

Louisiana Department of Natural Resources

# FY 2017 Annual Plan

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## ATCHAFALAYA BASIN PROGRAM



*America's Largest River Swamp*

*Atchafalaya*  
BASIN



# LOUISIANA DEPARTMENT OF NATURAL RESOURCES ATCHAFALAYA BASIN PROGRAM

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Our mission is to Conserve,  
Restore, and Enhance the natural  
habitat of the Atchafalaya Basin and give  
all people the opportunity to enjoy the  
Atchafalaya Experience.



*from DNR Secretary STEPHEN CHUSTZ*

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January 8, 2016

**Dear Members of the Louisiana Legislature,**

I am pleased to present to you the FY 2017 Atchafalaya Basin Annual Plan, developed in accordance with Act 606 of the 2008 Regular Session of the Louisiana Legislature, which requires the Atchafalaya Basin Program (ABP) to identify water management, access, and recreation projects for state funding consideration and implementation.

Spanning nearly one million acres from Simmesport to the mouth of the Atchafalaya River near Morgan City, the Atchafalaya Basin is this nation's largest and most productive river swamp. The Louisiana Department of Natural Resources' Atchafalaya Basin Program is entrusted to conserve, restore, and enhance this natural treasure, and the Annual Plan process and project funding are critical to our Program's success. I thank members of the Research and Promotion Board, Technical Advisory Group, and Legislative Oversight Committee, as well as our Atchafalaya Basin Program staff and local residents, for their work culminating with the distribution of this FY 2017 Annual Plan.

Since the modern Atchafalaya Basin Program Annual Plan Process began in FY 2010, over \$7 million in Atchafalaya Basin water quality/water management, access, and recreation projects have been authorized, and as you will read in this Plan, many of these projects have been completed or are currently under construction. This year, the ABP will be building a Nature Trail at the Butte LaRose Visitor's Center, developing a Geo Cache trail, constructing Wilson's Landing boat launch in St. Mary Parish, partnering with the Boy Scouts on Swamp Base in Catahoula, and depth restoration of Grand Lake and Little Bayou Pigeon. We are also excited to work with The Nature Conservancy to implement water projects on what is their newly purchased land in the East Grand Lake Water Management Unit and with The Louisiana Department of Wildlife and Fisheries to build a multi-purpose building in the Sherburne Wildlife Management Area.

Additional funding is needed to implement water quality/water management projects proposed in this and previous Annual Plans. Water quality/water management projects are key to ensuring the sustainability of the Basin and all of its ecological and recreational benefits.

We thank you for your support of the Atchafalaya Basin Program, and look forward to working with you to secure funding to implement the projects identified on the following pages. Together, we can preserve the health and beauty of our Atchafalaya Basin for generations to come.

Sincerely,

Stephen Chustz, Secretary  
Louisiana Department of Natural Resources



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## CONNECTING ATCHAFALAYA SEDIMENT RESOURCES TO THE NEEDS OF COASTAL COMMUNITIES

Bridging the gap between sediment-deprived and sediment-burdened areas of the Louisiana coast is a much-needed strategy to support restoration efforts in both the Atchafalaya Basin and the Louisiana coast. Approximately 21 percent of the total suspended load and 50 percent of sands in the Atchafalaya River are sequestered within the Atchafalaya Basin and do not reach the coast where they are needed. Ongoing rapid and detrimental sedimentation in the Atchafalaya River Basin (ARB) fills swamps and waterways, impairs water quality, and degrades habitats. Conversely, areas of the Louisiana coast outside the Atchafalaya Basin protection levees are experiencing erosion and subsidence and are in need of sediment sources for restoration projects.

The Atchafalaya Basin Program (ABP) continues to collaborate with the Louisiana Coastal Protection and Restoration Authority (CPRA) to better coordinate restoration efforts between the two agencies and to improve beneficial use of dredged sediments. Recent progress on this effort includes:

### \* **February 19, 2015**

ABP staff met with CPRA staff on to discuss potential opportunities for the two agencies to work in cooperation to move sediment from the Atchafalaya floodway to areas of the Louisiana coast that need sediment to counteract erosion and subsidence. CPRA presented their project, “Increase Atchafalaya Flow into Terrebonne Marshes,” which was recommended in the first implementation period of the 2012 Coastal Master Plan. CPRA staff indicated that sediment sources are needed for this project area.

### \* **March 11, 2015**

Recommendations were provided to CPRA by the ABP which identified potential source areas and estimates of sediment volume that could be provided by these sources.

### \* **June 24 and 25, 2015**

CPRA staff attended meetings of the Atchafalaya Basin Research and Promotion Board and Technical Advisory Group.

### \* **July 13, 2015**

ABP presented a federal grant opportunity to CPRA that would support collaborative sediment coordination efforts between the two agencies. Funding constraints prevented this effort from moving forward at this time; however, the opportunity may be pursued in a future grant funding cycle.

### \* **July 27, 2015**

ABP provided CPRA with information regarding an oil and gas-related dredging project to explore the potential beneficial use of 155,778 cubic yards of sediment, which a private company plans to dredge and remove from the Atchafalaya Basin.

### \* **Ongoing**

ABP and CPRA continue to communicate on a regular basis to discuss opportunities for beneficial use of dredged sediments in the Atchafalaya Basin.

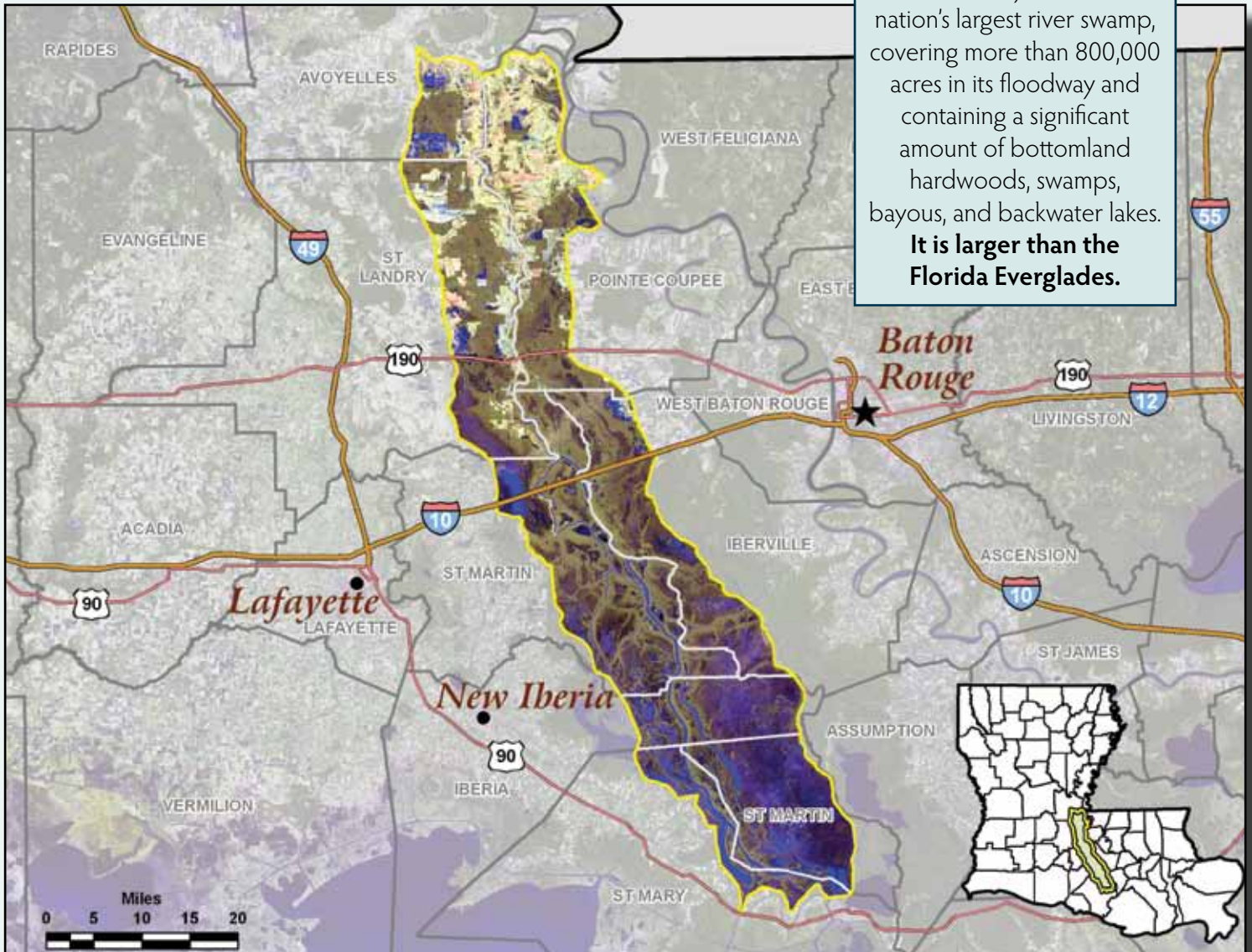




# *The Atchafalaya Basin*

Louisiana's Atchafalaya Basin is America's largest river swamp, including more than 800,000 acres of bottomland hardwoods, swamps, bayous, and backwater lakes. Stretching over 100 miles along the Atchafalaya River from Simmesport in Avoyelles Parish down to Morgan City in St. Mary Parish, the Basin includes portions of eight parishes and is larger than the Florida Everglades. It is considered this nation's most productive river basin, home to hundreds of species of mammals, fish, birds, and reptiles. The Atchafalaya Basin is truly a natural treasure that eagerly welcomes visitors to enjoy its beauty and explore its unique environment.

The Atchafalaya Basin is the nation's largest river swamp, covering more than 800,000 acres in its floodway and containing a significant amount of bottomland hardwoods, swamps, bayous, and backwater lakes. **It is larger than the Florida Everglades.**



# A River Story

The story of the Atchafalaya Basin begins with the Mother of the Louisiana Delta – the Mississippi River. Seeking a shorter route and steeper gradient to the Gulf of Mexico, the Mississippi changed course several times over thousands of years in geological history, and the Atchafalaya River was one of the Mississippi’s historic paths over 4,500 years ago. As the Mississippi changed course, it deposited rich sediment in its path which literally built coastal Louisiana, and flooding events created natural ridges along the banks of the river and its distributaries. Over time, these floodplain processes produced thriving environments for plant, animal, and marine life, particularly within the area now known as the Atchafalaya Basin.

The Atchafalaya River is the largest distributary of the Mississippi River. It originates at Old River, a seven-mile channel that links the Red River to the Mississippi River. Fed by waters from the Red and the Mississippi, the Atchafalaya flows south for approximately 140 miles, emptying into the Gulf of Mexico at Atchafalaya Bay, approximately 15 miles south of Morgan City, Louisiana.

The worst flood on record along the lower Mississippi River system was the Great Flood of 1927, which put the entire Atchafalaya Basin, nearby communities and rural areas under water. In reaction to this natural catastrophe, the Flood Control Act of 1928 was enacted, designating a portion of the Atchafalaya Basin as a “spillway,” to provide an outlet for diverted Mississippi River water in times of flooding. Extensive artificial levees were built to enclose the desig-

nated spillway area, distributary channels of the Atchafalaya River within the Basin were closed, the river was enlarged to handle increased capacity, and new diversion channels were created to provide for maximum discharge of floodwaters. In addition, a variety of dikes, dams, drainage canals, flood-gates, pumping stations, locks, levees, and floodwalls were built to aid in navigation and flood control. The unintended consequence of these actions was an increase of sediment flowing into the Basin, turning many swampy areas into dry land. The physiography, hydrology, water quality, landscape, and habitats of the Basin were changed significantly.

In 1963, the U.S. Army Corps of Engineers began operating the Old River Control Structure to regulate the flow of water into the Atchafalaya River from the Red and Mississippi Rivers. Today, the Old River Control Structure directs 30 percent of the combined flow of the Mississippi and Red Rivers into the Atchafalaya River, and the Atchafalaya Basin Floodway remains an important outlet for Mississippi River floodwaters. It played a critical role, in fact, in the spring high water event of 2011.



*The Bayou Teche National Wildlife Refuge in Franklin, Louisiana, is home to the largest concentration of Louisiana Black Bears in south Louisiana.*

## Economic Impact of Travel in Atchafalaya Basin Parishes (2014)

Parish	Travel Expenditures	Jobs	Payroll	State Sales Tax Receipts	Local Sales Tax Receipts
Assumption	\$ 11,657,000	63	\$ 1,193,000	\$ 570,000	\$ 270,000
Avoyelles	\$ 98,398,000	1,094	\$ 23,119,000	\$ 2,350,000	\$ 1,570,000
Iberia	\$ 46,110,000	371	\$ 6,888,000	\$ 2,140,000	\$ 840,000
Iberville	\$ 22,329,000	158	\$ 3,239,000	\$ 1,080,000	\$ 1,000,000
Pointe Coupee	\$ 10,644,000	76	\$ 1,361,000	\$ 480,000	\$ 280,000
St. Landry	\$ 97,179,000	620	\$ 10,910,000	\$ 5,110,000	\$ 2,770,000
St. Martin	\$ 31,491,000	180	\$ 3,886,000	\$ 1,510,000	\$ 1,820,000
St. Mary	\$ 165,086,000	1,740	\$ 35,128,000	\$ 4,720,000	\$ 2,800,000

Source: Louisiana Department of Culture, Recreation, and Tourism

Sources for the preceding narrative include the Center for Louisiana Studies at the University of Louisiana-Lafayette, LA Department of Natural Resources, LA Coastal Wetlands Planning Protection and Restoration Program, LA Geological Survey, U.S. Army Corps of Engineers, U.S. Geological Survey, and *Inherit the Atchafalaya* by Greg Guirard and C. Ray Brassieur.

The Atchafalaya Basin historically encompassed over two million acres, and was bounded by natural ridges to the east and west that formed as the Mississippi River changed its course. Flood protection levees substantially reduced the Atchafalaya River's floodplain, however. Today, the federally designated Atchafalaya Basin Floodway (depicted in green on the map below) encompasses more than 800,000 acres and stretches 100 miles. The historical Basin area including and surrounding the floodway boasts the largest contiguous tracts of fresh marsh in Louisiana, and is unique among basins in the state because it has a growing delta system with nearly stable wetlands.



The Atchafalaya Basin Floodway stretches over 100 miles from north to south, from Simmesport in Avoyelles Parish to Morgan City in St. Mary Parish.

### Atchafalaya Basin Parishes:

- Assumption Parish
- Avoyelles Parish
- Iberia Parish
- Iberville Parish
- Pointe Coupee Parish
- St. Landry Parish
- St. Martin Parish
- St. Mary Parish

### *Recreation and Tourism Are Big Business in the Basin!*

Total Travel Expenditures in the Eight Atchafalaya Basin Parishes:

2008:	\$ 451 million
2009:	\$ 435 million
2010:	\$ 450 million
2011:	\$ 468 million
2012:	\$ 464 million
2013:	\$ 470 million
2014:	\$ 483 million







## A Bountiful Basin

The Atchafalaya Basin contains three distinct areas of landscape that provide some of the country's most productive wildlife and fish habitats. The northern region is composed of bottomland hardwood forest; the middle region has cypress-tupelo swamps; and the lower region is known for freshwater and brackish marsh. The Atchafalaya Basin is five times more productive than any other river basin in North America, and is probably the most productive swamp in the world.

