FY 2018 ANNUAL PLAN Atchafalaya Basin Program

SUPPLEMENT History & Economics of the Basin The Annual Plan Process







America's Largest River Swamp

Louisiana Department of Natural Resources Atchafalaya Basin Program

Don Haydel, Director **April Newman,** Coastal Resources Scientist

Research and Promotion Board Appointees

Gerald Alexander / Chairman, Atchafalaya Levee Board Bijan Sharafkhani, Dept. of Environmental Quality Lance Broussard, Dept. of Health and Hospitals Jonathan Robillard, State Land Office Guy Cormier, St. Martin Parish (non-voting) Ray Berthelot, Dept. of Culture, Recreation & Tourism Keith Lovell, Dept. of Natural Resources Paul Naquin, St. Mary Parish J. Mitchell Ourso, Jr., Iberville Parish (non-voting) Brad Spicer, Dept. of Agriculture & Forestry Charles Sutcliffe, Office of the Governor Marty Triche, Assumption Parish (non-voting) Myles Brumfield, Dept. of Transportation & Development Melissa Kaintz, Dept. of Wildlife & Fisheries

Technical Advisory Group

Bobby Reed / Chairman, Dept. of Wildlife & Fisheries Joey Breaux, Dept. of Agriculture & Forestry Glenn Constant, U.S. Fish & Wildlife Service Dr. Bill Kelso, LSU School of Renewable Resources Bijan Sharafkhani, Dept. of Environmental Quality Dan Kroes, U.S. Geological Survey Charles Reulet, Dept. of Natural Resources Brac Salyers, Dept. of Wildlife & Fisheries Vacant, U.S. Army Corps of Engineers

Special thanks to these scientists who contributed to the TAG in an ex-officio capacity:

Dr. Richard Keim, LSU School of Renewable Resources **David Walther**, U.S. Fish and Wildlife Service

Atchafalaya Basin Program Legislative Oversight Committee:

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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.

In Memory of Gerald Alexander

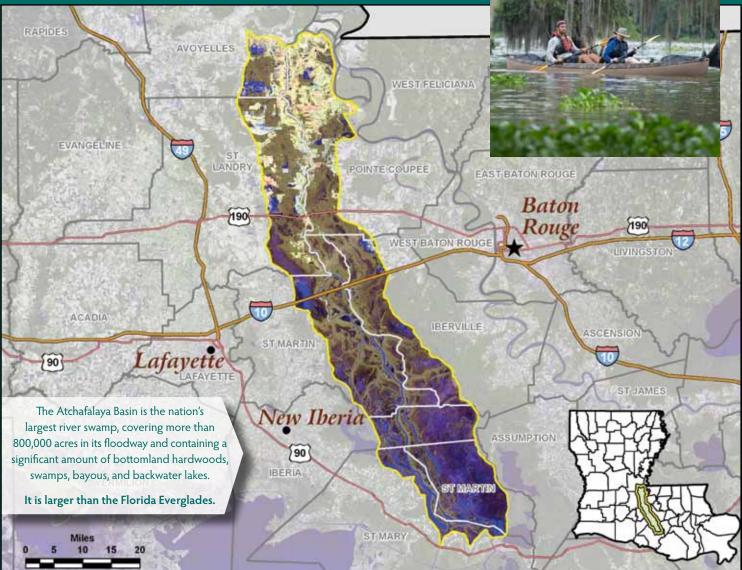
The Atchafalaya Basin Program lost a dear friend and passionate supporter on November 28, 2016, upon the passing of Chairman and long-time Research and Promotion Board member Gerald Alexander. Mr. Alexander was a native and resident of Donaldsonville and an educator at Donaldsonville High School for 33 years. He has made lasting contributions to the ABP over the years and will be greatly missed.



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.



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.

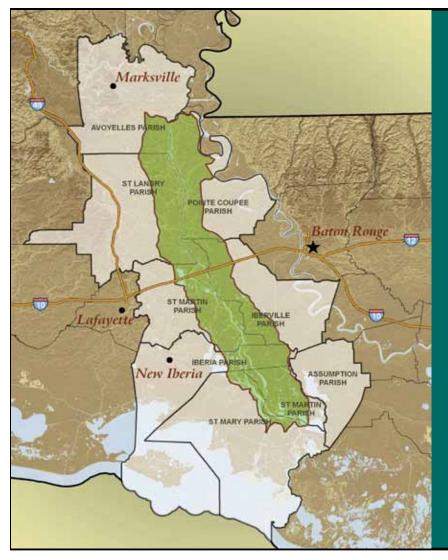
The worst flood on record along the lower Mississippi River system was the Great Flood of 1927, which put the entire Atchafalaya Basin, nearby communities and rural areas under water. In reaction to this natural catastrophe, the Flood Control Act of 1928 was enacted, designating a portion of the Atchafalaya 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 designated 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, floodgates, 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.

