
COASTAL PROTECTION AND RESTORATION AUTHORITY
CPRA
Chairman Gordon Dove
GOCA, CPRA
HTV PRESENTATION
July 21, 2025

Mid-Barataria Sediment Diversion

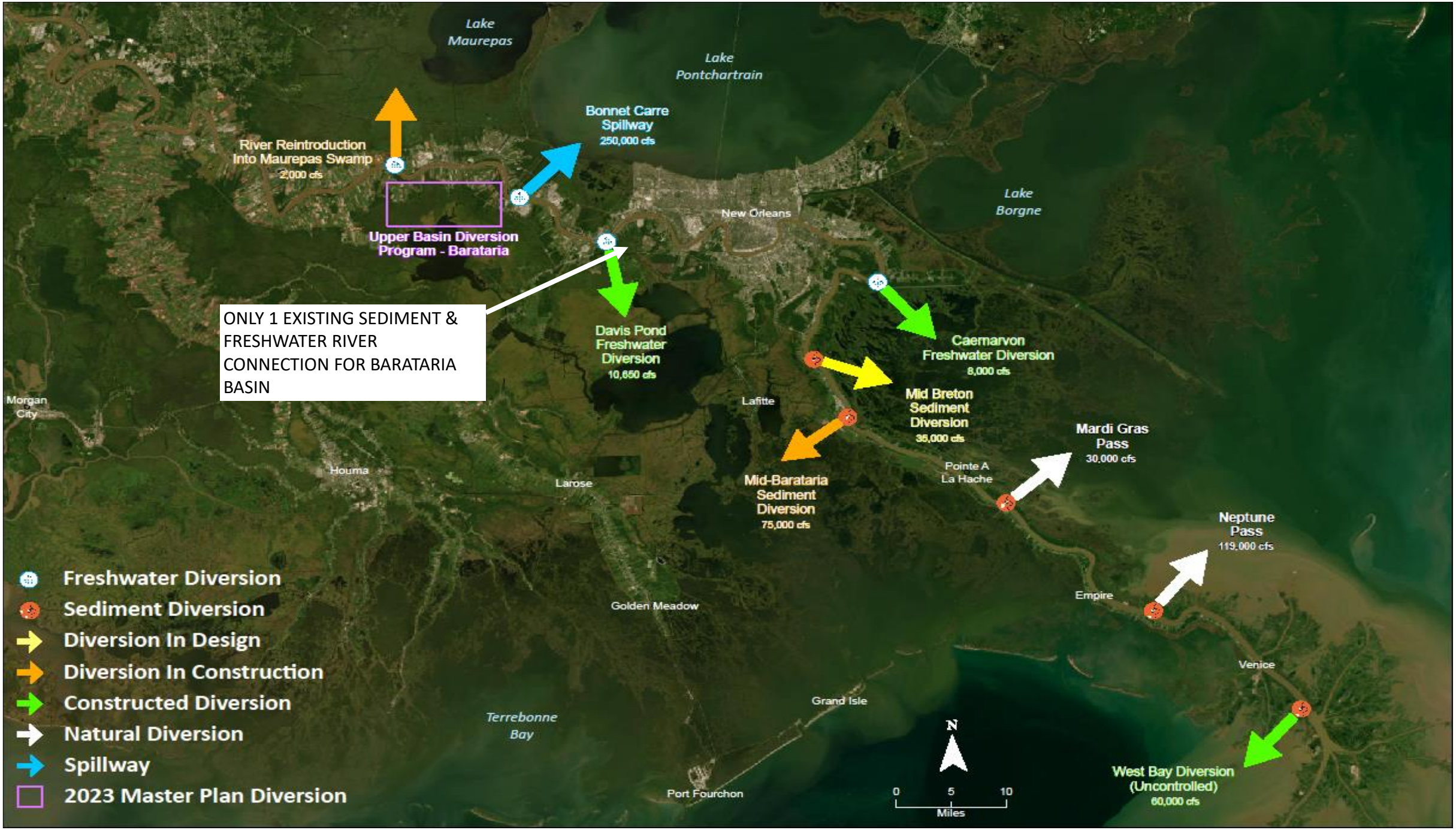
75,000 CFS Permit was suspended

by the UNITED STATES ARMY CORPS of ENGINEERS (USACE)

List of Major CPRA Projects in Engineering (Permits)

Including Coastal Restoration, Hurricane Protection, Barrier Islands, Floodgates and Levee Protection in Coastal Louisiana (Coastal Zone)

- Fourchon Segmented Breakwater Rocks - 5 1/2 miles
  - Fourchon Port Commission (CPRA)
- East Timbalier Island (Segmented Breakwater Rocks) & Casse-Tete Island
  - Restoration (CPRA)
- Wine Island Restoration & Segmented Breakwater Rocks
  - Terrebonne Levee & Conservation District (CPRA)
- Marsh Island Restoration (CPRA)
- White Lake Restoration & Rehabilitation (CPRA)
- Barataria Landbridge - 23 1/2 miles, 6,800 acres (CPRA) (In Process)
- Barataria Bay (Plaquemines Parish) Long Distance Pipeline Sediment
  - Diversion & Large Scale Marsh Creation - (CPRA) (In Process)
- Vermillion, New Iberia Levee & Floodgates - New Iberia Government (CPRA)
- Rockefeller Rock Extension West (CPRA)
- Grand Isle Segmented Breakwater Rocks (Jefferson Parish)
  - Shoreline of Grand Isle - 15,000 Linear feet (Rocks)
  - CPRA providing Engineering to USACE
- North Side of Grand Isle - Levees and Pump Stations - Jefferson Parish
  - Grand Isle Government (CPRA)
- Empire Locks System - Plaquemines Parish Government (CPRA)
- Bayou Des Allemands Floodgate - (Presently Under Engineering & Permitting)
  - Working on Funding with Lafourche Basin Levee District (CPRA)
- Morganza Levee System
  - Lift levees to 15 feet - Terrebonne Levee & Conservation District (CPRA)
  - Also funding for Lafourche Levee Reach 1 - North Lafourche Levee District (CPRA)
- Chandeleur Island Restoration - 13.5 Miles - Federal Agencies (CPRA)


Lake Maurepas
Lake Pontchartrain
Lake Borgne
River Reintroduction Into Maurepas Swamp
2,000 cfs
Bonnet Carre Spillway
250,000 cfs
Upper Basin Diversion Program - Barataria
New Orleans
ONLY 1 EXISTING SEDIMENT & FRESHWATER RIVER CONNECTION FOR BARATARIA BASIN
Davis Pond Freshwater Diversion
10,650 cfs
Caernarvon Freshwater Diversion
8,000 cfs
Mid Breton Sediment Diversion
35,000 cfs
Lafitte
Morgan City
Houma
Larose
Mid-Barataria Sediment Diversion
75,000 cfs
Pointe A La Hache
Mardi Gras Pass
30,000 cfs
Neptune Pass
119,000 cfs
Empire
Golden Meadow
Venice
Grand Isle
Terrebonne Bay
Port Fourchon
West Bay Diversion (Uncontrolled)
60,000 cfs
Freshwater Diversion
Sediment Diversion
Diversion In Design
Diversion In Construction
Constructed Diversion
Natural Diversion
Spillway
2023 Master Plan Diversion
N
0
5
10
Miles

Louisiana Trustee Implementation Group

LA TIG – Federal Trustees

U.S. Department of Commerce:
National Oceanic & Atmospheric Association

U.S. Environmental Protection Agency

U.S. Department of the Interior

U.S. Department of Agriculture

Louisiana Trustee Implementation Group

LA TIG – State Trustees

Louisiana Department of Energy and Natural Resources (LDENR)

Louisiana Department of Environmental Quality (LDEQ)

Louisiana Coastal Protection and Restoration Authority (CPRA)

Louisiana Oil Spill Coordinator's Office (LOSCO)

Louisiana Department of Wildlife and Fisheries (LDWF)

Construction Funding

NATIONAL FISH AND WILDLIFE FOUNDATION (NFWF) - $660 MILLION FOR MBSD

- $1.27 billion *Deepwater Horizon* oil spill settlement dollars dedicated to Louisiana
- Required to be spent on barrier island restoration or river diversions.
- NFWF must consult with the state and consider the Coastal Master Plan
- Use of any funds needs to be consistent with the directions in the criminal plea agreement (the source of those funds) and is subject to approval of the NFWF Board.

NATURAL RESOURCES DAMAGE ASSESSMENT (NRDA) - $2.26 BILLION FOR MBSD

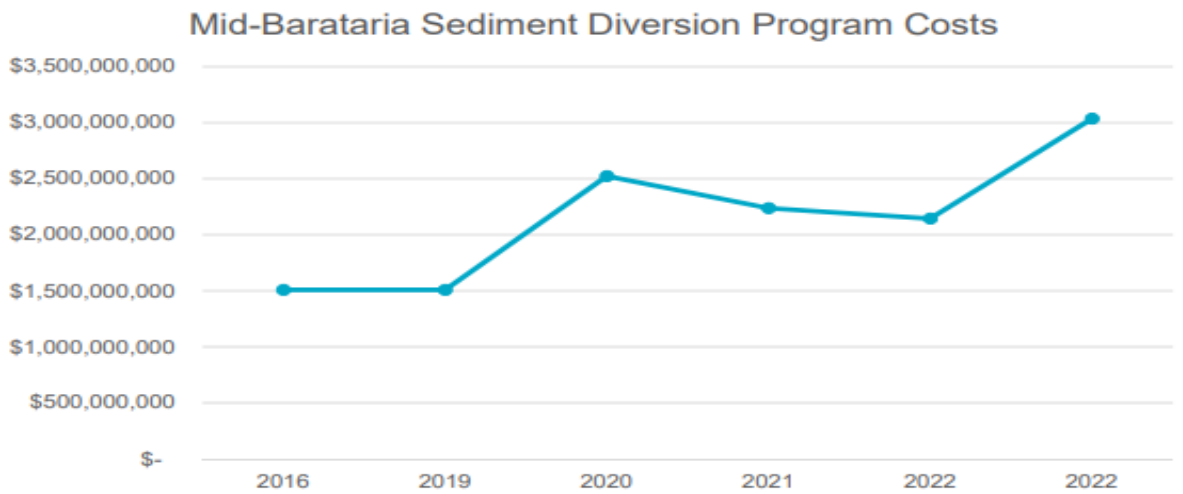
- $5 billion *Deepwater Horizon* oil spill settlement dollars for oil spill restoration activities (Louisiana)
- Required to be spent on Wetlands, Coastal and Nearshore Habitats
- Unspent funds will be returned to the LA TIG
- Funds must be consistent with the Programmatic Restoration Plan (PDARP), Consent Decree, and subsequent restoration plans
- Strategic Restoration Plan committed to advancing large-scale sediment diversions plus large-scale marsh creation projects

Money Becomes Available upon termination of Mid-Barataria Diversion

$2.2 Billion for other qualifying projects

MBSD Costs over Program Life

- 2016 = $1.51B
- 2020 = $2.52B
- 2021 = $2.23B
- 2022 = $2.15B
- 2022 = $3.04B
- 2023 = $3.10B



MAJOR ISSUES UNDER REVIEW

Mid-Barataria Diversion at 75,000 CFS

- Raising Basin 1.7 ft to 3 ft. (Possibly 4 ft with strong South wind,)
  - Quality of water
    - Estimated cost to date - $3.1 Billion
    - Already at $200 million +/- over

NFIP Compliance with 8 parishes and FEMA
As per Corps permit

800+ Properties, structures, camps, homes, businesses, bulk heads, sewage plants, boat shed, docks, etc.

