



# FY 2020 Annual Plan

Atchafalaya Basin Program

*America's Largest River Swamp*





# Coastal Protection and Restoration Authority

## Atchafalaya Basin Program



The Atchafalaya Basin Program was put in place to develop, implement, and manage a comprehensive state master plan for the Atchafalaya Basin Floodway System, Louisiana Project. This master plan directs the efforts of state as local sponsor the US Army Corps of Engineers Floodway project and provides the mechanisms to match federal dollars used in the mitigation of that system. Although the Program has focused on the components of the Atchafalaya State Master Plan approved in 1999, activities have also expanded to address the needs of both the resources and resource users of the Atchafalaya Basin.

Previously, the Program was housed within the Louisiana Department of Natural Resources and that agency was charged as lead for the implementation of the Atchafalaya State Master Plan. On July 1, 2018 the Program and associated authorities were transferred to CPRA through Act 570 of the 2018 Regular Session. With that transfer the CPRA will continue to provide an annual plan for the Atchafalaya Basin Program that will be made part of the overall CPRA Annual Plan.

Although the structure of the Program has undergone revision in statute the CPRA is committed to continue the important work benefitting the Basin while tying this Program into the state's larger coastal efforts. This Annual Plan also includes descriptions of currently planned and future projects as well as an overview of the Advisory groups and other oversight. More information can be found on the CPRA website [coastal.la.gov](http://coastal.la.gov). We thank all involved with the management and preservation of the Basin and are excited to have this Program incorporated into the state's Coastal Program.

### **COASTAL PROTECTION AND RESTORATION AUTHORITY BOARD POSITIONS**

Governor's Executive Assistant for Coastal Activities (Chair)  
Secretary, Louisiana Department of Natural Resources  
Secretary, Louisiana Department of Transportation and Development  
Secretary, Louisiana Department of Wildlife and Fisheries  
Secretary, Louisiana Department of Environmental Quality  
Secretary, Louisiana Department of Economic Development  
Commissioner, Louisiana Department of Agriculture and Forestry  
Commissioner, Louisiana Division of Administration  
Chair, Governor's Advisory Commission on Coastal Protection, Restoration and Conservation  
Director, Governor's Office of Homeland Security and Emergency Preparedness  
Commissioner, Louisiana Department of Insurance  
Representative East of the Atchafalaya River (4 appointments)  
Representative West of the Atchafalaya River (2 appointments)  
Designee of Senate President (Ex-officio)  
Designee of Speaker of the House (Ex-officio)

## **TECHNICAL ADVISORY GROUP**

The Atchafalaya Basin Program Technical Advisory Group is in place to review, evaluate, and approve water quality or water management projects for inclusion into the Basin Annual Plan. Membership is as follows. Each of the entities below has one member unless otherwise noted:

Executive Director, Coastal Protection and Restoration Authority (Chair)  
Louisiana Department of Environmental Equality  
Louisiana Department of Agriculture and Forestry  
Louisiana Department of Natural Resources  
Louisiana Department of Wildlife and Fisheries  
Louisiana Department of Culture, Recreation, and Tourism  
Louisiana Department of Health  
Louisiana State Land Office  
Atchafalaya Basin Levee Board\*  
Police Jury Association of Louisiana East of Atchafalaya\*  
Police Jury Association of Louisiana West of Atchafalaya\*  
United States Geological Survey  
United States Fish and Wildlife Service  
United States Army Corps of Engineers  
Louisiana State University School of Renewable Natural Resources

**\* denotes memberships that have specific requirement for selection and appointment as set forth in Act 570 of the Louisiana Legislature Regular Session 2018.**

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# FY 2020 Project List



No new projects were nominated for FY 2020. At the final meeting under DNR the TAG had reviewed all previously approved projects and prioritized them according to viability and need. This list will remain the priority water management projects for the Program unless updated by the TAG or CPRA. The updated water quality priority list is as follows:

