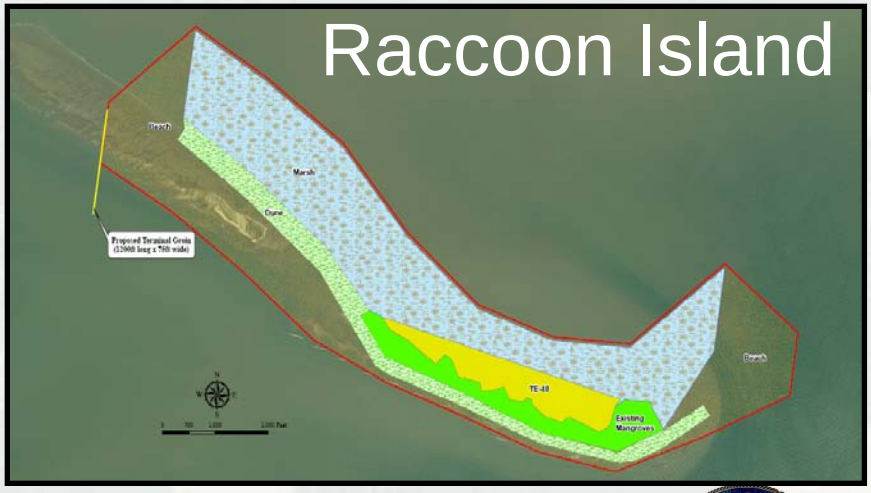
Terrebonne Basin Study Area Detail



Terrebonne Basin Recommended Plan

- Recommended plan is the NER plan
- The recommended plan restores 4 islands and includes a single island increment implementable within the current WRDA 2007 authority
- Cost ($689M) exceeds the 2007 WRDA authorized 902b limit ($180.9M)
- Creates 2,883 AAHU's by restoring 5,840 acres
- The NER plan restores of Raccoon, Timbalier, and Trinity Islands, and Whiskey Island, to their minimal geomorphologic form and ecologic function
- The plan includes periodic renourishment of all the islands
- This report recommends additional Congressional action to allow construction of the full NER plan
- The single-island increment, Whiskey Island, cost ($119 M) is within the 2007 WRDA authorized limit ($180.9M)
- This increment creates 678 AAHU's by restoring 1,272 acres

Recommended Plan / NER



Terrebonne Basin Review

Agency Technical Review

- All comments resolved, closed and incorporated into the report
- Received ATR certification on August 24, 2010
- Received CostDX memorandum on August 3, 2010
- Contingencies adjusted to reflect CostDX concerns regarding design data

Independent External Peer Review

- 16 Comments Received
- Teleconference with IEPR panel July 26, 2010
- All comments resolved and incorporated into report
- Final IEPR report received August 20, 2010
- IEPR certification received on August 24, 2010

Terrebonne Basin Island Degradation

Terrebonne Basin Risk & Uncertainty

Risk and uncertainties documented within the report and disseminated to the agencies and the public include:

- Relative Sea Level Rise (RSLR) within the project area
- Design data / Cost estimate
- Tropical Storm and Hurricane Damages
- Formal Consultation for Piping Plover

Terrebonne Basin Restoration Example

Blind River

- The study area is a scarce and rapidly degrading cypress swamp habitat
- Due to hydrologic modification of the area for drainage and isolation from the Mississippi River the cypress swamp has limited capacity for regeneration
- The recommended plan will restore hydrologic connectivity, system vitality, and increase cypress extent though a diversion of the Mississippi River to provide freshwater, nutrients, and sediments into the swamp

Blind River Study Area

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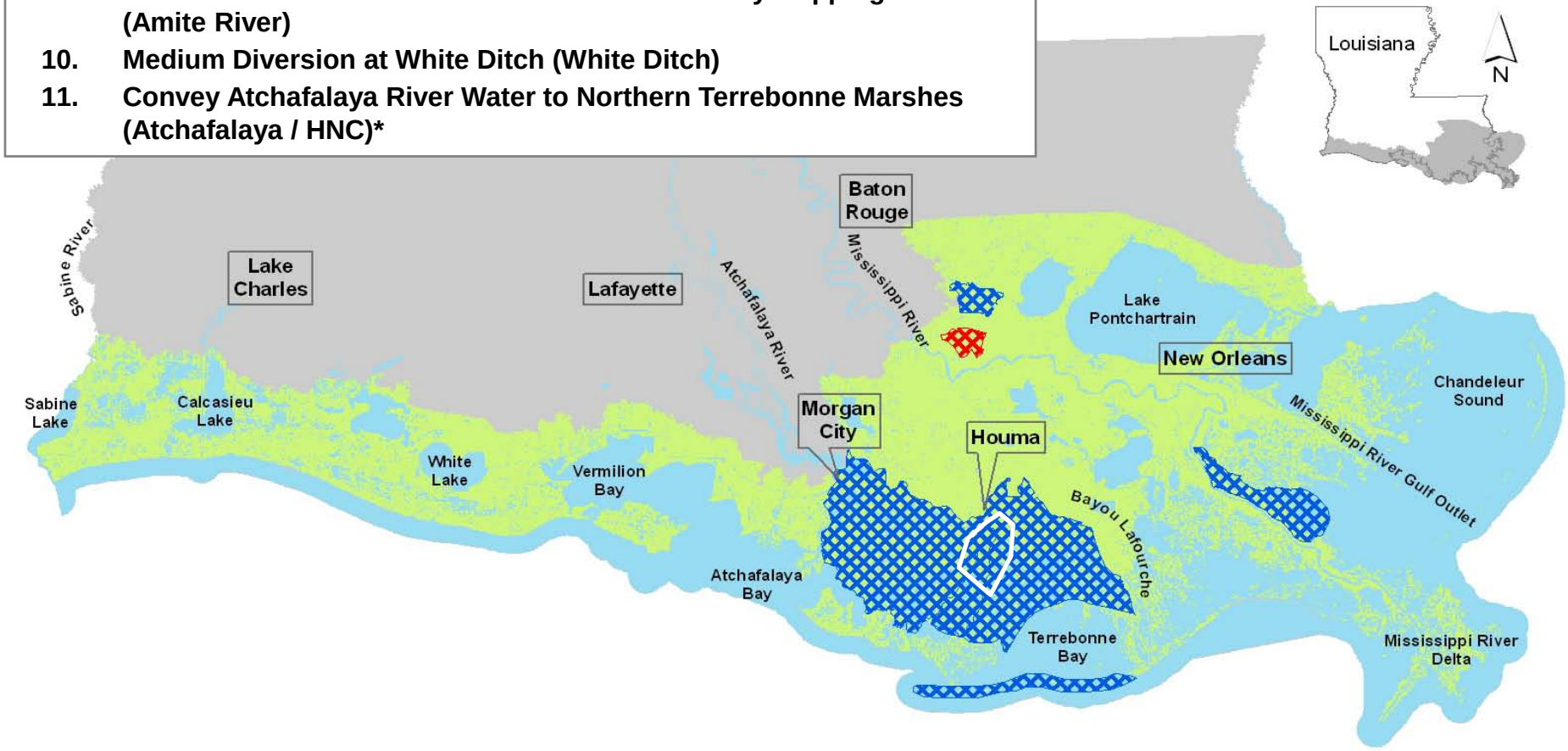