Forty-five species of mammals inhabit the Basin, including bobcat, coyote, fox, armadillo, opossum, and beaver. Small game animals like the fox squirrel, gray squirrel, and swamp rabbit live here, as well as white-tailed deer, the principal big-game species. Raccoon, mink and nutria are so abundant in the swamps and marshes that Louisiana was ranked as the number one fur producer until the downturn of the industry near the close of the 20th century.

The wetlands of the Atchafalaya Basin provide excellent feeding and resting areas for migratory waterfowl, making the region an important wintering area for mallards and gadwalls. Over 250 species of birds can be found in the Basin, including the bald eagle, peregrine falcon, and Bachman's warbler. Wood ducks, great blue herons, and great egrets are common inhabitants of the shallow lakes and bayous.

The Basin is home to an estimated nine federal- and state-recognized endangered/threatened wildlife species like the Louisiana black bear, six endangered/threatened bird species, and 29 known rookeries. In fact, the Bayou Teche National Wildlife Refuge in Franklin is home to the largest concentration of Louisiana black bears in South Louisiana. Over 40 reptilian species, including the American Alligator and Western Cottonmouth, make their home in the Basin, along with 20 species of amphibians.



## Hunting, Fishing, and Trapping Licenses Sold in Atchafalaya Basin Parishes:

	<u>Recreational License Year 2015</u>	<u>Commercial License Year 2014</u>
Assumption Parish	10,667	1,976
Avoyelles Parish	25,088	546
Iberia Parish	33,765	1,698
Iberville Parish	12,398	1,214
Pointe Coupee Parish	11,387	261
St. Landry Parish	44,002	749
St. Martin Parish	24,036	1,524
St. Mary Parish	25,313	3,178

Compiled from license data provided by the Louisiana Department of Wildlife and Fisheries

## Tourism in the Atchafalaya Basin

Visitors to Atchafalaya Welcome Center  
June 2004- July 2015: 1.3 million people

Visitors to Lake Fausse Pointe State Park  
FY 2004 - FY 2015: 890,770

Information gathered from data provided by the  
Louisiana Department of Culture, Recreation and Tourism.



## A Bountiful Basin *(continued)*

With over 100 species of fish, crawfish, shrimp, and crabs available, recreational and commercial fishing play significant roles in the economy of the Atchafalaya Basin. Commercial fishing began here in 1873 and, by the early 1900's, became a booming enterprise with catfish as the most popular catch. Thousands of sport fishermen traverse the Basin's waterways each year with the hopes of hooking yellow, striped or large-mouth bass, and white and black crappie.

Crawfish are typically associated with the cultural heritage of South Louisiana and the Atchafalaya Basin. While crawfish have been eaten in Louisiana since before the arrival of the Europeans, commercial crawfish harvesting in the Atchafalaya Basin did not take off until the 1960's. It is now one of the most widely recognized industries in the Basin. From January to June 2015, over 2.4 million pounds of wild crawfish were harvested in the Atchafalaya Basin with a dock side value of more than \$3 million, according to data provided by the Louisiana Department of Wildlife & Fisheries. Alligators, turtles, and bullfrogs are also commercially and recreationally harvested in the Basin, and crabbing and trapping remain integral parts of its culture and economy.

It's not surprising why fishermen, hunters, photographers, campers, and tourists flock to the unique Atchafalaya Basin to experience the sights and sounds of this natural wonderland. Recreational activities like boating, water skiing, bird-watching, hiking, and camping attract thousands of visitors to the Basin each year, and these visitors make a huge economic impact, with over \$483 million spent on travel expenditures in the Basin parishes in 2014 alone.

The natural beauty, ecological value, and economic significance of Louisiana's Atchafalaya Basin have endured for centuries. The current generation is challenged with conservation and restoration of this unique Louisiana treasure so that many more generations of Louisianans can enjoy all that it has to offer.



# CURRENT CHALLENGES IN THE BASIN

The Atchafalaya Basin is the nation's largest river swamp and one of America's most productive ecological regions. However, like other water resources, this system faces many stresses and challenges, including several cited in a 2001 U.S. Geological Survey fact sheet, "The Atchafalaya Basin – River of Trees."

- **Ever-Changing Hydrology** – Natural changes and human-induced modifications have resulted in the alteration of the ecology of this resource and will continue to do so.
- **Sedimentation** – Since 1932, there has been a net accretion of nearly 2.5 billion cubic meters of sediment in the Basin floodway, converting much open water and cypress swamps to bottomland forest.
- **Hypoxic Conditions** – Spoil banks, oil field canals and natural levees inhibit the historical sheeting pattern of water flow, causing hypoxic conditions (poor water quality) within nearly all of the large, interior swamps.
- **Invasive Exotic Plant Species** – Massive growth of hydrilla, salvinia, giant salvinia, and water hyacinth restricts access to many areas in the Basin and exacerbates hypoxic conditions in the swamps.
- **Land Use/Resource Management** – Diverse and sometimes conflicting activities within the Basin occur with regard to flood control, commercial fisheries, navigational, petrochemical, silviculture, recreational, environmental, and cultural interests.



From January to June 2015, landings of wild crawfish in the Atchafalaya Basin equaled 2,412,183 pounds with a dockside value of \$3,148,755, according to a preliminary analysis of trip ticket data by the LA Dept. of Wildlife and Fisheries.



# Milestones in Atchafalaya Basin History

*"The Raft"*



LSU-S Noel Memorial Library Archives

## 1800 – 1838

A 30-mile obstruction of logs and debris known as "the raft" in the upper reaches of the Atchafalaya River impedes the flow of water from the Mississippi and Red Rivers.

## 1839-1860

Substantial portions of "the raft" are removed, greatly increasing the river flow and allowing navigation between the Atchafalaya, Red and Mississippi Rivers. Commerce begins to develop in the Atchafalaya Basin, but flooding becomes severe and farmland in the Basin begins to fail. The wetland environment of the Atchafalaya Basin greatly expands, signifying the birth of this important floodplain.

## 1870s-1930s

Large portions of the Atchafalaya swamp are clear-cut, resulting in the near extinction of old growth cypress forests.

## 1927

The worst flood in recorded history in the Lower Mississippi River Valley occurred, putting the entire Atchafalaya Basin and nearby communities and rural areas under water.

## 1928

The Flood Control Act of 1928 transforms portions of the Atchafalaya Basin into a "spillway."

## 1929

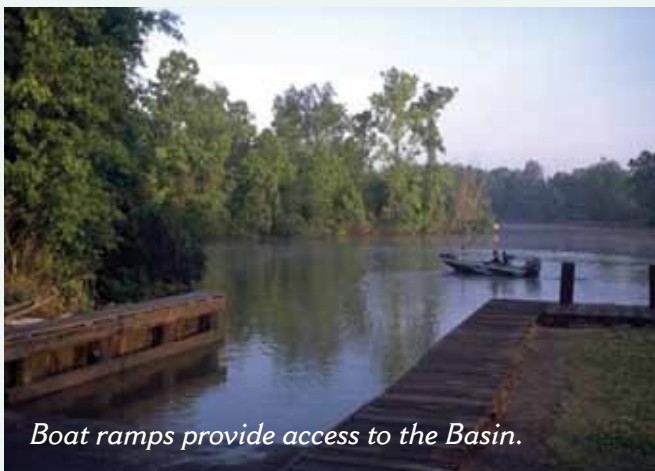
Construction of Atchafalaya Basin Floodway guide levees begins.

## 1963

Operation of the Old River Control Structure begins to regulate water flow from the Mississippi and Red Rivers into the Atchafalaya River.



*Old River Control Structure*



*Boat ramps provide access to the Basin.*

## 1970

Louisiana Governor John McKeithen creates the first Atchafalaya Basin Commission.

## 1972-1980

Boat ramps are built, recreational facilities are planned, and the State begins purchasing land for state parks.

## 1973

The Interstate 10 elevated expressway over the Basin is completed.

*Sources for this historical information include the Center for Louisiana Studies at the University of Louisiana-Lafayette, the Louisiana Department of Natural Resources, and U.S. Army Corps of Engineers.*

## 1981

The "Treen Agreement" (Governor Dave Treen) is negotiated between landowners and environmental groups and is presented to Congress.

## 1985

Congress enacts the Multipurpose Plan, authorizing the U.S. Army Corps of Engineers to spend \$250 million, subject to future appropriations, to preserve and restore the Basin ecosystem.

## 1998

The Atchafalaya Basin Program is created within the Louisiana Department of Natural Resources.

## 1999

The Louisiana Legislature unanimously approves the State Master Plan for the Atchafalaya Basin Program and \$85 million, subject to future appropriations, over 15 years for access, easements, water management, and recreation projects.

## 2004

Atchafalaya Welcome Center in Butte LaRose opens in June.



*Welcome Center*

## 2007

Congress directs an investigation and study of the maximum effective use of the water and sediment of the Mississippi and Atchafalaya Rivers for coastal restoration purposes, consistent with flood control and navigation, and an investigation and assessment of alterations in the operation of the Old River Control Structure.

## 2008

The Louisiana Legislature adopts Act 606, authorizing the Secretary of the Department of Natural Resources, through the Atchafalaya Basin Program, to submit to the legislature each year an Annual Plan for the Basin that will include water management and access projects, such as boat launches, and other projects consistent with the mission statement of the Atchafalaya Basin Master Plan. Act 606 also creates the Atchafalaya Basin Conservation Fund.

## 2009

The Louisiana Legislature approves \$3,500,000 in state funding for water quality/water management, access, and habitat restoration projects identified in the FY 2010 Atchafalaya Basin Program Annual Plan, the first since adoption of Act 606.

## 2011

In May, the U.S. Army Corps of Engineers opens a total of 17 gates at the Morganza Spillway to relieve record high water levels in the Mississippi River. Diverted floodwaters inundated approximately 95,000 acres of agricultural land in the Atchafalaya Basin and spared larger metropolitan areas downriver from catastrophic flooding.



## 2012

The Louisiana Legislature adopts Act 588, redrawing the state's coastal zone boundary for the first time in more than 25 years. The legislation increased the inland boundary of the state's coastal zone and increased coastal zone acreage in Atchafalaya Basin parishes such as Iberia, St. Martin, St. Mary, and Assumption.

# THE ATCHAFALAYA BASIN PROGRAM

Louisianans have long recognized the ecological value of the Atchafalaya Basin and, as early as the 1960's, began efforts to attract federal support for its restoration. The federal government's interest in the Atchafalaya Basin Floodway, however, was primarily focused on its value as a flood control and navigation asset. With the adoption of the Water Resources Development Act and subsequent legislation in 1985 and 1986, the U.S. Congress established as public policy the need for the nation to invest in public access, acquisition of environmental easements, water management projects, and recreational opportunities in the Atchafalaya Basin.

In 1996, the Louisiana Department of Natural Resources (LDNR) was named lead state agency in the development of a plan to protect and develop the Atchafalaya Basin as directed by Congress, in conjunction with the U.S. Army Corps of Engineers (USACE). The Louisiana Legislature created the Atchafalaya Basin Program and its advisory Research and Promotion Board in 1998. The State Master Plan for the Atchafalaya Basin was developed that year and approved unanimously by the Louisiana Legislature in 1999. Act 3 and Act 920 of the 1999 Louisiana Legislature empowered the Atchafalaya Basin Program to act on behalf of the State to implement and manage a comprehensive State Master Plan for the Atchafalaya Basin. To that end, the program staff regularly meets with USACE representatives regarding activities and projects in the Basin. The Atchafalaya Basin Program has no authority to issue or enforce permits, nor to directly regulate activities within the Basin.

Over the years, the Atchafalaya Basin Program has also entered into agreements with the USACE, Basin parishes, area towns and cities, the Atchafalaya Basin Levee District, and several state agencies involved in the Basin Program to advance conservation, restoration, enhancement, and recreation projects. These state agencies include Agriculture and Forestry; Culture, Recreation and Tourism; Environmental Quality; Health and Hospitals; Natural Resources; Transportation and Development; Wildlife and Fisheries; and the State Land Office.

The Atchafalaya Basin Program office is located in the LaSalle Building on N. Third Street in Baton Rouge.



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*The Atchafalaya Basin Program was primarily focused on the recreational component of the Atchafalaya Basin Master Plan from its inception through 2005, when the focus transitioned to water resource management and enhanced water access. Recognizing the need to codify this shift in public policy, the LDNR took a lead role in working with the Legislature to draft and enact Act 606 of the 2008 Regular Legislative Session. This Annual Plan is a direct result of that effort.*

## 2016 ACTIVITIES

With funding previously allocated, the Atchafalaya Basin Program is managing implementation and/or construction of several initiatives in 2016, including water quality/water management, access, and recreation projects authorized and funded in previous Atchafalaya Basin Annual Plans or by other funding arrangements.

### **Following are highlights of planned ABP activity in 2016:**

- Restoring depth of Grand Lake and Little Bayou Pigeon
- Working with The Nature Conservancy (TNC) to implement water quality/water management projects in the new Atchafalaya Basin Preserve - 5,359 acres recently acquired by TNC in the East Grand Lake Water Management Unit
- Construction of Wilson's Landing boat launch in St. Mary Parish
- Partnering with the Louisiana Department of Wildlife and Fisheries to build a multi-purpose building at the Sherburne Wildlife Management Area
- Partnering with the Boy Scouts in the development of Atchafalaya Swamp Base in Catahoula (formerly Camp Atchafalaya)
- Development of a nature trail at the Butte LaRose Visitor Center
- Development of a Geo Cache trail

### OTHER DEVELOPMENTS

- The federally funded U.S. Army Corps of Engineers water management project at Buffalo Cove is expected to be completed in 2016.
- The ABP Research and Promotion Board and Technical Advisory Group have decided to focus on projects located on state land and water bottoms or on private land where the landowner has granted permission as a way to overcome landowner objections to rights-of-way requests that, in most cases, have prevented ABP from moving forward on planned projects.



# FY 2017 ANNUAL PLAN PROCESS

Act 606 of the 2008 Regular Session of the Louisiana Legislature specifically mandates that the Secretary of the Louisiana Department of Natural Resources (LDNR) present an Annual Basin Plan to the Louisiana Legislature at least thirty days before the start of each regular legislative session for the Legislature's review and approval.

The plan identifies all projects or stages of projects in the Atchafalaya Basin Floodway System and surrounding areas that will be proposed for funding in that fiscal year. The Plan recognizes three distinct project categories: water quality/water management, access, and other projects consistent with the mission of the Atchafalaya Basin Master Plan.

