FY 2010 Annual Plan

Atchafalaya Basin Program

LOUISIANA DEPARTMENT OF NATURAL RESOURCES

Louisiana Department of Natural Resources
Atchafalaya Basin Program

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

Dear Members of the Louisiana Legislature,

It is with pride that I submit, for your consideration, the FY 2010 Atchafalaya Basin Annual Plan. It was developed in accordance with Act 606 of the 2008 Regular Session of the Louisiana Legislature, and identifies projects related to water quality and water management in the Basin, as well as access projects that will enhance public recreational opportunities. The significant legislation requires the focus of the Atchafalaya Basin Program to be on the management of and access to Basin resources.

Our great State of Louisiana is known as a "Sportsman's Paradise" to many across the nation, a credit to our abundant wildlife and fisheries, and our unique natural environment. The Atchafalaya Basin is one such treasured natural resource that is Louisiana's own.

Home to 250 species of birds and over 100 species of fish and aquatic life, the Atchafalaya Basin is the nation's largest river swamp, containing almost one million acres of bottomland hardwoods, swamps, bayous and backwater lakes. With attractions like these, the Basin serves as a recreation destination for thousands of boaters, fishermen, hunters, campers, hikers and bird-watchers each year. Clearly, preserving this natural treasure that spans eight parishes is important to us and all generations that follow.

I would like to thank the staff of the Louisiana Department of Natural Resources Atchafalaya Basin Program and members of the program's Research & Promotion Board for all of their assistance, and a special thanks to members of the Technical Advisory Group who worked many hours to identify and assess the projects listed in this document. I want to recognize David Fruge with the Coastal Protection and Restoration Authority for his leadership as former Atchafalaya Basin Program Acting Director. Mr. Fruge was instrumental in assisting with the annual plan verbiage in House Bill 1135, now known as Act 606, of the 2008 Regular Session of the Louisiana Legislature. We also would like to commend you, our legislators, for authorizing the publication of this plan, and we look forward to working with each you to secure funding to implement these important projects.

Our goal is to build a program that will become a top resources management program in the nation, and this annual plan is the first step in that process. You and all of the citizens of Louisiana can be assured that we are moving forward under a governance that makes the resources of the Atchafalaya Basin the top priority, encourages public input, and allows the best science to prevail.

Thank you for your support.

Scott A. Angelle, Secretary
Lousiana Department of Natural Resources

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A film crew at Lake Dauterieve

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What is the Atchafalaya Basin?