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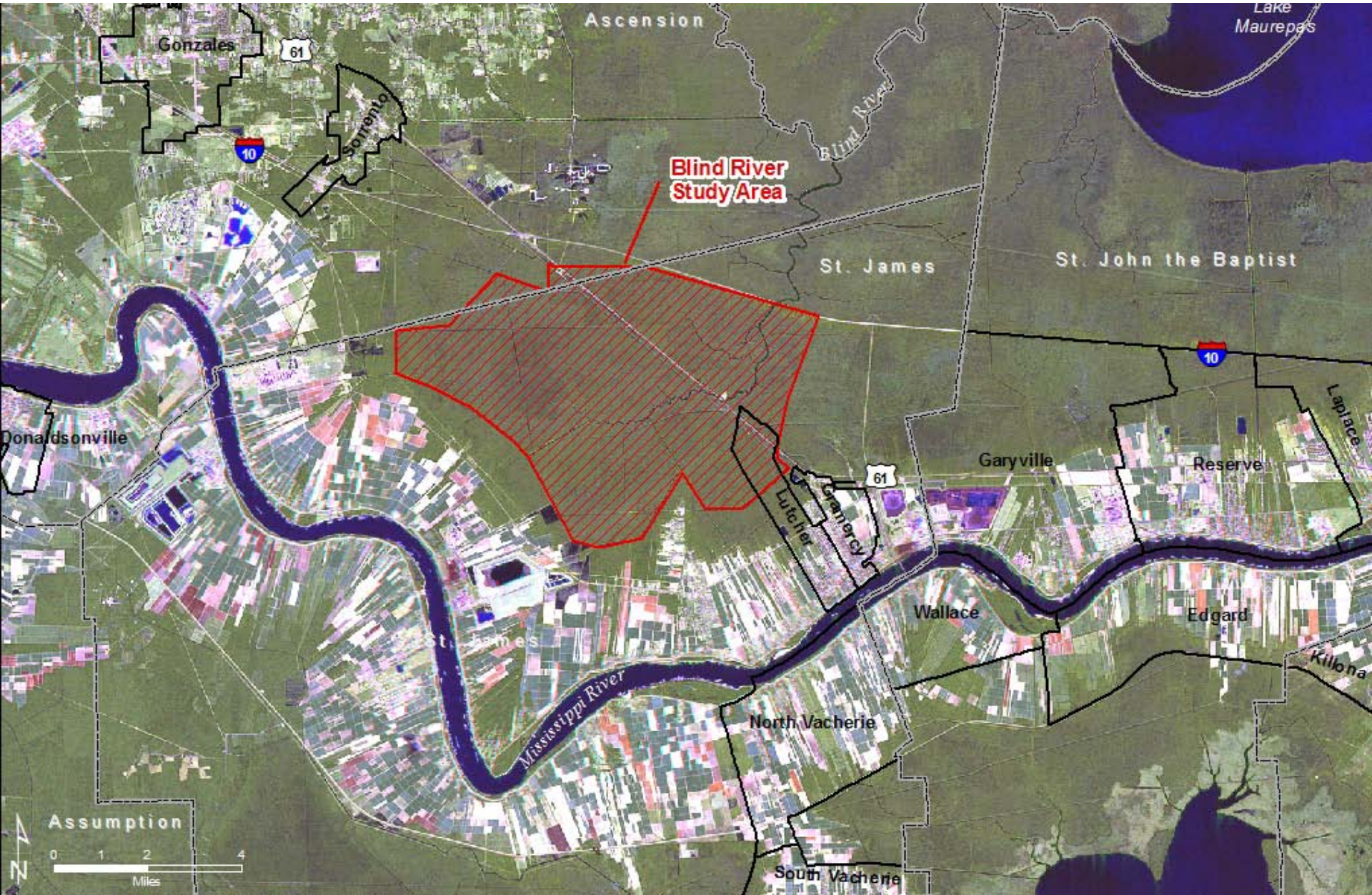
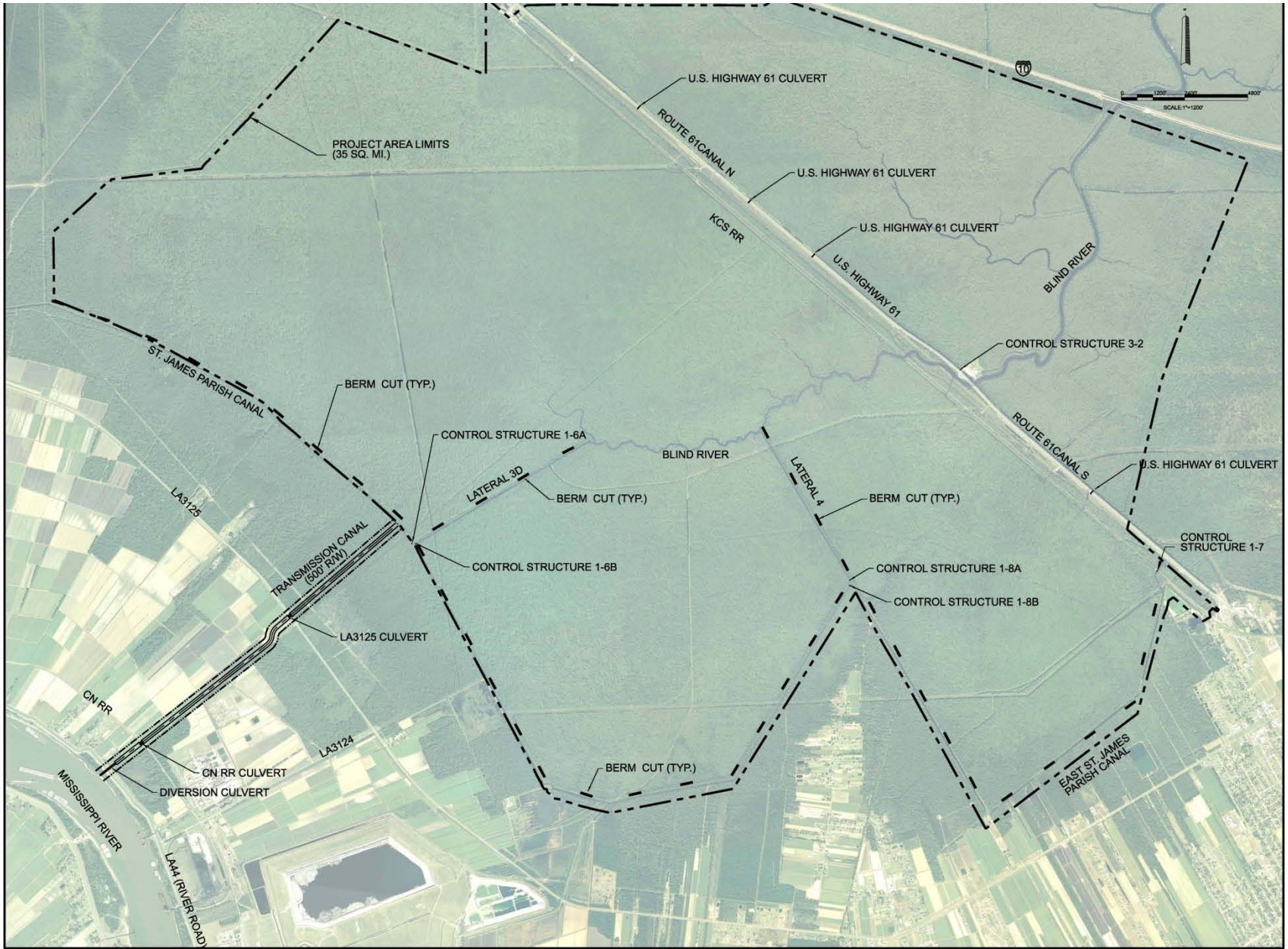


Blind River Recommended Plan

- The recommended plan is the NER Plan
- Recommended plan cost ($123.1 M) is within the 2007 WRDA authorized limit ($124.2 M)
- 3,000 cfs diversion at Romeville, LA
- Supports reversal of the trend of cypress conversion in the southeastern portion of the Maurepas Swamp
- Creates 6,421 AAHUs, retaining & improving 21,369 acres of cypress swamp

Recommended Plan / NER



Blind River Review

Agency Technical Review

- All comments resolved, closed and incorporated into the report
- Received ATR certification on August 24, 2010
- Received CostDX memorandum on March 29, 2010
  - Contingencies adjusted to reflect CostDX concerns regarding design data

Independent External Peer Review

- 14 comments received
- Teleconference with IEPR panel July 16, 2010
- All comments resolved and incorporated into report
- Final IEPR report received August 12, 2010
- IEPR certification received on August 24, 2010

Blind River Degraded Habitat

Blind River Risk & Uncertainty

Risk and uncertainties documented within the report and disseminated to the agencies and the public include:

- Relative Sea Level Rise (RSLR) within the project area
- Design data / Cost estimate
- Accretion
- Induced flooding
- Formal Consultation for Pallid Sturgeon

Blind River Restoration Example

Amite River

- The study area consists of scarce and rapidly degrading cypress swamp habitat
- Due to hydrologic isolation the cypress swamp in the study area suffers from a lack of freshwater input, constant inundation and little tree regeneration
- The recommended plan will restore hydrologic connectivity, system vitality, and increase cypress extent

Amite River Study Area

6. Multi-purpose Operation of Houma Navigation Canal Lock (Atchafalaya / HNC)*
7. Terrebonne Basin Barrier Shoreline Restoration (Terrebonne Basin)
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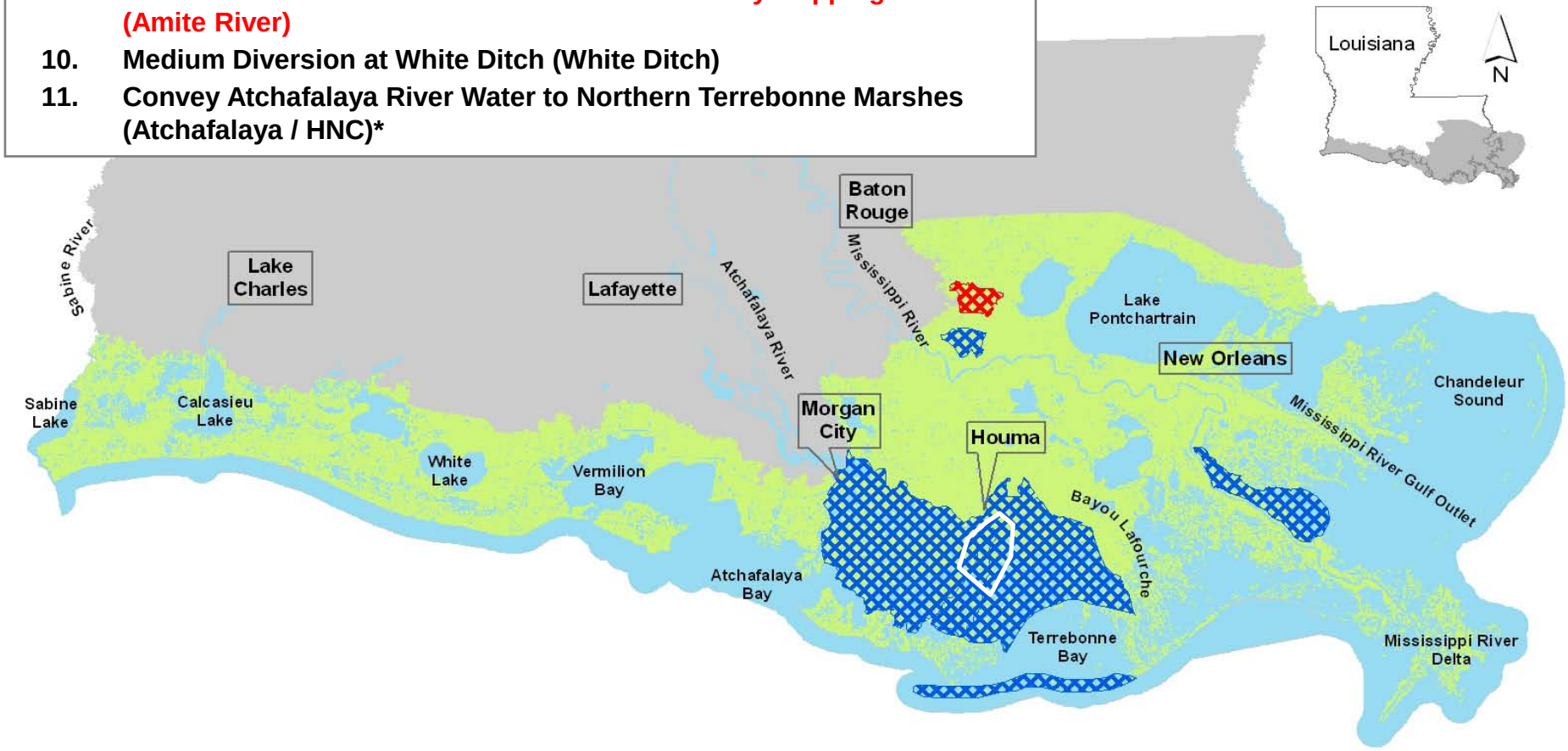