Parallel Parish levees to Federal NOV Federal Levees

Lifting roads in Myrtle Grove outside Federal Levees

Salt water wedge - Shoaling and Engineering Analysis review and study Mississippi River (Corps) to 75,000 CFS diversion 3 miles to the South of the salt water wedge
(Shoaling estimated dredging per occurrence - $50 - $100 Million Dollars)

MAJOR ISSUES UNDER REVIEW

Environmental assessment of oil and gas storage pits in impacted area when inundated by diversion (75,000 CFS) - 1'7" to 3' additional water level when operating diversion

Environmental and water access to hundreds of abandon wells inactive, orphaned, operating; Sediment and water level can and will affect access depth

Properties in impacted areas **NOT** included in 800 properties in original assessment

Impact to Grand Isle and Impact to Lafitte
(Grand Isle presently floods on North side of island with a strong South wind)

Hypoxia Review - Hypoxia Zones within Barataria Basin to Barrier Islands

Grand Isle Camps - Buyout due to quality of water, flooding (Bayside)

Navigable canals, bayous, waterway access and impact due to sediment
(LA Supreme Court ruling - Must keep accessible)

MAJOR ISSUES UNDER REVIEW

Mid-Barataria Diversion Footprint (Plaquemines Parish)

Expropriation of property presently in litigation (7 lawsuits)

PFAS (Forever Chemicals) Study (impact)

Future Lawsuits from Shrimp, Fisheries, Crabs, , Oysters (Private and State Oyster Leases), Recreation impact
Existing Federal Lawsuit and Lawsuits in the 25th JDC

Pipeline assessment in impacted area of Barataria Basin

Potential future buyouts – Lafitte Area

NOTE: The Corps approved a move smaller diversion - 2,500 - 15,000 CFS - through Corps Chief Report and was authorized and approved by Congress to engineer and construct 2,500 - 15,000 diversion with 65% Federal and 35% State match on smaller diversion in 2007.

(Saving approximately $1 (one) Billion Dollars to State of Louisiana)

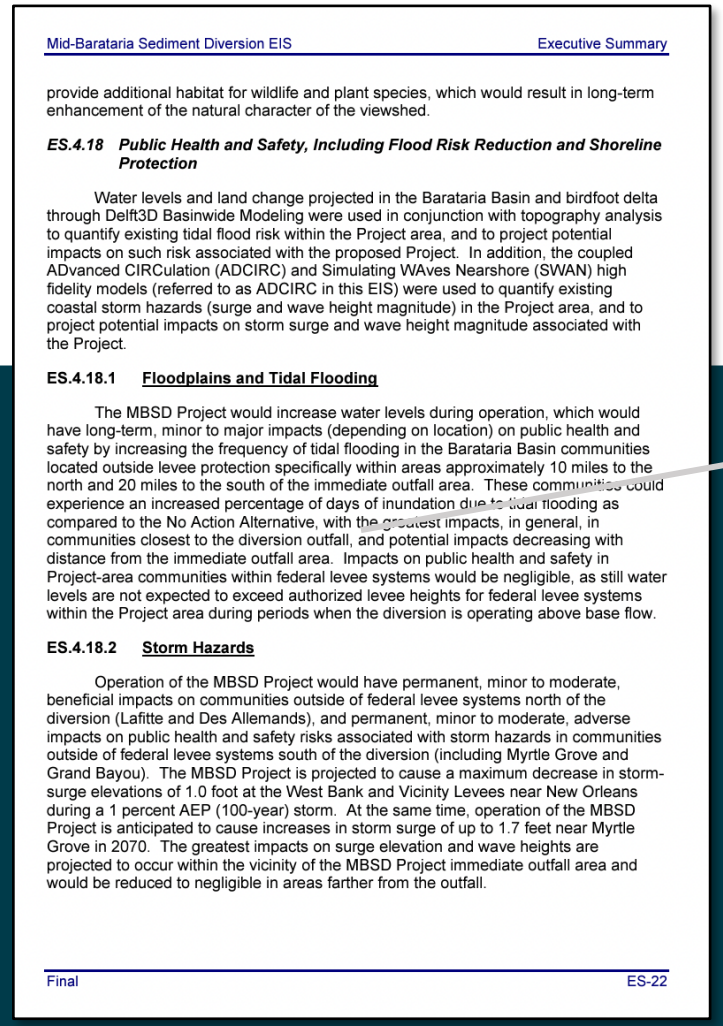
TOTAL MBSD PROJECT COST TO DATE APPROX. $3.1 + BILLION (Rising)

- Mitigated Infrastructure Damages
  - 800+ properties, structures, camps, homes, businesses, buildings, commercial, residential, bulkheads, lift roads, sewerage plants, boat sheds, docks etc.
  - $279 Million obligated for mitigated infrastructure damages (the final amount is substantially more)

- Operation & Maintenance
  - To Dredge & Maintain Canals, Bayous, Waterways for the life of MBSD for 50 years

    $1.7 Billion (not including all the Lakes, all Oil and Gas Wells)

Federal Economic Impact Statement for Mid-Barataria Sediment Diversion



Mid-Barataria Sediment Diversion EIS Executive Summary

provide additional habitat for wildlife and plant species, which would result in long-term enhancement of the natural character of the viewshed.

ES.4.18 Public Health and Safety, Including Flood Risk Reduction and Shoreline Protection

Water levels and land change projected in the Barataria Basin and birdfoot delta through Delft3D Basinwide Modeling were used in conjunction with topography analysis to quantify existing tidal flood risk within the Project area, and to project potential impacts on such risk associated with the proposed Project. In addition, the coupled ADvanced CIRCulation (ADCIRC) and Simulating WAves Nearshore (SWAN) high fidelity models (referred to as ADCIRC in this EIS) were used to quantify existing coastal storm hazards (surge and wave height magnitude) in the Project area, and to project potential impacts on storm surge and wave height magnitude associated with the Project.

ES.4.18.1 Floodplains and Tidal Flooding

The MBSD Project would increase water levels during operation, which would have long-term, minor to major impacts (depending on location) on public health and safety by increasing the frequency of tidal flooding in the Barataria Basin communities located outside levee protection specifically within areas approximately 10 miles to the north and 20 miles to the south of the immediate outfall area. These communities could experience an increased percentage of days of inundation due to tidal flooding as compared to the No Action Alternative, with the greatest impacts, in general, in communities closest to the diversion outfall, and potential impacts decreasing with distance from the immediate outfall area. Impacts on public health and safety in Project-area communities within federal levee systems would be negligible, as still water levels are not expected to exceed authorized levee heights for federal levee systems within the Project area during periods when the diversion is operating above base flow.

ES.4.18.2 Storm Hazards

Operation of the MBSD Project would have permanent, minor to moderate, beneficial impacts on communities outside of federal levee systems north of the diversion (Lafitte and Des Allemands), and permanent, minor to moderate, adverse impacts on public health and safety risks associated with storm hazards in communities outside of federal levee systems south of the diversion (including Myrtle Grove and Grand Bayou). The MBSD Project is projected to cause a maximum decrease in storm-surge elevations of 1.0 foot at the West Bank and Vicinity Levees near New Orleans during a 1 percent AEP (100-year) storm. At the same time, operation of the MBSD Project is anticipated to cause increases in storm surge of up to 1.7 feet near Myrtle Grove in 2070. The greatest impacts on surge elevation and wave heights are projected to occur within the vicinity of the MBSD Project immediate outfall area and would be reduced to negligible in areas farther from the outfall.

Final ES-22

Floodplains and Tidal Flooding

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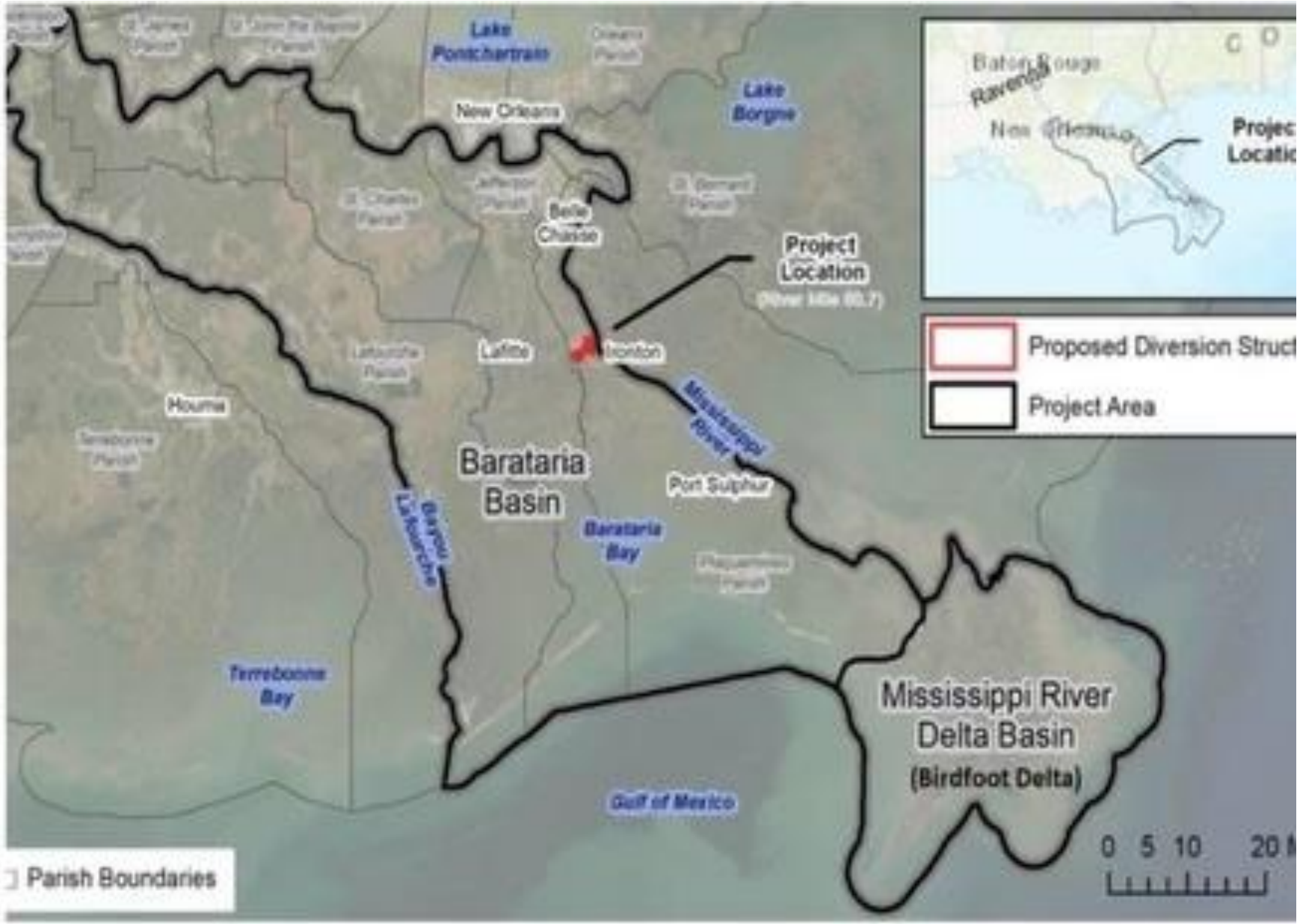


Figure 6. Overview of the Entire Action Area for the Proposed Project (Figure 2.4-1 in the project BA