1. **Grand Lake Depth Restoration**
2. **East Grand Lake Upper Region**
3. **Flat Lake Study**
4. **Murphy Lake Depth Restoration**
5. **Buffalo Cove Water Management Project**

## Water Quality/Water Management Project Descriptions

### Grand Lake Depth Restoration (201601)

A canal blockage at the Atchafalaya River was breached in 2011 and subsequently washed out completely. The opening allowed large amounts of sediment to enter and settle in Grand Lake. The incoming sediment rapidly formed a sandbar where there was previously open water. The filling of Grand Lake is a threat to public access and aquatic habitat. The TAG identified this project as the number one priority in the FY 2016 Annual Plan process because of the importance of preserving the remaining open water habitat. They reaffirmed the importance of the project in the FY 2019 Annual Plan.

#### Status Report

This project received funding reallocated from projects designated as unable to proceed in FY2016. Plans for this project have undergone several alterations during the planning process. Initially, the project was to restore the blockage at the Atchafalaya River and remove the sandbar from the lake. It was then combined with the adjacent depth restoration of Little Bayou Pigeon, because the proximity of the two projects made them more cost effective when completed at the same time. The Little Bayou Pigeon restoration project was later separated from the Grand Lake project after the ownership boundary was challenged by the adjacent landowner. Restoration of the blockage at the Atchafalaya River was completed by a private company in January 2017, and ABP entered into a cooperative agreement with that company to share the cost of dredging the lake and placing the dredged material in the canal. Sediments removed from Grand Lake were used to fill in the canal behind the blockage; however, hydrology of the surrounding area was maintained by leaving Schwing Chute open. Dredging was completed in FY19 and it is anticipated project will be accepted and closed-out at start of FY20.



Sediment accumulation closing off Grand Lake



Blockage of the pipeline canal at the Atchafalaya River was completed in January 2017.





Grading of newly dredged and placed material within the canal.

## **East Grand Lake Project (201006)**

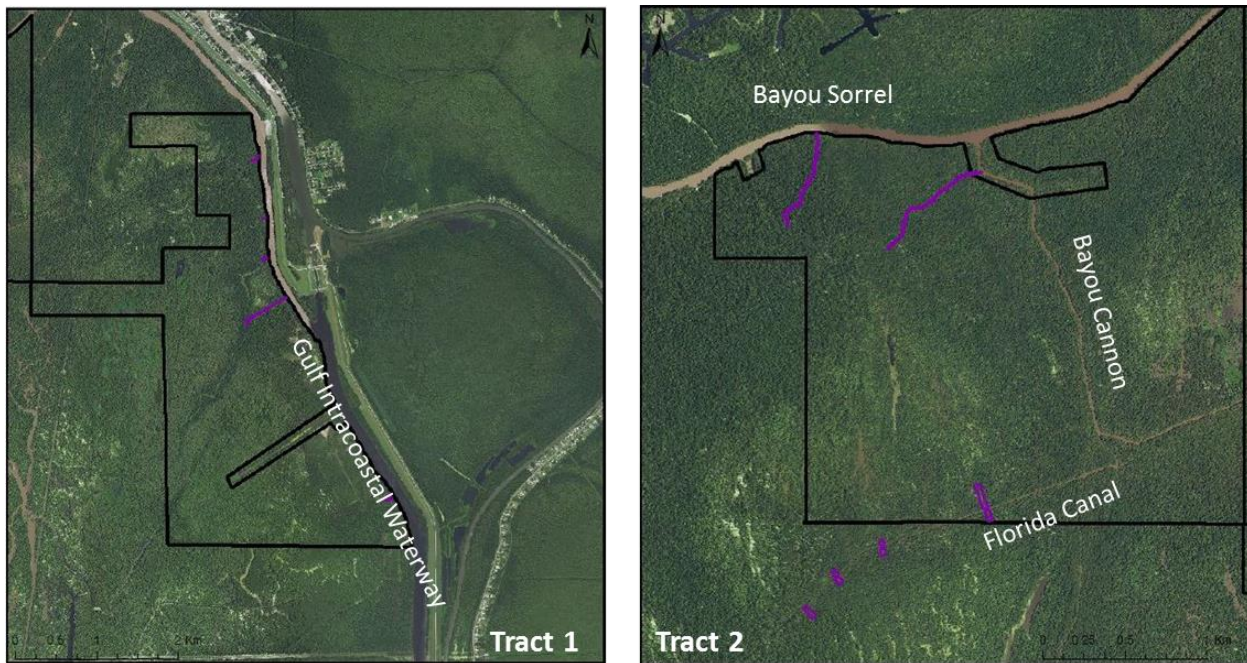
This project was initially approved in the FY 2010 Annual Plan process as “Development of a Complete and Specific Plan to Address Water Quality and Sedimentation in East Grand Lake/Flat Lake/Upper Belle River Management Units Through Modification of Water & Sediment Inputs.” The project was intended as a first step toward realigning water flow patterns and strategically redirecting sediment in the East Grand Lake (EGL) project area, and the Upper Region was chosen as a starting point.