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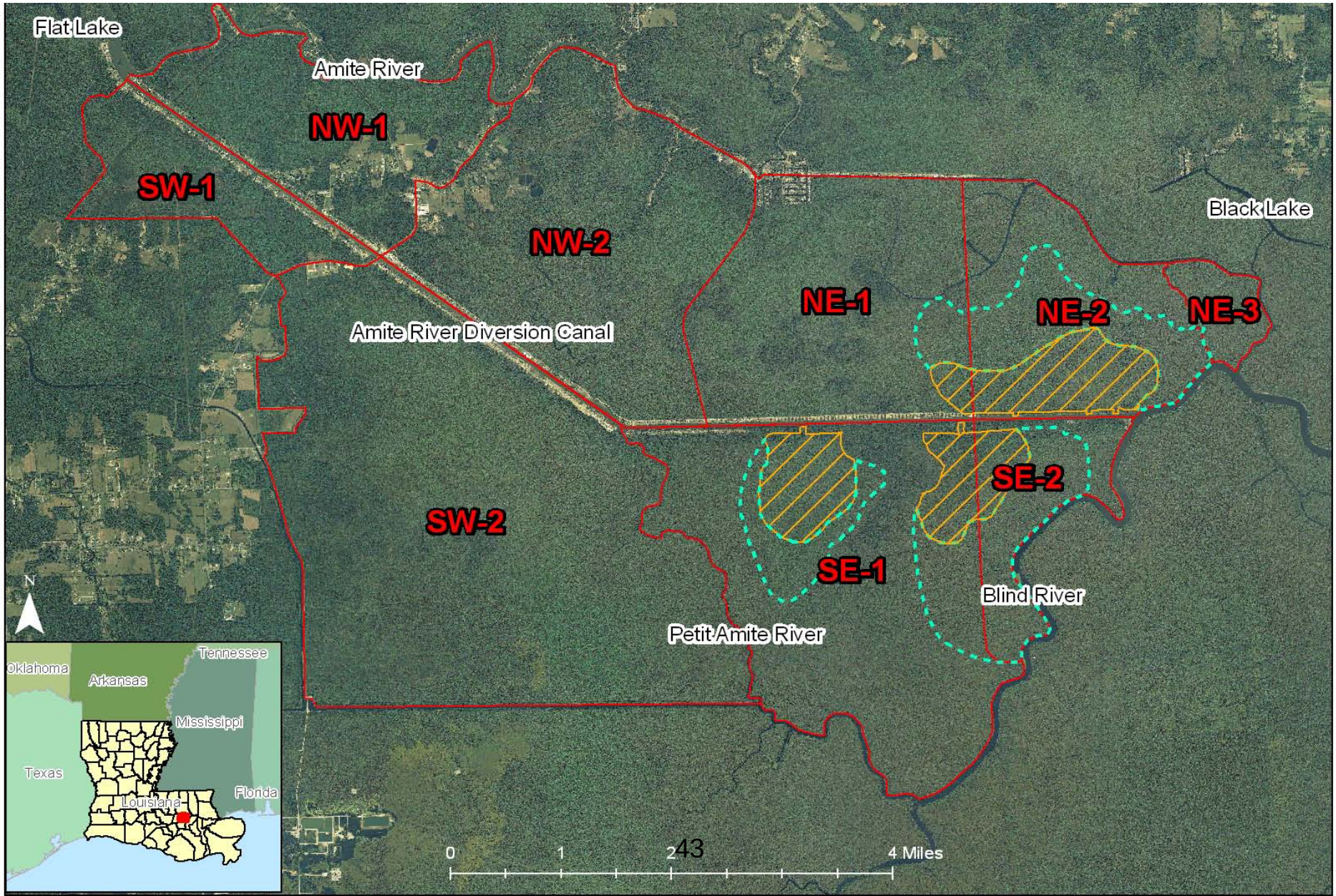
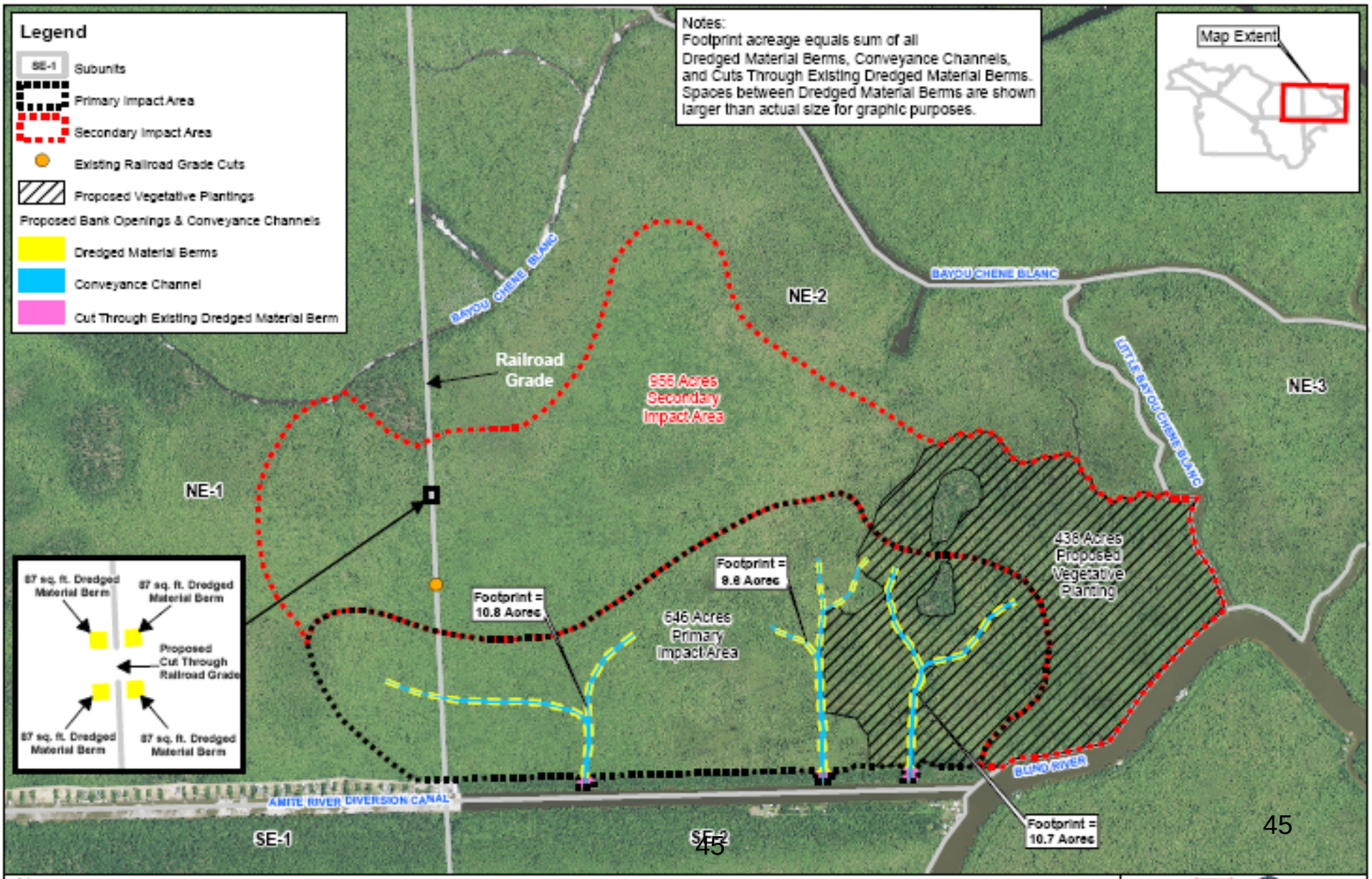
Amite River Study Area Detail/NER



