

UNITED STATES ARMY CORPS OF ENGINEERS

ATCHAFALAYA BASIN PROJECTS

Atchafalaya River Basin Restoration and Enhancement Task Force (ARBRE)

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US Army Corps of Engineers

New Orleans District

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ATCHAFALAYA BASIN

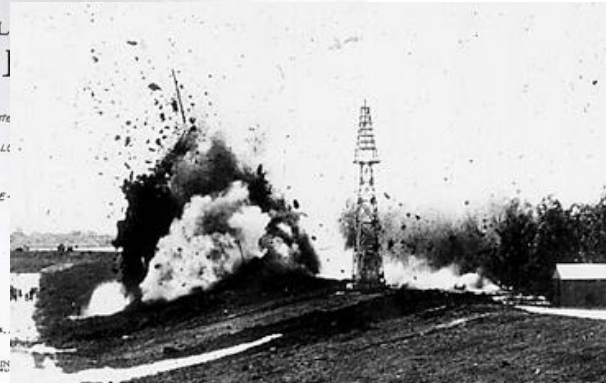
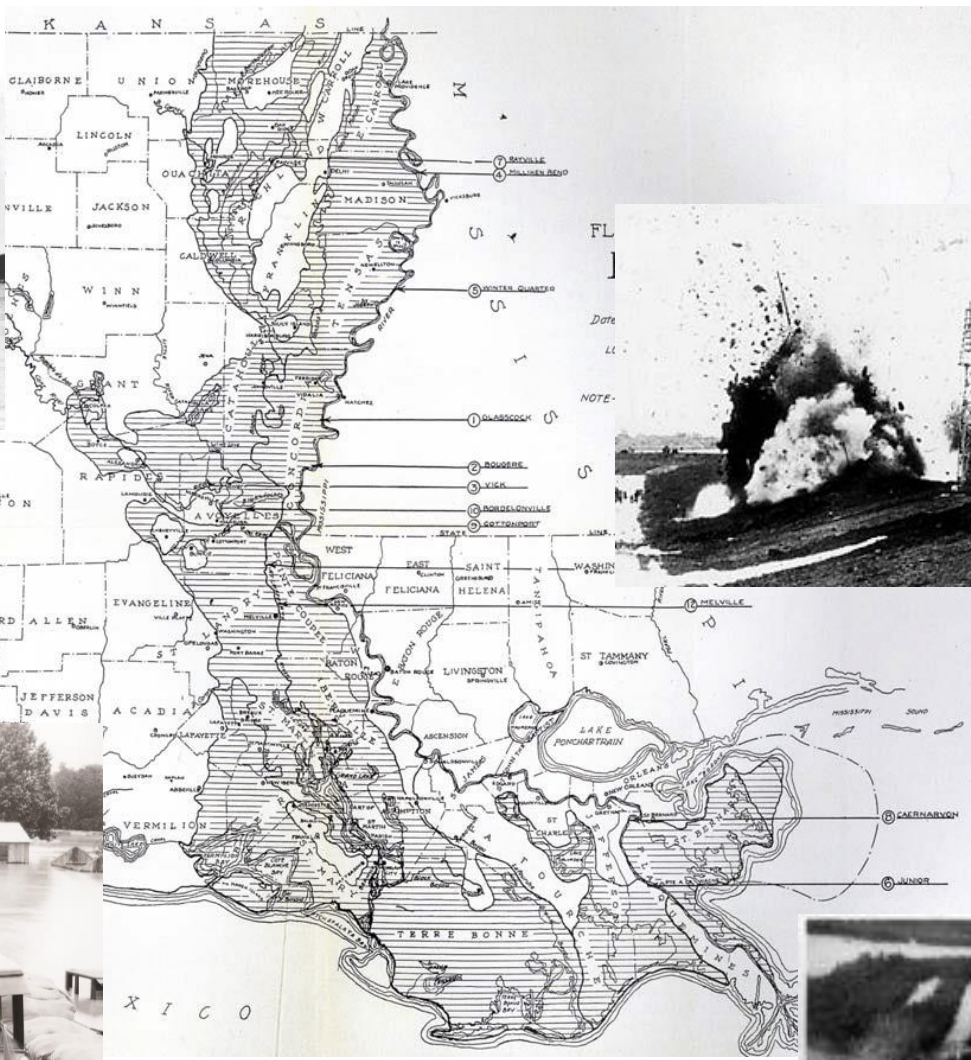
- Introduction to USACE Activities in the Basin
 - What I am NOT going to address:
 - OMAR, ORLSS, Lower Mississippi River-Comp Study, Regulatory Permitting
- Brief history of Atchafalaya Basin
- Atchafalaya Basin Flood Control Project.
 - Operation of features in the basin
- Atchafalaya Basin Floodway Project (ABFS)
- Atchafalaya Basin Operations & Maintenance