Water management projects are intended to accelerate restoration of the Atchafalaya Basin by facilitating improvement in water quality, interior circulation, and/or water access, or improving the general ecosystem through sediment reduction, removal, or redistribution. Public access projects are focused on enhancing recreational use of the Basin, such as the construction or renovation of a boat launch or a roadway that provides access to areas of the Atchafalaya Basin; land acquisition up to 1,500 acres; or other projects consistent with the mission of the Atchafalaya Basin Master Plan.

## STRUCTURE

In order to develop the Annual Plan, Act 606 activates a 14-member Atchafalaya Basin Program Research and Promotion Board and creates a nine-member Technical Advisory Group (TAG), chaired by the Louisiana Department of Wildlife and Fisheries. LDNR is the lead agency for the development of the Annual Plan.

The Research and Promotion Board oversees the Atchafalaya Basin Program, approving projects in the Annual Plan that enhance, protect, and preserve this unique Louisiana treasure. This Board is charged with adopting criteria to be used in determining the eligibility of projects listed in the Annual Plan, identifying access projects for the Plan, conducting public hearings prior to adoption of the Plan, publishing the Plan, and submitting the final Annual Plan to the LDNR Secretary.

The TAG is composed of resource experts responsible for reviewing, evaluating, and approving all water management and water quality projects for the Atchafalaya Basin Annual Plan. The makeup of the TAG is intended to ensure that the best science is used in focusing on restoration and preservation of the Basin ecosystem. TAG members are confirmed by the Atchafalaya Basin Oversight Committee of the Louisiana Legislature.





## DEVELOPMENT

The FY 2017 Atchafalaya Basin Annual Plan process began in the summer of 2014 as the Louisiana Department of Natural Resources Atchafalaya Basin Program invited the public to begin submitting water quality/water management projects for consideration in the Plan. The annual project nomination deadline is June 1 of each year, and public participation continues to be an integral part of the Annual Plan development process.

Following is a list of public meetings conducted during the FY 2017 Annual Plan process:

### **Research & Promotion Board Meetings**

June 25, 2015

September 3, 2015

November 5, 2015

February 2, 2016

### **Technical Advisory Group Meeting**

June 24, 2015

September 2, 2015

### **Louisiana Coastal Protection and Restoration Authority Meetings**

December 16, 2015

January 13, 2016

### **Public Meetings**

October 6, 2015 in Henderson, LA

October 7, 2015 in Plaquemine, LA

October 8, 2015 in Morgan City, LA



The FY 2017 Annual Basin Plan was submitted to the Louisiana Coastal Protection and Restoration Authority (CPRA) for that panel's review and approval as consistent with the Master Plan for Coastal Protection and Restoration. The FY 2017 Annual Plan was then submitted to the Research and Promotion Board for final approval, published, and submitted to the Louisiana Legislature for consideration, in compliance with Act 606 of the 2008 Regular Session of the Louisiana Legislature.

The Atchafalaya Basin Annual Plan process is critical to a sustainable future of the Atchafalaya Basin. The focus on science-based water management ensures that projects selected for implementation will be beneficial to the ecological and environmental health of the Basin. Successful project implementation will lead to improved water quality, enhanced habitat, and a more vibrant ecological community. Collaboration between Basin stakeholders and State and Federal agencies allows for the coordination of limited resources and restoration efforts to maximize results and provide a healthy ecosystem in the Atchafalaya Basin for generations to come.

# PROJECT FUNDING AND PRIORITIZATION

Act 606 of the 2008 Regular Session of the Louisiana Legislature created the Atchafalaya Basin Conservation Fund intended to finance projects listed in the Atchafalaya Basin Program Annual Plan. Of the monies allocated to the Fund in any one fiscal year, Act 606 requires that 75 percent shall be used for water management, water quality, or access projects, and 25 percent shall be used to complete ongoing projects and/or to fund projects that are in accordance with the Mission Statement of the State Atchafalaya Basin Master Plan that was unanimously approved by the Louisiana Legislature in 1999 (Act 920).

Act 541 of the 2009 Regular Session of the Louisiana Legislature provided for a constitutional amendment that set a funding source for the Atchafalaya Basin Conservation Fund to be put on a statewide ballot for voter approval. The amendment was approved on November 2, 2010, providing a dedicated source of revenue for the Fund and predictable funding levels for future Plans when certain criteria are met. To date, these criteria have not been met, and thus, revenue for the Fund has not been realized. Therefore, actual implementation of projects is dependent on the traditional state and federal appropriations processes.

In order to provide transparency in government, Act 606 of the 2008 Regular Session requires multiple public meetings for the development and review of the Annual Basin Plan and subsequent approval by the Atchafalaya Basin Research and Promotion Board and the Coastal Protection and Restoration Authority, all to be completed at least thirty (30) days prior to commencement of the regular legislative session. Therefore, it is required that the Annual Plan be drafted prior to the development of the appropriations bill that often funds the Plan. While it is certainly appropriate to have public vetting prior to submittal of the Annual Basin Plan to the Louisiana Legislature, one of the challenges of the process is determining the level of funding that will be provided. Until such time as appropriations are finalized, the level of funding for projects and the number of projects in the Plan that may be funded is uncertain.

The water quality/water management project proposed in the FY 2017 Annual Basin Plan has been approved by the Technical Advisory Group and the Atchafalaya Basin Research and Promotion Board. Also listed are water quality/water management and access projects that were approved in the FY 2011 - FY 2016 Annual Plans, but not totally funded for construction. Projects may be constructed based upon the level of funding provided in FY 2017 and prioritization established by the Research and Promotion Board. The Board will consider funding provided to the Atchafalaya Basin Conservation fund, with 75 percent of the funding being used for water management, water quality or access projects and the remaining 25 percent used to complete ongoing projects and for projects that are in accordance with the mission statement of the State Atchafalaya Basin Master Plan as required by Act 606.

Once funding levels for the FY 2017 Annual Plan are determined, projects that are proposed for funding will be brought before the Atchafalaya Basin Research and Promotion Board with proposed budgets for approval. Any subsequent significant changes to the approved budgets or project scope will also be brought before the Research and Promotion Board for approval.

Some projects that were considered but not included as part of this Annual Plan process may later be identified for implementation. Should funding become available, previously deferred projects may be implemented, provided that they are approved by the Technical Advisory Group, Atchafalaya Basin Research and Promotion Board, and the Joint Legislative Committee on Natural Resources; are consistent with the language of Act 606 of the 2008 Regular Session of the Louisiana Legislature; and meet one or more of the following qualifications:

1. Part of the Atchafalaya Basin Master Plan;
2. Part of the Atchafalaya Basin Floodway System, Louisiana Project;
3. Water management or water quality project that meets the criteria developed by the Board for inclusion in the Annual Plan and has been approved through the procedures adopted by the Board for inclusion of a project in the Annual Plan, including public hearings;
4. Consistent with the mission statement contained in the Atchafalaya Basin Master Plan;
5. A project to be completed that was previously approved by the Research and Promotion Board.

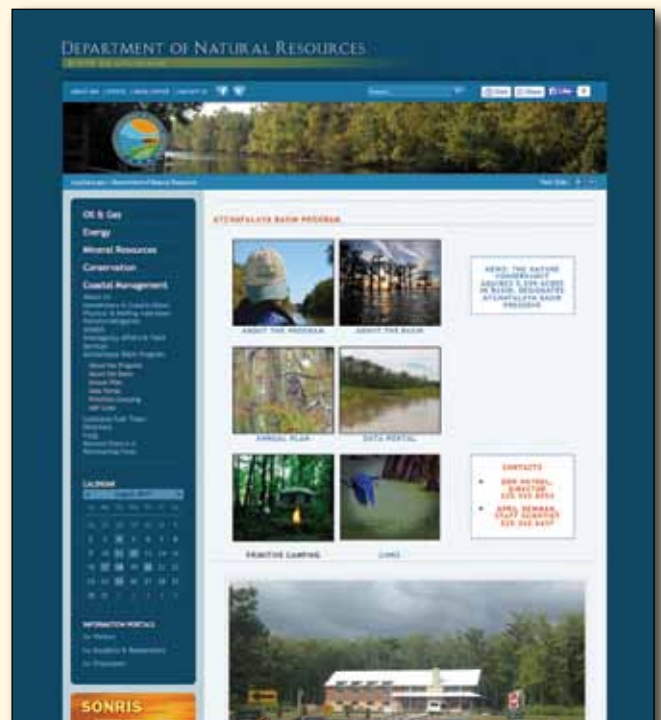
## ATCHAFALAYA ONLINE

The Atchafalaya Basin Program website brings the Basin to your fingertips. Visit [www.Basin.Louisiana.gov](http://www.Basin.Louisiana.gov) for:

- Current Weather and Water Levels
- Archives of ABP Annual Plans
- Map of Primitive Camping Areas
- History of the Basin
- Descriptions of Water Management Units
- Education Resources and Other Links
- Full-color Basin Maps for Purchase
- E-Newsletter Sign Up

[www.Basin.Louisiana.gov](http://www.Basin.Louisiana.gov)

*When you can't visit the Basin in person,  
visit it online at [www.Basin.Louisiana.gov](http://www.Basin.Louisiana.gov)*



# ADAPTIVE MANAGEMENT

Adaptive management is a key component of ecosystem restoration in the Atchafalaya Basin. As such, flexibility in project implementation and funding allocation must exist to ensure that projects in the Annual Plan are implemented in a way that will maximize our resources. Funding shall be distributed in a way that maximizes the benefits to the Atchafalaya Basin and achieves the greatest cumulative benefit as approved by the Research and Promotion Board.

The Atchafalaya Basin Program (ABP) recognizes that some projects may encounter unforeseen circumstances that hinder project implementation, such as access and land rights issues, availability of federal matching funds, and unanticipated costs. Projects for which no features or a reduced number of features can be constructed due to a lack of access or other issues will be deferred until such a time that these issues are resolved or additional funding is obtained to address the circumstances.

If such a project is deferred, the ABP may reallocate the remaining approved funding to other previously approved projects for which only partial construction funding has been allocated and which are able to move forward. These reallocations are to be presented by the ABP to the Research and Promotion Board for its approval, and then identified in the Annual Plan for presentation to the Legislature.

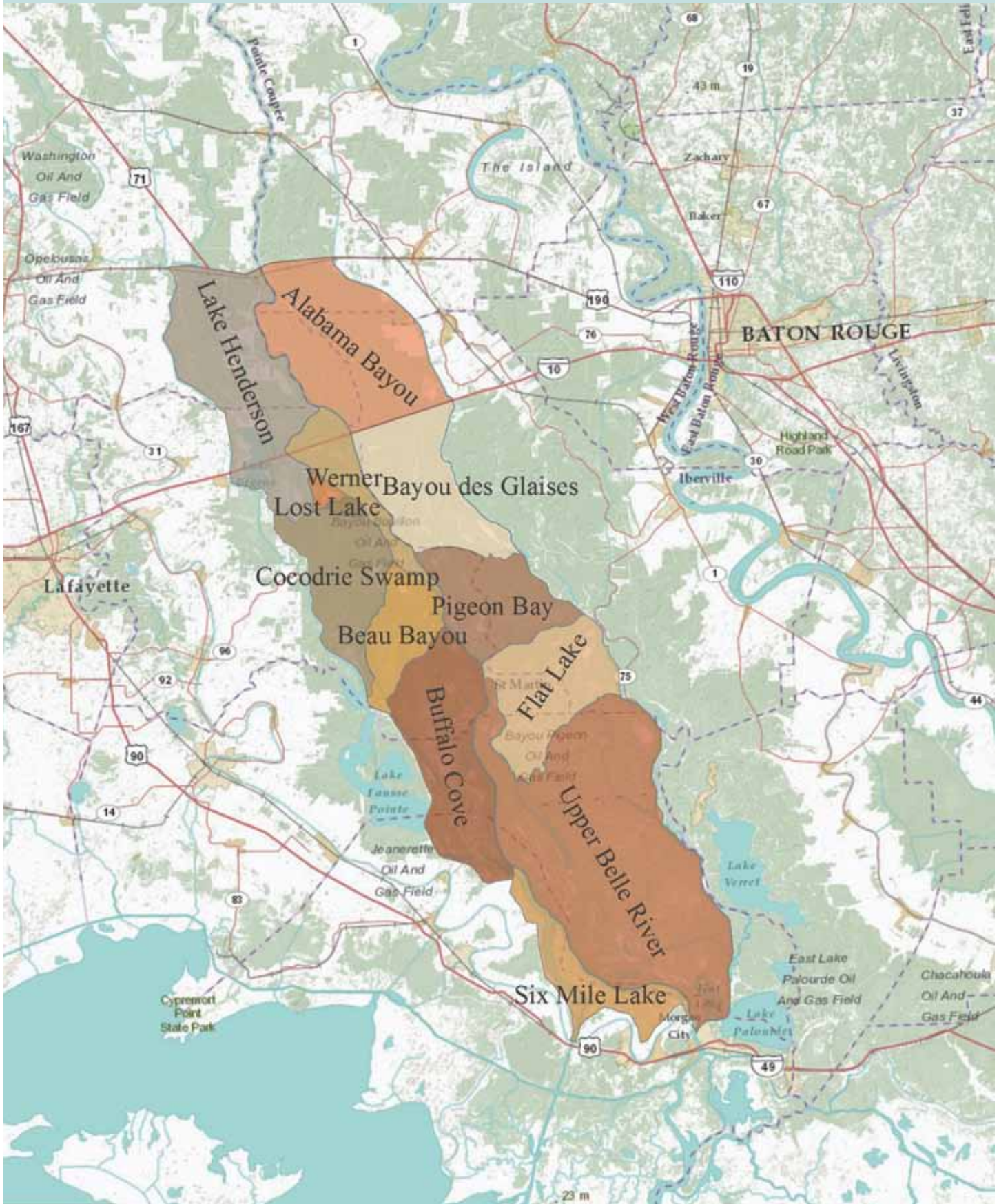
Project identification and evaluation are guided by management tools available to the Technical Advisory Group (TAG), and the scientific and management expertise of TAG members themselves through analysis of proposed projects. The Natural Resource Inventory and Assessment System (NRIAS), approved in the FY 2010 Annual Basin Plan and funded by the Coastal Protection and Restoration Authority (CPRA), serves as the TAG's primary tool for decision-making in the Basin.

The NRIAS is a repository of Atchafalaya Basin data, maps, and project information developed as a cooperative effort between the Louisiana Department of Natural Resources, CPRA, United States Geological Survey, United States Fish & Wildlife Service, United States Army Corps of Engineers, Louisiana Department of Wildlife and Fisheries, and Louisiana State University School of Renewable Natural Resources. Custom web-based tools are beneficial to users for navigating through the Basin, managing Basin resources, developing and reviewing projects for the Annual Basin Plan, and identifying public lands and boat launches. NRIAS can be accessed online at <http://abp.cr.usgs.gov/>.

To continue building a strong scientific base of information for project development, the ABP will potentially utilize additional tools and resources to better understand the Atchafalaya Basin and its individual management units. One such tool is the Atchafalaya Hydrodynamic Model developed by the National Audubon Society. This model can help to demonstrate how and where projects may work synergistically. Tools such as this complement the NRIAS by helping to forecast the effects of proposed projects or the effects of refined project design, regardless of whether projects affect the entire Basin and coast or smaller targeted areas.