Amite River Recommended Plan

- The recommended plan is an component of the NER plan
- recommended plan cost is $8.5 M
- The NER Plan ($15.2 M) exceeds the WRDA 2007 funding authorization of $10.8
- The recommended plan is a standalone, implementable component
- Reestablishes hydrologic connectivity, sediment and nutrient exchange to the Maurepas Swamp
- Creates 679 Average Annual Habitat Units (AAHUs) benefitting 1,602 acres of freshwater swamp
- Provides benefits to the most critical area within the study area
- Both the NER & recommended plans meet project goals, objectives, and are within the scope of the 2005 report

Recommended Plan



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Amite River Review

Agency Technical Review

- All comments resolved, closed and incorporated into the report
- Received ATR certification on August 24, 2010
- Received CostDX memorandum on March 29, 2010
  - Contingencies adjusted to reflect CostDX concerns regarding design data

Independent External Peer Review

- 11 comments received
- Teleconference with IEPR panel July 19, 2010
- All comments resolved and incorporated into report
- Final IEPR report received August 11, 2010
- IEPR certification received on August 24, 2010

Amite River – Diversion Canal Bank

Amite River Risk & Uncertainty

Risk and uncertainties documented within the report and disseminated to the agencies and the public include:

- Relative Sea Level Rise (RSLR) within the project area
- Design data / Cost estimate
- Effects of Accretion

Amite River Restoration Area

White Ditch

- The study area is a fresh, intermediate, brackish and saline estuary that has been isolated from the Mississippi River and heavily impacted by recent tropical systems

- Due to hydrologic isolation resulting from construction of the MR&T levee system and natural geomorphic barriers the marshes are sediment and nutrient starved

- The recommended plan will restore hydrologic connectivity and provide adequate freshwater, sediment and nutrient inputs to sustain areas of all marsh types, create new marsh and improve wetland resiliency

White Ditch Study Area

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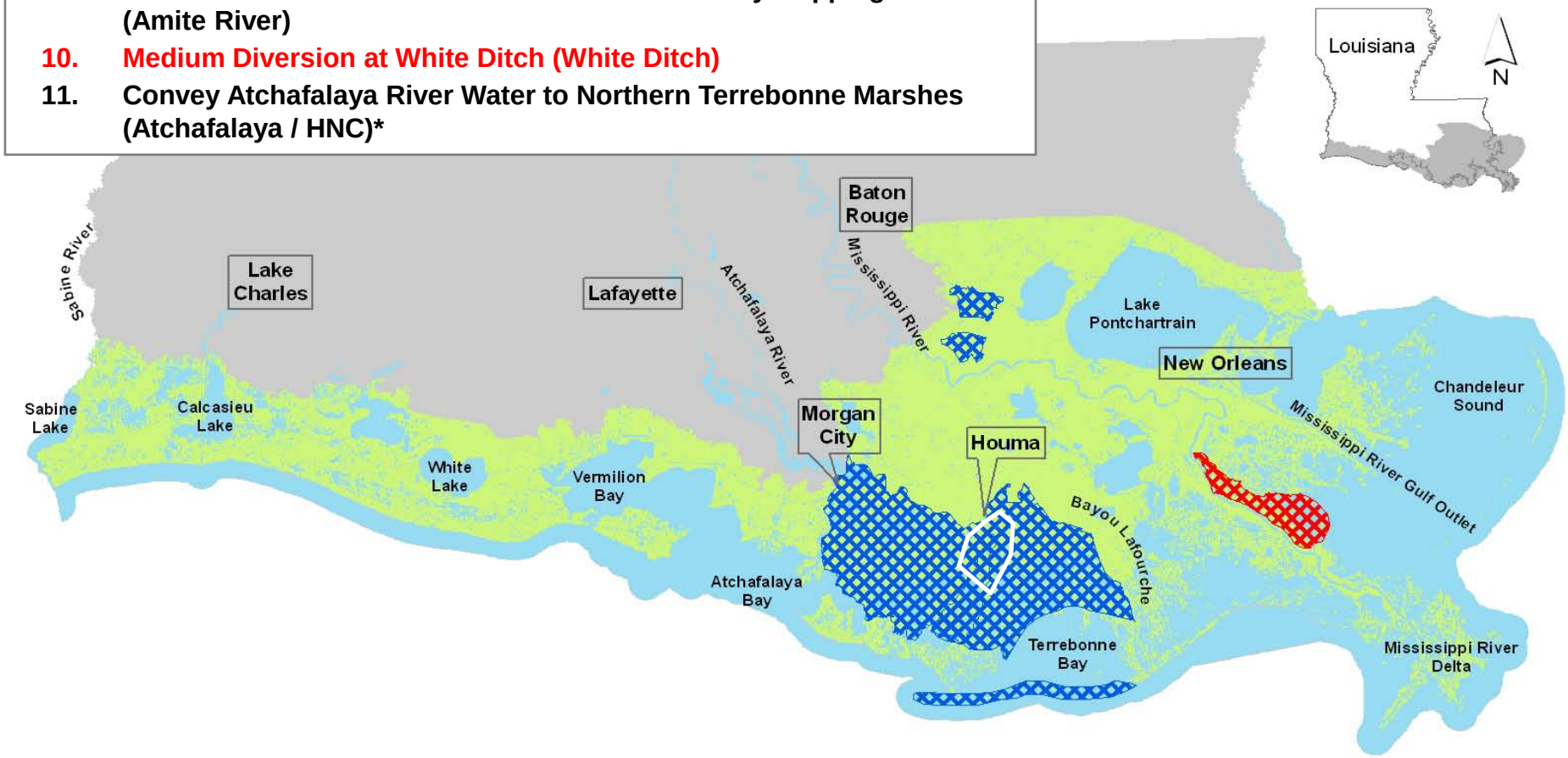