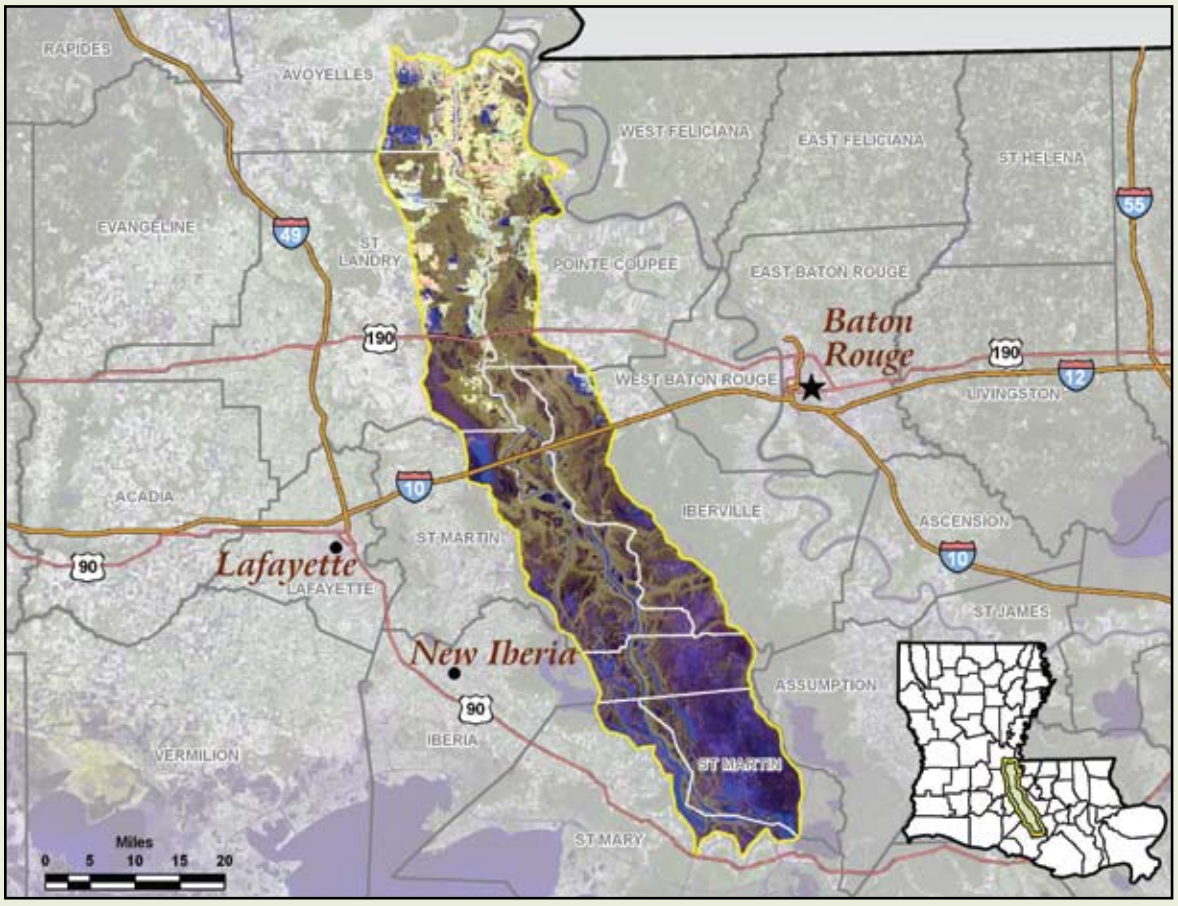
In the Beginning

The story of the Atchafalaya Basin begins over a half of a million years ago, when melting glaciers and rising oceans created what we now call the Mississippi River. Over thousands of years, the Mississippi River actually built South Louisiana, transporting sediment from upriver and depositing the rich silt as the river meandered across the delta, changing course, always in search of a shorter path and steeper gradient to the Gulf of Mexico. Following decades of flood events, the river's path changed, resulting in the formation of distributary channels and natural levees. Over time, floodplain processes created a thriving environment for plant, animal and marine life that remains with us today.

The Atchafalaya River

From its start at the Old River Control Structure to its mouth at the Gulf of Mexico, the Atchafalaya River is now the largest distributary stream of the Mississippi River. The navigable river is approximately 170 miles long and provides a significant industrial shipping channel for the state of Louisiana and is the flowing lifeline of the nation's largest river swamp – the Atchafalaya Basin.

The Atchafalaya River has its origin near Simmesport, Louisiana, in Avoyelles Parish at the confluence of the Red River with the Mississippi, where the Mississippi connects to the Red by the seven-mile channelized Old River. It receives the water of the Red as well as part of the water of the Mississippi, which itself continues in its main channel to the southeast. It meanders through extensive levees and floodways before emptying into the Gulf at Atchafalaya Bay, approximately 15 miles south of Morgan City, Louisiana. The river is now forming a new delta in Atchafalaya Bay– the only place on the Louisiana coastline that is gaining ground naturally.



America's Largest River Basin

The Atchafalaya Basin is the river's floodway, bound by natural ridges to the east and west formed as the Mississippi River changed its course as much as 4,500 years ago. Encompassing 838,000 acres of forests, bayous, swamp and lakes, it extends south from the Old River Control Structure approximately140 miles to Morgan City. The Basin represents the largest contiguous bottomland hardwood forest, and overflow, alluvial swamp remaining in the United States.

Approximately 400,000 acres of the Basin are publicly owned, including state and federal fee title lands, federal easement lands and state water bottoms. The remaining 438,000 acres are privately owned lands, including upland forest habitats as well as deep-water swamps.

Home to some of Louisiana's signature wildlife like alligators, roseate spoonbills, water moccasins and crawfish, plant life like cypress trees and water hyacinths, and abundant fish and marine life, the Atchafalaya Basin has long captured the interest of fishermen, photographers, hunters and those who simply enjoy the sights and sounds of nature. For centuries, people have adopted features of the Basin as part of their heritage, including the Native Americans who made their homes among the bottomland hardwoods, and the loggers and fishermen who made their livelihoods by harvesting the natural riches of the Atchafalaya Basin.

Channeling the Power of Nature

Until a monumental U.S. Army Corps of Engineers (USACE) project was completed in the 1960's to regulate water flow in the Atchafalaya River, residents and landowners in the river Basin struggled with the unpredictable flow of a natural river system. The river was not much more than a bayou in the mid-1800's when a thirty-mile obstruction of logs and debris known as "the raft" was removed from the upper reaches of the river, dramatically increasing the river flow. Over the next century, flooding in the Atchafalaya Basin became more severe. The Great Flood of 1927 is the worst flood on record in the lower Mississippi River. It put the entire Atchafalaya Basin, nearby communities and rural areas under water.

A levee break during the Great Flood of 1927

In reaction to this natural catastrophe, the federal government took steps to protect lives and property in the Basin, as well as preserve the river as a shipping channel. As part of the USACE flood control plan, the Atchafalaya swamp was formally designated 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. All of these actions resulted, perhaps unintentionally, in 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.

The Atchafalaya Basin is the nation's largest river swamp, containing almost one million acres of America's most significant bottomland hardwoods, swamps, bayous and backwater lakes.

It is larger than the Florida Everglades.

In 1963, the USACE opened the Old River Control Structure to regulate the flow of water into the Atchafalaya River from the Red and Mississippi Rivers. Ten years later, a catastrophic failure of the control structure during the height of a spring flood nearly resulted in the Atchafalaya River claiming over 70 percent of Mississippi River flow and virtually changing the course of the Mississippi River once again. Today, the Old River Control Structure directs 30 percent of Mississippi River flow into the Atchafalaya River.

The Atchafalaya Basin begins near Simmesport and stretches 140 miles southward to the Gulf of Mexico.

"The huge trunks of the cypress trees, which stand four and five feet asunder, shot up to a height of fifty feet, entirely free from branches, which then, however, spread out at right angles to the stem, making the trees appear like gigantic umbrellas, and covering the whole morass with an impenetrable roof, through which not even a sunbeam could find passage. Within this realm could be found thousands, tens of thousands, of birds and reptiles, alligators, enormous bullfrogs, night owls, anhingas, herons (all of) whose dwellings were in the mud of the swamp or its leaky roof, (and) now lifted up their voices bellowing, hooting, shrieking, and groaning. Bursting forth from the obscene retreat in which they had hitherto lain hidden, the alligators raided their hideous snouts of the green coating of the swamp, gnashing their teeth, and straining toward us, while the owls and other birds circled round our head, flapping and striking us with wings as they passed."
AUTHOR UNKNOWN – circa 1842

Atchafalaya Basin Parishes:

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

Milestones in Atcha


"The Raft"

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.