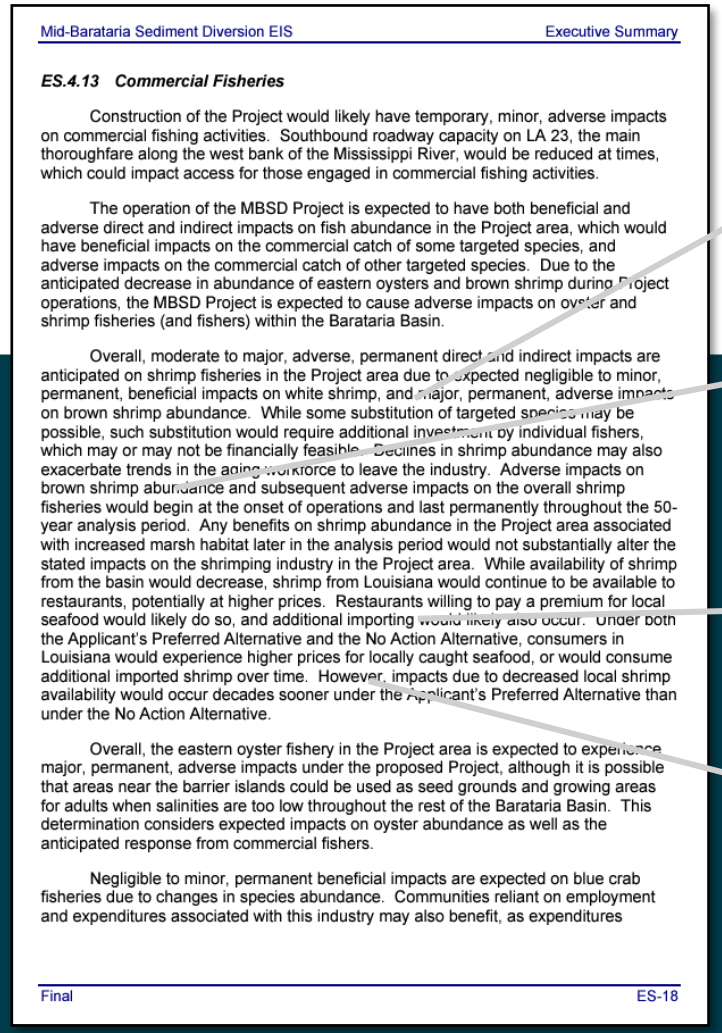
Mid Barataria Diversion Impacted Area

Need Approval

Corps of Engineers Permit

- **8 Parishes**
- **NFIP Compliance**

Federal Economic Impact Statement for Mid-Barataria Sediment Diversion



Mid-Barataria Sediment Diversion EIS — Executive Summary

ES.4.13 Commercial Fisheries

Construction of the Project would likely have temporary, minor, adverse impacts on commercial fishing activities. Southbound roadway capacity on LA 23, the main thoroughfare along the west bank of the Mississippi River, would be reduced at times, which could impact access for those engaged in commercial fishing activities.

The operation of the MBSD Project is expected to have both beneficial and adverse direct and indirect impacts on fish abundance in the Project area, which would have beneficial impacts on the commercial catch of some targeted species, and adverse impacts on the commercial catch of other targeted species. Due to the anticipated decrease in abundance of eastern oysters and brown shrimp during Project operations, the MBSD Project is expected to cause adverse impacts on oyster and shrimp fisheries (and fishers) within the Barataria Basin.

Overall, moderate to major, adverse, permanent direct and indirect impacts are anticipated on shrimp fisheries in the Project area due to expected negligible to minor, permanent, beneficial impacts on white shrimp, and major, permanent, adverse impacts on brown shrimp abundance. While some substitution of targeted species may be possible, such substitution would require additional investment by individual fishers, which may or may not be financially feasible. Declines in shrimp abundance may also exacerbate trends in the aging workforce to leave the industry. Adverse impacts on brown shrimp abundance and subsequent adverse impacts on the overall shrimp fisheries would begin at the onset of operations and last permanently throughout the 50-year analysis period. Any benefits on shrimp abundance in the Project area associated with increased marsh habitat later in the analysis period would not substantially alter the stated impacts on the shrimping industry in the Project area. While availability of shrimp from the basin would decrease, shrimp from Louisiana would continue to be available to restaurants, potentially at higher prices. Restaurants willing to pay a premium for local seafood would likely do so, and additional importing would likely also occur. Under both the Applicant's Preferred Alternative and the No Action Alternative, consumers in Louisiana would experience higher prices for locally caught seafood, or would consume additional imported shrimp over time. However, impacts due to decreased local shrimp availability would occur decades sooner under the Applicant's Preferred Alternative than under the No Action Alternative.

Overall, the eastern oyster fishery in the Project area is expected to experience major, permanent, adverse impacts under the proposed Project, although it is possible that areas near the barrier islands could be used as seed grounds and growing areas for adults when salinities are too low throughout the rest of the Barataria Basin. This determination considers expected impacts on oyster abundance as well as the anticipated response from commercial fishers.

Negligible to minor, permanent beneficial impacts are expected on blue crab fisheries due to changes in species abundance. Communities reliant on employment and expenditures associated with this industry may also benefit, as expenditures

Final — ES-18

Major, permanent, adverse impacts on brown shrimp abundance

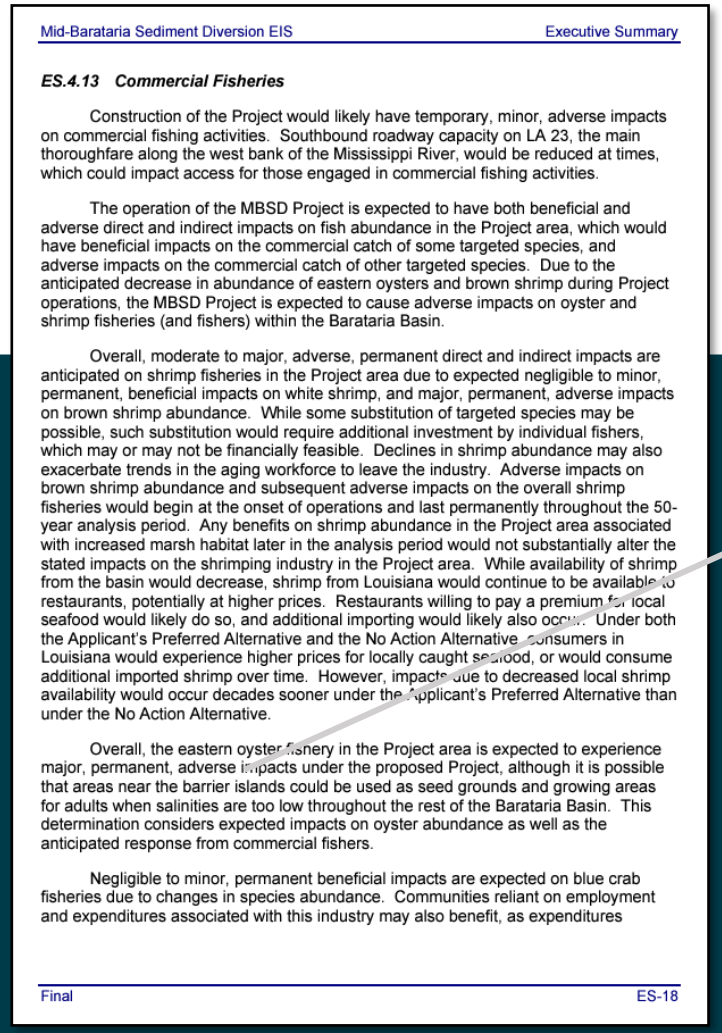
Brown shrimp, abundance, and subsequent adverse impacts of the overall shrimp fisheries would begin at the onset of operations and last permanently throughout the 50-year analysis period

Additional importing would likely also occur

Would consume additional imported shrimp overtime

5 – 25 parts per thousand Salinity Level to sustain Brown Shrimp

Federal Economic Impact Statement for Mid-Barataria Sediment Diversion



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Final — ES-18

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Must maintain adequate fecal levels to sustain oysters.

Pollution of the Mississippi River

- a variety of toxins, including furan, trichlorobenzene, dichloro-diphenyl-trichloroethane (DDT), trichloroethane (TCA), and polychlorinated biphenyls (PCBs)

Water Quality in the Mississippi River - National Park Service

- the Mississippi River within the park corridor exceed water quality standards for mercury, bacteria, sediment, PCBs (polychlorinated biphenyl), and nutrients

PFAS 'Forever chemicals'

- State tests revealed the river is contaminated by perfluoroalkyl and polyfluoroalkyl substances - commonly known as PFAS or "forever chemicals."

What are the levels of E coli in the Mississippi river?

The standard for E. coli in the Mississippi River within the MWMO is 126 CFU/100 mL for a monthly geomean of at least five samples. The MPCA E.

In the context of E. coli in drinking water:

- Swimming beaches: E. coli levels should not exceed 88 per 100 milliliters in any one sample, or a three-sample geometric mean average of 47/100 milliliters over a 60-day period.

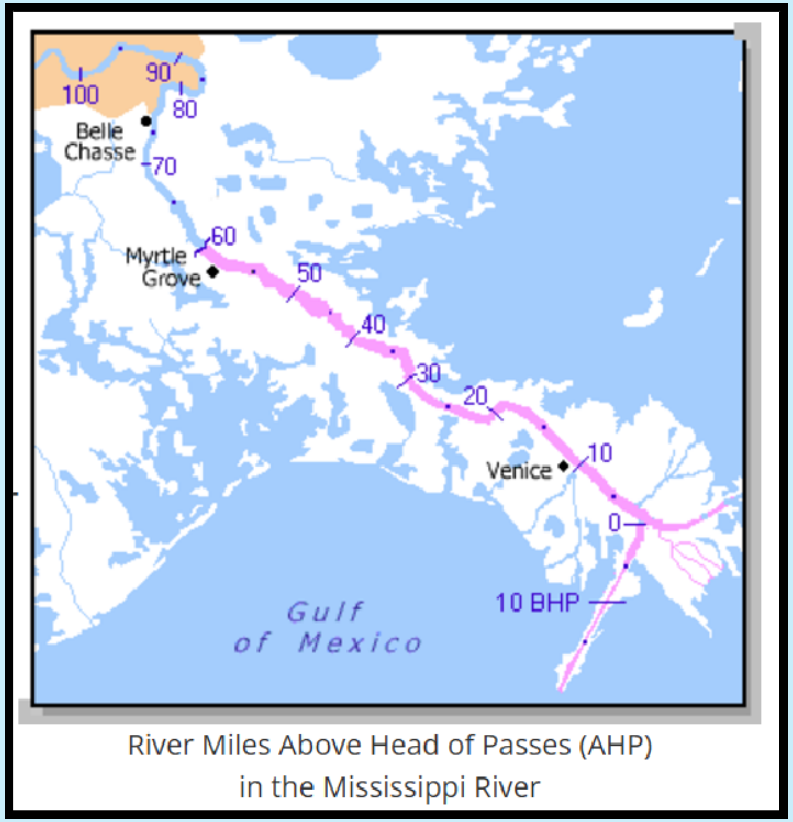
Location of Saltwater Sill Marker Installed by U.S. Amy Corps of Engineers

The Corps constructed an underwater sill in 1988, 1999, 2012 and 2023 at River Mile 64, near Myrtle Grove, LA, to arrest the progression of saltwater intrusion. This sill will be maintained until river flows increase and push the salt water down stream. (August 29, 2024)

The saltwater sill installed in the Mississippi River by the U.S. Amy Corps of Engineers to slow migration of salt water north of the Mid-Barataria Basin. In essence, the diversion would be closed wile salt water is that far north.

This saltwater sill installed in the Mississippi River by the Corps is 3.3 miles north of the Mid-Barataria Sediment Diversion.

The MBSD Diversion would not operate until the Miss. River reaches 450K cfs



River Miles Above Head of Passes (AHP) in the Mississippi River

Mississippi River Drainage

The Mississippi River has the third largest drainage basin in the world, exceeded in size only by the watersheds of the Amazon and Congo Rivers. It drains 41 percent of the 48 contiguous states of the United States.