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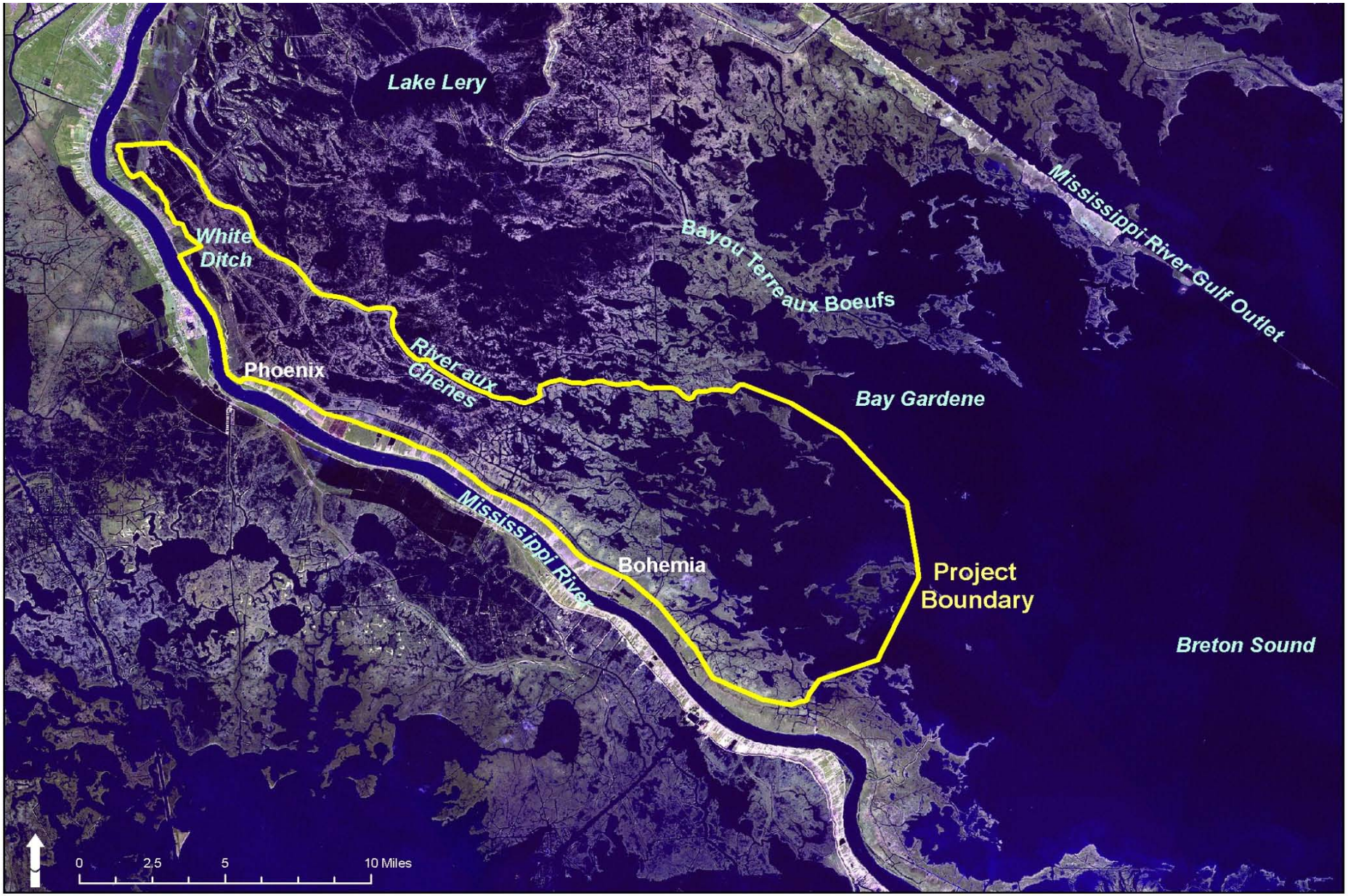
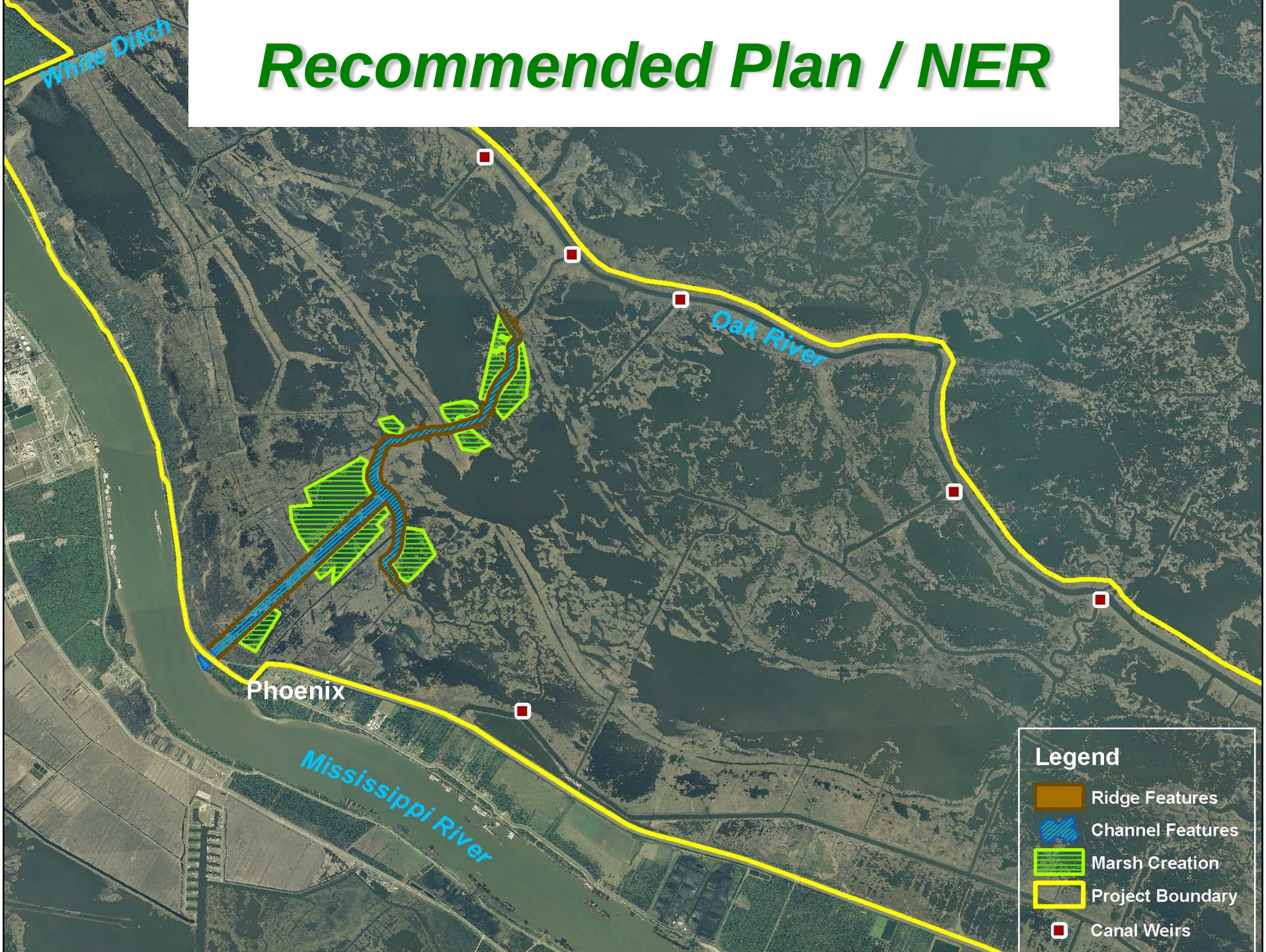
White Ditch Study Area Detail



White Ditch Recommended Plan

- Recommended plan is the NER plan
- The recommended plan ($387.6M) exceeds the WRDA 2007 authorized limit ($126.6M)
- Recommended plan involves a 35,000 cfs diversion, with outfall management, marsh creation, and ridge features
- Reestablishes hydrologic connectivity, sediment, and nutrient exchange with the Mississippi River
- Creates 13,355 AAHUs within the project area
- Offers the most flexibility to address uncertainty related to relative sea-level rise
- Recommended plan requires additional Congressional action

Recommended Plan / NER



White Ditch Review

Agency Technical Review

- All comments resolved, closed and incorporated into the report
- Received ATR certification on August 24, 2010
- Recevied CostDX memorandum on March 29, 2010

Independent External Peer Review

- 19 Comments Received
- Teleconference with IEPR panel July 8, 2010
- All comments resolved and incorporated into report
- Final IEPR report received August 11, 2010
- IEPR certification received August 24, 2010

White Ditch Degraded Habitat

White Ditch Risk & Uncertainty

Risk and uncertainties documented within the report and disseminated to the agencies and the public include:

- Relative Sea Level Rise (RSLR) within the project area
- Design data / Cost estimate
- Accretion
- Formal consultation for Pallid Sturgeon
- Project requires reauthorization due to its cost
- Choosing the best river location for sediment
- Effects on fisheries species
- Potential induced shoaling effects on the river

White Ditch Diversion Location (Phoenix)

Plan Cost Summary

Cost Apportionment (October 2010 Price Level)

Project	Total First Cost*	Federal Cost	Non-Federal Cost	Annual O&M Cost
Amite River Diversion Canal Modification	$8,136,000	$5,288,000	$2,848,000	$10,000
Convey Atchafalaya River Water to Terrebonne Marshes	$283,534,000	$184,298,000	$99,236,000	$73,000
Houma Navigation Canal Lock	$1,496,000	$972,000	$524,000	N/A
Small Diversion at Convent/Blind River	$116,791,000	$75,914,000	$40,877,000	$2,754,000
Terrebonne Basin Barrier Shoreline Restoration (1st Inc/NER)	$113,434,000	$73,732,000	$39,702,000	$6,900,000
	$646,931,000	$420,505,000	$226,426,000	$11,300,000
Medium Diversion at White Ditch	$365,201,000	$237,381,000	$127,820,000	$1,468,000
Total LCA Sec. 7006(e)(3) Cost*	$1,422,089,000	$924,358,000	$497,731,000	$15,605,000

*Total cost is based on the NER plan cost for TBBSR

Model Certification

- Wetland Valuation Assessment Model
  - Quantitative, habitat based assessment methodology
  - Utilized to evaluate the ecosystem benefits of project alternatives

- Model review report, detailing revisions to spreadsheets and documentation, provided to Ecosystem Center of Expertise in March 2010

- Per Ecosystem PCX, projects documented how the study teams incorporated the model revisions in their analyses

- Awaiting approval/certification per EC 1105-2-407

Planning Center of Expertise

Battelle
The Business of Innovation

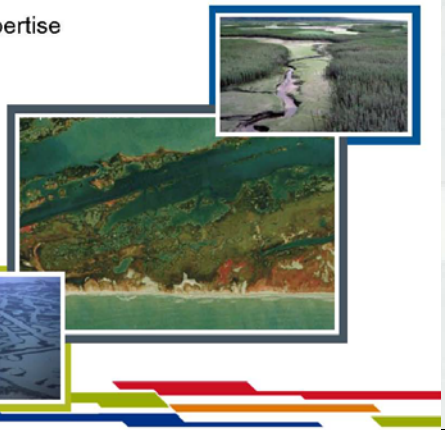
Draft Model Certification Review Report for the Wetland Value Assessment Models

Prepared by
Battelle Memorial Institute

Prepared for
Department of the Army
U.S. Army Corps of Engineers
Ecosystem Planning Center of Expertise
Mississippi Valley Division

Contract No. W911NF-07-D-0001
Task Control Number: 09032
Delivery Order: 0594

July 8, 2009



Policy Review

- Significant comments that have been addressed and incorporated into the reports

  a) Refine Future Without Project condition

  b) Include periodic renourishment for Terrebonne to assure sustainability

  c) Obtain approval to deviate from acquisition of fee interests and approval of non-standard estates.

  d) CE/ICA for ARTM, Best Buys and Plan Selection

2004 LCA Study – Main Report

US Army Corps of Engineers
New Orleans District

Louisiana Coastal Area (LCA), Louisiana

Ecosystem Restoration Study

November 2004
Final
Volume 1:
LCA Study - Main Report

Public Involvement Process

- NOI to prepare draft SEIS --December 2008
- Scoping meetings --February 2009
- Various meetings --Throughout 2009-2010
  (*Meetings held with local landowners, parishes, NGOs, recreation groups, interest and focus groups, academia)*
- Draft released to public --May 21, 2010
  (Terrebonne Basin --June 11, 2010)
- Public Meetings on Drafts --June - July 2010
- No significant negative issues were raised