1838-1850

A substantial portion of "the raft" is removed, greatly increasing the river flow and allowing navigation between the Atchafalaya, Red and Mississippi Rivers. Commerce begins to develop in the Atchafalaya Basin and flooding becomes more severe.

1849-1860

Farmland in the Basin begins to fail as flooding continues. The wetland environment of the Atchafalaya Basin greatly expands, signifying the birth of this important floodplain.

1870's-1930's

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 in 1927, putting the entire Atchafalaya Basin and nearby communities and rural areas under water.

1928

The Flood Control Act of 1928 identifies the Atchafalaya Basin as a "spillway."

1929

Atchafalaya Basin Guide Levee construction 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

falaya Basin History

1970
Louisiana Governor John McKeithen creates the first Atchafalaya Basin Commission.

Recreational Boat Ramp

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.

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.

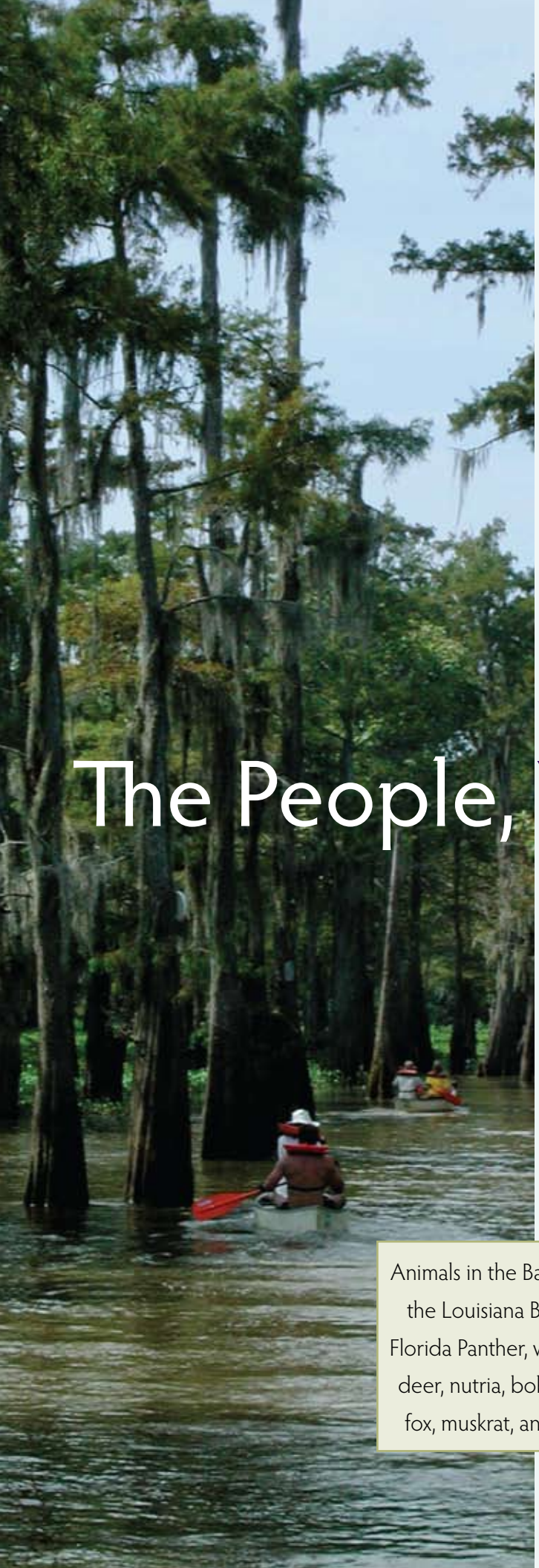
1998
The Atchafalaya Basin Program is created within the Louisiana Department of Natural Resources.


Welcome Center

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.

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.



The Atchafalaya Basin's cultural history may go back 2,500 years when Native Americans are believed to have first settled in the Basin, a time when the Mississippi River flowed down the course of the present-day Bayou Teche. According to research by Dr. Mark Reese of the University of Louisiana at Lafayette on Native American culture from A.D. 1000 – A.D. 1700, Indian villages were located within the wetlands and on grassy prairies along the Bayou Teche. Villagers harvested and hunted fish, shellfish, reptiles, birds, deer and small mammals that were plentiful in the area.

The People, Wildlife and Econ

Tribes with a history in the Atchafalaya Basin include the Chitimacha, Attakapas, Opelousa, Houma, Coushatta and Alabama, Tunica-Biloxi and Avoyel, and Taensas. Native American association with the "great swamp" is evidenced by many place names in the modern Basin, including Atchafalaya (hacha falaia), bayou (bayuk), Catahoula (oka hullo), Chacahoula (chukka hullo), Plaquemine (piakimin), and Whiskey Bay (oski abeha).

Animals in the Basin include the Louisiana Black Bear, Florida Panther, white-tailed deer, nutria, bobcat, mink, fox, muskrat, and beaver.

