



Atchafalaya

BASIN PROGRAM

Atchafalaya Basin Program
DRAFT Fiscal Year 2021 Annual Plan

Program History

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 the state as local sponsor for 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/atchafalaya-basin-program/. 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 Quality

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.

FY 2021 Project List

Only one new project was nominated for FY 2021. 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. **Henderson Lake WMU Spoil Bank Gapping Project**
2. **Flat Lake Study**
3. **Murphy Lake Depth Restoration**
4. **Buffalo Cove Water Management Project**
5. **East Grand Lake Upper Region**

Water Quality/Water Management Project Descriptions

Henderson Lake WMU Spoil Bank Gapping Program

The Henderson Lake Water Management Unit Spoil Bank Gapping Program will address restricted water flows north of Henderson Lake. The restricted flows contribute to water quality issues in the swamps, the lake, and also inhibit flood flows south to the lower basin. The program will help to reestablish more natural North/South water flows present in the basin. Due to the importance of improving water quality and hydrologic regime, the ABP TAG identified this project as a top priority in the FY 2021 Annual Plan process.

Status Report

This project is not currently funded.



Existing spoil bank conditions within Henderson Lake.



Existing spoil bank conditions within Henderson Lake.

East Grand Lake Upper Region

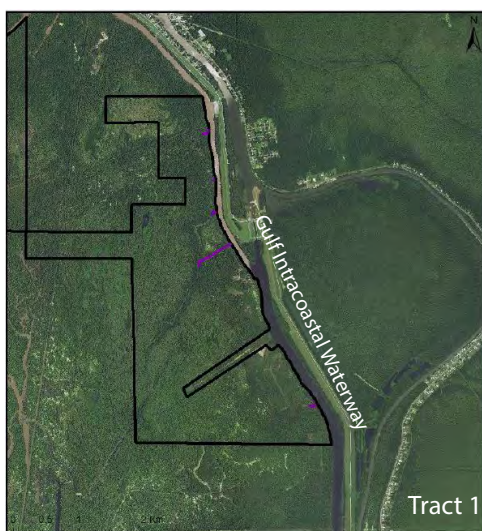
This project was initially approved in the FY 2010 Annual Plan process as “Development of a Complete and Specific Plan to Address Water Quality and Sedimentation in East Grand Lake/Flat Lake/Upper Belle River Management Units Through Modification of Water & Sediment Inputs.” The project was intended 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.

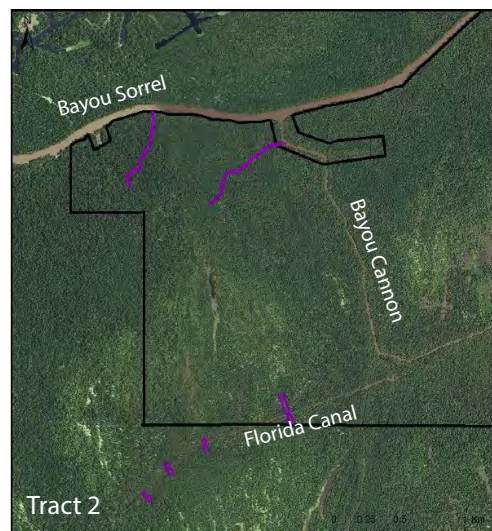
Status Report

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.

Murphy Lake Depth Restoration

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.

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.



