

Flooding

Coastal and River Flooding in Louisiana

What issues with flooding
have you/your tribe
experienced?

Double in LA

River



<http://news.yahoo.com/floods-sweep-northwest-louisiana-damaging-hundreds-structures-212831805.html>

Coastal



<http://www.cnn.com/2012/09/04/us/severe-weather/>

River Flooding

- Caused by:
 - Upstream rains/seasonal melting (spring)
- Worsened by management issues

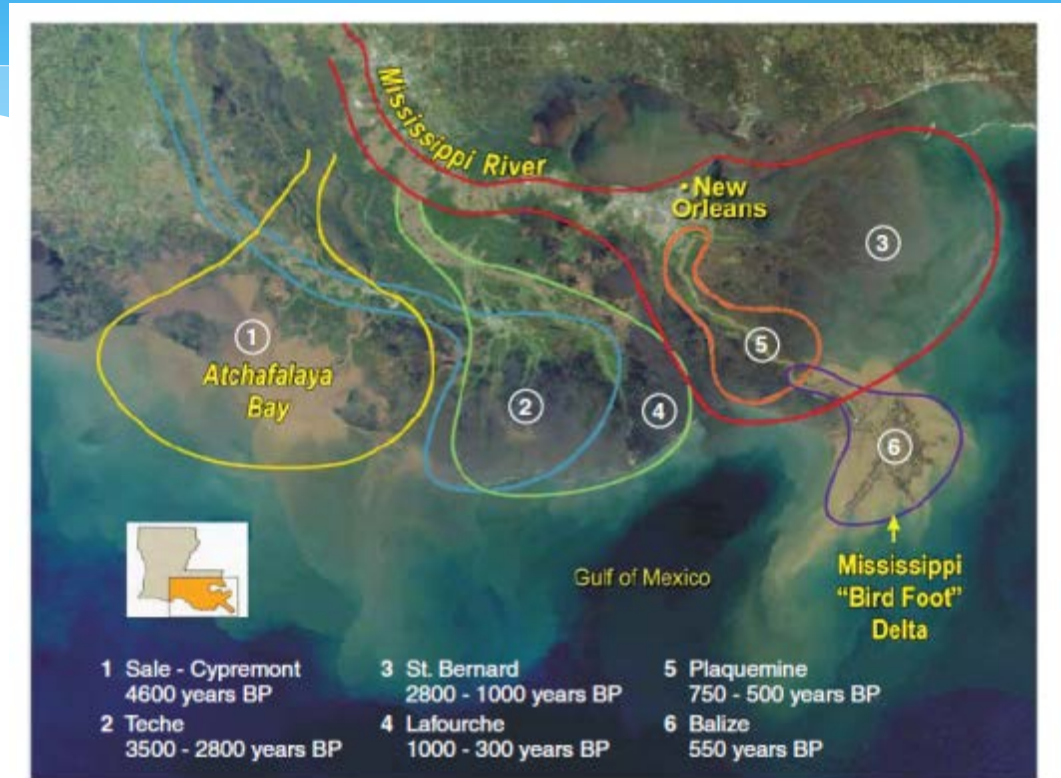


Fig. 1. The MDP was formed by a series of overlapping delta lobes as the river occupied different channels. The delta is characterized by current and abandoned river channels, barrier islands, and extensive coastal wetlands. Currently, about two-thirds of flow is discharged via the lower Mississippi directly to the Gulf and one-third is discharged via the Atchafalaya River to a shallow bay where a new delta is forming. The location of levees is shown on the lower river as well as the location of the MRGO. The turbid plume shown on the right results from a river diversion. BP, before the present. [Modified from (66)]

Historical Floods

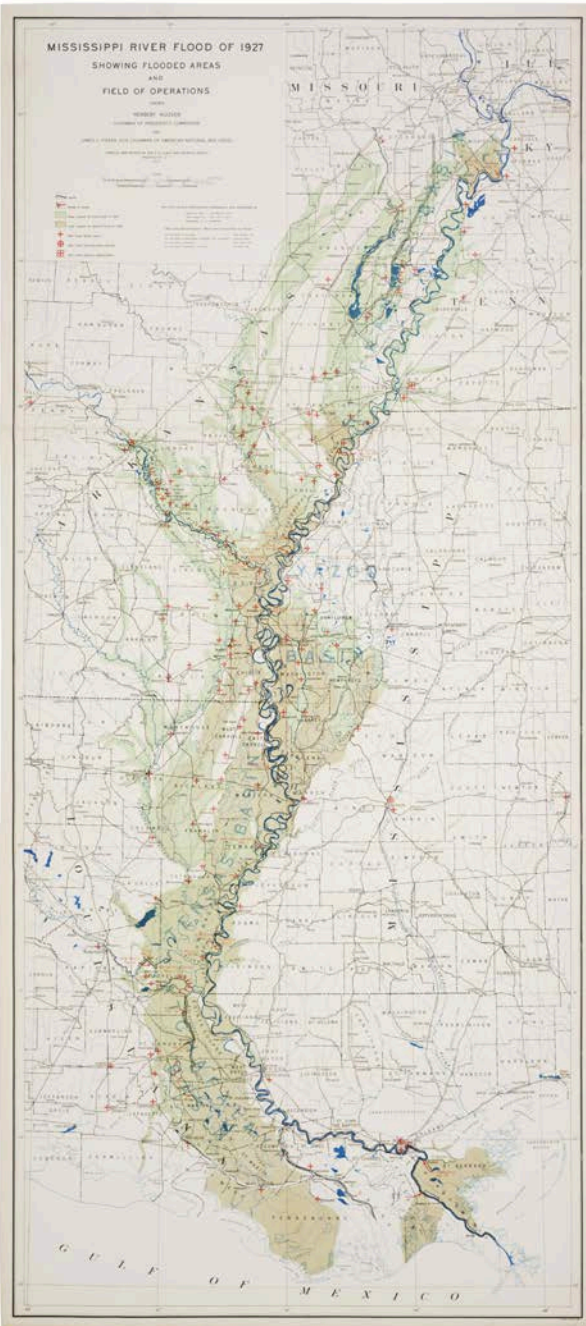
1927

100 year flood

Prompted
massive
overhaul of river
infrastructure



http://www.louisianafolklife.org/LT/Articles_Essays/DeltaDepression.html#tab1
Courtesy of Betty Jo Harris



<http://www.archives.gov/>

Recent Floods

USGS



2011 & 2015/16

Caused by heavy upstream rainfall

USGS



Hurricanes & Tropical Storms



<http://www.nhc.noaa.gov/climo/>

Examples

Katrina 2005



<http://insights.globalspec.com/article/1729/hardening-the-infrastructure-flood-management-controls>

Isaac 2012



<http://www.cnn.com/2012/09/04/us/severe-weather/>

River Control Structures



USGS

<https://www.youtube.com/watch?v=H8bx6yG4Fzg>

<https://www.youtube.com/watch?v=DDLJ7Z8qSvo>

https://www.youtube.com/watch?v=6m_iwd3vpAQ



USGS

Coastal Walls

New Orleans surge barrier



Photo by Nick Silbert, courtesy of the Army Corps of Engineers.

Coastal levee plan



<http://coastallinesofdefense.org/linesofdefensemaps.html>

Housing



USGS