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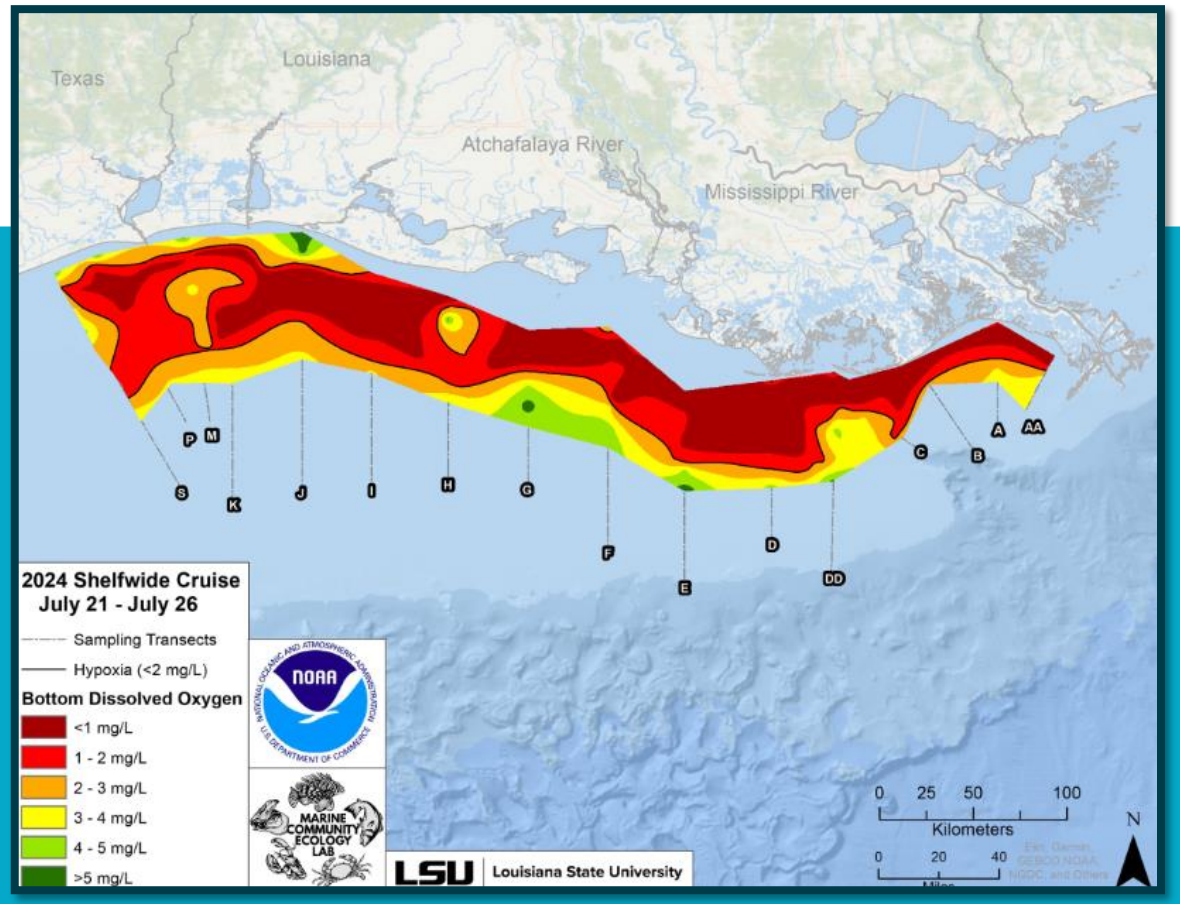
What is the Gulf of Mexico Dead Zone?

"Dead zone" is a more common term for **hypoxia**, which refers to a **reduced level of oxygen** in the water.



NOAA-supported scientists recently announced that this year's Gulf of Mexico "dead zone" — an area of low to no oxygen that can kill fish and marine life — is approximately 6,705 square miles, the 12th largest zone on record in 38 years of measurement.

Hypoxic Zone Report 2023

Should we be worried about the dead zone in the Gulf of Mexico?

By: Jacob Silverman | Updated: Nov 30, 2023

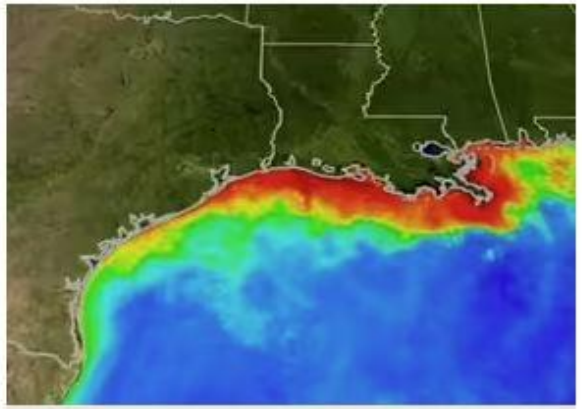


PHOTO COURTESY OF NASA/GODDARD SPACE FLIGHT CENTER SCIENTIFIC VISUALIZATION STUDIO THE ABOVE MAP SHOWS CONCENTRATIONS OF PHYTOPLANKTON, THE ALGAL BLOOMS THAT CONTRIBUTE TO DEAD ZONES, IN GULF COAST WATERS.

Every spring, a vast area of the northern Gulf of Mexico loses most of its oxygen and becomes deadly to marine life. The **Gulf of Mexico dead zone**, which is also called a hypoxic zone, is caused by the growth of massive quantities of algae known as algal blooms. As algae die, bacteria feed on them and, in the process, suck up the water's available oxygen. The resulting low oxygen levels in the water kill fish and other marine life.

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Algal Blooms

What Causes the Algal Blooms?

Algal blooms occur when the surface waters contain excess nutrients, particularly nitrogen and phosphorus, fostering rapid algae growth. These harmful blooms partly arise from natural processes, but human activities have exacerbated their frequency and intensity. The Mississippi River and the Atchafalaya River discharge into the Gulf of Mexico, carrying with them pollutants like fertilizer and sewage from the expansive Mississippi River Basin. The Basin collects water from various tributaries around the country, contributing to the nutrient runoff entering the Gulf. With springtime's arrival and snowmelt, these tributaries transport an even greater amount of nutrients, creating a fertile environment for algae growth, particularly in warm waters.

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Dead Zones and Impacts

Dead Zones and Their Impact

The 2007 dead zone is one of the largest since measurements began in 1985. It was mapped at around 7,900 square miles — bigger than several U.S. states [Source: NBC News]. The 2006 dead zone was 6,662 square miles [Source: BBC], while the one in 2002 measured 8,495 square miles [Source: Reuters]. The dead zone was 8,776 square miles in 2018 — the largest we've seen yet [Source: The Progressive Farmer].

In 2007, the level of algae-boosting nutrients entering the Gulf of Mexico was triple the levels of a half-century before, when dead zones were an infrequent occurrence. A scientist from Louisiana State University attributed the change to an increase in intensive farming, which generally employs lots of nitrogen-rich fertilizers, combined with effects from the weather.

The National Oceanic and Atmospheric Administration (NOAA), which monitors the dead zone, said the area presents a danger to the $2.8 billion-per-year fishing industry that operates along the Texas and Louisiana coasts [Source: NOAA]. Millions of pounds of brown shrimp are caught every year in these waters, but over the last decade, fishermen have reported declining brown shrimp catches. Shrimp may be dying or simply swimming to other, more breathable waters.

COASTAL PROTECTION AND RESTORATION AUTHORITY
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RACCOON ISLAND 2023

Alternative

Medium Diversion at Myrtle Grove with Dedicated Dredging (MDMG)

Engineering & Construction Congressionally Authorized

in 2007 WRDA (Water Resources Development Act) Bill

As submitted by Corps of Engineers Chief's Report

DISCUSSIONS

Corps 2,500 to 15,000 CFS Federally and Congressionally Authorized Project

1. Authorized 2007 WRDA by Congress (Corps Chief Report) 2,500 to 15,000 CFS Myrtle Grove diversion land bridge, long distance pipeline from Mississippi River to Barataria land and marsh re-creation are already on Annual Plan
   - 65% Federal funding and 35% State Funding
   - Engineering - 50% Federal and 50% State
2. Corps constructs diversion and State only matches with 35% funds
   1. No liability to State of Louisiana (lawsuits)
   2. Protects shrimp ad oyster industry (culture)
      - 5 to 25 parts per thousand salinity level
   3. No substantial water rise in Barataria Bay
      - Very little mitigation damages, buyouts, expropriation, NFIP, etc. to 8 affected parishes, existing hundreds of oil and gas well locations, private and navigable waterways
      - Operations and maintenance cost greatly reduced (State operates)
   4. Would release funding other State Master Plan and Annual Plan approved projects
      - Approximately $2.2 + Billion Dollars NFWF and NRDA would be available to apply for Plaquemines Parish and other parishes - State Master Plan projects as follows:
        1. 23 1/2 mile land bridge in Barataria Bay
        2. Long Distance Pipeline Sediment Diversion
        3. Barrier Islands, Coastal projects
        4. Marsh Re-creation Projects
        5. Segmented Breakwater Rock Programs
        6. Miscellaneous Coastal Restoration Projects

Corps can IMMEDIATELY start project with a letter from CPRA

(This was suspended in 2013.)

· DOES NOT OBLIGATE GOMESEA and other State funding

(approximately $150+ Million Dollars per year) for decades.

· NRDA (TIG) is out of the picture EXCEPT for Terminate for Convenience and AWA contract monies.

Medium Diversion at Myrtle Grove with Dedicated Dredging (MDMG)

- The Medium Diversion at Myrtle Grove with Dedicated Dredging feasibility study (MDMG) is a Mississippi River diversion with dedicated dredging ecosystem restoration project identified in the LCA program.
- It was authorized under the Water Resources Development Act of 2007 - Section 7006(c)(1)(E) and the Coastal Protection and Restoration Authority of Louisiana is the cost-share partner in the development and implementation of this project.
- The Medium Diversion at Myrtle Grove is located near the community of Myrtle Grove on the west bank of the Mississippi River in Plaquemines Parish, LA.
- The study area covers the Barataria Basin from north of Lake Cataouatche south to the Gulf of Mexico in Lafourche, Jefferson and Plaquemines parishes.

- Federal Govt. (Corps) 65% of project – Approx. $1+ (One+) Billion Dollars savings to State
- $2.2+ Billion Dollars – NRDA, NFWF, BP Fine Monies become available upon qualifying (NFWF, NRDA) State Master Plan

No Liability exposure to State if Corps of Engineers designs, constructs Medium Diversion at Myrtle Grove

AUTHORIZED LOCATION: The Medium Diversion at Myrtle Grove is located near the community of Myrtle Grove on the west bank of the Mississippi River in Plaquemines Parish, LA.
NOTE: SAME LOCATION AS MBSD

AUTHORIZED PROJECT GOALS: The diversion would provide additional sediment and nutrients to nourish highly degraded existing fresh to brackish wetlands in shallow open water areas of the mid- and lower Barataria basin. Dedicated dredging and sediment delivery from the Mississippi River to surrounding wetlands will quickly build new marsh that can be supplemented by the diversion.