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

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

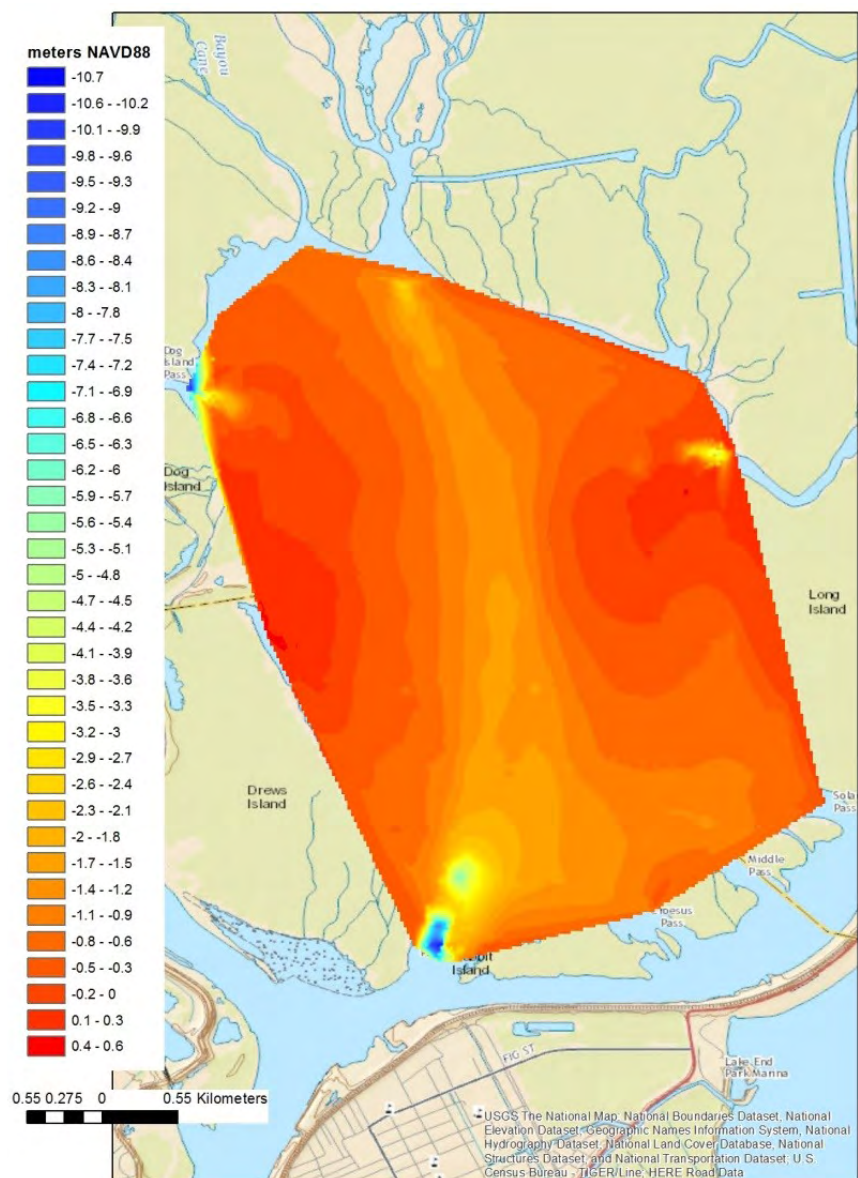
Flat Lake Study

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.

Other Projects

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.