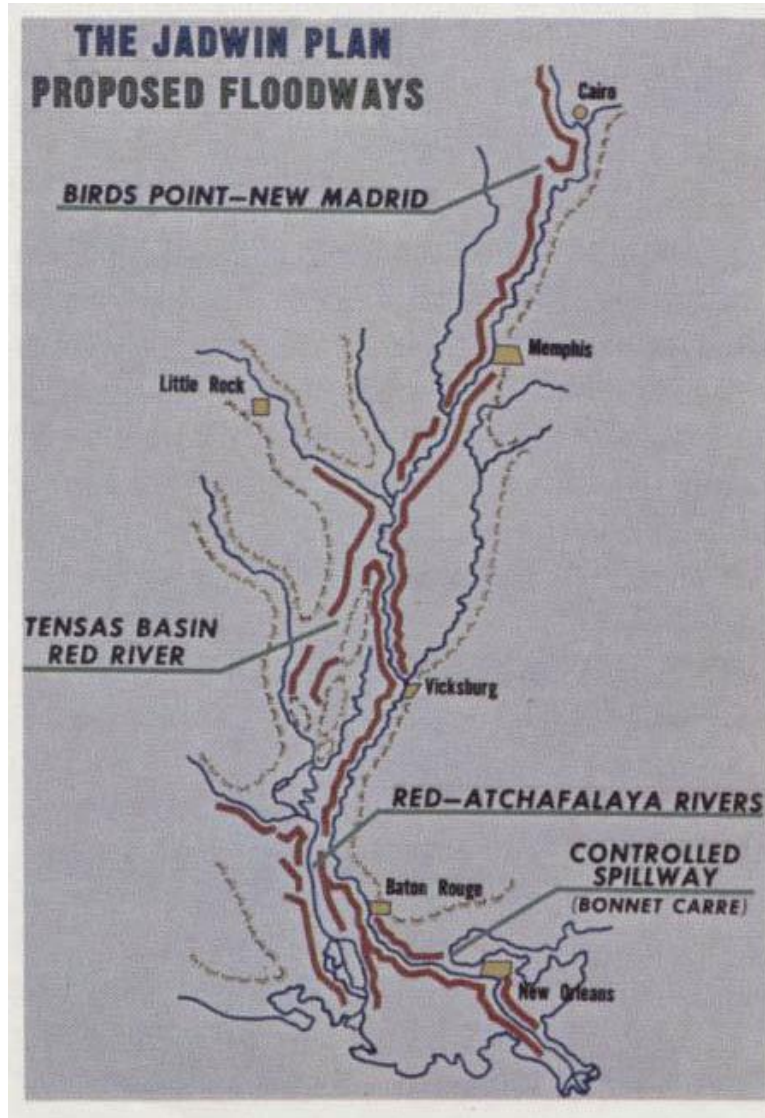
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THE FLOOD OF 1927



Flood Control Act of 1928 and the Jadwin Plan



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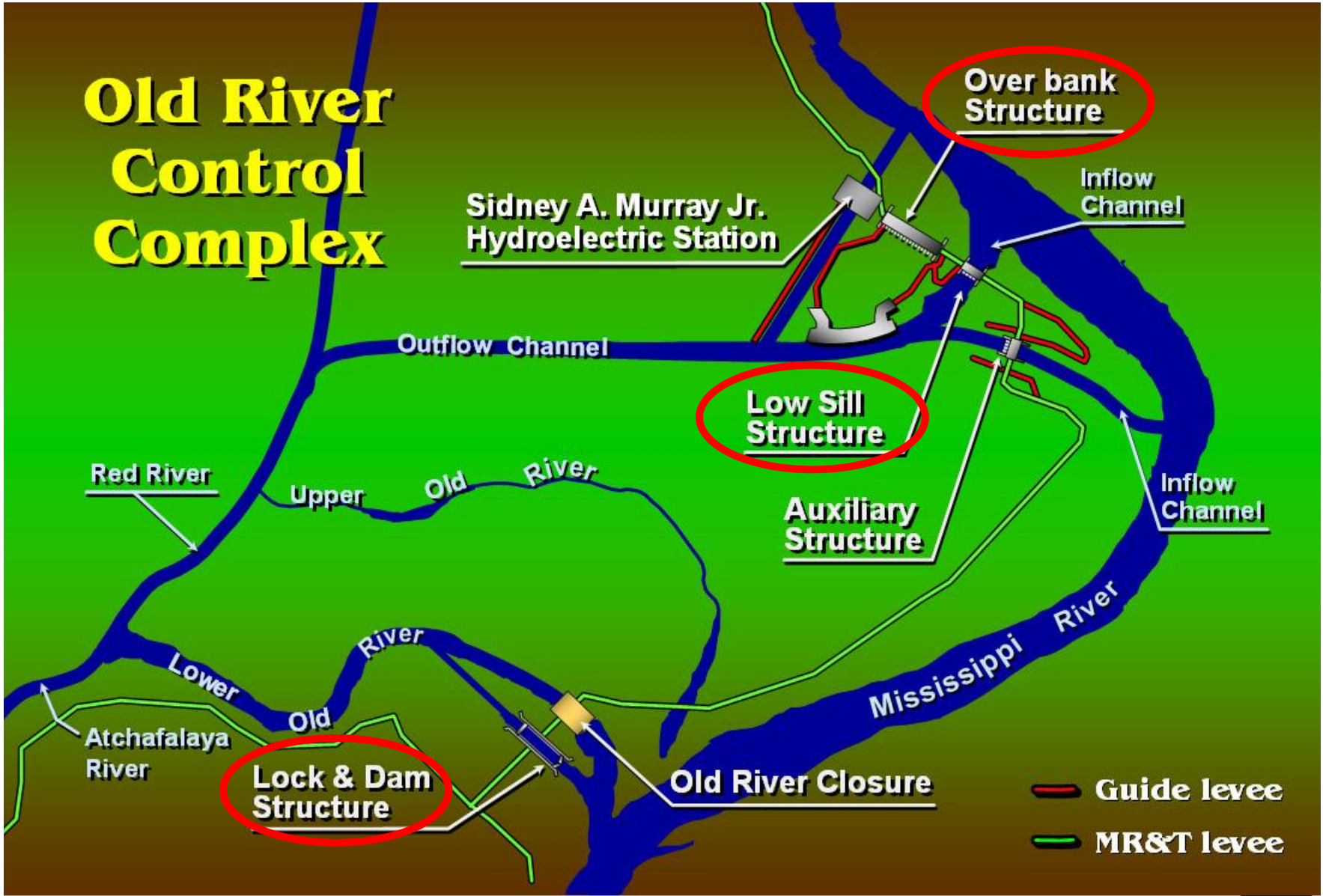
The Morganza Floodway