Recommendation
Option - Lift Suspension from CPRA to Corps

Move forward on smaller diversion - 2,500 - 15,000 CFS with NFWF funding and partner with United States Army Corps of Engineers (USACE) on EXISTING FEDERAL LEGISLATION – Saving Approximately $1+ (One+) Billion Dollars

1. Authorized by Congress in 2007 WRDA Bill
2. Huge savings - USACE Cost share - 65% on Construction
    1. State 35% Cost
3. Saving $1+ (One+) Billion Dollars
    1. $2.2 + Billion Dollars in NFWF & NRDA Funds Available for new qualifying projects
4. Avoids Parish litigation
5. Additional Time for Engineering and Design work
6. New EIS on Supplement EIS needed with support from Corps
7. USACE MVN will facilitate new or amended 408 Permit
8. No WRDA work needed
9. Amend NFWF Grant
10. New Federal USACE funding needed appropriation
12. Long Distance Pipeline Sediment (Louisiana Annual Plan)
    1. Mississippi River to Barataria Basin (23 1/2 mile land bridge)
    2. 19,000 acres - 10-14+ years total
13. https://www.mvn.usace.army.mil/Missions/Environmental/Louisiana-Coastal- Area/Critical-Near-Term-Projects/Medium-Diversion-at-Myrtle-Grove/
14. Plaquemines Parish moving forward on Spanish Pass Land Bridge
    1. Current State Master Plan – 1,500 acres created
15. Redistribute (NRDA, NFWF, Surplus Trust Fund, etc.
    1. $2.2 Billion +/- to other parishes and Plaquemines Parish for submittal for approval (NFWF, NRDA)

THIS DOES NOT OBLIGATE GOMESEA money and State future monies.

This Recommendation would move forward smaller diversion as authorized and approved by Congress in 2007 WDRA Bill.

· 65% Federal and 35% State NFWF Funding

This would, in essence, free NRDA & NFWF funds to move on other coastal projects in Barataria and the other parishes and Basins.

$2.2 + Billion Dollars

Summaries

CPRA move forward with Corps – Federally, Congressionally Authorized

- 2,500 – 15,000 CFS Diversion - **65% Federal**
  35% State

Engineering – 50% Federal and 50% State

Saving to State of Louisiana – **Approx. $1+ (One+) Billion Dollars**

REGARDLESS, we have to perform aforementioned concerns under study, appraisals, environmental assessments, saltwater wedge concerns, etc. which are being performed.

The State moves forward on the Congressionally authorized 2,500 – 15,000 CFS, finds of all concerned issues, and chooses best method for State moving forward in 2 to 3+ years

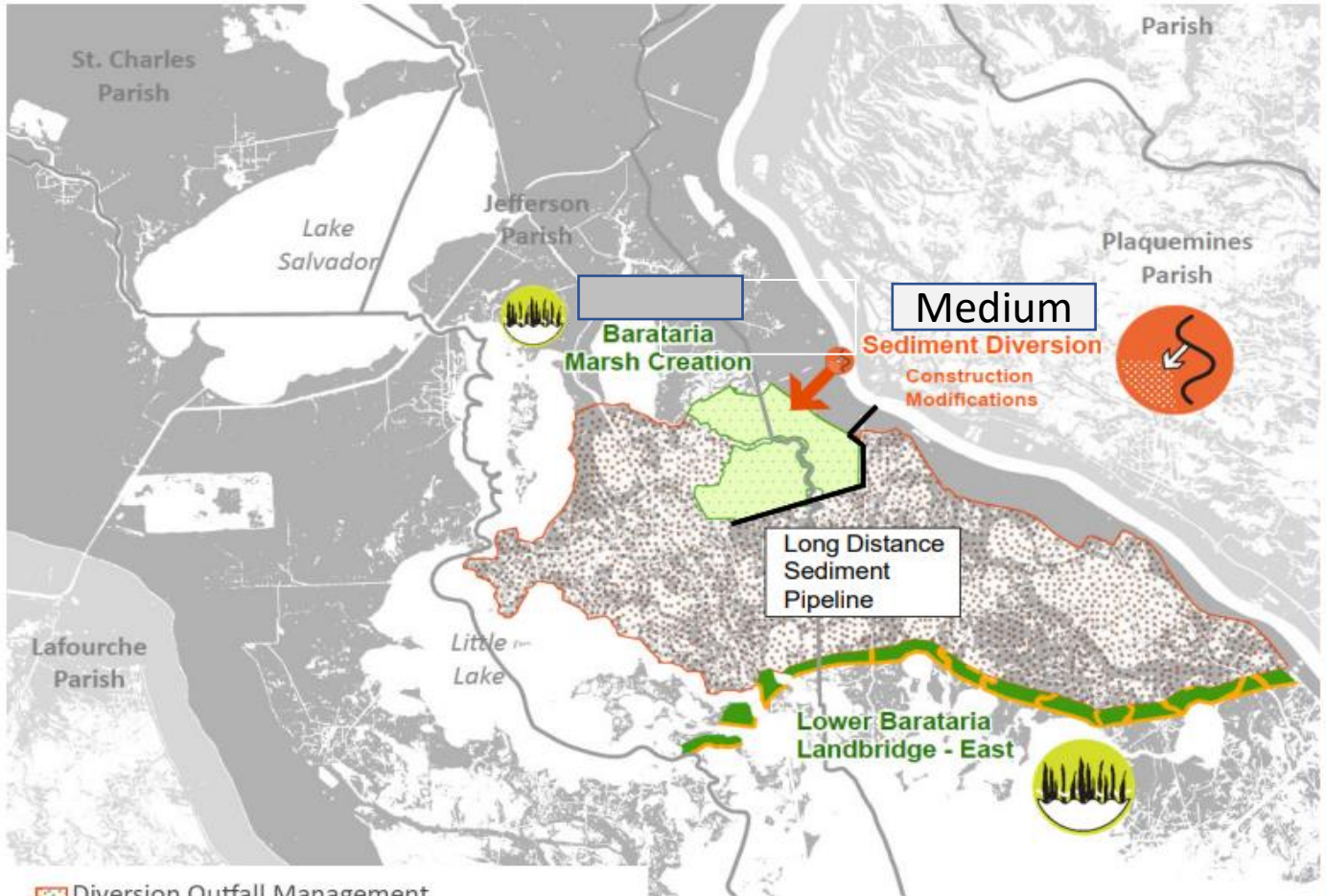
Discussion

If 75,000 CFS Mid-Barataria Diversion was to proceed:

All State funded – NRDA, NFWF, GOMESA

State Appropriated Surplus and Capital Outlay, etc., will be exhausted

GOMESA obligated for decades



COMBINATION OF SEDIMENT DIVERSION & IMMEDIATE LAND BUILDING IN THE BASIN

PRIORITIZE IMPLEMENTATION OF CRITICAL MARSH CREATION, RIDGE AND LANDBRIDGE PROJECTS

LARGE-SCALE MARSH CREATION WITH LONG DISTANCE SEDIMENT PIPELINE FROM MS RIVER

LOWER BARATARIA LANDBRIDGE RIDGE RESTORATION FROM BAYOU DOGRIS TO PORT SULPHUR

Evaluate Potential Modification to MBSD Peak Flow

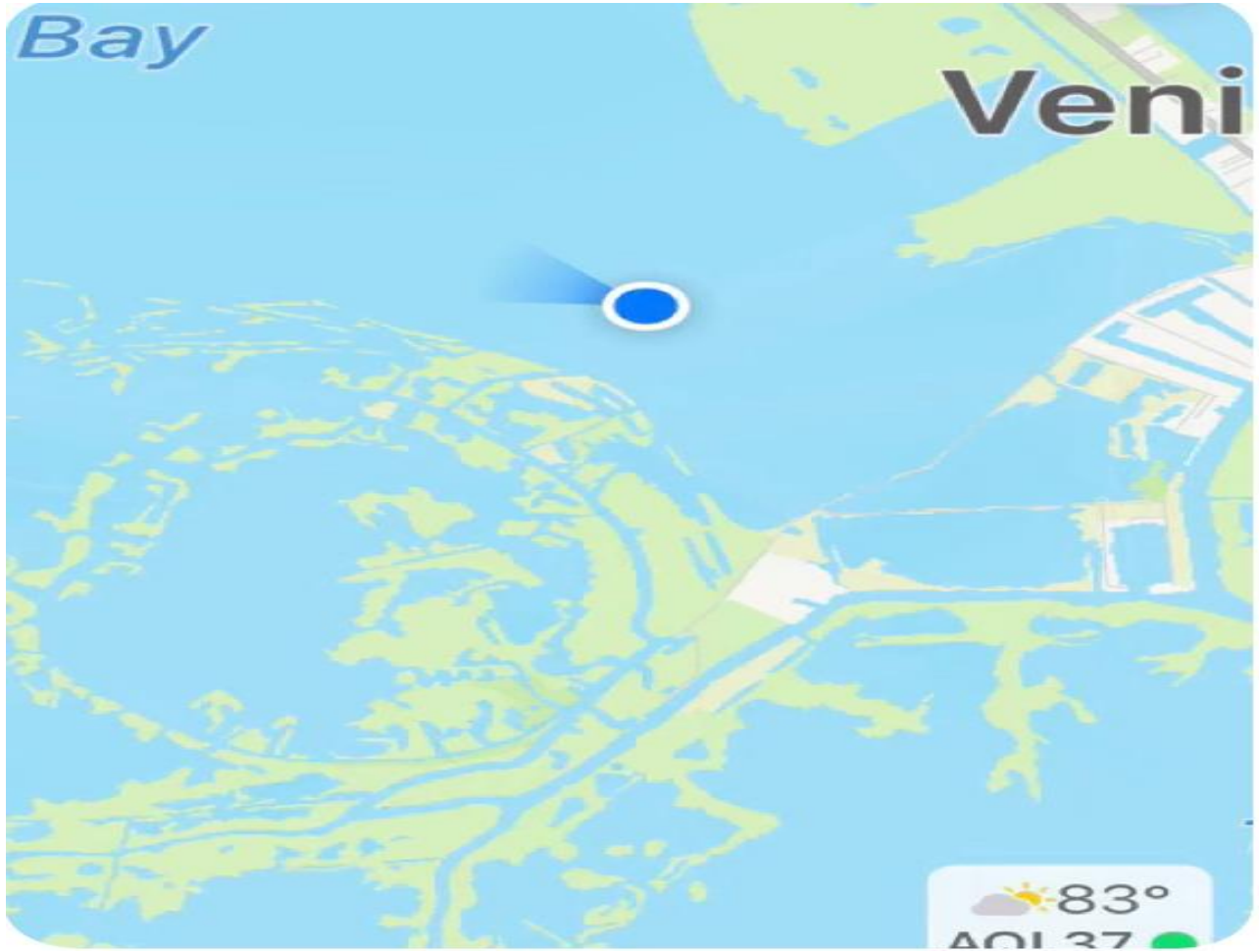
Immediate Land Building

Jefferson and Plaquemines Parish – Lower Barataria Landbridge (State Master Plan)
23 ½ mile Landbridge from Plaquemines Parish to Lafourche Parish at a 3 ½+ ft above sea level (create 6,800 acres)

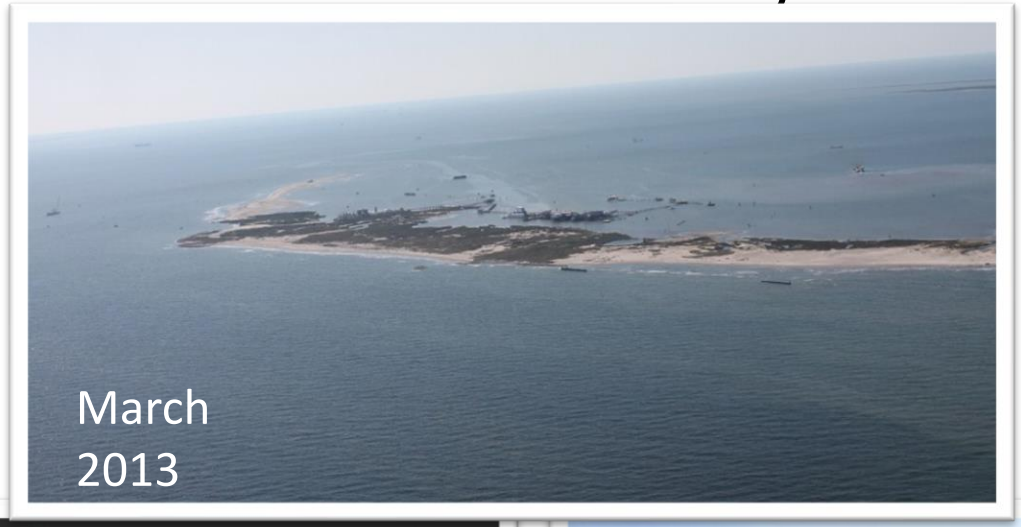
Spanish Pass Long Distance Sediment Pipeline