The EGL Upper Region encompasses the area south of Bayou Sorrel to Old River and east of Grand Lake to the Gulf Intracoastal Waterway. It covers an estimated 72,143 acres. This area has only a few flow restrictions preventing water from entering and circulating throughout a large portion of the area, and the highly channelized flow of water through the School Board Canal (Unnamed Canal), Indigo Bayou, Salt Mine Bayou, Williams Canal, Bayou Pigeon, and the Coon Trap creates a sediment delivery network that carries sediment deep into the area, promoting further restriction of flow and isolation of small areas. Hydrologic restoration of the area requires modifying this network of channelized water inputs. Ownership of the area is a mix of public and private land, so completing landscape-scale hydrologic restoration requires cooperation among landowners. In 2015 The Nature Conservancy (TNC) acquired specific tracts needed to provide critical water inputs, and the project is now moving forward through a partnership between ABP and TNC. In December 2015, DNR and TNC signed a Memorandum of Understanding to formalize this partnership.

### **Status Report**

A robust monitoring program has been initiated by TNC. This monitoring program includes a combination of continuously recording instrumentation and discrete monitoring stations to determine the change in water flow patterns resulting from restoration. The program will also track the corresponding effects on water quality, habitat, forest health, biodiversity, and carbon and nutrient sequestration during flood and drainage events. Design and permitting for phase 1 of project construction is underway and includes a suite of elements designed to restore healthy flow patterns in the EGL Upper Region. As the project progresses, there will be ample opportunities for public input at TAG and CPRA public meetings, which are held throughout the year.

Additionally, the CPRA holds public meetings annually to receive input on the CPRA Annual Plan which includes the Basin Plan.



Proposed project features.

Current funding for this project was reallocated from projects that were unable to proceed including Cocodrie Swamp and Pigeon Bay. A portion of the funding received in 2017 will also be allocated to this project.