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Old River Control Structures Authorized



View of Old River Control Complex

Old River Lock



Auxiliary Control Structure



Low Sill Control Structure



Overbank Control Structure

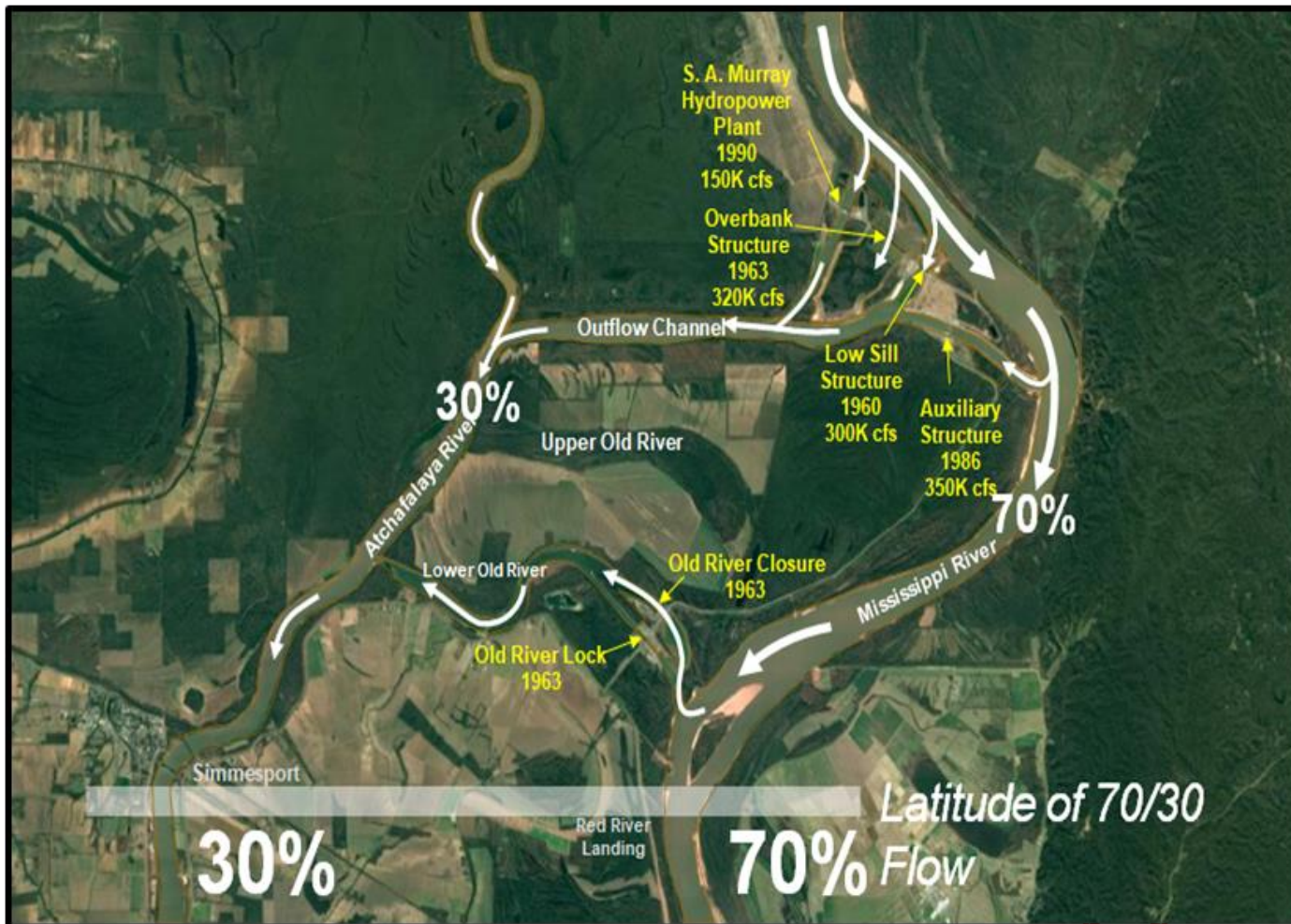


S.A. Murray Hydro



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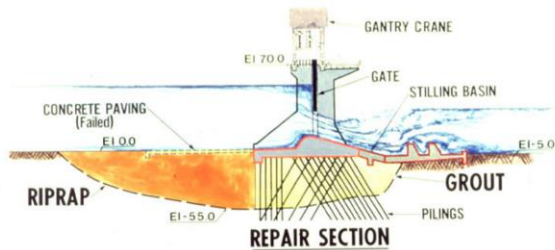
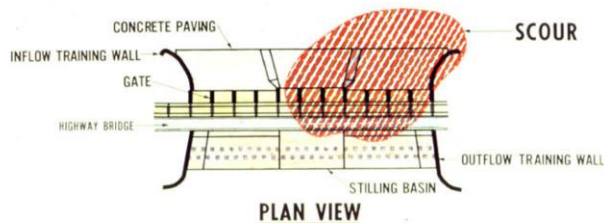
OLD RIVER CONTROL STRUCTURE