# Atchafalaya Basin Water Management Units



# FY 2017 PROJECT LIST

## WATER QUALITY / WATER MANAGEMENT PROJECTS

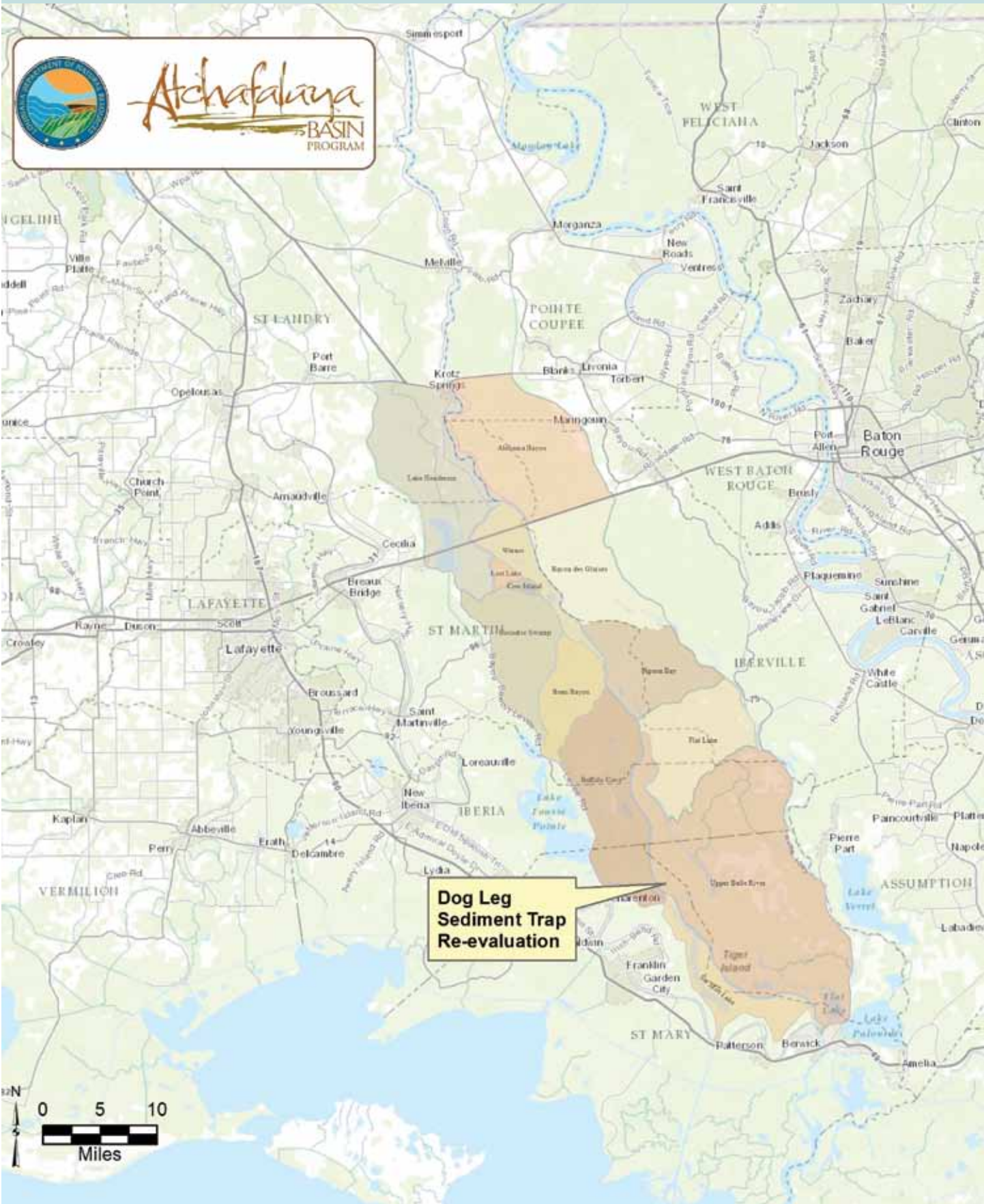
This category includes activities such as sediment removal, redistribution, construction of cuts and gaps; data collection, evaluation and monitoring; and related planning, engineering and design within the Atchafalaya Basin's 13 Water Management Units. In addition to newly proposed projects listed, Water Quality/Water Management Projects that were approved in the FY 2011, 2012, 2013, 2014, 2015 and 2016 Atchafalaya Basin Annual Plans, but not funded or only partially funded for construction, may be funded in the FY 2017 Annual Plan based on the prioritization given to these projects by the Atchafalaya Basin Program's Research and Promotion Board. Last year, projects deemed "Unable to Proceed" because of lack of landowner consent on private land were defunded, and that funding was reallocated to previously approved projects that have landowner approval.

NEW WATER QUALITY/ WATER MANAGEMENT PROJECT PROPOSED IN FY 2017 ANNUAL PLAN		
PROJECT NAME	PROJECT NUMBER	STATUS
Re-evaluation of Dog Leg Canal Sediment Trap Dredging Project	201701	The TAG recommendation was to take no action at this time.

*The location of the project listed above is identified on the map displayed to the right. >>>*

*Additional funding is needed to construct or implement projects proposed in this and previous Annual Plans.*

# New Water Quality/Water Management Project Proposed in FY 2017 Annual Plan



**WATER QUALITY / WATER MANAGEMENT PROJECTS APPROVED  
TO RECEIVE REALLOCATED FUNDING FOR DESIGN OR CONSTRUCTION  
IN FY 2017 ANNUAL PLAN IN ORDER OF PRIORITY**

PROJECT NAME	PROJECT NUMBER	STATUS
1. Channel Training Breach Restoration and Grand Lake Depth Restoration	201601	Recipient of reallocated funding and proposed for additional funding
2. Little Bayou Pigeon Depth Restoration	200921	Recipient of reallocated funding and proposed for additional funding
3. 21" and Orange Barrel	201511, 201513	Deferred
4. Murphy Lake Delta Depth Restoration	201208	Recipient of reallocated funding and proposed for additional funding
5. Big Bayou Pigeon Depth Restoration	200918	Recipient of reallocated funding and proposed for additional funding

**ADDITIONAL FY 2011 - FY 2016 WATER MANAGEMENT PROJECTS PROPOSED FOR  
DESIGN OR CONSTRUCTION FUNDING IN FY 2017 ANNUAL PLAN**

PROJECT NAME	PROJECT NUMBER	STATUS
Flat Lake Ecosystem	201501	Proposed for Funding

## View Proposed Basin Projects and Other Basin Maps Online

Maps of Atchafalaya Basin Program projects identified in this and previous Annual Plans are now included in the Louisiana Department of Natural Resources' Strategic Online Natural Resources Information System (SONRIS). To view:

- Log on to [www.SONRIS.com](http://www.SONRIS.com)
- Click on the GIS category
- Click on the Coastal Management Section and check "Atchafalaya Basin Projects."
- Click on the binoculars icon.
- Search for projects by fiscal year, year proposed, last name, or project number.



**[www.SONRIS.com](http://www.SONRIS.com)**

Through the Coastal Management Section of SONRIS, you may also view pictures of Atchafalaya Basin projects and a map of the Atchafalaya Basin Water Management Units, among other project and basin information. A tutorial is included for those unfamiliar with navigating the site and using the maps.



## ACCESS PROJECTS

This category includes the construction or renovation of boat launches that provide public access to areas in and adjacent to the Atchafalaya Basin. The access projects listed below are included in the Atchafalaya Basin Master Plan and/or were approved in previous Annual Plans; however, funding has not been received. These projects are being proposed for funding in this FY 2017 Annual Plan.

PROJECT NAME	STATUS
Sandy Cove Landing	Proposed for Funding
Ramah Landing	Proposed for Funding
Catahoula Landing	Proposed for Funding
Grand Avoille Cove Landing	Proposed for Funding
Joe Russo Landing	Proposed for Funding

## OTHER PROJECTS AND INITIATIVES CONSISTENT WITH THE MISSION STATEMENT OF THE STATE MASTER PLAN

The Atchafalaya Basin Program has a history of promoting public use of the Basin and, as such, continues to work to implement recreation projects that are part of the State Master Plan, part of the legislation, ongoing projects previously approved by the Research and Promotion Board, and/or consistent with the Mission Statement of the State Master Plan.

Projects consistent with the above criteria, including additional phases of some ongoing projects, are proposed for funding in FY 2017. These projects, in alphabetical order, include: Attakapas Wildlife Management Area, Biking/Paddling/Hiking Trails, Habitat Restoration, and Sherburne Wildlife Management Area.

Based upon the level of funding provided, projects that are proposed for funding will be brought before the Atchafalaya Basin Program's Research and Promotion Board for approval.



# New Water Quality/Water Management Project Proposed in FY 2017 Annual Plan

## PROJECT DESCRIPTION

### **Evaluate the Effectiveness of the Dog Leg Canal Sediment Trap Project (201701)**

The Dog Leg Canal is located within Attakapas Island Wildlife Management Area in St. Mary Parish, approximately two miles north of Millet (Myette) Point on the east bank of the Atchafalaya River. It was previously opened to the Atchafalaya River, at the request of the commercial fishing industry, to allow freshwater to flow into this area of the Basin and improve water quality, primarily dissolved oxygen levels. A natural sediment trap existed near the Dog Leg cut that is believed to be in part responsible for the success of the project. Maintenance dredging of the Dog Leg Canal sediment trap to restore the functionality of the sediment trap and prolong the transport of freshwater from the Atchafalaya River to the swamp began in mid-October 2012 and was completed in December 2012.

This project was nominated for a re-evaluation in the 2017 Annual Plan. The nomination noted observations of heavy sediment entering Dog Leg Canal during high water and depositing in the surrounding swamps. The ABP's Technical Advisory Group reviewed the available information and recommended no action at this time.

## Look for the ABP Sign!

The Atchafalaya Basin Program has implemented a signage program designed to make Basin visitors aware of projects implemented under the Master Plan and Annual Plan process.

Signs such as this one at the Bayou Sorrel boat launch in Iberville Parish have been installed at project locations in the Basin and will be a part of future projects.



# Ongoing Water Quality/Water Management Projects

## APPROVED FY 2016 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECT

### Channel Training Breach Restoration and Grand Lake Delta Depth Restoration (201601)

A breach in an Atchafalaya River Channel Training Blockage levee is allowing large amounts of sediment to enter and settle in Grand Lake. The sediment is rapidly forming a delta and filling in what was previously open water. The filling of Grand Lake is a threat to 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.

**Status Report:** This project received reallocated funding from projects designated “Unable to Proceed” in the FY 2016 Annual Plan process and is proposed for additional funding in the FY 2017 Annual Plan.



# APPROVED FY 2015 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

## Flat Lake Ecosystem (201501)

Sedimentation is causing loss of access and aquatic habitat in the Flat Lake WMU that both impact the overall health of the ecosystem. The proposal requests that an environmental evaluation be conducted on the lake and its ecosystem in order to design a restoration project that could rehabilitate habitat to improve biological conditions and also to 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” was completed in 2010 as one of the projects funded in the FY 2009 Atchafalaya Basin Annual Plan. The overview clearly identified the Flat Lake area as an important component of the drainage of the Flat Lake and Upper Belle River WMUs and that its hydrodynamic influence should be quantified as part of the planning process. The overview document suggests 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. Due to the changing physical landscape that routes water through most of the Upper Belle River WMU, sediment accumulation in Flat Lake continues to exacerbate drainage issues and stagnation of interior swamp habitat. The proposed plan is consistent with the stated objectives of the existing planning process and should be considered for funding. In addition, the TAG also approved project number 201108 (Bathymetry Data in American Pass) in the FY 2013 Annual Plan which would support the development of this assessment.

**Status Report:** This project is proposed for funding in the FY 2017 Annual Plan.

## Sediment Trap in 21 Inch Canal (201511)

This project recommends creation of a sediment trap at the mouth of 21 Inch Canal to reduce sediment buildup in Bayou Boutee in the Upper Belle River WMU.

The proposed concept of reducing sediment in the project area is consistent with sediment reduction projects like the Dog Leg Canal sediment trap. The TAG recommends forwarding this project for approval and recommends the inclusion of a cost-benefit assessment to evaluate the efficiency of sediment traps as sediment reduction features on water management projects.

**Status Report:** This project was approved by the Research and Promotion Board on September 24, 2014 to receive funding that was reallocated from projects unable to proceed. In 2015, the TAG recommended that no further action be taken at this time on sediment traps.

“Atchafalaya” is derived from the Choctaw words “hatcha” (river) and “falaia” (long), meaning, “long river.”



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

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

This project proposes a very similar action as Project 2012-08, which was approved by the TAG for funding in the FY 2012 Annual Plan. The TAG recommends that the two projects be funded as a unified effort and that the planning for the Murphy Lake project be closely coordinated with the East Grand Lake Plan.

**Status Report:** This project was approved by the Research and Promotion Board on September 24, 2014 to receive funding that was reallocated from projects unable to proceed and is proposed for additional funding in the FY 2017 Annual Plan.



## Sediment Trap in Orange Barrel Canal (201513)

This project provides for the creation of a sediment trap at the mouth of Orange Barrel Canal in the Upper Belle River WMU to reduce sediment buildup.

The proposed concept of reducing sediment in the project area is consistent with sediment reduction projects like the Dog Leg Canal sediment trap. The TAG recommends forwarding this project for approval and recommends the inclusion of a cost-benefit assessment to evaluate the efficiency of sediment traps as sediment reduction features on water management projects.

**Status Report:** This project was approved by the Research and Promotion Board on September 24, 2014 to receive funding that was reallocated from projects unable to proceed. In 2015, the TAG recommended that no further action be taken at this time on sediment traps.

## Orange Barrel Canal



## Dredge Work Canal (201514)

Work Canal in Iberville Parish has filled with sediment and the blockage currently creates fish passage, access, and water quality issues. This project proposes dredging Work Canal from the Upper Grand River to Interstate 10, very similar to Project 2010-01, which was approved by the TAG for funding in the FY 2010 Annual Plan. The TAG recommends that the two projects be considered as a unified effort to ensure consistency and compatibility among project features.

**Status Report:** This project was combined with the Upper Grand River Flats project, which was designated by the Research and Promotion Board on September 24, 2014 as “Unable to Proceed.” Any funding remaining for this project has been reallocated to other projects according to the approved priority list.