## Flat Lake Study (201501)

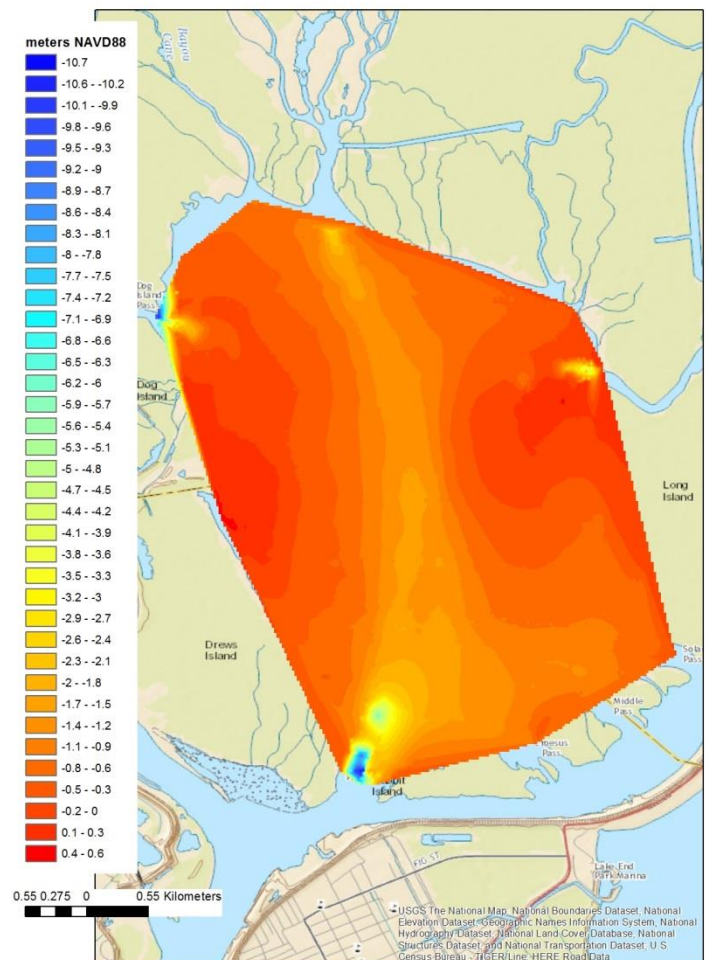
Sedimentation is causing loss of access and aquatic habitat in Flat Lake and is detrimental to the overall health of the ecosystem. Sediment accumulation in Flat Lake exacerbates drainage issues and stagnation of interior swamp habitat throughout the Upper Belle River WMU. This study is an evaluation of the lake and its ecosystem to support the design of a restoration project to rehabilitate habitat, improve biological conditions, and re-establish access for the benefit of public use.

The “Overview and Planning Process of the East Grand Lake Water Quality Improvement and Sediment Management Plan” (2010) clearly identified the Flat Lake area as an important component of the drainage of the East Grand Lake and Upper Belle River WMUs. The study concluded that the hydrodynamic influence of Flat Lake should be quantified as part of the planning process and suggested that decisions regarding the future management of the waterways in and around Flat Lake will have a significant influence on the hydrology and ecology of the Western and Upper regions.

Because of its proximity to Coastal Master Plan projects designed to build wetlands in Terrebonne Parish, Flat Lake was chosen as a location for a demonstration project for utilizing Atchafalaya Basin sediments as a borrow source. This study will include analysis of lakebed sediments and will provide that and other information to assess the feasibility of this area as a component of the Coastal Plan.

### Status Report

A portion of funding received in 2017 will be allocated to this project.



Bathymetry of Flat Lake.

## Depth Restoration at Entrance to Murphy Lake (201512)

Sediment has closed off access to Murphy Lake in the East Grand Lake WMU in low water conditions, causing water circulation and water quality problems. The project would involve dredging sediment accretion from the entrance of Murphy Lake to improve access and water flow into the lake.

### Status Report

This project is not currently funded.



## Buffalo Cove Water Management Project

The Buffalo Cove Water Management Project is a project of the U.S. Army Corps of Engineers (USACE). It was designed to improve water circulation and sediment management in the Buffalo Cove Water Management Unit in an effort to enhance fish and wildlife resources. The project includes the improvement of interior circulation within the swamp; the removal of barriers to north-south flow; the input of oxygenated, low temperature river water; and the prevention or management of sediment input into the interior swamps.



*This Buffalo Cove WMU element at Bayou Eugene was repaired after the flood of 2011*

The project location is the lower Basin in Iberia, St. Martin and St. Mary Parishes. USACE began construction on Buffalo Cove in 2004, and the project was estimated to benefit more than 7,500 acres initially and 53,000 to 58,000 acres eventually.