1973 Flood

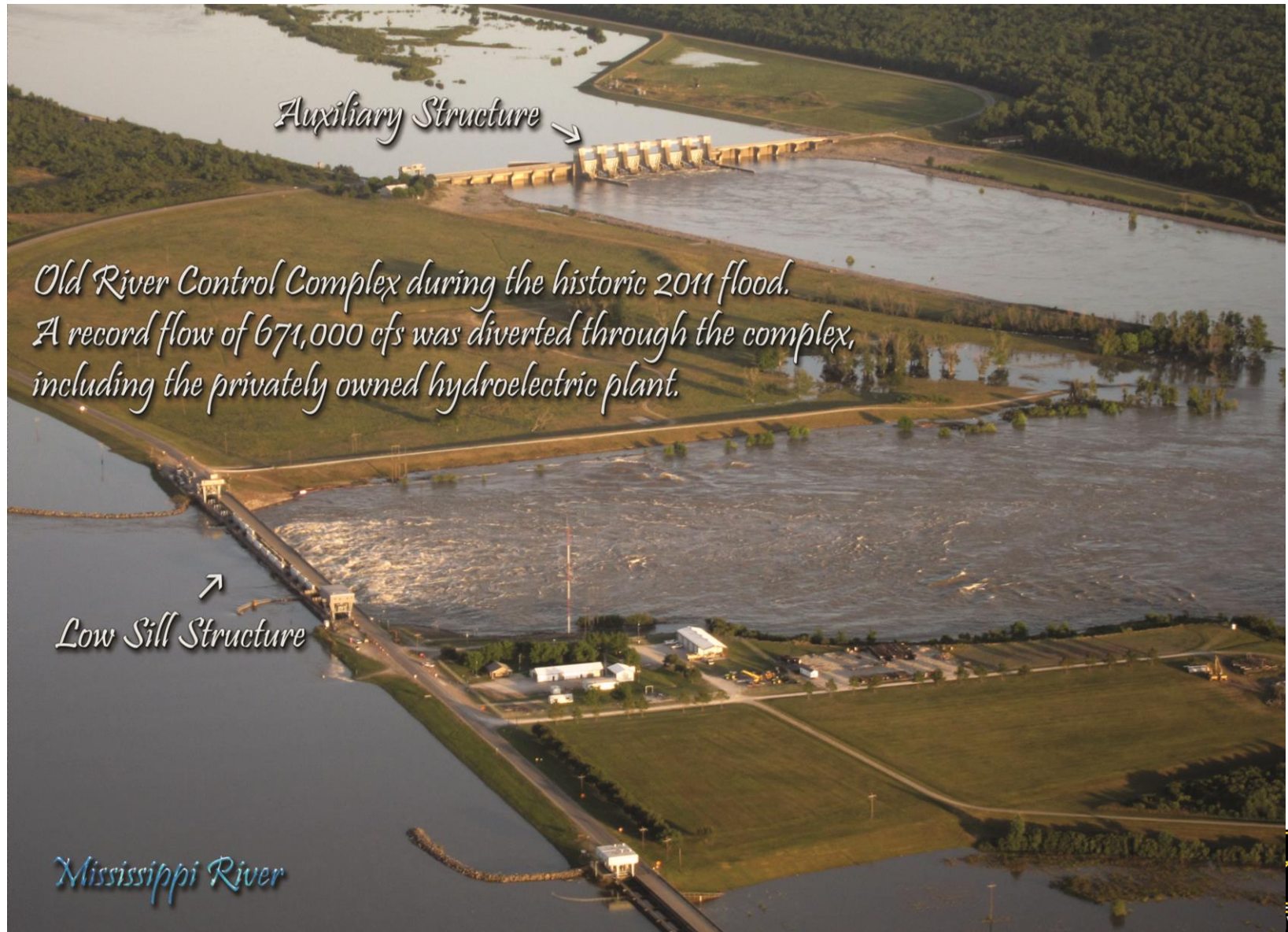


- The Low Sill Control Structure was undermined and the Wing Wall failed
- The Old River Overbank Control Structure and the Morganza Control Structure were opened to relieve stress on the Low Sill Control Structure
- Due to severe damage to the Low Sill Control Structure, USACE recommended construction of the Auxiliary Control Structure, which was completed in 1986

