# PROJECT LOCATION East Baton Rouge Parish PROJECT LEAD AGENCY USACE





#### PRIMARY AREAS OF PROJECT IMPACT

Portions of East Baton Rouge Parish adjacent to the Comite River



# NET STRUCTURES LOSSES AVOIDED (100-YEAR FLOOD)

Approximately 10,000



NET ECONOMIC LOSSES AVOIDED (100-YEAR FLOOD)

\$462M



PROJECT COSTS

\$907.8M



### **FUNDING STATUS**

Fully funded

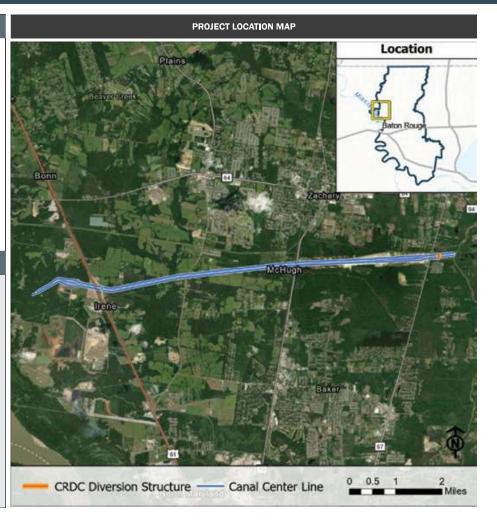
# **MITIGATION NEEDS**

The Comite River is a major tributary of the Amite River, capturing a 348 square miles drainage basin in Mississippi and Louisiana. The Amite River Basin has a long history of major riverine driven flooding. Notable flooding events during the past 50-years include the April 197, April 1983, January 1990, January 1993, June 2001, March 2016 and August 2016 flood of record.

During these events, the metropolitan Baton Rouge and surrounding areas experienced extensive flooding. Estimates for the August 2016 flood indicate that over 70,000 structures were flooded within the basin resulting in over \$4B of economic losses and 7 lives lost.

# PROJECT SUMMARY

The Comite River Diversion Canal is a 12-mile-long diversion canal currently under construction. It is located on the right over-bank bank of the Comite River between Baker and Zachary and will consist of control structures at the Comite River that diverts flow directly into the canal during flood events. The Lilly Bayou control structure at mile eight of the canal slows down water dropping from it from the channel to swamp bottoms along the Mississippi River, removing it from the Amite River Basin system.



# PREDICTIVE MODEL SUMMARY

LWI Models were used to quantify the potential impacts of the Comite River Diversion Canal project for storm events and resultant floods on both the Amite and Comite basins as part of this Master Plan. 95% plans for the the diversion control structure and canal provided by USACE through DOTD were utilized for proposed conditions geometry. Multiple design storms were used to demonstrate the benefits of the canal for floods within the Baton Rouge Metropolitan Area ranging from the 10-year through to the 500-year flood.

#### PROJECT IMPACTS

Modeling results demonstrated that significant benefits could be realized from the Comite River Diversion Canal project once construction is complete. During the 10-year flood, up to 13,806 cfs of flow was determined to be removed from the Comite River and 21,156 cfs during a 100-year flood.

#### FLOOD IMPACTS FOR 100-YEAR FLOOD CAUSED BY RAINFALL CENTERED OVER THE COMITE RIVER BASIN

LOCATION	10-YEAR FLOOD ON COMITE RIVER (FT)	100-YEAR FLOOD ON COMITE RIVER (FT)	
Confluence with Redwood Creek	- 0.21	-0.06	
Highway 64	-0.83	- 0.25	
Dyer Road	-3.9 -1.0		
Highway 408 (Hooper Rd.)	- 3.4	- 2.2	
Highway 37 (Greenwell Springs Rd.)	- 3.5	- 3.0	
Central Throughway	- 2.7	- 2.3	

#### FLOOD IMPACTS FOR 100-YEAR FLOOD CAUSED BY RAINFALL CENTERED OVER THE WHOLE AMITE RIVER BASIN

LOCATION	10-YEAR FLOOD ON AMITE RIVER (FT)	100-YEAR FLOOD ON AMITE RIVER (FT)	
Confluence with Redwood Creek	- 0.13	- 0.06	
Highway 64	- 0.64	- 0.23	