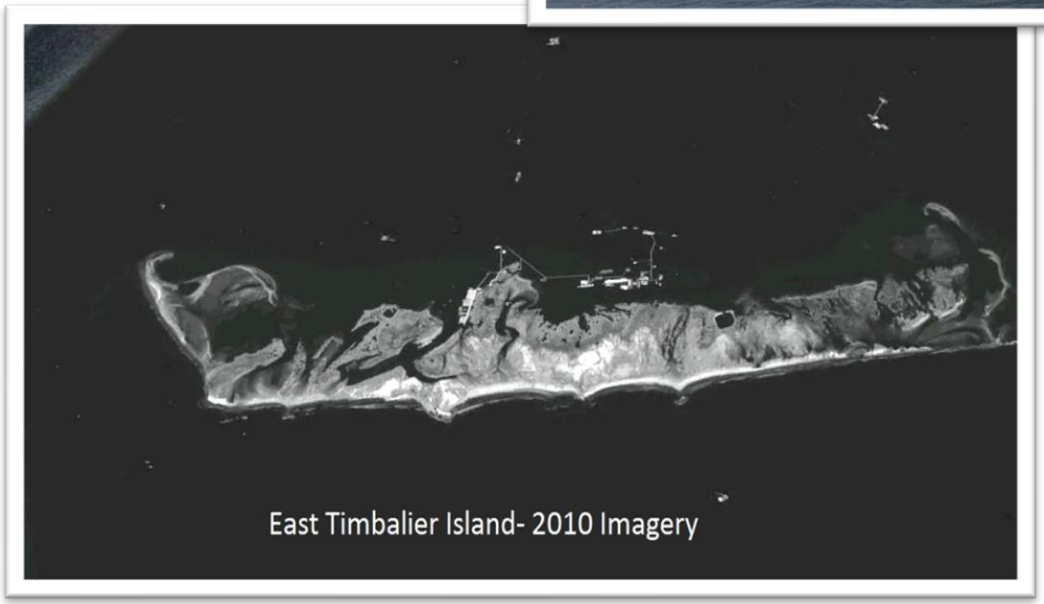
(approximately 1500 acres west of Venice)

President Hinkley in his car in Barataria Bay on Landbridge



Restoration & Shoreline Protection of East Timbalier Island - *Lafourche Parish*





EAST TIMBALIER ISLAND

LOUISIANA COASTAL AREA (LCA) PLAQUEMINES PARISH, LA, MEDIUM DIVERSION WITH DEDICATED DREDGING AT MYRTLE GROVE, ENVIRONMENTAL IMPACT STATEMENT SCOPING DOCUMENT

Introduction

The National Environmental Policy Act (NEPA) of 1969 established a nationwide policy requiring an environmental analysis of impacts as a result of proposed major Federal actions affecting the environment. A Notice of Intent to prepare a draft Environmental Impact Statement (EIS) for the Medium Diversion at Myrtle Grove with Dedicated Dredging, Louisiana Coastal Area (LCA) was published in the Federal Register (Volume 75, Number 199) on October 15, 2010: http://frwebgate1.access.gpo.gov/cgibin/TEXTgate.cgi?WAISdocID=igU9pV/1/1/0&WAISaction=retrieve.

The U.S. Army Corps of Engineers, New Orleans District, and the local sponsors, the Office of Coastal Protection and Restoration are working together to prepare the draft EIS.

Scoping Process

The scoping process is designed to provide an early and open means of determining the scope of issues (problems, needs, and opportunities) to be identified and addressed in the draft EIS. Scoping is the process used to: a) identify the affected public and agency concerns; b) facilitate an efficient draft EIS preparation process; c) define the issues and alternatives that will be examined in detail in the draft EIS; and d) save time in the overall process by helping to ensure that the draft statement adequately addresses relevant issues. Scoping is a process, not an event, or a meeting; it continues throughout the development of the draft EIS and may involve meetings, telephone conversations, and/or written comments. Scoping is a critical component of the overall public involvement program. An intensive public involvement program will be initiated and maintained throughout the study to solicit input from affected Federal, state, and local agencies, Indian Tribes, as well as interested private organizations and individuals. This scoping report represents and summarizes the scoping comments expressed at the public scoping meetings, as well as written comments received during the comment period ending December 15, 2010. Scoping meeting public notices were mailed to interested parties in October 2010. The public notice provided three questions as a means of focusing the public's comments and concerns related to the proposed project:

1. *What are the most important issues, resources, and impacts that we should consider in the EIS?*

2. *Are there any other alternatives or modifications to existing alternatives that we should consider in the EIS?*

Public scoping meetings regarding the proposed project were held at:
Joseph's Hall, Crown Point, Louisiana on November 9, 2010;
The South Lafourche Levee District, Galliano, Louisiana on November 10, 2010; and The Woodland Plantation, Port Sulphur, Louisiana on November 18, 2010

All scoping meeting participants who requested to be on the study mailing list, as well as those people who provided written comments, will be included on the study mailing list and will receive copies of this scoping report.

Authority

This EIS will be tiered off of the programmatic EIS for the LCA Ecosystem Restoratio Study and Record of Decision dated November 18, 2005. The U.S. Army Corps of Engineers, New Orleans District, is conducting this feasibility study under the authority of the Water Resources Development Act (WRDA) of 2007 that authorized the LCA program. Specifically, Section 7006(c)(1)(E) of the act authorizes the Secretary of the Army to carry out the Medium Diversion at Myrtle Grove with Dedicated Dredging project in accordance with the restoration plan set out in the Chief's Report dated January 31, 2005.

Purpose and Need

The primary purpose of this project is to provide additional sediment and nutrients t nourish highly degraded existing fresh to brackish wetlands in shallow open water areas of th mid- and lower Barataria Basin.

Project Activities

There are two primary activities associated with this project. 1) the restoration of highly degraded fresh and brackish wetlands in shallow open water areas of the mid- and lower Barataria Basin through the construction of a medium diversion structure (2,500-15,000 cfs) in the Mississippi River levee that would provide additional sediment and nutrients to the degraded wetlands; and 2) dedicated dredging from the Mississippi River at a rate of 2M cy per year for several years that would provide for the creation and protection of up to 19,700 acres of new wetlands over the life of the project.

Comments

Twenty-seven people attended the meeting on 9 November 2010 in Crown Point, LA, with 12 people providing oral comments at the meeting. Approximately 20 people attended the meeting on 10 November 2010 in Galliano, LA, with 16 people providing oral comments at the meeting. Approximately 53 people attended the meeting on 18 November 2010 in Port Sulphur, LA., with 19 people providing oral comments at the meeting. Six written comments were received during a 60 day comment period. Scoping comments (Figure 1) were sorted into categories in order to more efficiently address issues of concern about the scope of the proposed project and the evaluation of impacts in the draft EIS. Table 1 also provides the sections where the comments may be discussed in the draft EIS.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

November 15, 2010

Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

The U.S. Fish and Wildlife Service (Service) has reviewed the Department of the Army, Corps of Engineers (Corps), Notice of Intent (NOI) to prepare a Draft Supplemental Environmental Impact Statement (SEIS) for the Louisiana Coastal Area (LCA) – Plaquemines Parish, Louisiana, Medium Diversion with Dedicated Dredging at Myrtle Grove Feasibility Study. The NOI was published in the Federal Register on October 15, 2010 (75 FR 63447; Department of Interior No. ER 10/899). The LCA Program was authorized by the Water Resources Development Act of 2007, and this SEIS will be tiered off of the programmatic EIS (LCA – Louisiana, Ecosystem Restoration Study, November 2004) for that program. The Service submits the following comments in accordance with the National Environmental Policy Act of 1969 (83 Stat. 852, as amended; 42 U.S.C. 4321 et seq.), the Migratory Bird Treaty Act (MBTA, 40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The proposed project would be located along the Mississippi River, near river mile 60, above the Head of Passes. It would occur along the right descending bank of the Mississippi River in the vicinity of Myrtle Grove, Plaquemines Parish, Louisiana. The proposed project would include both a freshwater diversion feature and a dedicated dredging component for wetland creation. As recommended in the January 31, 2005, U.S. Army Chief of Engineers Report, the freshwater diversion feature would consist of a gated, box culvert diversion structure that could convey flows ranging from 2,500 to 15,000 cubic feet per second. That report also recommends dedicated dredging and the placement of approximately 2 million cubic yards of material from an existing shoal in the Mississippi River. That dredging would be conducted annually for a period of 16 years and, in conjunction with the proposed diversion, would create up to 13,400 acres of emergent marsh and sustain an additional 6,300 of marsh in the Barataria Basin. Such a project would not only allow for rapid marsh creation, but it should provide long-term sustainability for those marshes. It is also expected to maximize the amount of acreage created by capitalizing on incremental accretion of diverted sediment (75 FR 63447).

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

December 8, 2010

Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

In a letter dated November 15, 2010, the U.S. Fish and Wildlife Service (Service) reviewed and commented on the October 15, 2010, Notice of Intent to prepare a draft environmental impact statement (EIS) for the Louisiana Coastal Area (LCA)—Plaquemines Parish, Louisiana, Medium Diversion With Dedicated Dredging at Myrtle Grove Feasibility Study (75 FR 63447; Department of Interior No ER 10/899). A description of the proposed project and a discussion of the significant fish and wildlife resources (including habitats) that occur within that study area are contained in our November 2010 comment letter. For brevity, that information and discussion is incorporated by reference herein.

The Service would like to supplement the November 2010 letter to include the following additional comment and recommendations for consideration and evaluation in the Myrtle Grove project. These comments should be incorporated with all previously submitted Service comments for consideration. The following comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Historically, wetlands in the Barataria Basin were nourished by the fresh water, sediments, and nutrients delivered via overbank flooding of the Mississippi River and through its many distributary channels such as Bayou Lafourche, Bayou Barataria, and Bayou Grand Cheniere. As the flow of fresh water and sediments from the Mississippi River was restricted by flood protection levees and the closure of those distributaries, the basin began to gradually deteriorate from saltwater intrusion, subsidence, wave action, and sediment deprivation. Historically, Bayou Perot, and the longer, narrower Bayou Dupont-Bayou Barataria-Bayou Villars channels provided limited hydrologic connection between the upper and lower basin. The hydrologic connections between the upper and lower Barataria Basin are much greater today, due to the Barataria Bay Waterway, Bayou Segnette Waterway, Harvey Cutoff, and substantial erosion and interior marsh loss along Bayous Perot and Rigolettes. The frequency of high salinity events has also increased in the Barataria Basin (Swenson and Turner 1998), probably as a result of the increased tidal connectivity.