LCA Public Meetings

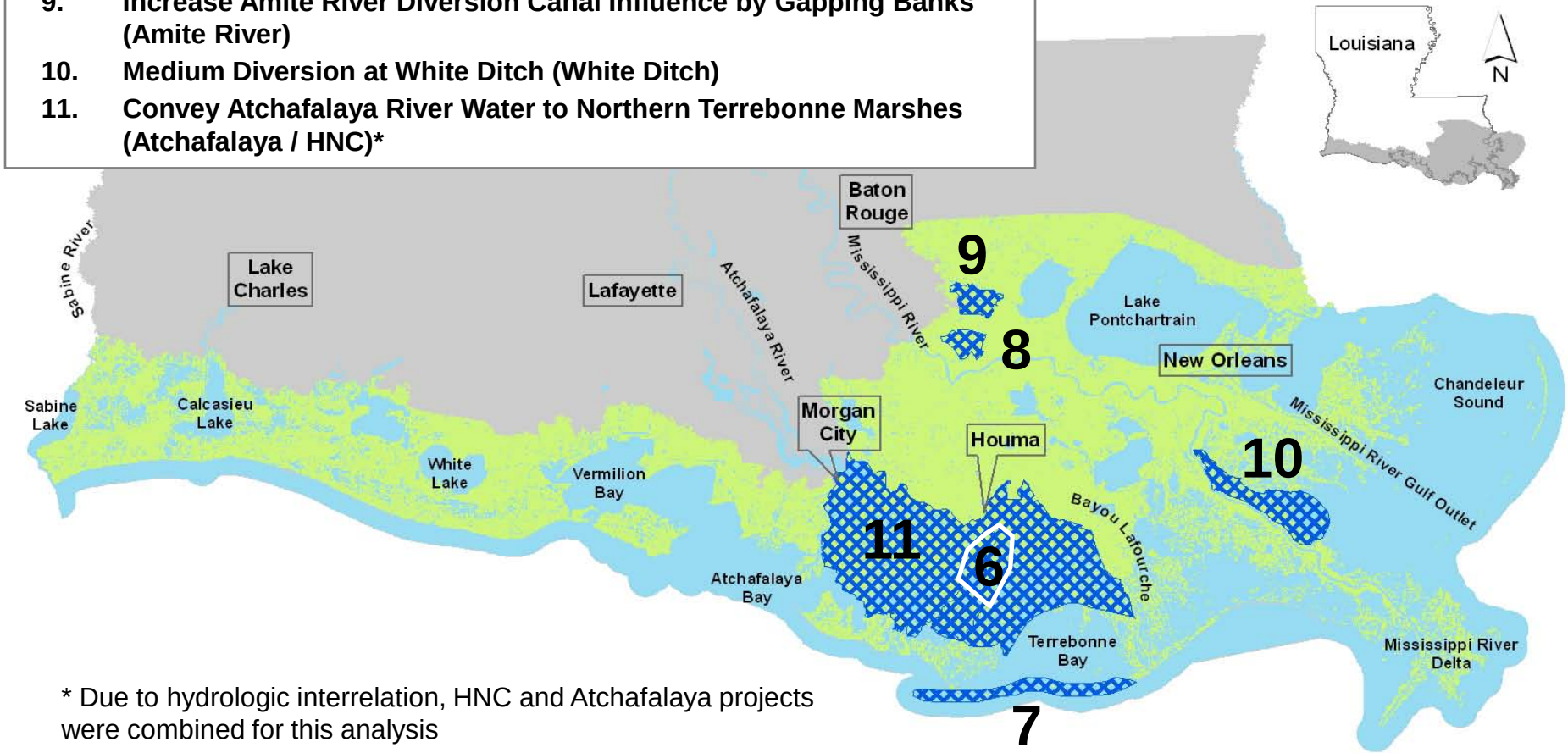
Environmental Operating Principles

All of the recommended and/or NER, plans represent the best plans to meet the EOP standards by incorporating:

- The environmental sustainability of the project on its own merits
- The interdependence of each project with other proposed and or constructed projects throughout coastal Louisiana (CWPPRA, CIAP, and existing authorized projects
- Project balance and synergy with the existing environment, including natural and manmade
- Project designs to benefit degraded ecosystem habitat while avoiding or minimizing impacts to other commercial and/or public interests
- Close PDT's coordination with the non-Federal sponsor, local municipalities, other entities, and residents within each study area

LCA '6' Study Area Map

6. Multi-purpose Operation of Houma Navigation Canal Lock (Atchafalaya / HNC)*
7. Terrebonne Basin Barrier Shoreline Restoration (Terrebonne Basin)
8. Small Diversion at Convent / Blind River (Blind River)
9. Increase Amite River Diversion Canal Influence by Gapping Banks (Amite River)
10. Medium Diversion at White Ditch (White Ditch)
11. Convey Atchafalaya River Water to Northern Terrebonne Marshes (Atchafalaya / HNC)*

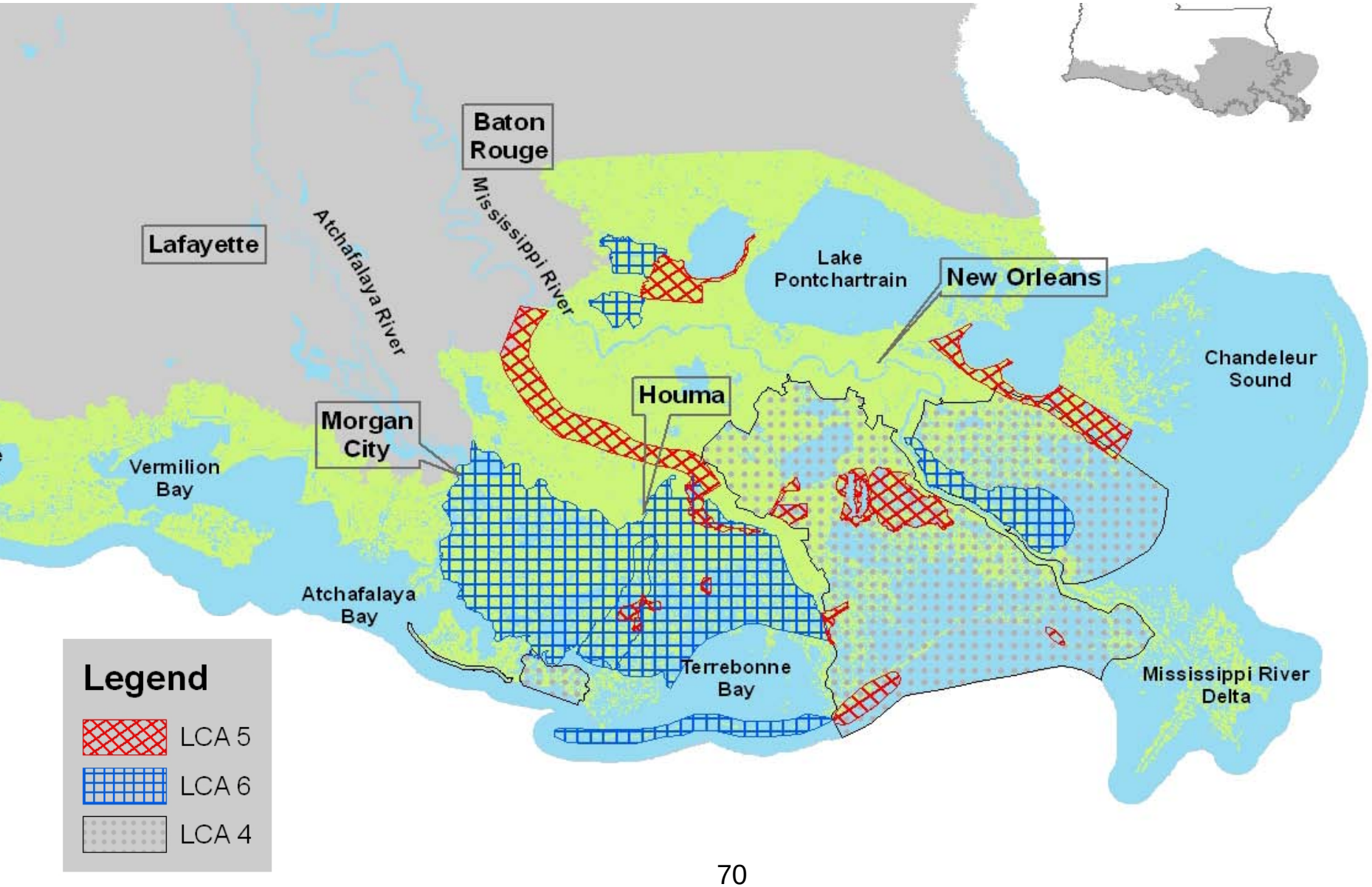


* Due to hydrologic interrelation, HNC and Atchafalaya projects were combined for this analysis

USACE Campaign Plan

- These LCA projects deliver enduring and essential water resource solutions through collaboration with partners and stakeholders
  - 4a -Multidisciplinary and multiagency PDTs
  - 2b -Frequent meetings with stakeholders
  - 2d -Enable Gulf recovery through development of long-term sustainable coastal and ecosystem projects
  - 4c -Use of an integrated, systemic approach to planning
- The LCA planning effort has built and is cultivating a competent, disciplined, and resilient team equipped to deliver high quality solutions
  - 4b -Communicating to teams and stakeholders strategically and transparently
  - 4b -Establishing a comprehensive LCA website
  - 4c -Standardization of reports and business processes