In the early 1700's, French settlers and slaves arrived in the Atchafalaya Basin to trade with the Native Americans, primarily in the fur trade. In 1755, however, one of the most culturally significant migrations into the Atchafalaya Basin occurred when refugees expelled from the Canadian province of Acadia found a home here. These immigrants quickly adapted to their new environment and developed skills that allowed them to survive in the challenging, yet fertile, swamp. As the years went by, they intermarried with other settlers of the area, including Hispanics, Old World and Canadian French, Anglo-Americans and Native Americans, resulting in a people and culture referred to as "Cajun." Many residents in the region surrounding the Basin, in fact, can trace their roots back to the Acadians, and the unique Cajun heritage is expressed in the food, music and traditions of the area. Other ethnic groups who immigrated to the area over the years include Creoles, African Americans, Colonial Spanish and Islenos, Italians and Asians, with each contributing their own cultural "seasonings," so to speak, to the Atchafalaya Basin region's cultural "gumbo."

In the early years, the one element that seemed to tie all of the Basin settlers together was the bountiful resources of the hardwood forests, cypress swamps, bayous, and marshes, and the utilization of these resources for subsistence and commerce. Logging, agriculture and cattle farming were staples of life in the Basin. Based on an 1874 river commerce survey report, "The products of the Atchafalaya country are cotton, sugar, molasses, moss, lumber, staves and shingles. The cotton is all grown above the Courtableau and is sent to New Orleans by the two steamers that run to Washington, or the one that makes a 10-day trip to the Teche country."

Today, people from across South Louisiana and beyond continue to rely on these natural resources for their livelihood and for recreation. According to a USDA Census of Agriculture report, the market value of all agricultural products sold in the area total almost $900 million, about 45 percent of the state's total. The value of livestock and livestock products sold total about $168 million, or 28 percent of the Louisiana total.

omy of the Basin

While much of the Basin today is unsuitable for farming due to its wetland status, major crops include sugarcane, rice, soybeans and cotton.

The Atchafalaya Basin contains three distinct areas of landscape that provide some of the country's most productive wildlife and fish habitats. These areas include the northern region composed of bottomland hardwood forest, the middle region composed of cypress-willow-tupelow swamps, and the lower region of 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.

Over 250 species of birds, including the American Bald Eagle, Great Blue Heron and the Peregrine Falcon, can be found in this productive region.

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 about 15 years ago.

Parts of the Basin are also home to the American Bald Eagle, in addition to the endangered Louisiana Black Bear, Florida Panther, Peregrine Falcon and Bachman's Warbler. In fact, it is a haven for an estimated nine federal- and state-recognized endangered/threatened wildlife species, six endangered/threatened bird species, and twenty-nine rookeries. Over 40 reptilian species, including the American alligator and western cottonmouth can be found in the Basin, along with twenty species of amphibians.

The People, Wildlife and Economy of the Basin (continued)

The wetlands of the Atchafalaya Basin provide excellent feeding and resting areas for migratory waterfowl, making the area an important wintering area for mallards and gadwalls. Over 250 species of birds can be found in the Basin, including wood ducks, great blue herons and great egrets, which are common inhabitants of the shallow lakes and bayous.

With over 100 species of fish, crawfish, shrimp and crabs, recreational and commercial fishing play a significant role in the economy of the Atchafalaya Basin. Commercial fishing began here in 1873, and by the early 1900's, it 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. According to the Louisiana Department of Wildlife and Fisheries, the commercial fishing industry in the Atchafalaya Basin is valued at $95.7 million per year and the recreational fishing industry is valued at $47 million.

Crawfish are commonly associated with the cultural heritage of South Louisiana and the Basin, with images of crawfishermen and crawfish boils common to any story about the Cajun people. However, while crawfish have been eaten in Louisiana since before the arrival of the Europeans, the successful "mudbug" industry in the Atchafalaya Basin did not take off until the 1950's. According to the Louisiana Department of Wildlife and Fisheries, crawfishermen harvest an average of 10-15 million pounds of crawfish each year, making this the most profitable industry in the Basin. Alligators, turtles and bullfrogs are also commercially and recreationally harvested along the Atchafalaya, and crabbing and trapping remain integral parts of the Basin culture and economy, along with recreational pursuits like boating, water skiing, bird-watching, hiking and camping.

The landscape has changed since Native Americans first made their home on the grassy prairies and along the bayous of the Atchafalaya River Basin, but its natural beauty, ecological value and economic significance have endured for centuries. The current generation is challenged to preserve this unique Louisiana treasure so that many more generations of Louisianans can enjoy all that it has to offer.

- The Atchafalaya Basin is five times more productive than any other river Basin in North America.
- According to the La. Department of Wildlife & Fisheries, the commercial fishing industry in the Atchafalaya Basin is valued at $95.7 million per year, and the recreational fishing industry at $47 million annually.
- 100 species of fish and aquatic life can be found in the Basin.
- In 2008, approximately 14 million pounds of crawfish were harvested in the Basin, according to the La. Department of Wildlife & Fisheries.

A bountiful crawfish harvest. (above right)
Each sack holds about 40 lbs. of crawfish.

A hoopnet fisherman harvests Garfish,
Catfish and Gasper Goo, or Freshwater Drum.