To effectively address the above-mentioned issues the Service encourages pulsing (i.e., fluctuating the amount of water diverted) to optimize sediment delivery, whether suspended sediments in the upper river column or if possible, the river bedload. In order to determine the best time to pulse during yearly operations, the project should incorporate a sediment gauge in the river near the diversion structure to

provide real time information. Placement of the gauge (or other increased monitoring) during the planning phase would greatly improve the data needed to develop and select alternatives that would maximize sediment delivery. In addition, the Service advocates restoring and/or nourishing marsh in the area and using the diversion's influence to provide additional sediments to help sustain the new and existing marshes.

As the Myrtle Grove outfall area naturally fills in, sedimentation management of the outfall area would be needed to achieve full benefits of the diversion. The Service suggest managing the natural crevasse splay to enhance flows across the outfall area by dredging appropriate areas and using the dredged material beneficially to create, restore, or enhance marsh within the basin or surrounding areas of need.

The Service urges consideration be given to aquatic resources when developing the operation of the diversion structure. Though a shift in aquatic resources may be expected and is acceptable, our preference is not to overwhelm the basin but rather to optimizing basin benefits for both aquatic resources and land building and sustainability. In order to fully disclose benefits and impacts to aquatic resources, the Service recommends the use of aquatic modeling during the feasibility study.

The Service recommends this project consider cumulative impacts of the Myrtle Grove diversion, Davis Pond diversion (up to 10,650cfs), Naomi siphon (up to 2,000cfs) and West Point a la Hache siphon (2,000cfs) into the Barataria basin. The report should discuss how all diversions and siphons could be operated in conjunction with each other to minimize adverse impacts and maximize beneficial effects. The Service suggests that a comprehensive basin-wide operations plan be developed to better coordinate all the diversions and siphons for the health of the basin. In additions affects of other existing projects, such as Donaldsonville to the Gulf, and how they will work with this diversion should be discussed.

We appreciate the opportunity to review the Notice of Intent and to provide comments in the planning stages of the proposed project. If you or your staff have further questions regarding the above letter or would like to meet and discuss our recommendations, please contact Catherine Breaux of this office at (504) 862-2689.

Swenson, E. M. and R. E. Turner. 1998. Past, present, and probably future salinity variations in the Barataria estuarine system. Coastal Ecology Institute, Louisiana State University. Baton Rouge, LA. 112 pp.

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

cc: Fish and Wildlife Service, Atlanta, GA (AES)
Environmental Protection Agency, Dallas, TX
FWS, BAP & HC (ERT), Arlington, VA
DOI, OEPC, Washington, D.C. (Attn: Loretta Sutton)
FWS, Atlanta, GA (ES/PP; Attn: Richard Warner)

BTNEP
BARATARIA-TERREBONNE NATIONAL ESTUARY PROGRAM

November 18, 2010

U.S. Army Corps of Engineers
Public Affairs, Rm. 238
P.O. Box 60267
New Orleans, LA 70160-0267

BTNEP comments on the Myrtle Grove Sediment Diversion Scoping Meeting

We are submitting the attached written comments on behalf of the Barataria-Terrebonne National Estuary Program (BTNEP) in response to the recent scoping meetings regarding the development of the proposed Louisiana Coastal Area, Medium Diversion at Myrtle Grove with Dedicated Dredging ecosystem restoration project. We appreciate the opportunity to provide these comments on behalf of the BTNEP.

The Barataria-Terrebonne National Estuary Program is one of only 28 National Estuary Programs (NEP) in the United States. We are funded through Section 320 of the Clean Water Act and the State of Louisiana on a 50/50 basis. The state-sponsoring agency is the Louisiana Universities Marine Consortium (LUMCON).

The BTNEP was created in 1990 by an historic agreement between the State of Louisiana and the United States of America. That agreement acknowledged that the Barataria and Terrebonne systems, consisting of the area between the Mississippi and Atchafalaya rivers, were both of national significance and critically threatened. The Environmental Protection Agency, on behalf of the U. S. government, pledged to elevate the status of this entire region to that of a National Estuary. The State of Louisiana fulfilled its part of this pledge by convening hundreds of representatives from business and industry, universities and other educational institutions, local governments, federal and state agencies, NGOs, farmers, agriculture, and fisheries. This group of diverse stakeholders gathered in 1991 to begin the development of a comprehensive plan to restore and preserve the newly designated Barataria-Terrebonne National Estuary.

As such, the BTNEP is committed to practical, meaningful restoration that includes stakeholders in the restoration process, which is the only way to guarantee support of the public and success of any restoration plan. Unfortunately, the insistence of some groups to use large river diversions to restore our eroding coastal landscape, and the exclusion of groups who depend on estuarine species for their way of life, has led us to an endless cycle of arguments regarding how best to accomplish the restoration of the coastal features that are necessary for the maintenance of our unique culture.

NICHOLLS STATE UNIVERSITY CAMPUS • P.O. BOX 2663 • THIBODAUX, LA 70310
Phone:985.447.0868 • Fax:985.447.0870 • Toll Free:1.800.259.0869 • WWW.BTNEP.ORG

permanently due to the induction of downstream shoaling and interference with navigation from West Bay Diversion.

5. We do not know if this sort of river diversion on the Mississippi will even work. A large river diversion on the Mississippi River has never built land. West Bay at 50,000 cfs only built land because it used dredged material. The water diversion component of West Bay actually eroded some of the land gained by the dredging component. Models that predict land gain are based on TSS levels far up river from the Myrtle Grove location and data collected at Wax Lake Outlet. Extrapolating land building capability from these data sets are completely erroneous because they do NOT reflect the sediment in the river near Myrtle Grove, or the nature of the diversion that will be built at Myrtle Grove. Wax Lake receives bed load or bottom sediment material from the Atchafalaya River, which greatly increases its land building capability but this will NOT be the case at Myrtle Grove. This is the reason why dedicated dredging has been made part of this project. There will be little land built in this project without dedicated dredging and marsh creation.

Destruction of Fisheries

So, this brings us to another question. Why are the proponents insisting that a massive diversion be constructed at Myrtle Grove? Why do we need so much fresh water to nourish the wetlands that will be constructed through dedicated dredging and marsh creation? The cost of this massive diversion will be the destruction of fisheries throughout the Barataria Basin, a fishery that has been very productive for Louisiana and the fishermen who depend on it. It's clear from the smaller diversion at Davis Pond that a diversion of small size can freshen most of the Barataria basin. Why bother building such a large diversion when a small to medium-sized diversion (less than 15,000 cfs flow) would do the same job, cost far less and have much more public support?

We suggest the construction of a smaller diversion at Myrtle Grove and the use of long distance Pipeline Sediment Delivery (PSD) to greatly increase the land building capability of our restoration dollars.

Cost of Time

The following table further illustrates how we should focus our time and money more on a combination of PSD and small diversions/siphons than large river diversions.

Project	Cost	Acres	Cost/Acre	Years	Acres/Year
Bayou Dupont	$27,300,000	471	$57,962	0.3	1413
Myrtle Grove	$417,500,000	8891	$46,958	20.0	445
PSD used to build Myrtle Grove*	$417,500,000	7,203	$57,962	5.10	1413

Source: http://lacoast.gov/reports/qpfs/BA-39.pdf; http://lacoast.gov/reports/qpfs/BA-33.pdf
*Acres calculated from Bayou Dupont Cost/Acre. Years calculated from Bayou Dupont Acres/Year

One of the major benefits that have been claimed by proponents of large river diversions is that river diversions are less expensive for the same result than using pipeline sediment delivery (PSD) for building land. This is shown by the comparison in the above table but what is the cost of time and are we actually getting the same result? There are three important differences between PSD and large river diversions:

1. Time is a key factor which will determine the success of any restoration effort. As a result, we are NOT getting the same result by just comparing the cost per acre of each project. The use of river diversions to build land as part of the Myrtle Grove project will take an incredibly optimistic 20 years (according to project estimates); whereas, a similar amount of land built using PSD will only take 5.1 years. Each acre of land lost over time compounds the effects of land lost and increases the vulnerability of the remaining land areas. The longer we have to wait on restoration, the less valuable that restoration will be because its effectiveness goes down over time and its cost increases.

2. The startup time for PSD is very small; whereas, construction of a large river diversion could easily take 10 years or more just to become operational (this is based on construction time, repair, and adjustments to ponding area levees, gabions, and box culverts for Davis Pond Diversion).

3. With PSD we know exactly what we are getting at the end of the pipe…land. No complicated mathematical models are needed to make this calculation. We would be getting land that we could see within months, available for ecological uses and coastal community protection within our lifetime! This is the value of meaningful restoration through PSD! Why do we persist in this movement toward unnecessarily sacrificing our estuarine seafood economy for a strategy that may take multiple generations to see any meaningful benefit…if ever?

Sincerely,

Kerry M. St.Pé

Kerry M. St.Pé, Director
Barataria-Terrebonne National Estuary Program

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701

November 18, 2010 F/SER46/RH:jk
225/389-0508

Ms. Joan Exnicios, Chief
Environmental Planning and Restoration Branch
New Orleans District
Department of the Army, Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Ms. Exnicios:

NOAA's National Marine Fisheries Service (NMFS) has received the October 15, 2010, Notice of Intent (NOI) to prepare a draft Environmental Impact Statement for the Louisiana Coastal Area (LCA), Louisiana; Medium Diversion at Myrtle Grove with Dedicated Dredging project. This NOI was not received in the Baton Rouge office until the week of November 15, 2010. According to the public notice, the U.S. Army Corps of Engineers intends to prepare an environmental impact statement (EIS) to evaluate a freshwater diversion of 2,500 to 15,000 cubic feet per second (cfs) of Mississippi River water into the Barataria Basin. Project components include dedicated dredging for the creation of up to 19,700 acres of new wetlands. Resources potentially impacted by project implementation are located in Jefferson, Lafourche, and Plaquemines Parishes, Louisiana. According to the NOI, this EIS will be tiered off a programmatic EIS completed for the Louisiana Coastal Area Ecosystem Restoration Study completed in November 2004.

19,700 Acres of New Welands

Aquatic and tidally influenced wetland habitats in portions of the study area are designated as essential fish habitat (EFH) for various federally managed species, including white shrimp, brown shrimp, red drum, lane snapper, dog snapper, and Gulf stone crab. These species are managed by the Gulf of Mexico Fishery Management Council (GMFMC). The attached table lists life stages and subcategories of EFH for these species that would potentially be benefitted or impacted by this project. Primary categories of EFH in the study area include estuarine emergent wetlands; submerged aquatic vegetation; mud, sand and shell substrates; and estuarine water column. Detailed information on federally-managed fisheries and their EFH is provided in the 2005 generic amendment of the FMPs for the Gulf of Mexico prepared by the GMFMC. The generic amendment was prepared as required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act, P.L. 104-297).

In addition to being designated as EFH for the species listed in the attached table, water bodies and wetlands in the study area provide nursery and foraging habitats supportive of a variety of economically important marine fishery species, such as striped mullet, Atlantic croaker, gulf menhaden, spotted seatrout, sand seatrout, southern flounder, black drum, and blue crab. Some of these species also serve as prey for other fish species managed under the Magnuson-Stevens Act by the GMFMC (e.g., mackerels, snappers, and groupers) and highly migratory species managed by NMFS (e.g., billfishes and sharks).

