

# Restoration Solutions:

## SEDIMENT DIVERSIONS

# RESTORE

## THE MISSISSIPPI RIVER DELTA

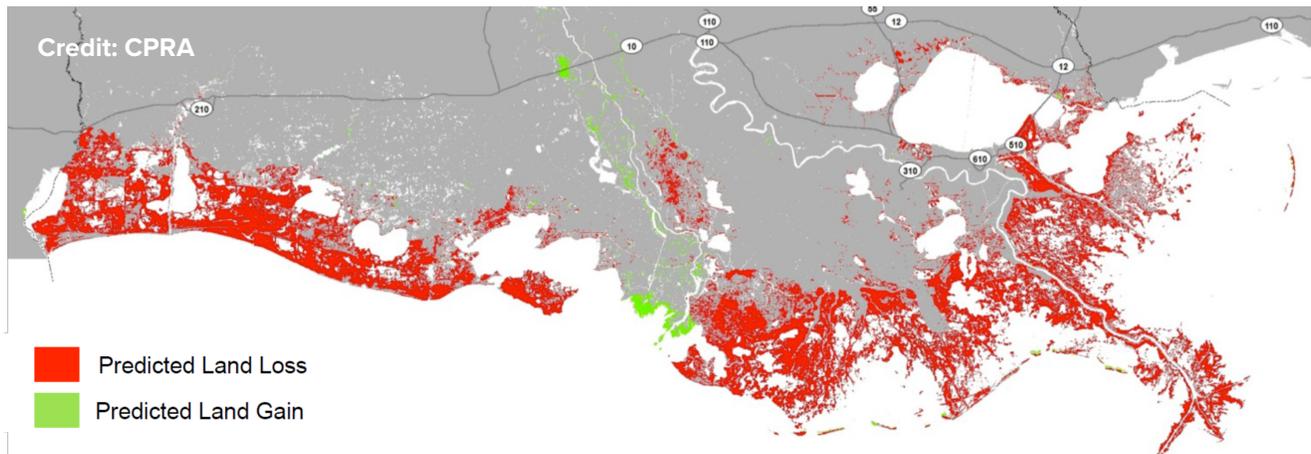


### Louisiana's Land Loss Crisis:

**The Mississippi River has been disconnected from its wetlands.** This is a major factor in our land loss crisis. Louisiana has lost 1.2 million acres of land since the 1930's, exposing our coast to increased risk of flooding, threatening wildlife habitat, communities and vital industries.

### The Solution:

**Reconnect the river to its wetlands.** We have the opportunity to reduce further land loss and restore our coast by using a combination of restoration project types included in Louisiana's Coastal Master Plan. Multiple projects working together are needed to build and sustain land, but **sediment diversions** are a crucial foundation needed to confront Louisiana's ongoing land loss crisis.

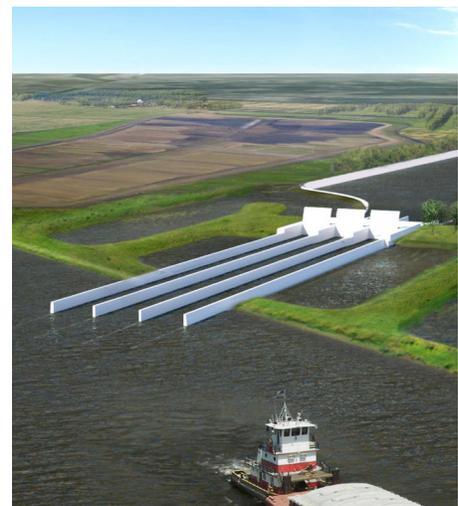


Without action, Louisiana is projected to lose as much as 1,750 square miles of land in the next 50 years.

### What are Sediment Diversions?

A sediment diversion is a structure of gates that will be built into the Mississippi River levee system to allow river water, sediment and nutrients to flow into degrading wetlands to help sustain and rebuild land. Sediment diversions mimic the natural processes that once allowed the river to build the land of coastal Louisiana.