# PROJECT IMPACTS

LOCATION	10-YEAR FLOOD ON AMITE RIVER (FT)	100-YEAR FLOOD ON AMITE RIVER (FT)	
Dyer Road	- 2.0	- 0.68	
Highway 408 (Hooper Rd)	- 1.73	- 0.84	
Highway 946 (Joor Rd)	- 1.32	-0.96	
Highway 37 (Greenwell Springs Rd)	- 1.42	- 0.94	
Central Throughway	-0.84	-0.44	
US 190 (Florida Blvd)	-0.42	- 0.19	
Downstream of I-12	-0.38	- 0.18	

#### STRUCTURE AND ECONOMIC IMPACTS OF THE PROJECT

FLOOD EVENT	STRUCTURES REMOVED	ADDITIONAL STRUCTURES WITH DECREASED FLOODING	ECONOMIC LOSSES AVOIDED
10-year flood	1,450	525	\$105,212,000
100-year flood	5,100	4,898	\$461,942,000

# **ENVIRONMENTAL CONSIDERATIONS**

This project has been permitted by the corps and is under construction.

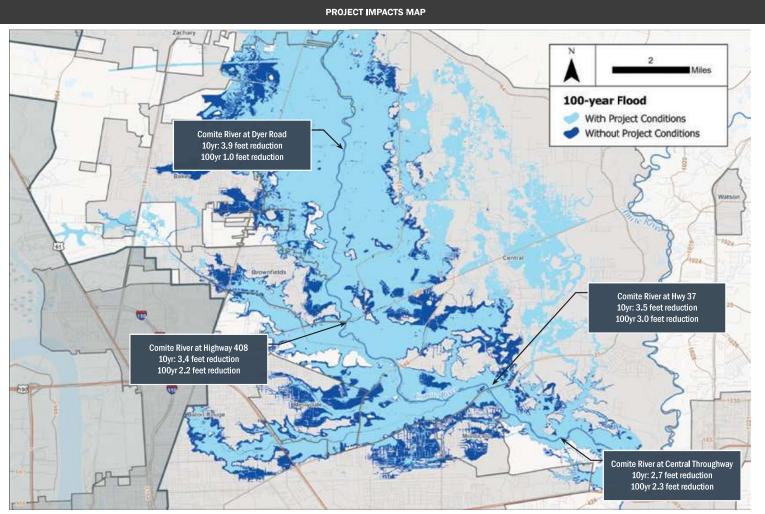
# **REAL ESTATE CONSIDERATIONS**

Land acquisition for the remaining sections to be constructed is underway.

# PERMITTING

This project has been permitted by the corps and is under construction.

In accordance with 44CFR §65.3, new technical data must be submitted to FEMA by the community as soon as available, but no later than 6-months after completion for floodplain management requirements.



RAINFALL OVER COMITE RIVER BASIN

# PROJECT COSTS

TOTAL (ESTIMATED): As of July 2023, USACE estimated the total cost to be \$907.8M.

# **FUNDING CONSIDERATIONS**

The project is federally funded under the Bipartisan Budget Act of 2018.

The project is funded through a combination of federal and local sources. The federal share was funded under the Bipartisan Budget Act of 2018. Additionally, the ARBC used a tax mileage for the Comite River Diversion Canal Impact to help fund the non-federal share.

# BENEFIT COST ANALYSIS

A benefit cost was not performed as part of this Master Plan.

# SEQUENCING AND DEPENDENCIES

 $This \ project \ is \ currently \ under \ construction \ and \ is \ not \ dependent \ on \ the \ completion \ of \ other \ ARBC \ Master \ Plan \ projects.$ 

# COMITE RIVER DIVERSION CANAL CONSTRUCTION IMAGES



KCS RAILROAD AND LA HIGHWAY 61 BRIDGES, CHANNEL SEGMENT 1 (PHOTO SOURCE: USACE)



CYPRESS BAYOU, 80% COMPLETE (PHOTO SOURCE: USACE)



CHANNEL SEGMENT 2A, 90% COMPLETE (PHOTO SOURCE: USACE)