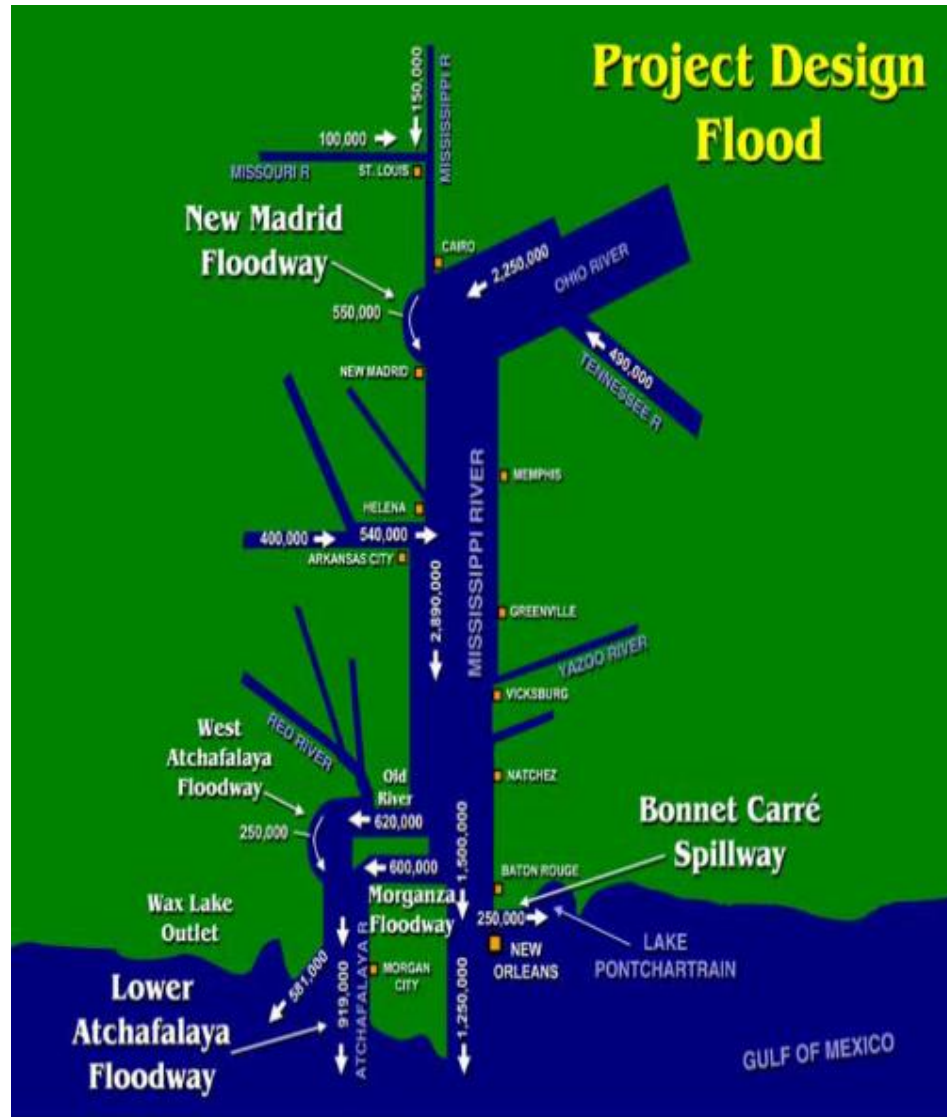


Morganza Control Structure Operated for First Time

The Flood of 2011



Passing the Project Design Flood



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ATCHAFALAYA BASIN FLOOD CONTROL PROJECT



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The MR&T Atchafalaya Basin Project

Major Components

- 451 Miles of Levees and Floodwalls
- 4 Navigation Locks
 - Old River Lock
 - Bayou Sorrel Lock
 - Berwick Lock
 - Bayou Boeuf Lock
- 3 Navigable Floodgates
 - Charenton Floodgate
 - East Calumet Floodgate
 - West Calumet Floodgate
- 11 Pumping Stations
- 3 Drainage Structures
- Wax Lake Outlet
- Morganza Flood Control Structure



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450 Miles of
Levees and
Floodwalls

Lafayette

Baton Rouge

Morgan City

4 Navigation Locks

Old River Lock - provides passage between the Mississippi River and the Atchafalaya & Red Rivers

Baton Rouge

Bayou Sorrel Lock - provides passage for the GWV alternate route



4 Navigation Locks

Old River Lock – provides passage between the Miss River and the Atchafalaya & Red Rivers