Sediment diversions allow us to use the energy of the river to capture and push sediment out into the basin. The water will move through the wetlands, leaving sediment behind that will build land over time. These new and sustained wetlands can provide natural habitat and a buffer from storm surge for communities and industry.



Conceptual design of a sediment diversion.  
Credit: CPRA

# RESTORING the Natural Process

## The Natural Process:

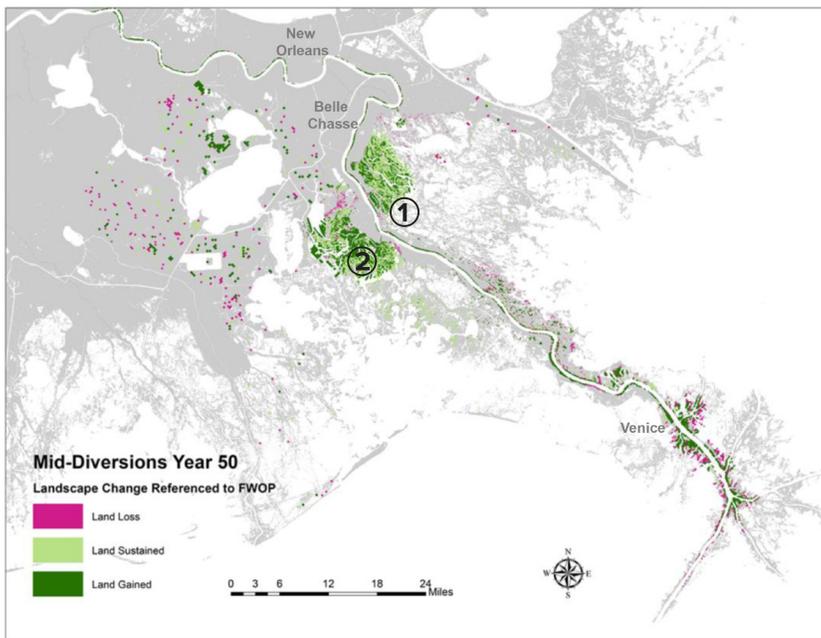
For 7,000 years, the Mississippi River deposited sediment from 31 states and two Canadian provinces across its coast, forming the land of southern Louisiana. Through regular flood events, the river would break through its natural levees, depositing sediment and laying the foundation for wetlands that help protect our communities.

## What Went Wrong:

Levees and flood-control structures were constructed along the Mississippi River to protect ports and communities, improve navigation and keep the river from changing course. These levees prevented the river from depositing sediment into its wetlands, contributing to our land-loss crisis and making our region vulnerable to flooding.

## Restoration Solution:

Restore the Mississippi River Delta has included two sediment diversions, that would capture some of this sediment and reroute it into our dying wetlands, in its list of priority restoration projects. Both projects are in the Engineering & Design phase and are on track to begin construction by 2020 with funding from the BP oil spill settlement.



1.

### Mid-Breton Sediment Diversion

This diversion (35,000 cfs maximum at peak river flow) in the Breton-Chandeleur Basin will be located along the east bank of the river, near Bertrandville.

2.

### Mid-Barataria Sediment Diversion

This diversion (75,000 cfs maximum at peak river flow) in the Barataria Basin will be located along the west bank of the river, near Myrtle Grove.

**Combined, these sediment diversions have the potential to build and maintain tens of thousands of acres.**

Land change by year 2070 with Mid-Diversions.

Credit: CPRA, The Water Institute of the Gulf

**WHO WE ARE** The Restore the Mississippi River Delta Coalition is working to protect people, wildlife and jobs by reconnecting the river with its wetlands. As our region faces the crisis of threatening land loss, we offer science-based solutions through a comprehensive approach to restoration. We are composed of conservation, policy, science and outreach experts from Environmental Defense Fund, National Audubon Society, the National Wildlife Federation, Coalition to Restore Coastal Louisiana and Lake Pontchartrain Basin Foundation.