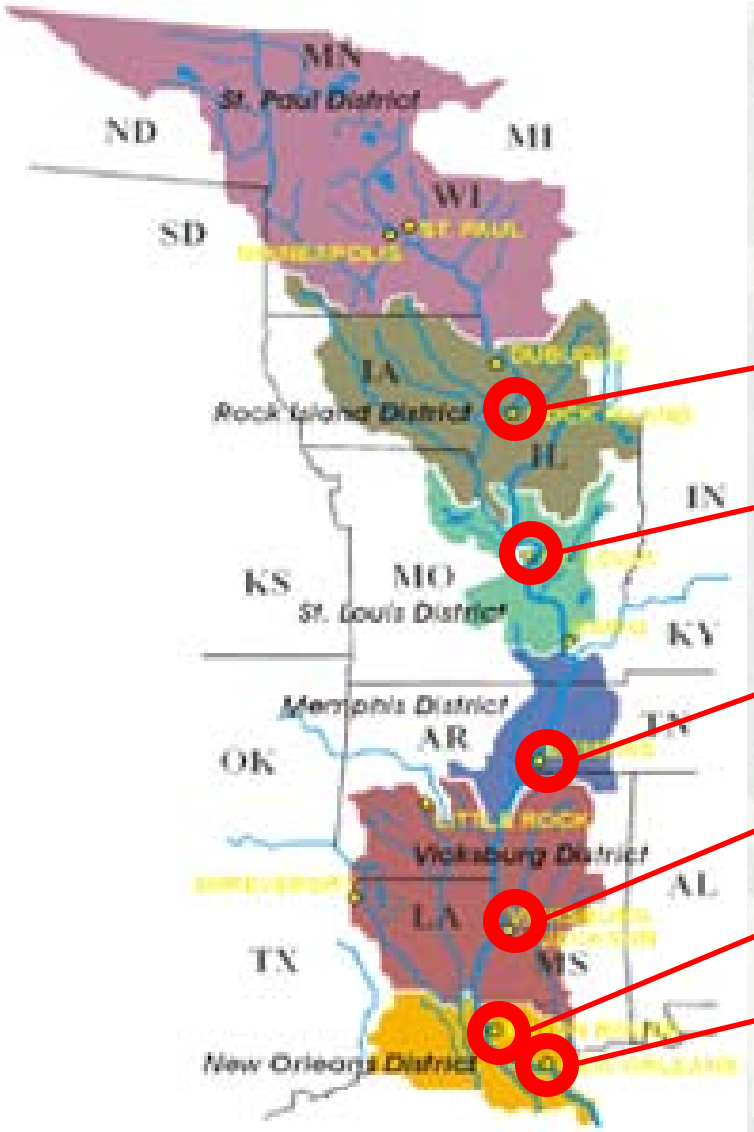
LCA '15' Critical Near-Term Projects



PDT Performance

- Regional resourcing greatly enhanced team capability
  - requires continuous high level of communication
- Local sponsor project technical leads enhanced team capability
  - success stems from early involvement and goal setting
- Agencies contributed to planning success and issue resolution
  - team participation is essential to formulation and info exchange
- Detailed and flexible coordination process needed to produce reports
  - frequent team-level and vertical coordination is necessary
- Institutional memory for implementation and O&M challenging
  - district team members essential for design, construction, O&M

PDT Coordination



MVR

MVS

MVM

MVD

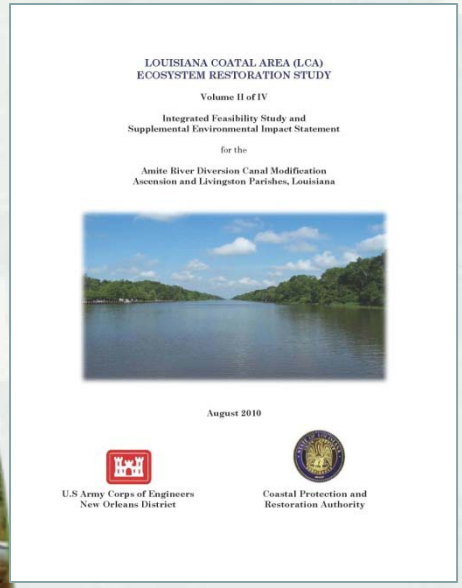
OCPR

MVN

Possible Process Improvements

- Establish vertical agreement on minimum study timelines
- Agree upon project evaluation or review deviations needed to make timelines
- Obtain vertical concurrence on multi-project report outlines
- Institute a central consistency management function
- Seek policy waivers and deviations as early as possible

LCA '6' Studies



LOUISIANA COATAL AREA (LCA)
ECOSYSTEM RESTORATION STUDY

Volume II of IV

Integrated Feasibility Study and
Supplemental Environmental Impact Statement

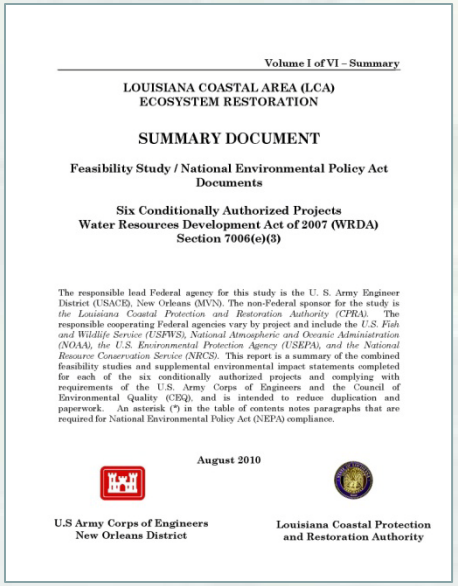
for the

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana

August 2010

U.S Army Corps of Engineers
New Orleans District

Coastal Protection and
Restoration Authority



Volume I of VI – Summary

LOUISIANA COASTAL AREA (LCA)
ECOSYSTEM RESTORATION

SUMMARY DOCUMENT

Feasibility Study / National Environmental Policy Act Documents

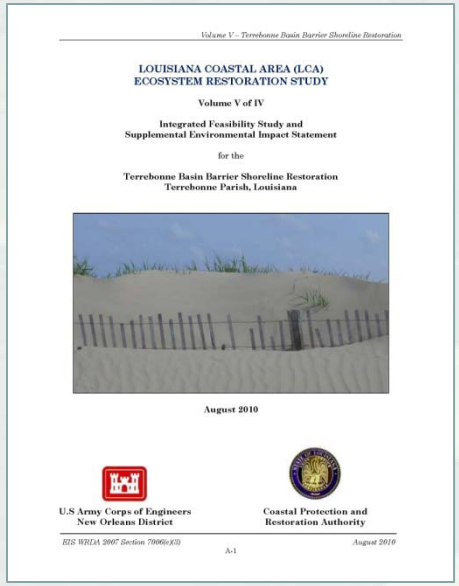
Six Conditionally Authorized Projects
Water Resources Development Act of 2007 (WRDA)
Section 7006(e)(3)

The responsible lead Federal agency for this study is the U. S. Army Engineer District (USACE), New Orleans (MVN). The non-Federal sponsor for the study is *the Louisiana Coastal Protection and Restoration Authority (CPRA).* The responsible cooperating Federal agencies vary by project and include the *U.S. Fish and Wildlife Service (USFWS), National Atmospheric and Oceanic Administration (NOAA), the U.S. Environmental Protection Agency (USEPA), and the National Resource Conservation Service (NRCS).* This report is a summary of the combined feasibility studies and supplemental environmental impact statements completed for each of the six conditionally authorized projects and complying with requirements of the U.S. Army Corps of Engineers and the Council of Environmental Quality (CEQ), and is intended to reduce duplication and paperwork. An asterisk (*) in the table of contents notes paragraphs that are required for National Environmental Policy Act (NEPA) compliance.

August 2010

U.S Army Corps of Engineers
New Orleans District

Louisiana Coastal Protection
and Restoration Authority



Volume V – Terrebonne Basin Barrier Shoreline Restoration

LOUISIANA COASTAL AREA (LCA)
ECOSYSTEM RESTORATION STUDY

Volume V of IV

Integrated Feasibility Study and
Supplemental Environmental Impact Statement

for the

Terrebonne Basin Barrier Shoreline Restoration
Terrebonne Parish, Louisiana

August 2010

U.S Army Corps of Engineers
New Orleans District

Coastal Protection and
Restoration Authority

RTE WRDA 2007 Section 7006(e)(3)

August 2010

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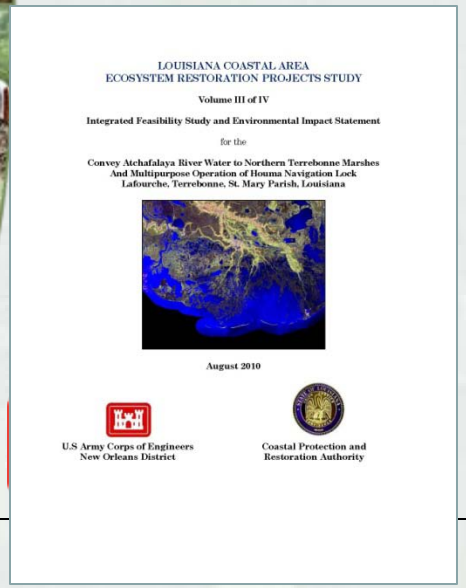