Economic Impact of Travel in Atchafalaya Basin Parishes (2007)

Parish	Travel-related Expenditures	Jobs	Payroll	State Sales Tax Receipts	Local Sales Tax Receipts
Assumption	$ 10,710,000	70	$ 1,190,000	$ 580,000	$ 250,000
Avoyelles	$ 102,200,000	1,270	$ 24,310,000	$ 2,510,000	$ 1,650,00
Iberia	$ 44,380,000	410	$ 6,800,000	$ 2,180,000	$ 790,000
Iberville	$ 20,510,000	170	$ 3,110,000	$ 1,070,000	$ 860,000
Pointe Coupee	$ 10,180,000	80	$ 1,350,000	$ 490,000	$ 260,000
St. Landry	$ 88,050,000	650	$ 10,410,000	$ 4,940,000	$ 2,520,000
St. Martin	$ 28,810,000	170	$ 3,350,000	$ 1,380, 000	$ 1,530,000
St. Mary	$ 136,500,000	1,670	$ 31,210,000	$ 4,040,000	$ 2,300,000

Source: LA Dept. of Culture, Recreation, and Tourism

Approximately 30,270 hunting licenses were sold in or to residents of the Atchafalaya Basin parishes in 2007.

Brandon Soileau, 14, of Krotz Springs, poses with a 240-pound, 8-point buck he killed while hunting in the Sherburne Wildlife Management Area in November 2008. Soileau was able to hunt through a state program that allows wheelchair-bound hunters special assistance and access. Photo Courtesy of LA Dept. of Wildlife & Fisheries

New for 2009 – Atchafalaya Interactive

The Atchafalaya Basin Program has added a new feature to its website, giving the public the ability to share memories and experiences of working in the Basin or enjoying recreational time there, by posting photos on the site.

The photo upload feature provides people who live near, work in or visit the Basin a chance to directly participate in telling the story of the Basin and spread the word about one of Louisiana's signature attractions. We want to see sons and daughters catching their first fish, families cooking and playing at their camps, hunters who have bagged a buck, crawfish traps being pulled in, birds on the wing, trails no one else knows and fog on the water first thing in the morning – all of the aspects of life in the Basin that could not be widely shared until now.

The recently revamped web site —**basin.louisiana.gov**— better evokes the unique character of the Basin, and other new features provide real-time information, such as weather forecasts and water levels.

Visitors to the Atchafalaya Basin Visitors Center, 2004-2008: 420,176

Lake Fausse Point State Park

Annual Visitors: 75,000

Annual Economic Impact: $2.3 million

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 response to this expanded focus on the ecology of the Atchafalaya Basin, the Louisiana Department of Natural Resources (LDNR), in 1996, 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 completed that same year and approved unanimously by the 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 Black Bear Wildlife Refuge in Franklin, Louisiana, is home to the largest concentration of Louisiana Black Bears in America.

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, recreation, and enhancement 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.

FY 2010 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 their 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. It is divided into water management projects, access projects, and other projects consistent with the mission of the Atchafalaya Basin Master Plan.

Water management projects aim to accelerate restoration of the Atchafalaya Basin by facilitating improvement in water quality, interior circulation, water access, or improving the general ecosystem through sediment reduction, removal or diversion. Public access projects are focused on enhancing public use of the recreational opportunities, such as the construction or renovation of a boat launch or a roadway that provides access to areas of the Atchafalaya Basin, acquisition of a maximum of 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 natural treasure of Louisiana. 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 plan to the LDNR Secretary.

The TAG is a group of resource experts responsible for reviewing, evaluating and approving all water management and water quality projects for the Basin Program's 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 were confirmed by the Atchafalaya Basin Oversight Committee of the Louisiana Legislature on August 27, 2008.

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

The FY 2010 Annual Plan Process (continued)

Development

The FY 2010 Atchafalaya Basin Annual Plan was completed within a condensed time frame following the Summer 2008 adoption of authorizing legislation and the September landfalls of Hurricanes Gustav and Ike. The level of public involvement in the plan's development process, however, was not impacted.

Following public notice, public hearings were conducted in October 2008 in Plaquemine, Henderson and Morgan City to solicit ideas from local residents, property owners and interested citizens as to the projects they would like to see addressed in the FY 2010 Annual Plan. Members of the TAG subsequently met in public meetings on October 29 and December 4, 2008, and January 7 and January 27, 2009, to discuss these and other possible water quality/water management projects, and to determine the final list of these projects to be included in the Annual Plan.

The Research and Promotion Board held public hearings on February 9, 2009 in Plaquemine and February 11, 2009 in Henderson to accept public comments on the draft annual plan. Modifications resulting from public comment were considered when the Research and Promotion Board finalized the plan on February 19, 2009. The document was then submitted to the Louisiana Coastal Protection and Restoration Authority (CPRA) on March 18, 2009 for its review and approval as consistent with the Master Plan for Coastal Protection and Restoration. Once approved by CPRA, the FY 2010 Annual Plan was published and submitted to the Louisiana Legislature for consideration, in compliance with Act 606 of the 2008 Regular Session of the Louisiana Legislature.

Funding

Act 606 of the 2008 Regular Session of the Louisiana Legislature also creates the Atchafalaya Basin Conservation Fund 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, while the remaining 25 percent may be used to complete ongoing projects or for projects that are in accordance with the mission statement of the 1998 Atchafalaya Basin Master Plan.

Act 932 of the 2008 Regular Session of the Louisiana Legislature proposed a revenue source for the Atchafalaya Basin Conservation Fund. As written, the legislation would have provided for all oil and gas severance taxes collected from state owned lands within the Atchafalaya Basin guide levees, and 50 percent of state severance taxes not to exceed $10 million per year, to be deposited into the fund to finance annual plan projects. However, state law required Act 932 to be approved as a constitutional amendment by Louisiana voters, and the amendment failed to win approval in the November 2008 general election. As a result, implementation of Annual Plan projects continues to rely on traditional state and federal appropriations.