# APPROVED FY 2014 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

## Pigeon Bay WMU (201202, 201204, 201206)

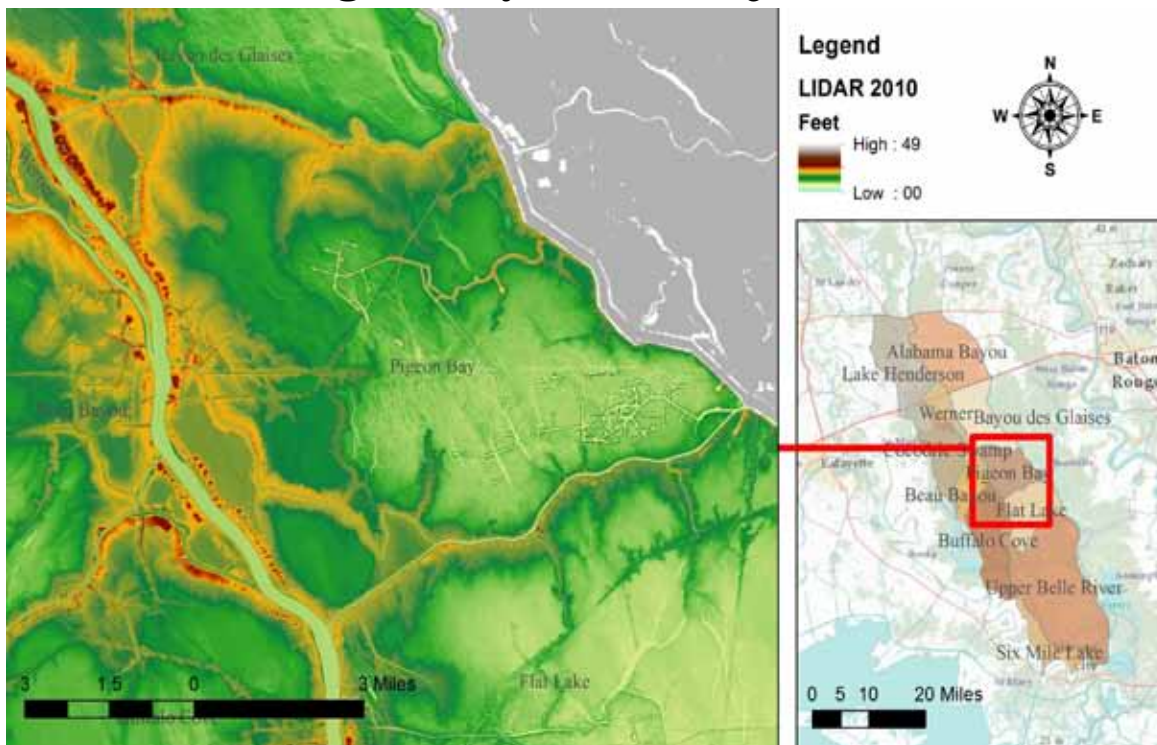
Project nomination 201202 stated that sediment accumulation has occurred at the north and south end of Little Bayou Tensas, where Little Bayou Tensas meets Upper Grand River and Atchafalaya River. In addition, project nomination 201204 stated that there is poor water quality in the swamps adjacent to Bayou Simpson and Graveyard as well as Spike Bay. Finally project nomination 201206 stated that the channelization of Upper Grand River from the Atchafalaya River has caused excessive sediment accumulation. This excess sediment through Upper Grand River is affecting commerce and filling in Pigeon Bay WMU wetlands. This sediment accumulation at water input points is negatively affecting water quality in Pigeon Bay WMU.

As a result of the multiple project nominations submitted in the Pigeon Bay WMU, the TAG has requested that a Pigeon Bay study be done to identify the optimum available locations for project features that would benefit this area and to incorporate the recent project nominations (201202, 201204, 201206), if appropriate.

**Status Report:** This water management project was approved for implementation as part of the FY 2014 Annual Basin Plan. These projects received funding from the “Open Location Canal North of Bayou Sorrel” (200941) project. Landowner consent is necessary for this project to proceed, and this project has been on hold while negotiations were finalized and the TAG re-evaluated whether the project is viable with the features that can be constructed.

Recently acquired property by The Nature Conservancy may make some project features viable that were previously held up in landowner negotiations. The ABP will work closely with The Nature Conservancy to select and implement features that will achieve the intended project functionality. The next steps include discussions between the The Nature Conservancy and the ABP’s Technical Advisory Group and Research and Promotion Board to begin determining a path forward.

### Pigeon Bay WMU Project Area



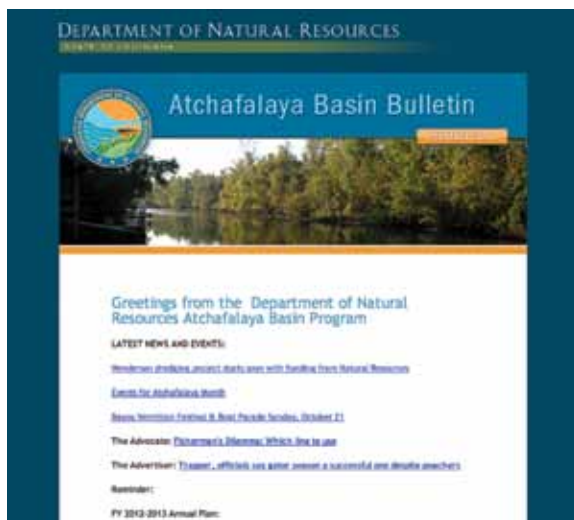
# APPROVED FY 2013 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

## Bristow Bayou North of I-10 (201105 )

According to local residents, water in the area between the LDWF South Farm section of the Sherburne Wildlife Management Area and the I-10 Canal has begun to pool and stagnate, due to inadequate culverts placed in Bristow Bayou. The area previously would flood and drain during high water periods. The project nominator suggested that the existing culverts at Bristow Bayou on the north side of the I-10 Canal be replaced with larger culverts or a bridge to accommodate adequate water movement.

In the FY 2013 Annual Plan development process, the TAG recognized the restricted water flow into and out of the area. The TAG recommended that improvements be made to remove restrictions and improve water flow in an effort to improve water quality and drain impounded forested habitats currently in danger of being degraded due to ponding in the area.

**Status Report:** Project was approved as part of the FY 2013 Annual Basin Plan. Landowner agreed to make improvements independent of funding from the Atchafalaya Basin Program. Once that work is completed, the ABP and TAG will determine if additional project activity is needed to improve water quality and drain impounded forested habitats.



## SIGN UP FOR THE BASIN BULLETIN!

News about activities in the Basin and work of the Atchafalaya Basin Program is as close as your e-mail in-box! Sign up for the new Basin Bulletin e-newsletter on the ABP website at [www.Basin.la.gov](http://www.Basin.la.gov)

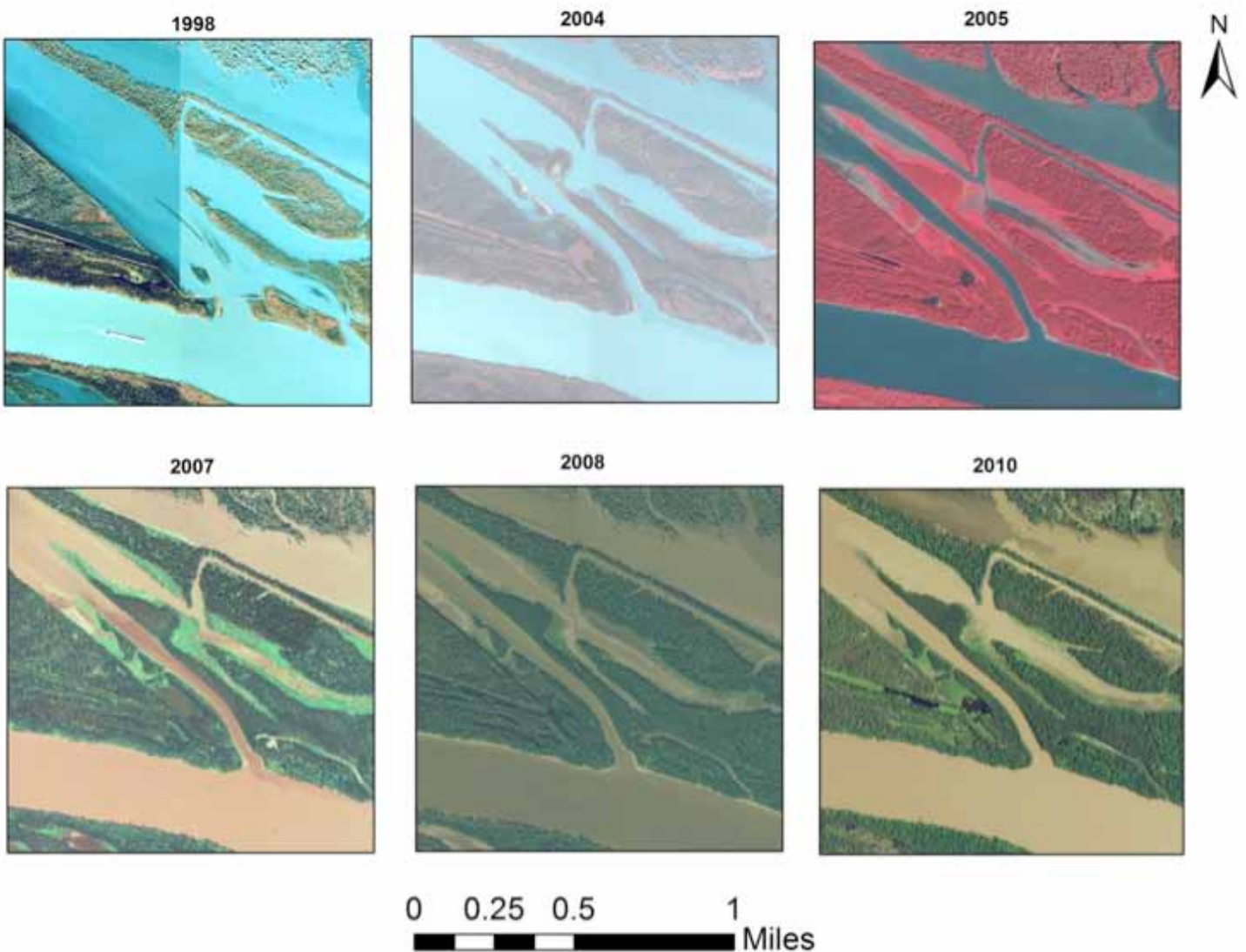


## Bathymetry Data in American Pass (201108)

Over many years and through many high and low water periods, the American Pass has begun to fill in as sediments have built up naturally. The nominator of this project requests the collection of bathymetry data in American Pass. The nominator emphasizes the potential for the latest high water event, the 2011 flood, to have deposited sediment in an area that was already very shallow. The data would be used to help engineers determine necessary actions.

In the FY 2013 Annual Plan process, the TAG recognized that the bathymetry in American Pass is an essential part of evaluating potential changes to the hydrology of the lower East Grand Lake Water Management Unit (EGL WMU). The TAG recommended this project for funding in the FY 2013 Annual Plan as part of a larger bathymetry data gathering project that will provide data to engineers and hydrologists designing projects in the lower EGL WMU.

**Status Report:** This project was approved and funded as part of the FY 2013 Annual Basin Plan. Bathymetry data has been collected in the lower EGL WMU as proposed, and the data was used as part of the EGL study.



# APPROVED FY 2012 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

## East Grand Lake Project (201006)

### *Approved for Design/Engineering and Construction Funding*

The ABP's FY 2010 Annual Plan project titled "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" or "East Grand Lake (EGL) Project area" was utilized to develop projects proposed in these water management units for the FY 2012 Annual Basin Plan. The funding of these projects in the Upper Region is the first step in developing the plan to realign water flow patterns and strategically redirect sediment in the EGL Project area. Additional Annual Plan cycles will be necessary to identify and fund projects for the Western and Lower Regions as described in the Summary Report (located online: <http://dnr.louisiana.gov/assets/OCM/ABP/EastGrandLakeSummaryReport8152010.pdf>).

The Upper Region was chosen as the initial point of developing the overall strategy for the EGL Project area because there is a reasonable confidence in the projected benefits for realignment of flow and sediment. Additionally, since north-south flow patterns that disperse water and sediment more evenly throughout the Project area are desired, a north to south planning effort seems to be the most logical approach. Also, the Western and Lower Regions present greater uncertainty in realignment and will therefore require additional information before projects can be designed.

The Upper Region takes in the area south of Bayou Sorrel to Old River and east of Grand Lake to the GIWW and covers an estimated 72,143 acres. While elevation or "LiDAR" data suggests the Upper Region has fewer restrictions to flow than other areas of the EGL Project area which allow water to enter and circulate throughout a large portion of the Region, the highly channelized delivery of water through the School Board Canal (Unnamed Canal), Indigo Bayou, Salt Mine Bayou, Williams Canal, Bayou Pigeon, and the Coon Trap has developed a sediment delivery network that carries sediment deep into the Project area which in turn promotes further restriction of flow and isolation of small areas. Modifying this network of channelized water inputs was the initial target for realignment.

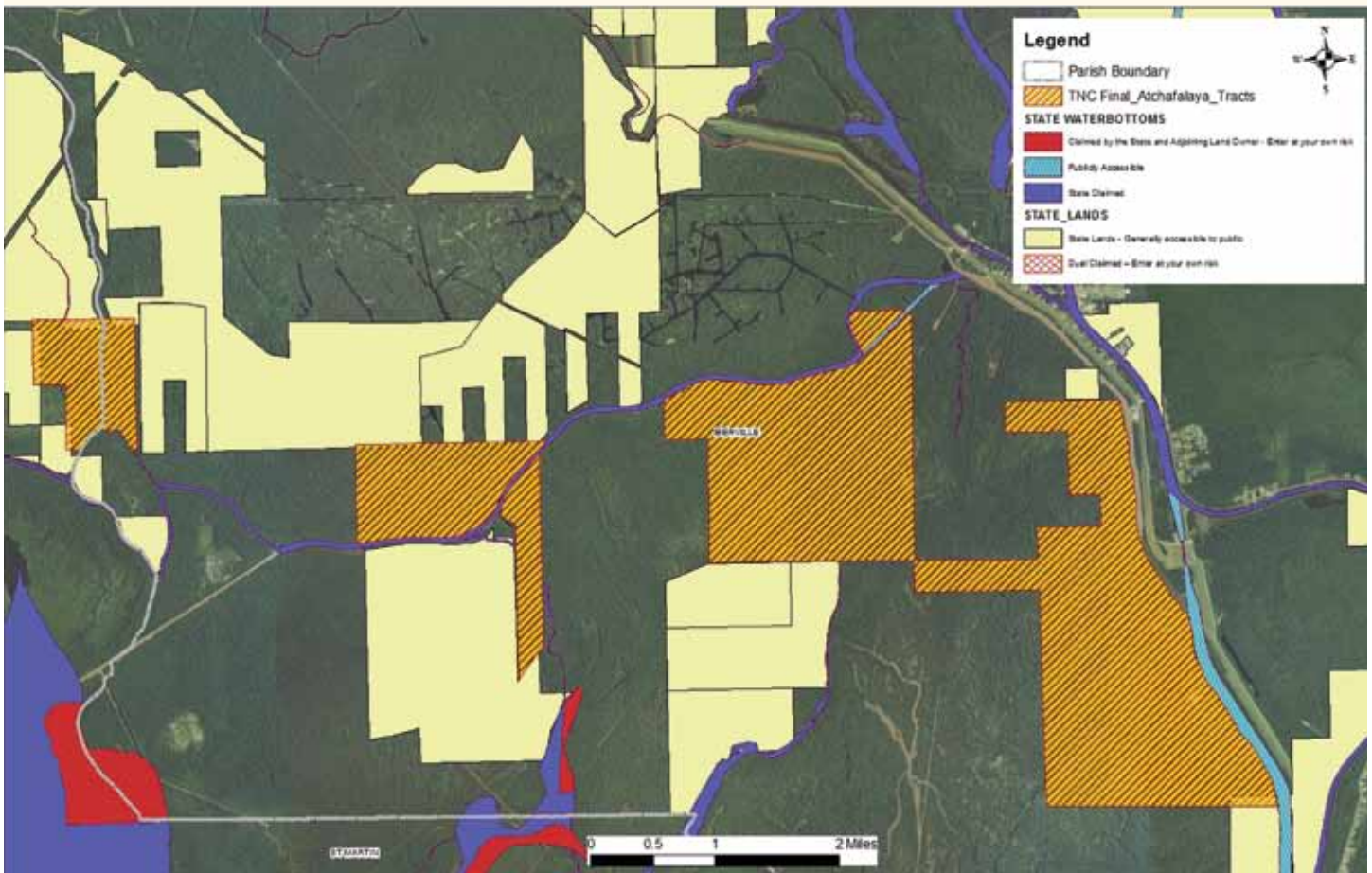
The strategy to improve water quality is the realignment of water input through the northern part of the Upper Region with construction of bank shavings and re-establishment of existing fresh water inputs along Bayou Sorrel, School Board Canal (Unnamed Canal), Indigo Bayou, and Cannon Bayou. To complement additional input entering in the north, gaps positioned further south in the banks of Salt Mine Bayou, the Florida Canal, and the Williams Canal are designed to promote sheet-flow patterns southward through the Region.