Sandy Cove Landing

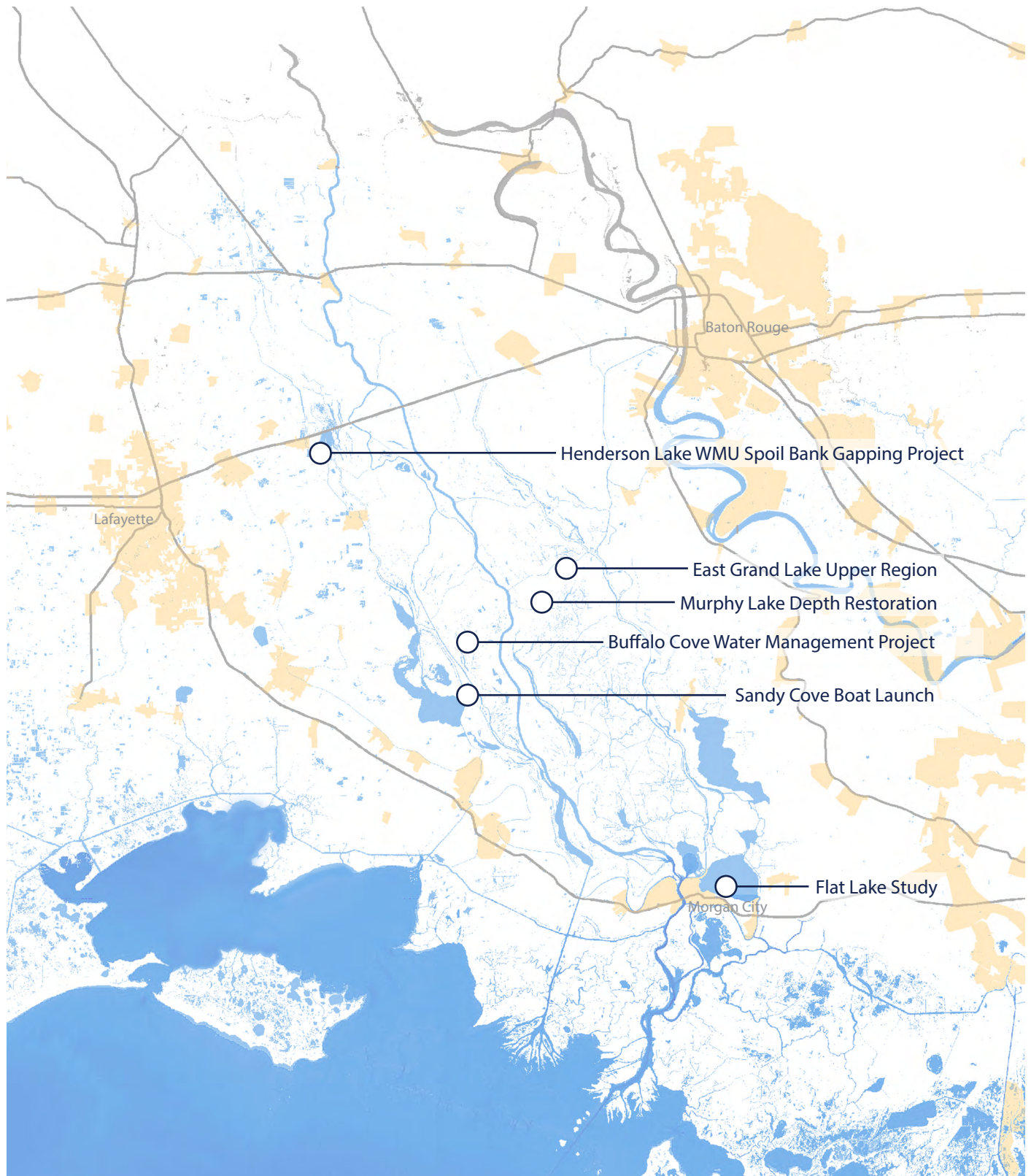
Upgrades to this launch were proposed in the State Master Plan. Improvements to the existing launch are proposed. Improvements to the parking area, lighting, restrooms and a fishing area, as well as other improvements.

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 2021 Project Locations





With the passage of Act 8 of the First Extraordinary Session of 2005 (Act 8), the Louisiana Legislature mandated the integration of hurricane protection activities (e.g., levee construction) and coastal restoration activities (e.g., river diversions or marsh creation). Act 8 also created the Coastal Protection and Restoration Authority Board (CPRA Board) and tasked it with oversight of these activities. The Office of Coastal Protection and Restoration (OCPR) was designated as the implementation arm of the CPRA Board. To avoid confusion, the 2012 Louisiana Legislature changed the name of the state agency from OCPR to the Coastal Protection and Restoration Authority (CPRA).

The CPRA Board, with the assistance of CPRA, is required by Act 523 of the 2009 Regular Legislative Session, amended by Act 604, to produce an Annual Plan that inventories projects, presents implementation schedules for these projects, and identifies funding schedules and budgets. This Atchafalaya Basin Program Fiscal Year 2020 Annual Plan provides an update on the state's efforts to protect and restore its coast and describes the short-term and long-term results that citizens can expect to see as the state progresses toward a sustainable coast.

Act 570 of the 2018 Regular Session, enacting La. R.S. 49:214.8.1, et seq., transferred the responsibilities of the Atchafalaya Basin Research and Promotion Board and the Atchafalaya Basin Program from the Department of Natural Resources to the Coastal Protection and Restoration Authority. The Atchafalaya Basin Program (R.S. 49:214.8.1 et seq.) is placed within the Coastal Protection and Restoration Authority, which shall perform and exercise the powers, duties, functions, and responsibilities of the Program as provided by law. The annual basin plan shall be included in the Annual Plan: Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana produced each year by the Coastal Protection and Restoration Authority.

Atchafalaya Basin Program Fiscal Year 2021 Annual Plan:
Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana.
Submitted to the Senate Natural Resources Committee;
House Natural Resources and Environment Committee Senate; Transportation, Highways and Public Works
Committee House; Transportation, Highways and Public Works Committee;
by The Coastal Protection and Restoration Authority of Louisiana.
In accordance with R.S. 49:214.5.3 and R.S. 49:214.6.1



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