Current Challenges in the Basin

The Atchafalaya Basin is the nation's largest river swamp and one of America's most valued ecological resources. However, like many of America's 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, oilfield 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 and water hyacinth restricts access to many areas in the Basin and exacerbates hypoxic conditions in the swamps.
- **Land Use/Resource Issues** – Diverse and sometimes conflicting activities within the Basin occur with regard to flood control, commercial fisheries, navigational, petrochemical, recreational, environmental, and cultural interests.
- **Subsidence and Land Loss** – Areas within the Basin but outside the floodway lack sufficient sediment, resulting in subsidence and land-loss problems.

With the desire to address these challenges and stresses, the Technical Advisory Group, composed of experienced Basin scientists, reviewed, evaluated and approved the water quality / water management projects that are proposed for state funding in this FY 2010 Annual Plan. (See Appendix, page 23.) As a result of Hurricanes Gustav and Ike, the group worked within an abbreviated schedule in 2008-09 in order to properly analyze and submit water quality / management projects for funding consideration in FY 2010.

FY 2010 Project List

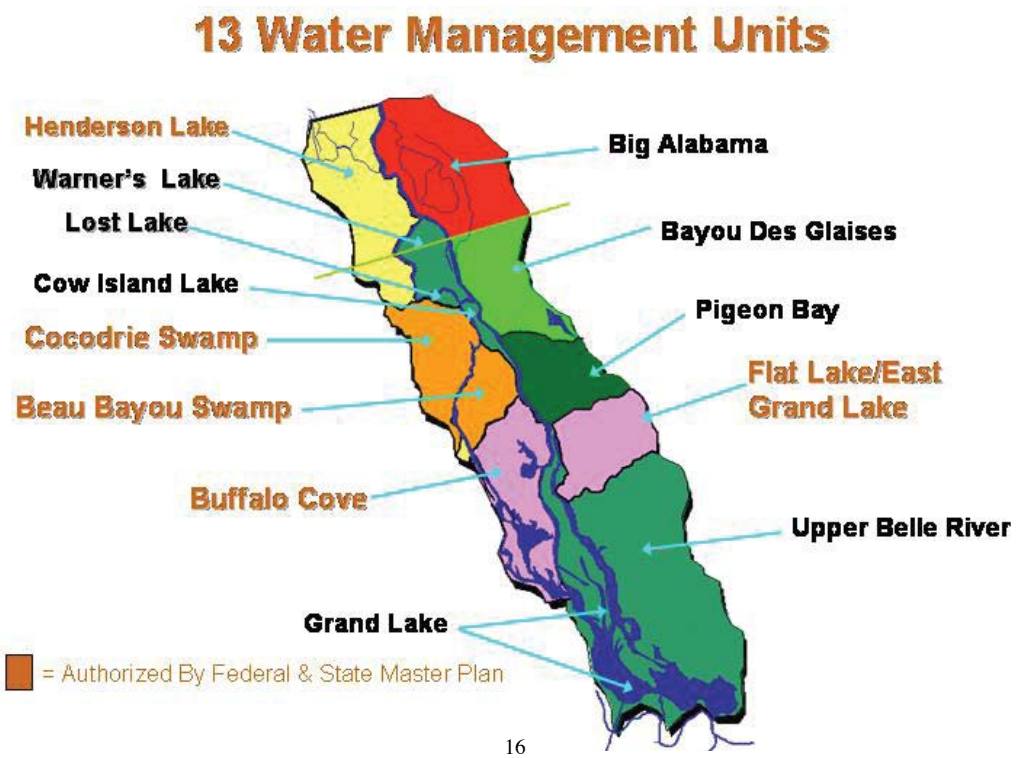
Water Quality / Water Management Projects

This category includes activities such as dredging, diversions, 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.

PROJECT	STATUS	FY 2010 STATE FUNDS REQUESTED
Atchafalaya Basin Natural Resource Inventory and Assessment Tool	Proposed	$ 1,500,000 (CPR Fund)
Dog Leg Canal Sediment Trap Maintenance Dredging	Proposed	$ 280,000 (Capital Outlay)
East Grand Lake/Flat Lake/ Upper Belle River WMU Modifications	Proposed	$ 700,000 (Capital Outlay)
* Beau Bayou Swamp Hydrologic Restoration	Planning/CIAP Funded	$ 0 (100% Parish Funded)
* Sherburne Freshwater Diversion at Big Alabama Bayou	Planning/USACE Funding TBD.	$ 0 (100% Federal - USACE)
* Buffalo Cove Water Management Project	Construction	$ 0 (100% Federal - USACE)
* Henderson WMU	Planning	$ 0 (100% Federal - USACE)
* Henderson Lake Access Channels	Permitting; funded for construction	$ 0

* denotes Ongoing Projects

Total FY 2010 State Funds Requested **$ 2,480,000**



Access and Habitat Restoration Projects

This category includes the construction or renovation of boat launches that provide access to areas of the Atchafalaya Basin, and habitat restoration projects as identified in Act 606 of the 2008 Regular Session of the Louisiana Legislature.