Baton Rouge

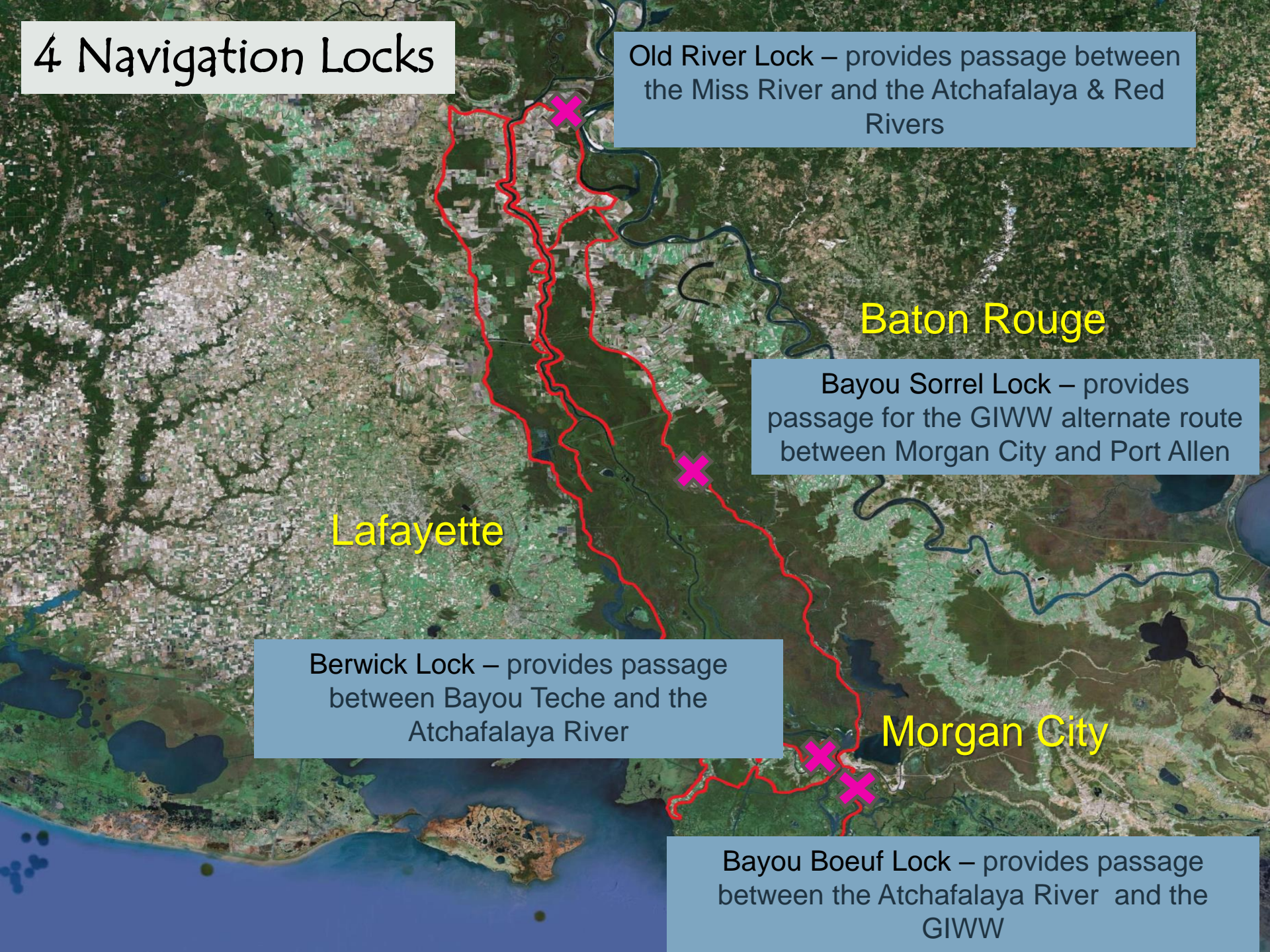
Bayou Sorrel Lock – provides passage for the GIWW alternate route between Morgan City and Port Allen