LOUISIANA COASTAL AREA
ECOSYSTEM RESTORATION PROJECTS STUDY

Volume III of IV

Integrated Feasibility Study and Environmental Impact Statement

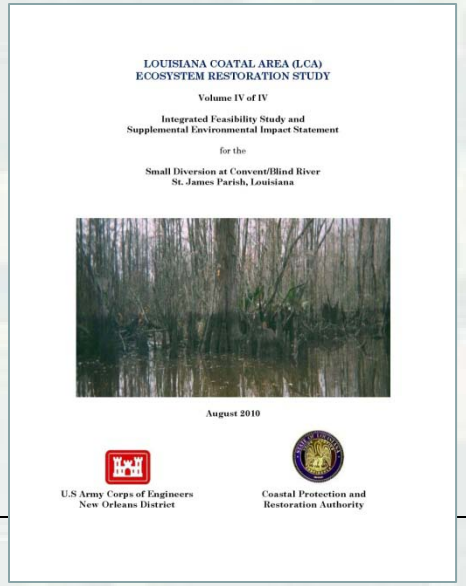
for the

Convey Atchafalaya River Water to Northern Terrebonne Marshes
And Multipurpose Operation of Houma Navigation Lock
Lafourche, Terrebonne, St. Mary Parish, Louisiana

August 2010

U.S Army Corps of Engineers
New Orleans District

Coastal Protection and
Restoration Authority



LOUISIANA COATAL AREA (LCA)
ECOSYSTEM RESTORATION STUDY

Volume IV of IV

Integrated Feasibility Study and
Supplemental Environmental Impact Statement

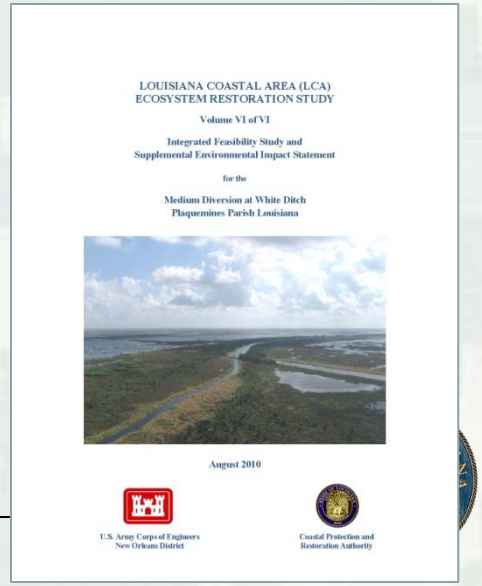
for the

Small Diversion at Convent/Blind River
St. James Parish, Louisiana

August 2010

U.S Army Corps of Engineers
New Orleans District

Coastal Protection and
Restoration Authority



LOUISIANA COASTAL AREA (LCA)
ECOSYSTEM RESTORATION STUDY

Volume VI of VI

Integrated Feasibility Study and
Supplemental Environmental Impact Statement

for the

Medium Diversion at White Ditch
Plaquemines Parish Louisiana

August 2010

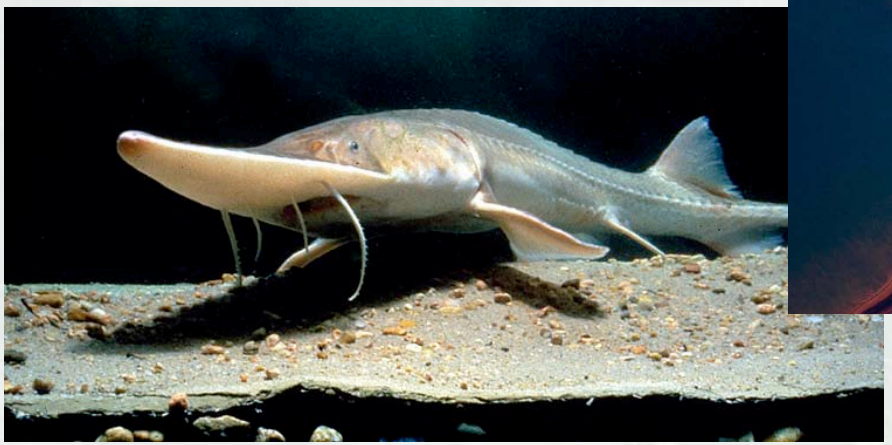
U.S. Army Corps of Engineers
New Orleans District

Coastal Protection and
Restoration Authority

Pending Actions

- Completion of formal consultation with USFWS
- Section 401 Water Quality Certification
- Completion of Legal Certification

Pending Issues



Recommendation

That the Civil Works Review Board approve the release of the LCA WRDA 2007 Section 7006(e)(3) report and Environmental Impact Statements for State and Agency Review conditioned upon completion of pending actions.

Questions?

Sponsor Support

Dr. Steve Mathies

Executive Director, Louisiana Office of Coastal Protection and Restoration

Presentation to the

CIVIL WORKS REVIEW BOARD

Louisiana Coastal Area (LCA)
Six Conditionally Authorized Projects
WRDA of 2007, Title VII, Section 7006 (e)(3).

by

MG Michael J. Walsh

Commander
Mississippi Valley Division

August 27, 2010

BUILDING STRONG®

MVD Command Endorsement

- Concur with MVN Commander's findings and recommendations for LCA "6"
- Report complies with all applicable policies and laws in place at this time
- Anticipate a favorable response to the draft Chief's Report
- Plan supported by sponsor and congressional delegation

MVD Command Endorsement (cont)

- Consistent with the Environmental Operating Procedures
- Consistent with LACPR allowing for adaptive engineering
- Cost estimates are adequate

Certification of Legal and Policy Compliance

- Legal certification by MVN Counsel pending completion of FWS consultation on 28 Sep 2010
- Technical and policy compliance:
  - ATR performed through composition of staff from NAD, SAD, MVD and NWD
  - All ATR comments resolved

MVD Quality Assurance Activities

- MVD reviewed ATR comments/responses to ensure appropriate resolution
- Active participation by vertical team
- Worked with MVN to successfully resolve HQ review comments
- MVD concurs that project is technically and policy complaint
- Final legal certification will be provided prior to release for State and Agency review on 05 October 10
- Implementation in conformance with WRDA 2007 guidance dated 10 July 2009

MVD Recommendation

- Approve Final Report
- Release report for State and Agency Review
- Complete Chief's Report NLT 31 Dec 10

MVD Lessons Learned

- Great use of regional and sponsor resources to complete
- Execution of required Cost Share Agreements between parties earlier in the process
- Elevate cost estimating issue to HQUSACE senior level for concurrence earlier in process
- Vertical team alignment on differentiation of authorized TSP and recommendation for NER

Civil Works Review Board

HQUSACE POLICY REVIEW CONCERNS

Louisiana Coastal Area
Six Authorized Projects, WRDA 2007

Mark Matusiak
Office of Water Project Review
Planning and Policy Division

Washington, DC – 27 August 2010

Areas of Significant Policy Concern:

- Future Without Project Conditions.
- Periodic Nourishment for Terrebonne Barrier Islands Alternatives.
- Proposed Use of Non-Standard Estates.
- CE/ICA for ARTM, Best Buys and Plan Selection.

Future Without Project Conditions

CONCERN: The future without project conditions (FWOP) were substantially incomplete and un-quantified at the time of the AFB, February 2010.

REASON: FWOPC are the baseline for demonstrating the potential benefits of project alternatives. Policy states that it is necessary to forecast conditions of all planning area resources relevant to the identified problems and opportunities.

RESOLUTION: Following discussions at AFB, MVN provided additional quantified information on the FWOPC in the draft report submitted to HQUSACE for review prior to public release.

RESOLUTION IMPACT: Concern Resolved.

Periodic Nourishment of Terrebonne Barrier Islands Alternatives

CONCERN: Initial plan did not propose periodic renourishment of certain constructed project features (e.g., beaches and dunes) with the result that some features would largely disappear during period of analysis.

REASON: HQUSACE questioned sustainability over time; uncertainty about ecological benefits and incidental protection afforded to critical habitats; justification of investment; conflict with standard O & M requirements.

RESOLUTION: MVN re-evaluated periodic renourishment for final array of alternatives, and recommended plan includes renourishment at 20 and 40 years following construction.

RESOLUTION IMPACT: Concern resolved.

Proposed Use of Non-Standard Estates

CONCERN: Draft report did not contain detailed information on the proposed non-standard estates, i.e., easements.

REASON: Any estates considered must assure that all rights needed to construct ,operate and maintain the project are captured in easement language, and that estate protects Corps' investment from incompatible uses now and in the future.

RESOLUTION: Draft non-standard estates will be included in final report and updated in ensuing phase based on additional detail.

RESOLUTION IMPACT: Concern resolved.

CE/ICA for ARTM, Best Buys & Plan Selection

CONCERN: Two plans in the final array of alternatives were not considered in cost-effectiveness and incremental cost analysis. HQUSACE thought these might qualify as best buy plans. Also, while the tentatively selected plan was cost-effective, the gain in habitat units was relatively small in relation to the increase in costs.

REASON: Including the two plans in the CE/ICA could result in additional best buy plans, and could serve to identify a lower cost plan that provided similar benefits.

RESOLUTION: All plans in final array of alternatives were re-examined using CE/ICA, and a lower cost plan was identified and selected.

RESOLUTION IMPACT: Concern Resolved.

Tasks to Be Completed Prior to S & A Review

- Incorporate Final Biological Opinion into report
- Revisions to Report to Ensure Consistency
- Final Legal Certification

HQUSACE POLICY COMPLIANCE REVIEW TEAM RECOMMENDATION

Approve release the Draft Chief's Report-Feasibility Report and EIS for S&A Review upon completion of above noted tasks.