Initially constructed Buffalo Cove elements included Bayou Eugene and elements 1, 6, 7, 8, 9-1, and 9-2. Some of these elements were impacted by unprecedented high water during the Mississippi River Flood of 2011 and were no longer functioning as designed. The following elements were repaired as of February 2013: 6, 7, 9-1, 9-2, and elements within Bayou Eugene (E1, E2, and E3). In 2016, the USACE began construction on elements 3, 12, 14, and 16 to further improve interior flows, and with the completion of those elements in June 2016, the project was considered substantially complete.

## Status Report

Element 10 (Logjam), which was a late addition to the project design, still remains to be constructed. Element 10 was designed to improve a historic flow corridor of approximately 2.9 miles in the south/central Buffalo Cove WMU. It includes construction of cuts in hydrologic impoundments, which have been caused by the spoil banks of two oil and gas canals and one impoundment caused by sedimentation along a ridge. This project element was added to improve hydrologic connection between Buffalo Cove Lake, the Ice Box, and areas further downstream to the Atchafalaya River. In order to construct the proposed cuts, an existing access channel (Bayou Bieber) will be partially improved from Poncho Chute and a 100 foot portion of the access channel will be backfilled to preexisting conditions in order to maintain the existing channel capacity. The Atchafalaya Basin Program has set aside a portion of the funding received in 2017 funding to provide the State's 25% cost-share for Element 10.

Once Buffalo Cove WMU is completed, the State of Louisiana has a cost share of 25% of ongoing operation and maintenance funding for this project

## Other Projects

### Bayou Plaquemine Boat Launch

Bayou Plaquemine is a historic natural waterway and former tributary of the Mississippi River into the Atchafalaya Basin. At one time, poor water quality limited public designated uses such as fishing, swimming, and other water recreation activities. Efforts by the City of Plaquemine, Iberville Parish Council Office, and the Atchafalaya Basin Program have successfully rehabilitated Bayou Plaquemine so that it now supports public designated uses. As a result, public demand for access into Bayou Plaquemine is increasing.

Improvements will include lengthening the existing concrete boat launch to allow launching boats in lower water conditions and improving access to Bayou Plaquemine.



*Bayou Plaquemine Boat Launch*

## **Atchafalaya Welcome Center Trail**

This project will create a walking trail located at the I-10 Welcome Center at Butte la Rose. It is anticipated that construction will begin and terminate within FY20. This project is funded by a grant through the National Highway Administration.

## **Cajun Coast Welcome Center Trail**

This project will include construction of boardwalk behind the Cajun Coast Welcome Center in St. Mary Parish to provide a trail through the scenic cypress-tupelo swamp. It will also include informational signage to explain flood protection and its relation to the floodway.

## **Grand Avoille Cove Boat Launch**

Upgrades to this landing were proposed in the FY 2017 Annual Plan process. Recommended improvements include an upgraded boat launch and improved parking.