NMFS recommends the EIS include separate sections titled "Essential Fish Habitat" and "Marine Fishery Resources" that identify the EFH and fisheries resources of the study area. These sections should describe the potential impacts, both positive and negative, to those resources that could be caused by the proposed river diversion. While NMFS believes that overall project implementation could be beneficial to protecting and restoring EFH and to maintaining the productivity of marine fishery resources, there are some potential localized adverse impacts that could be caused by structure operations, especially during high flow periods. These impacts include: 1) displacement of less freshwater tolerant, or cold water intolerant, marine fishery species from large areas of wetlands and water bodies that serve as nursery and foraging areas; 2) destruction of productive oyster reefs that serve as habitat and a food source for some fishery species; 3) increased turbidity and associated decreases in coverage of submerged aquatic vegetation in some areas; 4) potential low dissolved oxygen levels in water bodies caused by decomposition of large quantities of algae and/or phytoplankton resulting from high nutrient levels in diverted river water; and, 5) potential reduction in the shear strength of organic soils caused by high nutrient levels in diverted river water. The EFH and marine fishery resource sections of the SEIS should evaluate the potential for any or all of these impacts to occur as a result of the proposed diversion. NMFS recommends these sections of the document also discuss the potential beneficial effects of the proposed diversion on EFH and marine fishery resources. These effects include the maintenance of marsh habitats through the accretion of sediment and input of beneficial nutrients.

The EFH and marine fishery resources sections of the document also should describe and quantify the potential impacts and benefits of the proposed activities on EFH sub-categories (e.g., marsh, marsh edge, submerged aquatic vegetation/seagrass beds, mud bottoms, oyster reefs, and estuarine water column). The appropriate sections should describe the potential impacts and benefits of the diversion on the utilization of these sub-categories of EFH by those fishery species and life stages included in the enclosed table. The EIS should evaluate alternatives to any activities that would result in an adverse impact to those resources to determine if there are less damaging methods to achieve the same result. The overall net benefits of the project on wetland habitats supportive of marine fishery resources should not preclude efforts to minimize the negative impacts of river diversion on fishery resources or EFH. Such alternatives to minimize adverse impacts of maximize beneficial effects includes: 1) reduced fresh water inflows during low river stages and periods less fresh water tolerant species may be found in the project area; 2) direct placement of sediment into the outflow channel during high flow periods to maximize delivery to area marshes; and, 3) placement of marsh terraces or silt fences to help trap sediments and reduce turbidity.

NMFS recommends the EIS include a section titled "Cumulative Impacts" that evaluates project impacts and benefits with other similar projects proposed for, or implemented, in the area. Presently, the existing Davis Pond diversion located in St. Charles Parish can divert up to 10,000 cfs into the Barataria Basin. In addition, siphons near Naomi and West Point a la Hache can

each divert up to 2,000 cfs into the Barataria Basin. The EIS should evaluate the relative need, benefits of, and impacts associated with the diversion of 2,500 to 15,000 additional cfs into the Barataria Basin. The EIS should include evaluations on how all four diversions could be operated in conjunction with each other to minimize adverse impacts and maximize beneficial effects. Considering that the four diversions identified above would impact large areas of the Barataria Basin estuary, the EIS should evaluate the cumulative impacts, including beneficial effects, of multiple diversions of Mississippi River waters on resources of concern.

Please note that our Protected Resources Division is responsible for all issues regarding threatened and endangered species and marine mammals for which NMFS is responsible. For information regarding those resources, please contact Mr. David Bernhart of our Protected Resources Division at (727) 824-5312. For additional information regarding EFH, marine fisheries, or National Environmental Policy Act issues, please contact Mr. Richard Hartman of our Habitat Conservation Division, Baton Rouge Office at (225) 389-0508, ext 203.

Sincerely,

for Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

Enclosure

c:
FWS, Lafayette
EPA, Dallas
LA DNR, Consistency
F/SER46, Swafford
F/SER3, Bernhart
Files

TO: Patricia Leroux
CEMVN-PDR-RS
patricia.s.leroux@usace.army.mil.

FR: National Audubon Society
National Wildlife Federation
Environmental Defense Fund
Coalition to Restore Coastal Louisiana

RE: Comments on Draft Environmental Impact Statement for the LCA Plaquemines Parish, LA, Medium Diversion with dedicated dredging.

DA: 12/17/2010

The Myrtle Grove diversion and dedicated dredging project should be a model for a next generation of diversions that use a pulsed operation and maximize sediment transport for effective land-building. To ensure a project that leads toward a healthy, thriving ecosystem and sustainable wetland areas, the Environmental Impact Statement must examine a number of factors.

The Myrtle Grove diversion and dedicated dredging should be built to maximize the land-building potential of the project. The alternatives in the EIS should compare the effectiveness of different rates of flow (including flows larger than 15,000 cfs). It should examine strategic placement of material using dedicated dredging to capture and entrain sediment. It should base alternatives on recent scientific research on sediment loads, location, and movement to ensure that the location, design, and operation of the diversion structure maximizes the delivery of sediment. In order to evaluate land-building potential and effectiveness, physical as well as numerical models should be developed and utilized.

Building land is critical to maintaining the culture and economy of the Barataria Basin. A thriving fishery is critical to these purposes as well. The EIS should examine "pulsing" alternatives that consider impacts to oysters and other fisheries while taking advantage of the best opportunities to deliver sediment to build land and sustain the ecosystem. The potential presence of pollutants in the water – nutrients, toxins, and run-off from farm fields – should be thoroughly investigated and evaluated. The EIS should determine whether the water entering the basin as a result of the diversion will cause negative impacts, and should suggest measures to avoid, minimize, or mitigate such impacts if they are present.

The EIS should also examine impacts associated with higher water levels, including the potential for flooding of homes and businesses, which could result from controlled operation of the diversion. It should evaluate changes in water levels and velocities in the Barataria Basin as a result of a Myrtle Grove land-building diversion that could affect communities and industry, and develop alternatives that address and/or mitigate potential harm from flooding.

In addition, alternatives in the EIS should be evaluated for positive or negative effects on dredging volumes in maintained portions of the navigation channel. Potential impacts should be identified and evaluated, and measures should be provided to maximize benefits .

To maximize the potential for land-building, recent science has pointed toward the importance of and effective operational plan to complement an effective diversion design. The EIS should identify key parameters for monitoring, and should propose an operational plan based on these parameters that seeks to maximize land-building and minimize other foreseeable negative impacts to the receiving basin.

Creating sustainable wetlands in the Barataria Basin through the combination of dedicated dredging and sediment diversion will help to halt the highest rates of land loss along the coast, and will provide a "first line of defense" for the state's largest metropolitan area. The protective value of this wetland buffer should be quantified in the EIS and included as a benefit of the project.

The best available data for addressing the impacts referred to above is the OCPR/NGO/contractor data collection and modeling that has been provided to the Corps. This effort has examined flows up to 75,000 cfs at a preferred sediment-richer location. It has also examined efficient conveyance channel alignment and diversion structure configuration.

In summary, in the face of coastal land loss, the sediment and power of the Mississippi River are resources that must not be wasted. The River must be reconnected with the wetlands in a controlled way, and with an eye to urgency and maximizing the potential for land-building. At the same time, lessons learned from previous fresh-water diversions, concerns of stakeholders, and recent science must be addressed and incorporated in the EIS. Proposed quarterly meetings with stakeholders offer a check point for the project team and the stakeholders. The Myrtle Grove diversion and dedicated dredging should combine effective sediment capture with pulsed operation to mimic the natural delta-building cycle, maintain a thriving ecosystem and fishery, and let the River do what it does: build land.

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December 15, 2010

Patricia S. Leroux
CEMVN-PDR-RS
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P.O. Box 60267
New Orleans, LA 70160-0267

Re: Louisiana Coastal Area, Medium Diversion at Myrtle Grove with Dedicated Dredging Ecosystem Restoration Project

Dear Ms. Leroux:

Restore or Retreat (ROR) is a regional, coastal advocacy, non-profit organization created by concerned stakeholders in the Barataria and Terrebonne Basin who recognized this area was on the brink of an environmental and economic disaster due to increasing coastal land loss and salt water intrusion. Since our inception in 2000, ROR has been actively engaged in the day-to-day effort to aggressively implement sustainable restoration projects for our area and has worked diligently to advocate on the state and federal level for the effective projects that our area so desperately needs and deserves. ROR respectfully submits the following comments regarding the preparation of a Draft Environmental Statement (EIS) for the Louisiana Coastal Area Study (LCA) - Medium Diversion at Myrtle Grove with Dedicated Dredging Project.

Overall Comments
We support the general principle behind project scope as stated: "The restoration feature consists of a freshwater diversion ranging from 2,500 to 15,000 cubic feet per second, coupled with dedicated dredging for the creation for up to 19,700 acres of new wetlands," but have the following concerns:

- "Up to 19,700 acres"- Given the cost constraints on the project and the range in scale stated in the scope, how will decisions be made regarding the balance of water diversion and marsh creation? If funds are too limiting to achieve the highest scale identified here, which element of the project will be given priority?"Ranging from 2,500 to 15,000 cfs"- would an operational plan be implemented? Who would oversee? Is this an estimated average annual discharge? Will pulsing be considered as an alternative? Does pulsing fit within the authorized scope?

Proposed Action
While we support the strategy of coupling a fresh-water diversion with dedicated dredging, we do so with caution. Statements included in the project summary and proposed action, such as: "This particular combination of restoration features would allow for the rapid creation of wetland acreage and enable long term-stability" should be tempered. While we believe this type of coupling is a good strategy based on sound theory, we do not have an existing freshwater diversion that has been supplemented with dedicated dredging that has provided the data to prove this statement. This project could have this potential, but we should be cautious not to "oversell" the overall benefit of this project to the public. Our recent experience with the West Bay Diversion has proven how important it is that all involved have a realistic expectation of the outcomes, how quickly they will materialize and the uncertainties involved.

Compatibility
This EIS will be tiered off of the programmatic EIS for the LCA Ecosystem Restoration Study from November in 2004, which was then followed with a Record of Decision in November 2005. After that exhaustive previous analysis, and the developments in understanding which have occurred in the intervening time, what elements of this EIS agrees with/contradicts the 2004 EIS? How will those issues be resolved?

Long-term Strategy
A concern of our organization is whether construction of the proposed project would preclude additional diversion projects from being constructed in the Barataria Basin, either at the same size or larger than the proposed Myrtle Grove diversion. Also authorized as part of WRDA 2007 within the 2005 Chief's Report (LCA) was the "Investigation of Other Large Scale Concepts," like the Mississippi River Hydrodynamic and Delta Management Study, which was intended to encompass the scope of indentifying implementable alternatives that can make the maximal use of river resources through the Mississippi River gulf delta and vicinity. In other words, inventory of other projects currently being planned and implemented for the Barataria Basin needs to occur and the benefits of this project need to be evaluated in that context. How does this project fit into a more comprehensive strategy of restoration of the area and use of the Mississippi River resources?

Environmental Impacts
Environmental impacts should be evaluated on the basis of its effect on the entire Barataria Basin. Resources may move within the basin as a result of the project but will not necessarily be lost completely – this should be considered in the analysis. For example, the impact of the diversion may lead to an increase in white shrimp and decrease in brown shrimp, and/or a shift on the location of their habitat within the Basin, as opposed to being lost completely. This "trade-off" is far different than habitat for the species being lost altogether.

Navigation
As with any project using river resources that is being proposed, navigation is a critical issue, and the following needs should be considered.

- What are the expected 21st century needs of the navigation industry?
- Will their future/anticipated needs be accommodated with this project?
- What is the likely consequence for channel maintenance?
- What are the engineering challenges of integrating expected navigation uses with utilization of river resources with both the use of the freshwater for the diversion and removal of sediment for dedicated dredging?

In conclusion, we think believe the proposed Medium Diversion at Myrtle Grove with Dedicated Dredging project has merit, but this project has many factors that should be taken into consideration, such as: feasibility of stated proposed actions, compatibility with previous studies, long-term strategy for uses of Mississippi River resources, basin-wide environmental impacts, and impacts to and accommodations for navigation.

We look forward to intently following the progress of this study. If you have any questions or if there is anything you should need, please do not hesitate to contact our office at (985) 448-4485.

Sincerely,

Simone Theriot Maloz
Executive Director