Parish	Travel Expenditures	Jobs	Payroll	State Sales Tax Receipts	Local Sales Tax Receipts
Assumption	\$ 11,300,000	64	\$ 1,234,219	\$ 610,000	\$ 280,000
Avoyelles	\$ 99,048,000	1,090	\$ 23,267,000	\$ 2,390,000	\$ 1,590,000
Iberia	\$ 45,159,000	367	\$ 7,013,000	\$ 2,190,000	\$ 840,000
lberville	\$ 22,958,000	165	\$ 3,524,000	\$ 1,190,000	\$ 1,040,000
Pointe Coupee	\$ 10,551,000	76	\$ 1,398,000	\$ 500,000	\$ 290,000
St. Landry	\$ 98,028,000	633	\$ 11,537,000	\$ 5,510,000	\$ 2,890,000
St. Martin	\$ 32,198,000	190	\$ 4,240,000	\$ 1,640,000	\$ 1,890,000
St. Mary	\$ 166,877,000	1,770	\$ 35,128,000	\$ 4,830,000	\$ 2,830,000

Economic Impact of Travel in Atchafalaya Basin Parishes (2015)

Sources for the preceeding 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 Suvey, U.S. Army Corps of Engineers, U.S. Geological Suvey, Louisiana Office of Tourism, and *Inherit the Atchafalaya* by Greg Guirard and C. Ray Brassieur.



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

The Atchafalaya Basin

Atchafalaya Basin Parishes:

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

A River Story (continued)

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 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 (in green in map above) 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.





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

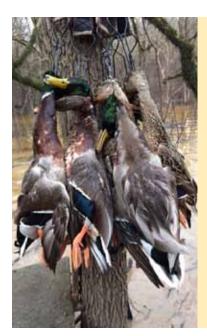
species. Raccoon, mink and nutria are so abundant in the swamps and marshes that Louisiana was ranked as the number one fur producer until the downturn of the industry near the close of the 20th century.

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.



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



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

	-	
	Recreational License Year 2016	Commercial License Year 2015
Assumption Parish	10,815	1,964
Avoyelles Parish	28,759	594
Iberia Parish	33,074	1,875
Iberville Parish	9,420	1,232
Pointe Coupee Parish	9,789	298
St. Landry Parish	48,878	786
St. Martin Parish	27,459	1,586
St. Mary Parish	30,950	3,193

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- September 2016: 1.4 million Visitors to Lake Fausse Pointe State Park FY 2004 - FY 2016: 951,487

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



A BOUNTIFUL BASIN (CONTINUED)

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 August 2016, over 11 million pounds of wild crawfish were harvested in the Atchafalaya Basin with a dock side value of more than \$9.6 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.

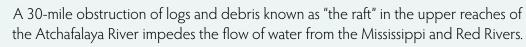
It's not surprising why fishermen, hunters, photographers, campers, and tourists flock to the unique Atchafalaya Basin to experience the sights and sounds of this natural wonderland. Recreational activities like boating, water skiing, bird-watching, hiking, and camping attract thousands of visitors to the Basin each year, and these visitors make a huge economic impact, with over \$486 million spent on travel expenditures in the Basin parishes in 2015 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.

From January to August 2016, landings of wild crawfish in the Atchafalaya Basin totaled 11,087,201 pounds with a dockside value of \$9,684,867, according to analysis of trip ticket data by the LA Dept. of Wildlife and Fisheries.

Milestones in <u>Atchafalaya Basin History</u>

1800-1838



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."

"The Raft"

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

1970

Louisiana Governor John McKeithen creates the first Atchafalaya Basin Commission.

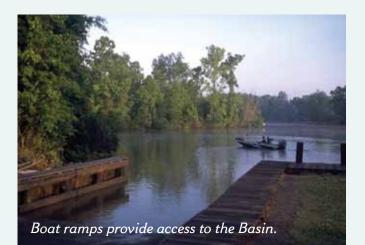
1972-1980

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.



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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

Welcome Center Atchafala

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.

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.



FY 2018 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.

	RECREATION BIG BUSIN	I AND TOU Ess in the			Section 5
	Travel Expenditures	in the Eight Atcha	afalaya Basin Parishes	s:	
2008:	\$ 451 million \$ 435 million		\$ 464 million \$ 470 million		
	\$ 450 million		\$ 483 million		
2011:	\$ 468 million	2015:	\$486 million	1	

DEVELOPMENT

The FY 2018 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 2018 Annual Plan process:

Research & Promotion Board Meetings

June 16, 2016 September 8, 2016 November 3, 2016 February 1, 2017

Technical Advisory Group Meetings

Since no project nominations were received this year, no TAG meetings were held.