## **Sandy Cove Landing**

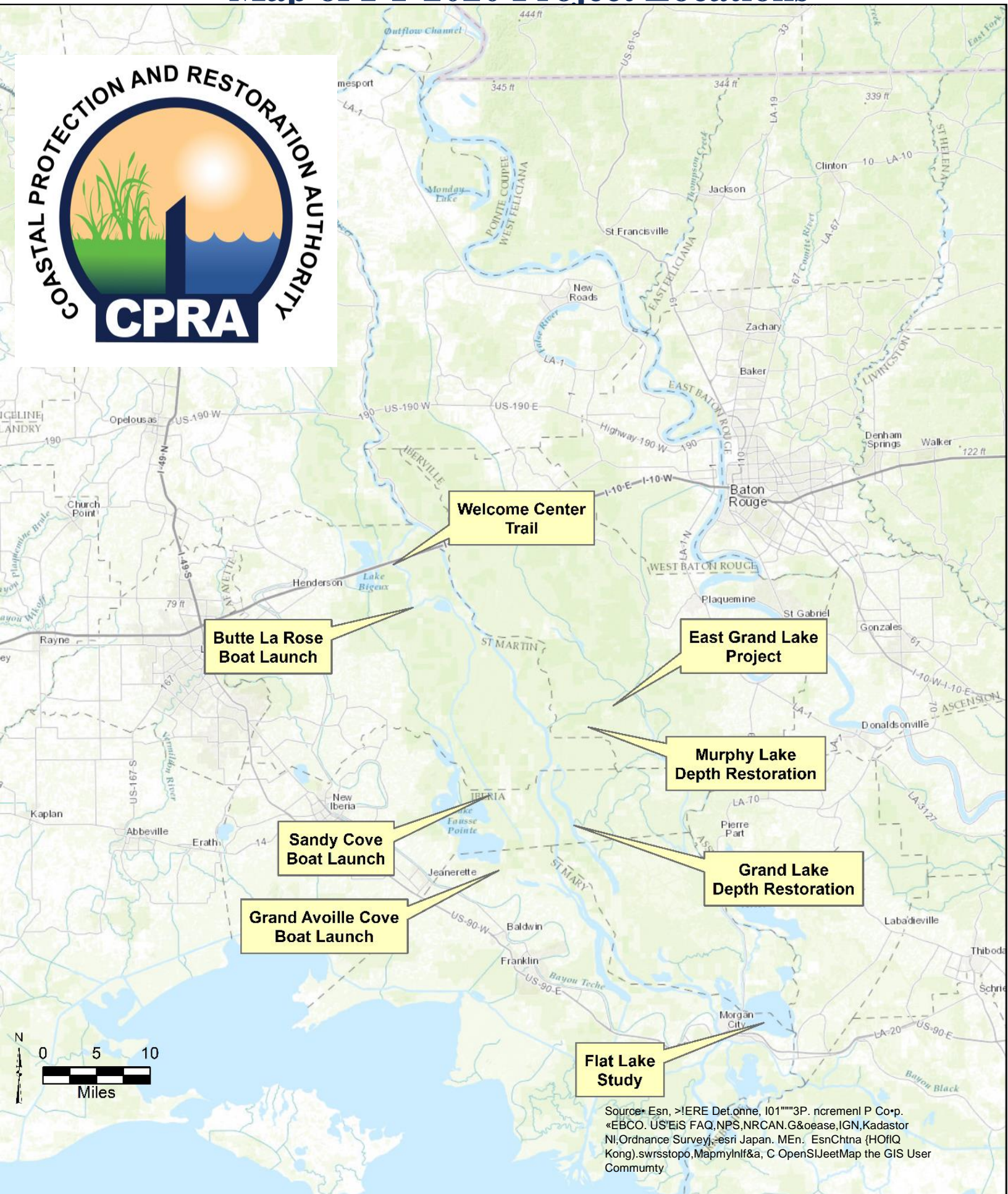
Upgrades to this launch were proposed in the State Master Plan. Improvements to the existing launch are proposed. Improvements to the parking area, lighting, restrooms and a fishing area, as well as other improvements.

## **Atchafalaya Basin GeoTrail**

The Atchafalaya Basin GeoTrail is a series of 24 geocaches that have been placed in and around the Atchafalaya Basin. Launched in 2017 each site highlights how water has influenced the region.



# Map of FY 2020 Project Locations



Source: Esri, DeLorme, Intermap, Inc., Swisstopo, Mapbox, OpenStreetMap, the GIS User Community, EBCO, US/EIS, NPS, NRCAN, G&O, IGN, Kadaster, NI, Ordnance Survey, Esri Japan, MEN, Esri China (Hong Kong), swisstopo, Mapbox, OpenStreetMap, the GIS User Community



# Atchafalaya

## BASIN



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