There are a total of 171 features that were identified by the TAG subcommittee and found to be the best possible solutions for achieving the desired goals of realigning sediment and water in the Upper Region of the EGL Project area. Elements were excluded that were found to be less than optimal for achieving the desired goals and may be incorporated into future plans should the need arise. *(continued on page 36)*

## The Nature Conservancy Acquires Over 5,000 Acres for Atchafalaya Basin Preserve

In July 2015, The Nature Conservancy announced its acquisition of 5,359 acres in the Bayou Sorrel region of the Atchafalaya Basin, which will comprise the Atchafalaya Basin Preserve.

The Conservancy plans to install restoration features on acquired tracts to improve water flow through the river swamp that will in turn improve fishing, bird habitat, and forests for people and nature. This coincides with the ABP's East Grand Lake Project. The Nature Conservancy's newly acquired land, along with adjacent State Land parcels in the Pigeon Bay and Flat Lake Water Management Units, will provide for a more efficient implementation of features included in the ABP's East Grand Lake Project approved in the FY 2012 ABP Annual Plan. On December 17, 2015, DNR and The Nature Conservancy signed a revised Memorandum of Agreement to formalize this partnership.



## East Grand Lake Project (201006) *continued from page 34*

The 171 features include the following and are depicted in the map on the next page:

- 37 – Clean outs to remove woody vegetation and debris from approximately 100 ft. wide x 100 ft. long in existing gaps where little if any sediment will be removed.
- 14 – Bank shavings typically to 8 ft. bottom elevation and 30 ft. bottom width and an average estimated length of 1,967 ft.
- 49 – Re-establishment of existing water inputs, typically to 6.5 ft. bottom elevation and 30 ft. bottom width and an average estimated length of 810 ft.
- 70 – Gap developments and reduction of banks typically to 6.5 ft. elevation and 100 ft. wide and an average estimated length of 302 ft.
- Although technically located in the Western Region of the EGL Project area, when water levels are above 8 - 8.5 ft. at the Butte La Rose water gauge, the Coon Trap input is an important source of fresh water to both the Upper and Western Regions. Dependent upon the need for additional water in this area, an option to remove a maximum of 3 ft. of material from the Coon Trap Weir to improve input at lower River stages will also be evaluated and constructed if needed.

The success of the entire EGL Upper Region and EGL Project area hinges on the implementation of a suite of construction projects that complement each other in order to keep the water moving from north to south throughout the Region. Benefits that will be realized are therefore dependent on the amount of funding that is provided to construct the features that are proposed. Locations may have to be modified based upon landowner and access issues and adaptive management strategies.

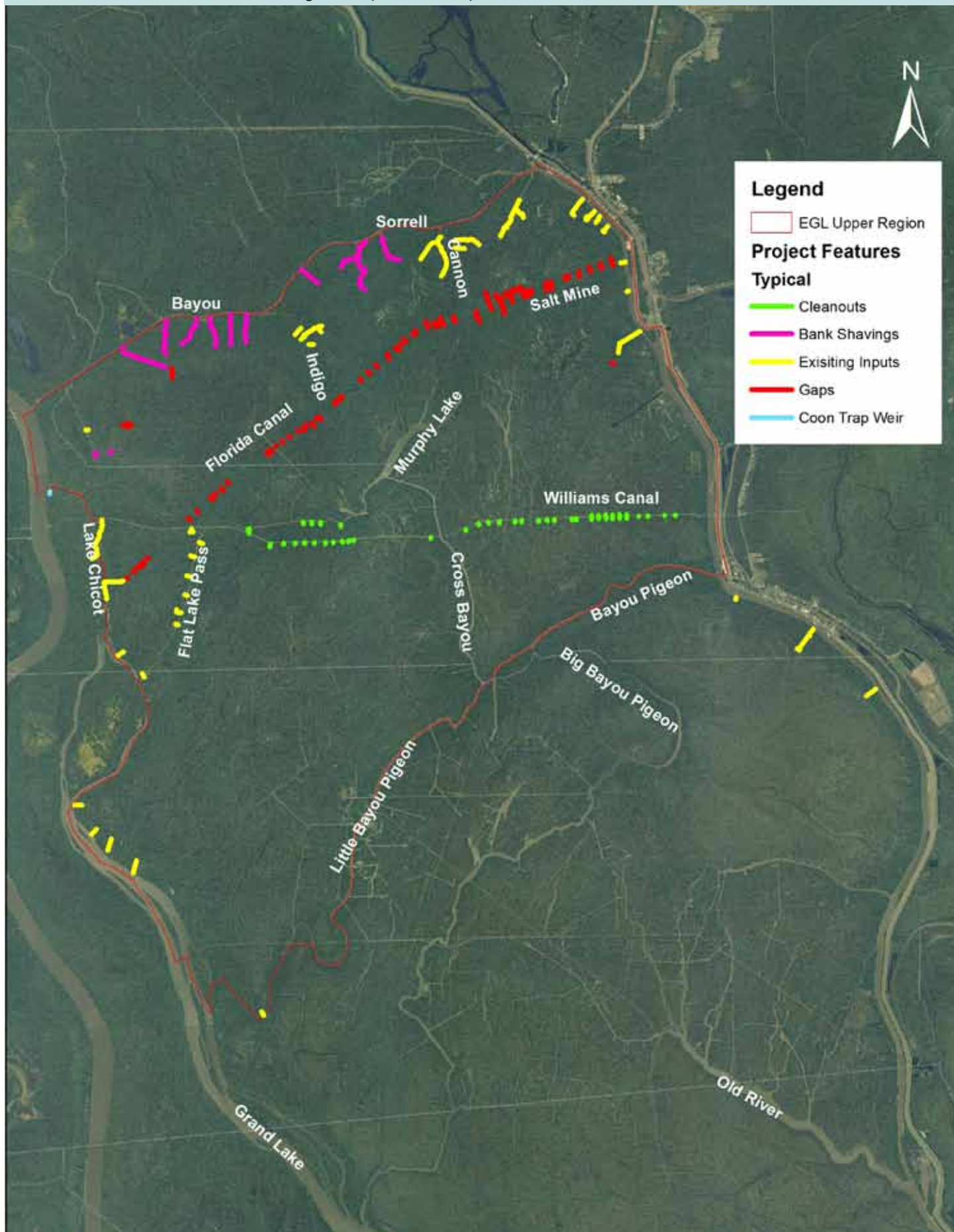
**Status Report:** This project was partially funded for engineering and construction as part of the FY 2012 Annual Basin Plan. Lack of landowner cooperation, especially for the critical northern input features, resulted in this project being unable to proceed as designed. Attempts to develop a revised plan that would be able to meet the intended project functionality were unsuccessful, but recent developments have increased the viability of this project.

The acquisition of property in the project area by The Nature Conservancy has now made some project features viable. The ABP will work closely with The Nature Conservancy to select and implement features that will achieve the intended project functionality. The next steps include discussions between the The Nature Conservancy and the ABP's Technical Advisory Group and Research and Promotion Board to begin determining a path forward.

***Sediment in the Upper Region of East Grand Lake restricts flow and contributes to poor water quality. Proposed modifications will improve water flow patterns and water quality conditions.***



# East Grand Lake Project (201006)



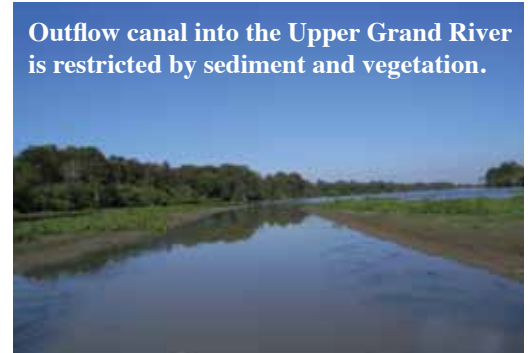
# Improve Water Quality in the Upper Grand River Flats (201001)

*Approved for Design/Engineering and Construction Funding*

Over the years, local users have witnessed water quality, crawfish harvest, and fish abundance diminish as freshwater input into the Upper Grand River Flats (UGRF) has decreased due to sediment build up and decreased fresh water input. Based on data and local statements, water flow patterns are unique in the project area throughout the year. During the higher water periods of the crawfish season, water flows from the Atchafalaya Basin Main Channel eastward through the Upper Grand River and then north through the Work Canal and north into the UGRF at the southeast corner.

Utilizing this unique hydrology, it is expected that by constructing and improving fresh water inputs on the east side of the Work Canal and improving the current drain on the southeast corner, incremental improvements in water quality and ecological conditions will occur. In total, there are four (4) project features in the UGRF area. The three (3) features proposed to increase fresh water input from the Work Canal, which borders the area to the west, are bank shavings to an approximate 8 ft. bottom elevation and 30 ft. bottom width. The last feature is to reduce the elevation by 1 and 2 feet of sediment in the southeast corner of the project to promote draining into the Upper Grand River.

Outflow canal into the Upper Grand River is restricted by sediment and vegetation.



**Status Report:** This project was funded for engineering and construction as part of the FY 2012 Annual Basin Plan. After meeting and corresponding with the landowner for over a year, the Atchafalaya Basin Program has received no response or approval from the landowner, which is necessary to be able to construct the project features. This project was designated by the Research and Promotion Board on September 24, 2014 as being Unable to Proceed. Any funding remaining for this project has been reallocated to other projects according to the approved priority list.

## APPROVED FY 2011 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

### Cocodrie Swamp Project (200915 and 200916)

*Approved for Design/Engineering and Construction Funding*

Bayou LaRose, in the Cocodrie Swamp Water Management Unit in St. Martin Parish, was once a very significant, commercially navigable waterway and the main source of freshwater for the swamp area. The cutting of oil and gas canals and USACE channel training has caused Bayou LaRose to silt up in many places and has resulted in portions of the bayou and the surrounding swamp being cut off from fresh water. The goal of the project is to open natural waterways that are currently blocked to improve freshwater flow and navigation and to promote forest health.

The work would include directing water through two existing deltas south of Bayou Garofier and possibly through Bayou LaRose by removing sediment from the main channels and near the mouths of the bayous and removing impediments to water flow throughout the length of the canals. Other work involves removing the plug from Old



Cocodrie Swamp

Bayou LaRose at the Panatec Canal, opening old Bayou Cocodrie to allow water to enter the swamp to the east, and overall drainage improvements in the project area.

**Status Report:** Funding for design, engineering and construction was approved by the Research and Promotion Board, and approved by the Bond Commission on October 21, 2010. Negotiations with landowners were unsuccessful, and this project was designated by the Research and Promotion Board on September 24, 2014 as “Unable to Proceed.” Any funding remaining for this project has been reallocated to other projects according to the approved priority list.

## **East Fork Bayou Pigeon (200941)**

**(Originally known as Open Location Canal into Swamp North of Bayou Sorrel)**

*Approved for Design/Engineering and Construction Funding*

This project is located in the Pigeon Bayou Water Management Unit in Iberville Parish. Poor water quality has resulted in poor fishing conditions and fish kills, and the original lakes in the Sorrel Oil Field area and north of that area are nearly gone. What remains is cut off from freshwater flow.

**Status Report:** This project was incorporated into the Pigeon Bay WMU Study, which is on hold until landowner negotiations are finalized. Recently acquired property by The Nature Conservancy may make some project features viable that were previously held up in landowner negotiations. The ABP will work closely with The Nature Conservancy to select and implement features that will achieve the intended project functionality. The next steps include discussions between the The Nature Conservancy and the ABP’s Technical Advisory Group and Research and Promotion Board to begin determining a path forward.

## **Open Brown Bayou to the I-10 Canal (200931)**

*Approved for Design/Engineering Funding. No Funding Approved for Construction.*

Due to man-made hydrologic changes and resultant sedimentation, Brown Bayou and several other natural waterways have been cut off, eliminating access and a route for freshwater flow to interior lakes and swamps. The Technical Advisory Group recommends clearing Brown Bayou to the I-10 Canal. This action will re-establish flow south into Brown Bayou. The work area is the Bayou Des Glaises Water Management Unit.

**Status Report:** Design/engineering funding was approved by the Research and Promotion Board and approved by the Bond Commission on October 21, 2010. Land rights must be secured and regulatory issues must be resolved prior to this project moving forward. Negotiations with landowners have been unsuccessful, and this project was designated by the Research and Promotion Board on September 24, 2014 as “Unable to Proceed.” Any funding remaining for this project has been reallocated to other projects according to the approved priority list.

## Bayou Fourche (200925)

### *Approved for Design/Engineering and Construction Funding*

There is no longer any water flow at any river stage in Bayou Fourche below Bayou Postillion, in the Flat Lake/East Grande Lake Water Management Unit in Iberville Parish. This project would involve clearing or dredging the existing canal to promote flow into the area from the Gulf Intracoastal Waterway.

**Status Report:** Funding for design, engineering and construction was approved by the Research and Promotion Board, and approved by the Bond Commission on October 21, 2010. Construction design was approved, and an engineering firm developed construction bid specifications. A light touch method was prescribed on this dredging project. This light touch means that the construction occurs instream, so as to not impact side bank vegetation or increase the width of the existing channel. Dredging was designed to increase the current channel depth 1 to 2 feet, which is the degree necessary to achieve increased average annual water flows for a distance of 1,600 feet. Construction began on April 23, 2015, and dredged spoil was barged from the construction site to a disposal area outside the Atchafalaya Basin. This project was completed as of June 30, 2015.