Louisiana Coastal Protection and Restoration Authority Meetings

November 30, 2016 January 18, 2017

Public Meetings

October 3, 2016 in Morgan City, LA October 4, 2016 in Plaquemine, LA October 6, 2016 in Henderson, LA

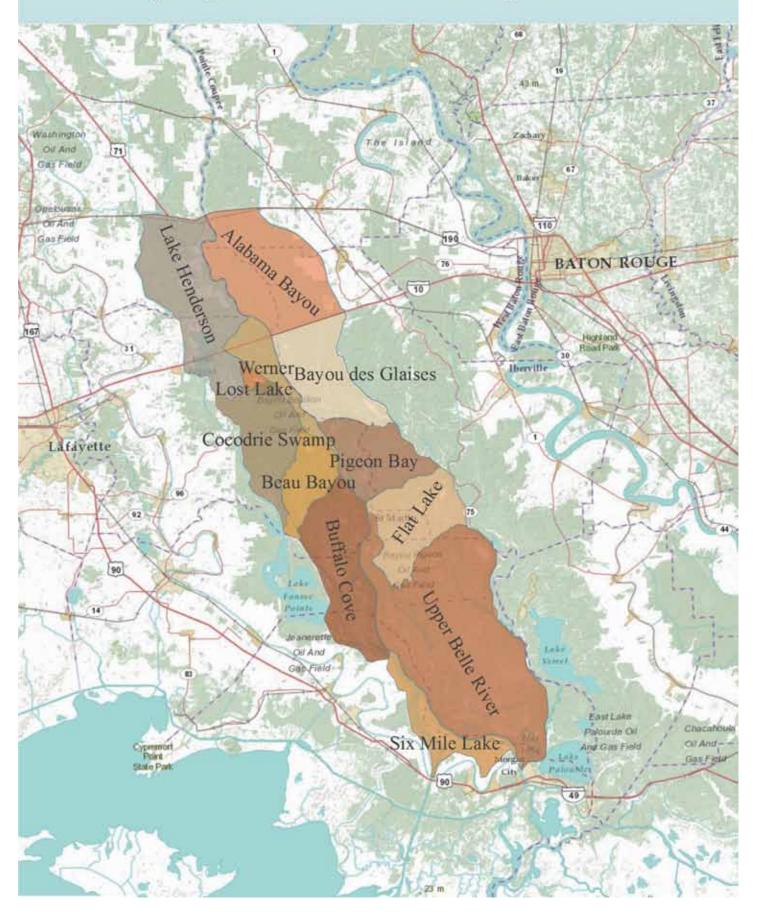




The FY 2018 Annual Basin Plan was submitted to the Louisiana Coastal Protection and Restoration Authority (CPRA) for that panel's review and approval as consistent with the Master Plan for Coastal Protection and Restoration. The FY 2018 Annual Plan was ubmitted to the Research and Promotion Board for final approval, published, and presented 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.

Atchafalaya Basin Water Management Units



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 projects proposed in the FY 2018 Annual Basin Plan have 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 2017 Annual Plans but not totally funded for construction. Projects may be constructed based upon the level of funding provided in FY 2018 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 2018 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** 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

When you can't visit the Basin in person, visit it online at www.Basin.Louisiana.gov



Acknowledgements & Sources

Information and images included in the FY 2018 Annual Plan and its supplements were 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.

Atchafalaya Basin Program	U.S. Department of Agriculture	
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U.S. Army Corps of Engineers

Guirard, Greg, C. Ray Brassieur, and Louisiana Dept. of Natural Resources. *Inherit the Atchafalaya*. New York: University of Louisiana at Lafayette, Center for Louisiana Studies, 2007.

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CONTRIBUTING PHOTOGRAPHERS:

Louisiana Swamp Base, Inc.	Charles Hebert	Andrew D. Lytle Collection, LSU Libraries
Ben Pierce	Bonnie Hedges	LA Dept. of Natural Resources
Dr. John Fuselier	Ashley Herrick	·
Darlene Bouchet	Sara Krupa	LA Geological Survey
Greg Guirard	Raywood Lagneaux	U.S. Army Corps of Engineers
Antoinette DeBosier	Tim Matte	LA Dept. of Culture, Recreation & Tourism
Charles Reulet	Burton Mayeaux	•
Matthew Armand	April Newman	Victor Guarisco Lake End Park
Eric Blanchard	John Taylor	
Twana Casey	Rhonda Thibodeaux	
John Clark	Theodore Thibodeaux	
Sherbin Collette	Jennifer Brooke Wallace	
Josh and Valerie Domingue	James Wilson	
Don Haydel	M. Celino	



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Atchafalaya Basin Program Louisiana Department of Natural Resources P.O. Box 44487 Baton Rouge, LA 70804-9396 phone: (225) 342-6437 • fax: (225) 342-9439 www.Basin.la.gov

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