Lafayette

Berwick Lock – provides passage between Bayou Teche and the Atchafalaya River

Morgan City

Bayou Boeuf Lock – provides passage between the Atchafalaya River and the GIWW



3 Navigatable Floodgates

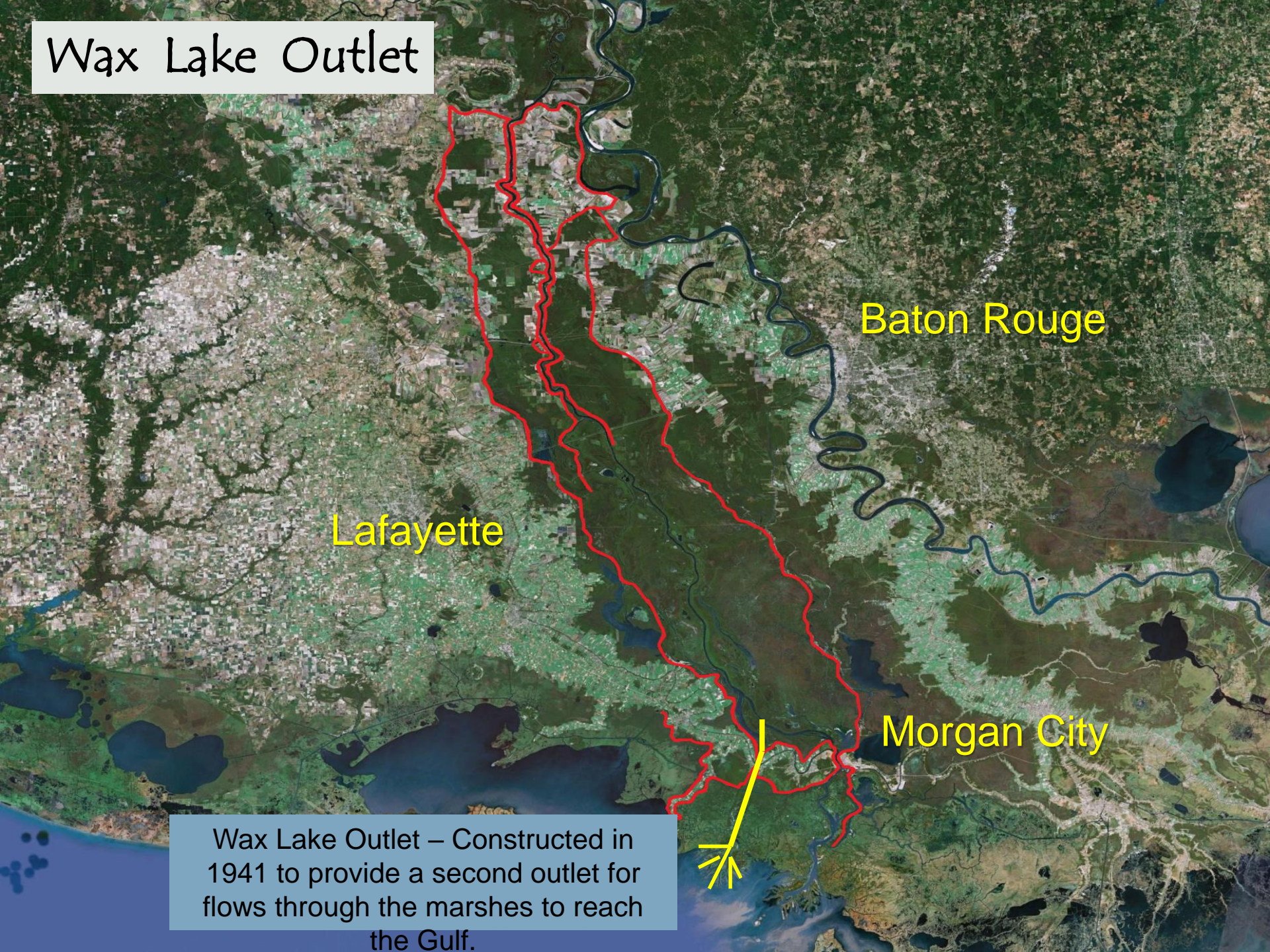


Charenton Floodgate – Located on the Charenton Canal in St Mary Parish



East & West Calumet Floodgates – Located at the intersection of Bayou Teche and the Wax Lake Outlet (AKA Calumet Bay)

Wax Lake Outlet



Baton Rouge

Lafayette

Morgan City

Wax Lake Outlet – Constructed in 1941 to provide a second outlet for flows through the marshes to reach the Gulf.

Atchafalaya Basin Floodway System "ABFS"



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Atchafalaya Basin Floodway System (ABFS)

- Underpinned by a comprehensive analysis, WRDA 86 authorized the Atchafalaya Basin Floodway System (ABFS) Project, which included:
 1. Acquisition of Real Estate Interest for:
 - Flood Control
 - Environmental Protection
 - Recreational Development
 - Public Access
 2. Construction of Recreational Facilities
 3. Construction of Water Management Units
- Funding constraints continue to challenge the advancement of ABFS Project elements



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ABFS Project

- The new ABFS project had three basic categories of responsibility:
 - (1) Acquisition of Real Estate Interest, excluding minerals, in the Lower Basin Floodway for purposes of Flood Control, Environmental Protection, Recreational Development and Public Access.
 - (2) Construction of Recreational Facilities
 - (3) Construction of Water Management Units



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(1) Real Estate Acquisition

The Real Estate Acquisition provision included 4 types:

- (1) Flood Control Easement – provides for purchasing of Flowage Easements on approximately 59,000 acres & Developmental Control Easements on approximately 367,000 acres, excluding developed ridges.
 - The Developmental Easement (a) prohibits construction or placement of new permanently habitable structures in the floodway (b) requires written permission for new camps or other structures (c) controls the cutting of certain sizes and species of trees, and (d) reserves to the landowners the right to engage in prudent and customary cultural practices
 - As of the authorization of ABFS, 180,148 acres in flowage easements had been acquired.