PROJECT	STATUS	FY 2010 STATE FUNDS REQUESTED
Krotz Springs Boat Launch	Design nearing completion; construction anticipated FY 2010	$ 670,000 (Capital Outlay)
Bayou Sorrel Boat Launch	Design nearing completion; construction anticipated FY 2011	$ 0
Myette Point Boat Launch	Currently under construction; completion anticipated Summer/Fall 2009	$ 0
Big Alabama Boat Launch Phase I	Currently under construction; completion anticipated Summer 2009	$ 0
Big Alabama Boat Launch Phase II	Proposed	$ 200,000 (Capital Outlay)
Bayou Amy Boat Launch	Project being designed	$ 0 (previously funded)
Bayou Benoit Boat Launch	Project being designed	$ 0 (previously funded)
Belle River Boat Launch	Plans being reviewed	$ 0 (previously funded)
Habitat Restoration	Proposed	$ 150,000 (Capital Outlay)

Total FY 2010 State Funds Requested **$ 1,020,000**

Water Quality / Water Management
PROJECT DESCRIPTIONS

Projects Requiring FY 2010 State Funding

Atchafalaya Basin Natural Resource Inventory and Assessment Tool

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 tool that has been proposed for inclusion in this year's plan will serve as the primary tool for decision making in the Basin. This tool will provide a means where scientists can access relevant project data for the Basin and provide a mechanism to request and fund data acquisition, monitoring, and data analysis to be used in project planning. This tool will be critical to providing information necessary to approve projects in future years and include them in subsequent annual plans for construction. The list of projects in the Appendix on page 27 along with a project proposal and public comments were provided to the Technical Advisory Group to be considered for the FY 2010 Annual Basin Plan. Concerns were raised that the impacts of these projects could not be adequately evaluated if they were not looked at on a system-wide basis. For example, the commercial crawfishing industry has recommended restoration of water flow in natural channels to improve water quality and access, while others have raised concerns that dredging of these channels may lead to increased sedimentation in down stream areas, without adequate sediment traps designed in the project(s). This assessment tool will allow for further evaluation and prioritization of projects such as these, with specific data acquisition, monitoring and data analysis of potential project areas. This will ensure the development and approval of specific projects to be included for construction in subsequent years that meet the needs of Louisiana's citizens and protect our natural resources.

This tool 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."

Dog Leg Canal Sediment Trap Maintenance Dredging

The Dog Leg Canal 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.

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 and 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 will be 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, and thereby improve water quality and habitat and reduce the sedimentation of waterways and lakes.

Ongoing 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.

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 proposed Beau Bayou hydrologic restoration project would 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. Any exposed spoil is to be vegetated with native plants.
- Gapping of the natural levee along the northern east section of Bayou L'Embarras to allow for the exchange of freshwater 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 $ 4,707,000 in Coastal Impact Assistance Program funds to advance the Beau Bayou project.

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.

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 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. It is approximately 50% complete at this time.

Henderson Water Management Unit (WMU)

In an October 2006 scoping report, the U.S. Army Corps of Engineers 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 was the main concern, followed by restoring 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.

Henderson Lake Access Channels
This project is being 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. Dredging will also create deep water fish habitat during low water periods. Survey data is being finalized and it is anticipated that revised permit drawings will be submitted to the U.S. Army Corps of Engineers in early 2009, followed by construction.

Access and Habitat Restoration
Project Descriptions

Krotz Springs Boat Launch

The Krotz Springs Boat Launch project in St. Landry Parish is the subject of a cooperative agreement between the State of Louisiana and the Greater Krotz Springs Port Commission. The U.S. Army Corps of Engineers is expected to provide the federal match for construction. The Research and Promotion Board first approved the project in 2006. The facility will consist of coordinated signage to the site and improved access from the service road, construction of a new concrete three-lane boat launch with floating courtesy dock, renovation of the existing launch into a canoe launch, expansion of parking area, security lighting, landscaping and curbing.

Bayou Sorrel Boat Launch

The Bayou Sorrel Boat Launch project in Iberville Parish is the subject of a cooperative agreement between the State of Louisiana and Iberville Parish Government. The U.S. Army Corps of Engineers is expected to provide the federal match for construction. The Research and Promotion Board approved this project in 2005. The proposed project consists of two new concrete ramps with five-lanes each, a new floating courtesy dock adjacent to one of the ramps, and a relocated floating courtesy dock adjacent to the other ramp; concrete landings adjacent to the boat ramps; expanding and improving a crushed stone parking area; security and restroom shelter; access roads; demolition of the existing ramp; electrical service to power and light the security building and restrooms and light the parking area and boat ramp.

Myette Point Boat Launch

The Myette Point Boat Launch project is the subject of a cooperative agreement between the U.S. Army Corps of Engineers 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. Completion is scheduled for late summer/early fall 2009.

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.

Big Alabama Boat Launch Phase I

This new two-lane boat launch, with a center pedestrian pier is already funded and under construction at this time. This facility is located in Pointe Coupee Parish in the state owned Sherburne Wildlife Management Area, located in the Morganza Floodway system of the Atchafalaya Basin. 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.

Big Alabama Boat Launch Phase II

The 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 first phase of this boat launch project which renovated the existing boat launch did not contain adequate funds for other needed improvements. This second phase will include improvements to the boat launch parking lot, the addition of a handicapped accessible fishing pier, and a modular restroom facility.

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 pavillion, self guided nature boardwalk, and a restroom facility.