## Big Bayou Pigeon (200918)

### *Approved for Design/Engineering Funding. No Funding Approved for Construction.*

Sediment has built up along nearly seven miles of the main channel of Big Bayou Pigeon in Iberia Parish, reducing water flow and impairing navigation. The project area is in the Upper Belle River Water Management Unit. The Technical Advisory Group recommended dredging Bayou Pigeon to no more than the width of the channel at low or intermediate river stage and only as far downstream as needed to provide for small boat passage at low water (low water level to be determined). The bottom contour of the channel shall mimic natural channel side-slope, and the channel depth shall provide three feet of access depth at low river stage. Sediment reduction will be achieved with a mid-channel dug deeper than the rest of the bayou within the first half-mile of the dredging operation, and this sediment trap should have a five-year life expectancy. Spoil disposal options shall be in a manner that is beneficial to the surrounding forest and does not increase the elevation of existing flow barriers. Project details will be further developed during the engineering phase with review by the TAG.

**Status Report:** Design/engineering funding was approved by the Research and Promotion Board, and approved by the Bond Commission on October 21, 2010. Major landowner in the project area has indicated that they are not interested in participating in this project. Other landowners in the project area have been identified and engineering team has developed project alternatives. Construction funding was not approved in FY 2014 or FY 2015, but this project was approved by the Research and Promotion Board on September 24, 2014 to receive funding that was reallocated from projects unable to proceed and is proposed for additional funding in the FY 2017 Annual Plan.



## Little Bayou Pigeon (200921)

*Approved for Design/Engineering Funding. No Funding Approved for Construction.*

Silt has built up in Little Bayou Pigeon from the crossover to Grand Lake in the Upper Belle River Water Management Unit in Iberia and St. Martin Parishes. This project would involve clearing debris and vegetation from Little Bayou Pigeon east from East Grand Lake and dredging, if necessary, to provide access to the lake.



**Status Report:** Design/engineering funding was approved by the Research and Promotion Board, and approved by the Bond Commission on October 21, 2010. Major landowner in the project area has indicated that they are not interested in participating in this project. Other landowners in the project area have been identified and engineering team has developed project alternatives. Construction funding was not approved in FY 2014 or FY 2015, but this project was approved by the Research and Promotion Board on September 24, 2014 to receive funding that was reallocated from projects unable to proceed and is proposed for additional funding in the FY 2017 Annual Plan.

Because of its close proximity to the Grand Lake Delta Depth Restoration Project (201601), these two projects have been combined into one construction project. This will minimize the cost of mobilizing equipment to the sites and allow access to the Grand Lake Delta through Little Bayou Pigeon. Work on this project is expected to commence in 2016.

## APPROVED AND FUNDED FY 2010 ANNUAL PLAN WATER QUALITY/WATER MANAGEMENT PROJECTS

### Atchafalaya Basin Natural Resource Inventory & Assessment System (NRIAS)

The Atchafalaya Basin is a resource that must be managed on a system-wide basis to ensure this invaluable national resource is protected and restored. It is recognized that we must develop better tools for managing the Basin and that data evaluation is necessary to ensure sound decision-making. The natural resource inventory and assessment system that was approved and funded in the FY 2010 Annual Plan will serve as the primary tool for decision making in the Basin. The system will provide a means for scientists to access relevant project data for the Basin and to request and fund data acquisition, monitoring, and data analysis to be used in project planning. This will be critical in providing information necessary for the development and approval of specific projects to be included for construction in future Annual Plans, projects that meet the needs of Louisiana's citizens and protect our natural resources.

This system will also assist in evaluating how the Atchafalaya Basin may interconnect with Coastal Protection and Restoration Authority projects by providing sediment and fresh water to nurture emerging marsh habitat without having an adverse impact on Basin resources. According to the Louisiana Comprehensive Master Plan for a Sustainable Coast, "The Atchafalaya River delta is the only region of coastal Louisiana that is building land naturally, and the master plan seeks to take maximum advantage of this resource."

The ABP will strive to beneficially utilize, to the extent practicable, any sediment removed from the Atchafalaya Basin to assist in building, sustaining, and maintaining Louisiana coastal wetlands. The ABP is also available to work with CPRA and its partners in development of initial planning studies described in the National Fish and Wildlife Foundation fact sheet for the Gulf Environmental Benefit Fund, “Increase Atchafalaya Flow to Terrebonne: Planning” project. The ABP urges the Corps to manage the ORCS and channel maintenance in the Atchafalaya River to maximize sediment transport to the coast and to minimize the sediment that continues to fill the swamp.

**Status Report:** A web-based version of the NRIAS is now available online. Enhancements to the system continue to be added, including the Physical Attribute Tool (PAT). The PAT tool is a Geographical Information System feature that allows the user to digitally construct a feature (such as a spoil bank gap) and be able to estimate the volume and cost of the dredging based on user-adjustable “what if” characteristics such as depth, width, slope, and length based on elevation data overlay (LiDAR). In addition, the tool utilizes a forestry overlay to estimate the cost of mitigation for tree habitat loss in the construction of the feature. Finally, the tool is able to estimate the additional days of inundation per year that the constructed feature will allow. When completed, this tool will be available through the ABP’s Data Portal, which is available online at [www.basin.gov](http://www.basin.gov).

## Dog Leg Canal Sediment Trap Maintenance Dredging

The Dog Leg Canal is located within Attakapas Island Wildlife Management Area in St. Mary Parish, approximately two miles north of Millet (Myette) Point on the east bank of the Atchafalaya River. It was previously opened to the Atchafalaya River, at the request of the commercial fishing industry, to allow freshwater to flow into this area of the Basin and improve water quality, primarily dissolved oxygen levels. A natural sediment trap existed near the Dog Leg cut that is believed to be in part responsible for the success of the project. That sediment trap is now almost completely filled and has caused transportation of sediment further into the canal. This sedimentation of the canal has decreased the canal’s ability to transport freshwater into the adjoining swamp. Maintenance dredging of the Dog Leg Canal sediment trap will restore the functionality of the sediment trap and prolong the transport of freshwater from the Atchafalaya River to the swamp.



**Status Report:** Construction began in mid-October 2012 and was completed in December 2012. The Atchafalaya Basin Program has contracted with Louisiana State University to monitor the efficiency and longevity of this sediment trap, and the reports from that monitoring effort will inform the design of future sediment traps.

This project was nominated for a re-evaluation in the FY 2017 Annual Plan. The nomination noted observations of heavy sediment entering Dog Leg Canal during high water and depositing in the surrounding swamps. The ABP’s Technical Advisory Group has reviewed the available information and recommends no action be taken at this time.

# 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 East Grand Lake/Flat Lake/Upper Belle River WMU's have degraded due to water movement being blocked by sediment and spoil deposition, thereby causing low oxygen levels and loss of habitat. This project will analyze water flow and sediment deposition throughout the study area, including analysis of five inputs into the system: American Pass, Bayou Sorrel, Blue Point Chute, Coon Trap Weir, Dog Leg Canal and Indigo Bayou. A plan is being developed to realign water flow patterns and strategically redirect sediment. The result of this action will be a specific list of construction items to accomplish water and sediment realignment in these WMU's, to thereby improve water quality and habitat and reduce the sedimentation of waterways and lakes.

**Status Report:** The Atchafalaya Basin Program has worked with the Technical Advisory Group and has developed scopes of services and interagency agreements to implement the project. Data collection efforts have been initiated by USGS and LSU who are collecting discharge and sediment information. Scientists have begun this planning effort and are working with the TAG to utilize the data collected to develop a water management unit level plan for redistribution of the water and sediment. Work performed to date was used to develop projects for the FY 2012 and FY 2013 Annual Plans, including Upper and East Grand Lake water and sediment flow modifications. The information has also been used to develop possible projects in the Lower and West Grand Lake areas. This information will be used to select project features for implementation in the East Grand Lake Project, and as the project proceeds, monitoring and evaluation of constructed features will continue through a cooperative effort with The Nature Conservancy.

## PREVIOUSLY AUTHORIZED WATER QUALITY/WATER MANAGEMENT PROJECTS

**Prior to the enactment of Act 606 of the 2008 Regular Session of the Louisiana Legislature, the water quality/water management projects listed below were initiated, and in part funded, with federal and local partnerships by the State of Louisiana. It is the policy of the Atchafalaya Basin Program to submit these projects to the Technical Advisory Group for approval prior to any additional obligation or additional funding by the State of Louisiana not contracted as of the effective date of Act 606.**

### Buffalo Cove Water Management Project

The Buffalo Cove Water Management Project 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. The U.S. Army Corps of Engineers (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.

**Status Report:** Previously constructed elements include Bayou Eugene and elements 1, 6, 7, 8, 9-1, and 9-2. Some existing Buffalo Cove elements were impacted by unprecedented high water during the Mississippi River Flood of 2011, and the elements were no longer functioning as designed. The following elements were repaired: 6, 7, 9-1, 9-2, and elements within Bayou Eugene (E1, E2, and E3). The USACE began construction of Buffalo Cove repairs in December 2012, and reported that all construction repairs were completed in early February 2013. This year, the USACE plans to construct elements 3, 12, 14, and 16 to further improve interior flows. The State of Louisiana is obligated to provide 25% of ongoing operation and maintenance funding for this project once it is completed, for which funding is being requested through this 2017 Annual Plan process.

Additionally, Element 10 (Logjam) has been added, which is designed to improve a historic flow corridor of approximately 2.9 miles in the south/central Buffalo Cove Management Unit. Element 10 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, 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 State of Louisiana is evaluating the possibility of providing the 25 % cost-share for Element 10, for which funding is being requested through this 2017 Annual Plan process.

The Buffalo Cove Management Project is expected to be completed in 2016.

## Henderson Water Management Unit (WMU)

In an October 2006 scoping report, the U.S. Army Corps of Engineers (USACE) identified three major challenges within the Henderson WMU in St. Martin and St. Landry Parishes: hydrology, environment/habitat, and environmental quality. With regard to hydrology, the use, control, and function of the water control structures at the northern and southern end of the WMU were the main concerns, followed by restoration of the area's water flow patterns. Constructing a freshwater distribution structure to increase water flow throughout the WMU was an additional concern. Habitat issues that are considered a primary component of the project include the control of invasive aquatic vegetation, protecting the native habitat, and the effects of initiating these activities.

**Status Report:** The project remains in the planning stage. Proposed actions, benefits, and alternatives are being identified, as well as additional details such as dredging dimensions, the size of gaps to be cut to restore water flow patterns, and measures to introduce additional flows into the upper end of the WMU. The USACE planning group, consisting of state and federal agencies, has held regular meetings to complete the planning documents. A Draft Supplemental Environmental Impact Statement had been scheduled for public release in March 2013; however, the release date is now indefinite.



# Sherburne Freshwater Diversion Structure at Big Alabama Bayou

This project was authorized by the Water Resource Development Act of 1986 in accordance with the plan recommended in the February 1983 Chief's Report. The plan included construction of freshwater distribution structures from the Atchafalaya River to provide water inflow into the Alabama Bayou area. To date, no funds have been budgeted for or allocated to this effort by the U.S. Army Corps of Engineers (USACE); however, the Atchafalaya Basin Program is actively working with the USACE New Orleans District to move this project forward.

**Status Report:** This project is in the planning stage. Discussions with the USACE have taken place to provide future funding for the project. The USACE is evaluating appropriate funding mechanisms that may be utilized for this project. A meeting was held with the USACE to discuss the project status, and the USACE has informed the ABP that the project is on hold as funds that had been budgeted for the Engineering Documentation Report have been redirected to address public safety issues brought forth by Flood of 2011.

## Beau Bayou Swamp Hydrologic Restoration

Beau Bayou Swamp is located in the west central region of the Atchafalaya Basin in St. Martin Parish. Once known as a highly productive fisheries area, hydrologic manipulation within the Atchafalaya Basin from levee construction, pipeline canal spoil banks, sediment diversions, and channelization of the Atchafalaya River led to hypoxic conditions within Beau Bayou Swamp, along with many of the Basin's other interior swamps. Most of the natural bayous and man-made canals flowing into Beau Bayou Swamp carry significant amounts of sediment adding to the already degraded condition of the swamp.

The initially proposed Beau Bayou hydrologic restoration project was to include:

- Dredging of Beau Bayou through the center of the swamp, along with dredging of some of the natural waterways. Dredged material is to be used beneficially to address subsidence problems within the adjacent swamp.
- Gapping of the natural levee along the northern east section of Bayou L'Embaras to allow for the exchange of fresh water and nutrients into the swamp.
- Creation of inline sediment traps to reduce the sediment load currently flowing into Beau Bayou Swamp.

St. Martin Parish has been approved to receive \$3,701,400 in Coastal Impact Assistance Program (CIAP) funds to advance the Beau Bayou project.

**Status Report:** St. Martin Parish continues to utilize the services of an engineering firm for this project, along with input from the Atchafalaya Basin Program, the U.S. Fish and Wildlife Service, and other entities. The engineering firm completed a project alternatives report which included preliminary cost estimates for the recommended project features for improving water quality. A meeting of the above parties was held in August 2012 to prioritize those recommended features to be addressed in the detailed design phase. St. Martin Parish is currently working to obtain permission from the landowners associated with the recommended features.

## Henderson Lake Access Channels

This project was implemented through a cooperative endeavor agreement between the Atchafalaya Basin Program and St. Martin Parish Government. It consists of dredging canals from the existing boat launches on the West Guideline Levee of the Atchafalaya Basin into Lake Henderson in St. Martin Parish to facilitate boat traffic during low water periods that are due to the annual lowering of lake levels for the ongoing hydrilla control project. Dredging will also create deepwater fish habitat during low water periods.

**Status Report:** Construction began in mid-October 2012 and channel dredging was determined to be complete in August 2013. Prolonged high water levels through May 2013 continued to delay planting of tree seedlings on the spoil disposal areas for mitigation, as well as dewatering of those disposal areas and degradation of the containment dikes. Mitigation will be conducted by the parish.

Workers clear vegetation for construction of a containment dike near McGee's Landing, part of the Henderson Lake Access Channels project.



# ACCESS PROJECTS PROPOSED FOR FUNDING

## PROJECT DESCRIPTIONS

### 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, are also proposed.



### Ramah Landing

Upgrades to this launch were proposed in the State Master Plan. Improvements to the existing launch as well as consideration of an additional launch on the South Side of the Weir are proposed. Improvements to the parking area, lighting, restrooms and a fishing area, as well as other improvements are also proposed.

### Catahoula 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, are also proposed.

### Grand Avoille Cove Landing

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

### Joe Russo Landing

Upgrades to this launch were proposed in the State Master Plan. Improvements to the existing launch are proposed. Improvements to the parking area as well as other improvements, are also proposed.