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(2) Recreation

Two Completed Boat Launches

Myette Point Boat Landing



Simmesport Boat Landing ⁴ 8 2005

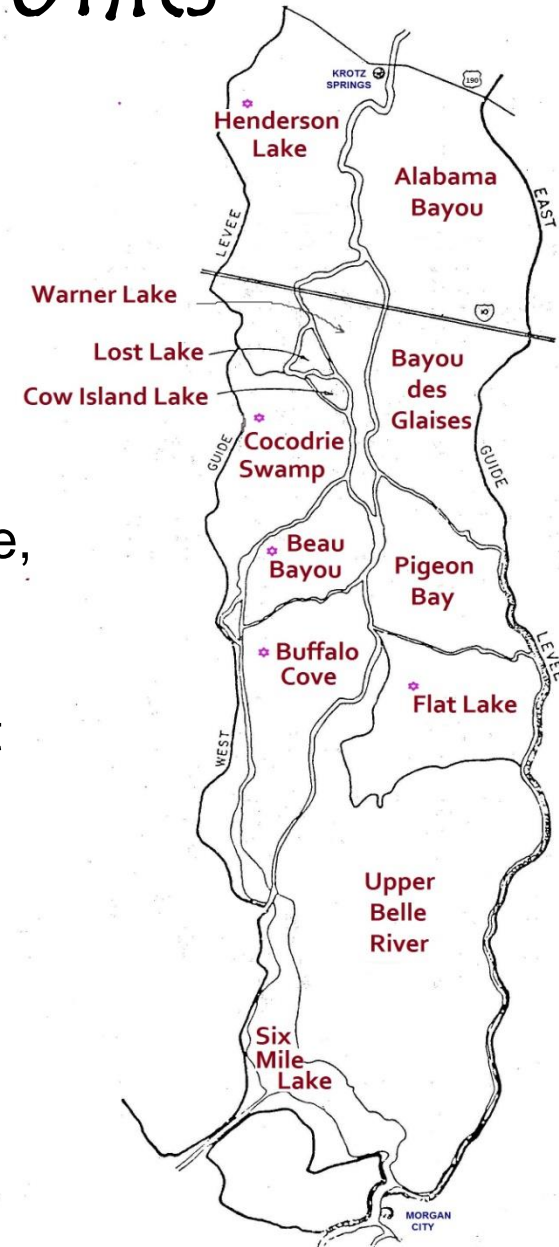


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(3) Water Management Units

- The 1982 study looked at Water Management Units in order to retain or restore unique environmental values of an area.
- The study considered and investigated 13 WMU's within ABFS
 - ❑ 5 WMU's were recommended - Buffalo Cove, Henderson Lake, Flat Lake, Beau Bayou and Cocodrie Swamp
 - ❑ Report recommended beginning with two pilot units – Buffalo Cove and Henderson Lake
 - ❑ Focus has been Buffalo Cove and now beginning in Henderson Lake Unit



Atchafalaya Basin O&M

■ NAVIGATION

- Dredging of the Lower Atchafalaya River and Bayous Chene, Boeuf and Black
- Dredging of Berwick Harbor and Upper River
- 3 Navigation Locks (Bayou Sorrel, Bayou Boeuf, Berwick)
- 3 Navigable Flood Gates (East Calumet, West Calumet, Charenton)

■ FLOOD RISK MANAGEMENT

- Darbonne, Courtableau and Pointe Coupee Drainage Structures
- Drainage Pump Stations (10 St Mary Parish) major maintenance and support
- Point Coupee Pump Station operations and maintenance
- Morganza Structure
- Levee Maintenance – Major repairs

■ INSPECTION AND COMPLIANCE

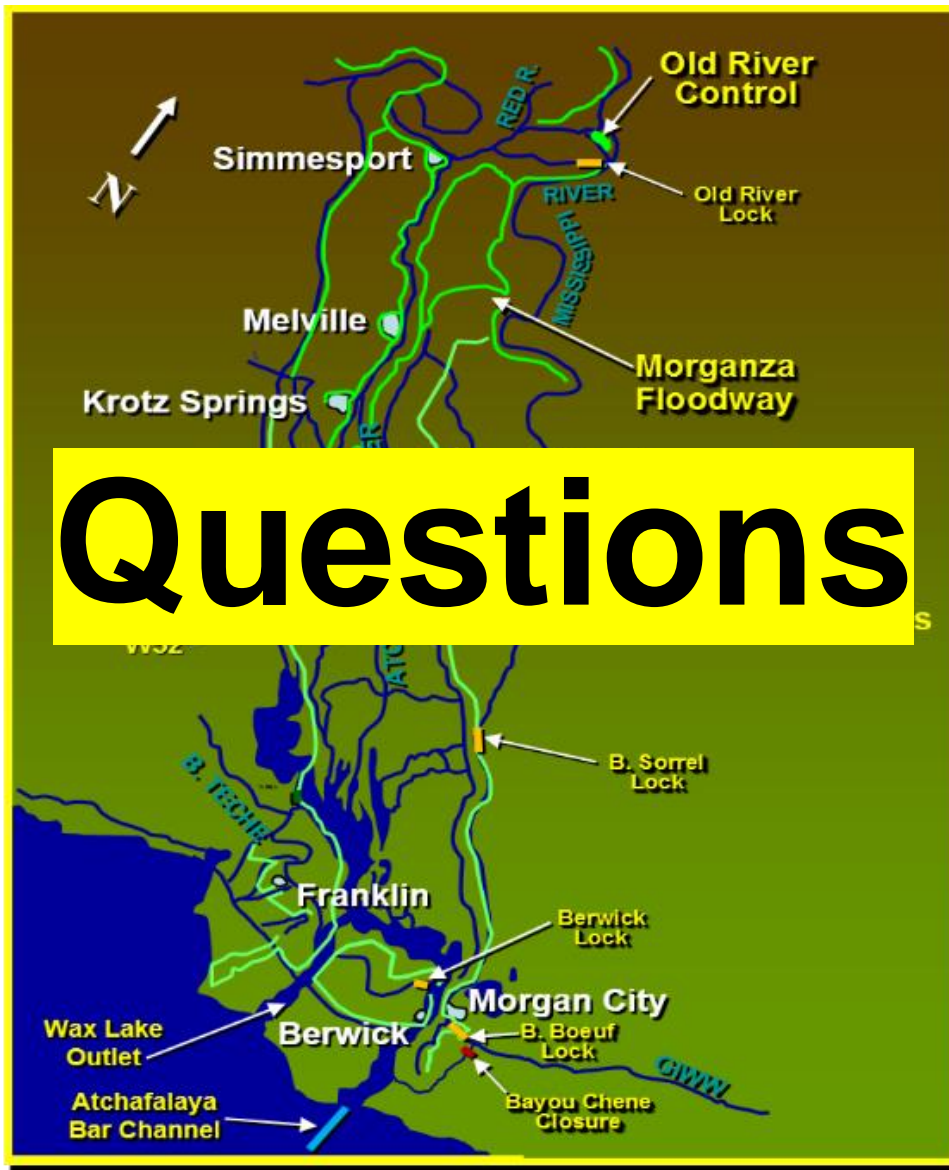
- Section 10/404 and Section 408 permitting
- Annual Levee Safety Inspections



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The MR&T Atchafalaya Basin Project



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