# ONGOING ANNUAL PLAN ACCESS PROJECTS

## PROJECT DESCRIPTIONS

### Wilson's Landing Boat Launch

Upgrades to this launch were proposed in the State Master Plan, and approved in the FY 2011 Annual Basin Plan but not funded by the Research and Promotion Board due to the total level of funding available. Proposed renovations to this landing include bringing in fill material to raise the elevation of the present "low-water launch" so that it can also function at higher river stages. In addition, the ramp(s) may need to be extended farther out into the water to facilitate safe launching at lower river stages. Improvements such as those to the parking area and lighting, as well as other improvements, are also proposed.

**Status Report:** The Atchafalaya Basin Program has entered into a cooperative agreement with St. Mary Parish to complete this launch. This project is currently in the design phase.

### Butte LaRose Boat Launch

This project that was proposed in the State Master Plan involves upgrading the Butte LaRose Boat Launch at the Atchafalaya River by extending the launch an additional 15 feet into the river to accommodate safe launching when the river falls below three to four feet at the Butte LaRose gauge.

**Status Report:** The Butte La Rose Boat Launch was approved in the FY 2011 Annual Basin Plan but not funded by the Research and Promotion Board due to the total level of funds available. The project was proposed for funding in the FY 2012 Annual Basin Plan as the top priority water access project. The Research and Promotion Board has agreed to fund a portion of this project, and St. Martin Parish has committed to share a portion of the project cost. Additional land acquisition for the boat launch area is being pursued by the Parish. Once that is complete, plans and specifications will be designed by the engineer. It is anticipated that the project will proceed to construction during 2016.



# OTHER PROJECTS AND INITIATIVES PROPOSED FOR FUNDING

## PROJECT DESCRIPTIONS

### Biking/Paddling/Hiking Trails

The Atchafalaya Basin is a paradise for outdoor adventure, and the Atchafalaya Basin Program aims to increase accessibility to the Basin's natural wonders through biking, paddling and hiking. Mountain bike paths, hiking trails and paddling areas are proposed for development within the Atchafalaya Basin in FY 2017. The Atchafalaya Basin Program will work with local government and other stakeholders to identify locations for these trails.



### Swamp Base (formerly “Camp Atchafalaya”)

Camp Atchafalaya was a project to construct a facility to provide the Atchafalaya Basin experience to physically challenged individuals. This project's goal was to create a universally accessible environment for people with disabilities to connect with nature. This facility would have been constructed in its entirety as a barrier-free and completely accessible park. The park would have been devoid of any designation of handicap signage, areas and identifications, because the park and anything in it would have been designed accordingly for access. Users would have been able to perform any activity normally done in a typical State Park regardless of their disability. This project would have ensured that everyone has access to what Louisiana and the Atchafalaya Basin has to offer. The Office of State Parks has worked on planning and design of this project with funding provided by the Atchafalaya Basin Program. State Parks was not able to move forward on the project due to a lack of funding.

The Evangeline Area Council of the Boy Scouts of America has received funding through the capital outlay process to construct a base camp near Catahoula, LA to support their Atchafalaya Swamp Base initiative. The base camp will include an area designated as ADA-accessible. The Atchafalaya Basin Program plans to partner with the Evangeline Area Council of the Boy Scouts of America to provide additional funds that were originally designated for Camp Atchafalaya.

### Habitat Restoration/Conservation

This project will provide for habitat restoration through vegetative plantings in areas that are or were impacted by construction activities in the Basin or areas where habitat improvements are needed. Monitoring of the success of the habitat restoration may be performed to ensure that goals have been met. Funding may also be utilized to acquire conservation servitudes to protect and preserve critical habitat in the Basin.

## Morgan City Interpretive Center

This project would be a cooperative effort with the United States Army Corps of Engineers. The concept of this project is for design of a building that would showcase the cultural aspects of the lower Atchafalaya along with other projects, both existing and proposed, that have been constructed by the United States Army Corps of Engineers. The funding provided for this project would be used as matching funds for the development of the Engineering Design Report by the Corps.

## Sherburne and Attakapas Island Wildlife Management Areas

The Atchafalaya Basin Master Plan contains provisions for improvements to the State Wildlife Management Areas. The Sherburne and Attakapas Wildlife Management Areas in the Basin are two locations that are heavily utilized by residents and tourists. Enhancement of these areas by providing space and facilities would provide distinct and increased opportunities for the public's access to and enjoyment of the hunting, fishing, camping, general recreation, education, and tourism aspects of the Basin.

## COMPLETED ACCESS PROJECTS AND OTHER INITIATIVES

### Bayou Sorrel Boat Launch

This project to construct improvements at the current location of the Bayou Sorrel boat launch has been an on-going project of the U.S. Army Corps of Engineers, the State of Louisiana and Iberville Parish Government, and was proposed in the State Master Plan. The proposed project consists of new concrete ramps with multiple lanes each, floating courtesy dock adjacent to boat ramps, concrete landings adjacent to boat ramps, expansion and improvement of stone parking area, security and restroom shelter, access roads, demolition of the existing ramp and electrical service to power and light the facility.

**Status Report:** Funding for this launch was provided through the capital outlay process in the FY 2011 Annual Basin Plan. A cooperative endeavor agreement was signed between Iberville Parish and the Atchafalaya Basin Program. Plans and specifications were submitted to and approved by the Office of Facility Planning and Control. Construction was completed in March 2013 and the launch is now open to the public.



## Big Alabama Boat Launch Phases I and II

The state-owned Sherburne Wildlife Management Area, which is operated and maintained by the Louisiana Department of Wildlife and Fisheries, has between 30,000 and 40,000 visitors annually. The Sherburne WMA adjoins other properties, including the lands owned by the U.S. Fish and Wildlife Service and the Corps of Engineers. The total site including all three government properties totals 44,000 acres.

The first phase of this boat launch project included the construction of a new, two-lane boat launch with a center pedestrian pier located in Pointe Coupee Parish, in the Morganza Floodway System of the Atchafalaya Basin. The second phase included improvements to the boat launch parking lot, the addition of a handicapped accessible fishing pier, and a modular restroom facility.

**Status Report:** Approved and funded in FY 2010 Annual Plan. Phase I was completed in 2010. Phase II was completed in August 2012, including the handicapped accessible fishing pier pictured below.

Phase II of the Big Alabama project included construction of this handicapped accessible fishing pier



This boat launch was completed as part of Phase I of the Big Alabama project.

## Bayou Amy Boat Launch

This new boat launch facility is already funded and will be constructed on Bayou Amy, directly across from the Atchafalaya Basin western guide levee in Henderson, Louisiana. The project will include a new boat launch, parking area, and docking facility. Additional improvements are being designed at this site, and that component will be funded with CIAP funds. That portion of the project will include an educational pavilion, self guided nature walk, and a restroom facility.



Jim Trewin Park is the site of a new Bayou Amy boat launch, pavilion, and restrooms.

**Status Report:** Construction began in August 2013 and the boat launch was opened to the public in March 2014.

## Millet (Myette) Point Boat Launch

The Millet (Myette) Point Boat Launch project is the subject of a cooperative agreement between the U.S. Army Corps of Engineers (USACE) and the St. Mary Parish Government. The project area is in the vicinity of the town of Charenton, Louisiana, in St. Mary Parish. Construction began in September 2007. The purpose of the proposed action is to provide a point of entry into the Lower Atchafalaya Basin Floodway for recreational fishing vessels, commercial fishing vessels, hunters, crew boats, federal and state government personnel, and others.

This project consists of a new concrete boat ramp with five lanes (four lane boat launch and one canoe launch) to be constructed; a new floating courtesy dock adjacent to the ramp; a concrete apron adjacent to the boat ramp that will be constructed by pre-loading the site and installing wick drains; a comfort station (restroom); a crushed stone parking area; upgrading of existing public roads used for ingress and egress; partial demolition and partial removal of an existing boat ramp with the remainder of said ramp converted into a canoe launch; water service for the comfort station; a sewage treatment plant; electrical service to power and light the comfort station and service to light the parking area and boat ramp; and landscaping.

**Status Report:** Construction has been completed and boat launch is operational.



Millet (Myette) Point Boat Launch was completed in October 2010.

## Bayou Benoit Boat Launch

The improvements to this boat launch were included in the State Master Plan. This launch was originally constructed with grant funds from a Wallop-Breaux Grant. Improvements consisted of the construction of a floating dock to allow boaters to tie up their boats during fluctuating water conditions and while parking trailers.

**Status Report:** Construction was completed in 2010 and facility is in use.



## Belle River Boat Launch

This project is already funded and involves the installation of restroom facilities at the existing Belle River boat launch. The boat launch is operated and maintained by the Atchafalaya Basin Levee District.

**Status Report:** Modular restrooms were installed in 2011 and are operational.



## **Belle River Park**

This is an ongoing project to provide a recreation facility for visitors and residents of lower St. Martin Parish in the Belle River area. Work completed to date includes earth work and a walking trail. Work remaining to be completed includes a roadway, parking, drainage, trails, landscaping, playground equipment, lighting, pavilion, meeting hall, building utilities, and sewer treatment. The design of this project was funded through the Atchafalaya Basin Program and a Trails Grant. Design was completed for the meeting hall and restrooms, and construction was partially funded in the FY 2011 Annual Basin Plan. Plans and specifications for the project were submitted to and approved by the Office of Facility Planning and Control. The project was bid and was awarded in August 2012, and construction was completed in September 2013.

## **Stephensville Park**

This is an ongoing project to provide a recreation facility for visitors and residents of lower St. Martin Parish in the Stephensville area. Phase I of this project has been completed and included earth work, ball fields, walking trail, parking area, playground and a picnic shelter. Work remaining to be completed includes ball field lighting, concession stand, restroom, landscaping, bleachers, playground equipment, parking, tennis court and sewage treatment. Additional funding for construction was provided in the FY 2011 Annual Plan. Design plans and specifications for permanent restrooms, a concession stand, and a covered pavilion area were submitted to and approved by the Office of Facility Planning and Control. A construction contract was awarded in July 2012, construction began in October 2012, and construction was completed in May 2013.

## **Lake End Park Cabins**

This project included design and construction of cabins and related appurtenances at Lake End Park in Morgan City along the shore of Lake Palourde, as outlined in the State Master Plan. Cabin design was completed, and construction funding was provided as part of the FY 2011 Annual Plan. Morgan City and DNR signed a Cooperative Endeavor Agreement. Project plans and specifications for the cabins were submitted and subsequently approved by the Office of Facility Planning and Control. The project was bid and awarded in early 2012. Those first three cabins were completed in May 2013. In the 2013 Legislative Session, capital outlay funding was provided by the State directly to Morgan City for the construction of additional cabins. An additional three cabins are now in the construction phase.



## Veterans Park

This is an ongoing project to provide a recreation facility for visitors and residents of the Pierre Part area in Assumption Parish. Phases I - V of this recreational facility have been completed. The facility includes baseball fields, tennis courts, concession stand, walking trail and a playground. Construction funding for Phase IV was provided in the FY 2011 Annual Plan and is being used for bleachers, concession equipment, and other amenities. Phase IV consisted of parking lot improvements, concession stand improvements, bleachers and canopies. The work was bid and awarded in 2012, and construction was completed in March 2013. Construction of Phase V, which includes a basketball court and a storage building, was completed in 2015.

## Primitive Campgrounds

This project was funded in the FY 2011 Annual Plan. The Atchafalaya Basin Program staff consulted with key stakeholders, local governments, and the State Lands Office to identify specific sites for establishing primitive camping areas on State-owned lands in the Basin. Stakeholder meetings were held in early 2012, and a draft plan was circulated for comments. A final project plan was developed incorporating stakeholder input for campsite locations and design. Construction to install campsite markers was completed in August 2013. The markers were installed, the markers locations were surveyed and latitude / longitude locations were collected.

In addition, maps and descriptions of the locations are posted on the ABP website for use by the public at [www.dothewildthing.dnr.la.gov](http://www.dothewildthing.dnr.la.gov). The website promotes primitive camping and contains pertinent material about conditions, precautions, primitive camping best management practices, and other items.



# U.S. ARMY CORPS OF ENGINEERS PUBLIC ACCESS & ACQUISITION OF ENVIRONMENTAL EASEMENTS

## **Fee Purchase**

The Atchafalaya Basin Floodway System authorization requires that the Public Access feature provide for fee lands to be purchased from non-governmental, willing sellers. As of September 2015, the U.S. Army Corps of Engineers reports that it has acquired ownership of 47,323 acres for public access lands toward a total authorized 70,000 acres.

## **Acquisition of Environmental Easements**

Acquisition of environmental easements refers to the purchase of federal easements in the Atchafalaya Basin for the purposes of developmental control and environmental protection. As of September 2015, the U.S. Army Corps of Engineers reports that it has acquired 93,878 acres of comprehensive easement toward an authorized 367,000 acres.





# APPENDIX



## Atchafalaya Basin Water Management Technical Advisory Group

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September 14, 2015

Mr. Gerald Alexander  
Atchafalaya Basin Research and Promotion Board  
307 Woodland Drive  
Donaldsonville, Louisiana 700346

Re: Project recommendation

Dear Mr. Alexander:

This letter is to notify the Atchafalaya Basin Program Research and Promotion Board of the one water management project nomination (Re-evaluation of Dog Leg Canal Sediment Trap) received in this year's planning process. The Technical Advisory Group (TAG) of the Atchafalaya Basin considered this project and recommends no action at this time. In accordance with House Bill 1135 of the 2008 Regular Session of the Louisiana Legislature, we present this nomination and recommendation for consideration by the Atchafalaya Basin Research and Promotion Board for the FY2017 Annual Basin Plan. If you have any questions or would like additional information please contact me at any time.

Sincerely,

  
Bobby Reed, Chairman  
Atchafalaya Basin Technical Advisory Group

BR:dh

Technical Advisory Group  
Atchafalaya Basin Water Management  
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**Potential FY 2017 Atchafalaya Basin Water Management Projects  
Identified by Stakeholders and Presented to the Technical Advisory Group**

The Technical Advisory Group (TAG) met on June 24, 2015 a to evaluate projects nominated by the public during the development of the Atchafalaya Basin Program’s FY 2017 Annual Plan. Only one project was proposed.

<b>Project Name</b>	<b>Project Number</b>
Evaluate the Effectiveness of Dog Leg Canal	201701
Sediment Trap Dredging Project	

# ACKNOWLEDGEMENTS & SOURCES

**Information included in the FY 2017 Annual Plan was compiled from a variety of sources, including state and federal agencies, organizations and individuals, as well as books, publications, and websites produced by these sources. We thank everyone for their contributions and assistance.**

Atchafalaya Basin Program	U.S. Army Corps of Engineers
Louisiana Department of Natural Resources	U.S. Department of Agriculture
Louisiana Department of Wildlife and Fisheries	U.S. Geological Survey
Louisiana Department of Culture, Recreation and Tourism	Atchafalaya Basinkeeper
Louisiana State University Agricultural Center	Greg Guirard and C. Ray Brassieur, authors of <i>Inherit the Atchafalaya</i> (2007)
Louisiana Geological Survey	Mark A. Rees and Patrick C. Livingood, editors of <i>Plaquemine Archaeology</i> (2006)

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# Atchafalaya

## BASIN



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