Bayou Benoit Boat Launch

The improvements to this boat launch are already funded and are currently being designed; final plans should be ready soon. This launch was originally constructed with grant funds from a Wallop-Breaux Grant. Planned improvements will consist of the construction of a floating dock to allow boaters to tie up their boats while parking trailers.

Belle River Boat Launch

This project is already funded and involves the installation of restroom facilities at the existing Belle River boat launch. The plans and specifications for this building were drawn up by DOTD, and are currently being reviewed by the Division of Administration, Office of Facility Planning and Control. Construction should be completed in the summer of 2009. The boat launch is operated and maintained by the Atchafalaya Basin Levee District.

Habitat Restoration

This project will provide for habitat restoration through vegetative plantings in areas that are or were impacted by construction activities in the Basin. In addition, monitoring of the success of the habitat restoration will be performed to ensure that goals have been met.

The Atchafalaya Basin Program has a number of ongoing recreation projects. These projects, or stages of projects, are already funded, and Cooperative Endeavor Agreements already exist. The projects are: Assumption Veterans Park, Avoyelles Interpretive Plaza, Avoyelles Sarto Bridge, Avoyelles Simmesport Park, Belle River Park, Camp Atchafalaya, Cajun Coast Tourism Center, Catahoula Park Improvements, Dick Davis Park, Eagle Point Park, Harry Hewes House, Iberville Welcome Center, Lake End Park, LePromenade de Pont Breaux, Opelousas Gateway, Pointe Coupee Doris Park and Stephensville Park.

This funding request has been prepared in consideration of the current national and state economic conditions. However, it is recognized that the Atachafalaya Basin has additional needs that exceed this funding level. In the event funding beyond the FY 2010 requested level becomes available during the legislative process, the Atchafalaya Basin Research and Promotion Board will provide a list of projects for consideration to the Joint Legislative Committee on Natural Resources, that 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 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 Basin Master Plan;**
5. **A project to be completed which was previously approved by the board.**

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. To date, the U.S. Army Corps of Engineers has acquired 47,297 acres in Fee 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. To date, the U.S. Army Corps of Engineers has acquired 111,689 acres of comprehensive easement toward an authorized 367,000 acres.

Appendix

Atchafalaya Basin Water Management Technical Advisory Group

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February 3, 2009

Mr. Stephen Chustz, Acting Director
Atchafalaya Basin Program
Louisiana Department of Natural Resources
P. O. Box 94396
Baton Rouge, Louisiana 70804-9396

Re: List of approved projects

Dear Mr. Chustz

Attached please find the list of projects that have been approved by the Technical Advisory Group of the Atchafalaya Basin, in accordance with House Bill 1135 of the Regular Session of the Louisiana Legislature, for inclusion in the 2009 Annual Basin Plan. If you have any questions or would like additional information please contact me at any time.

Sincerely,

Mike Wood, Chairman
Technical Advisory Group

MW:SC:aw
Enclosure

TECHNICAL ADVISORY GROUP
Atchafalaya Basin Water Management
Post Office Box 94396 - Baton Rouge, Louisiana 70804-9396
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Project Title – Atchafalaya Basin Natural Resource Inventory and Assessment Tool

Type of Problem – Data Acquisition, Assessment, and Centralization Services for the Atchafalaya Basin Program and the Atchafalaya Basin Technical Advisory Group (TAG)

Nominating Party – By the TAG through requests from stakeholders of the Atchafalaya Basin

Statement of Problem – The TAG has no independent means of gathering and analyzing information relevant to specific projects and how they fit into the overall ecology of the Atchafalaya Basin. Further, there is no mechanism through which data acquisition, specific analysis, ecological assessments, and the development of GIS products can be produced at the requests of the TAG or the ABP, and made available to other important programs, like the Coastal Restoration Program, that will also need these data.

Proposed Work Area – Atchafalaya Basin Floodway System

Action Description – The TAG is requesting that a sufficient account of pertinent information be centralized, summarized, and made available in GIS format when appropriate to account for environmental conditions, ecosystem functions, and project related changes in the ABFS.

Proposed Project to Address Problem – The Atchafalaya Basin Natural Resource Inventory and Assessment Tool is a means by which the TAG and other managers can access data relevant to the Atchafalaya Basin from which to evaluate potential projects. It also provides a mechanism, administered through the Atchafalaya Basin Program, to request and fund specific data acquisition, monitoring, data analysis, and ecological and socioeconomic assessments, and system-wide planning that aid in making project recommendations.

Request for Evaluation – This project will be comprised of evaluation and assessment of habitat conditions and processes.

Summary and Analysis - This proposal addresses a need identified by the scientific community, stakeholders of the Atchafalaya Basin Floodway System (ABFS), the Louisiana Department of Natural Resource's Atchafalaya Basin Program ABP), and the New Orleans District of the United States Army Corps of Engineers (NOD) for an environmental inventory, an assessment of how the Basin's natural resources function, and a standardized central tool from which all agencies can evaluate change. Over past decades there have been numerous environmental, commercial, and recreational activities or events that have altered the landscape and function of the ABFS. Regardless whether those changes are the result of stochastic geophysical process or human activity, there is a need to evaluate and track environmental change in a preset manner from a common set of data. Managers, particularly those responsible for the natural resources of the ABFS, realize that no such account of environmental conditions exists. A great deal of time and money has been invested in gathering environmental data over past decades and investment in those data can produce a more comprehensive environmental assessment from which to coordinate management within the ABFS, as well as with other interests like coastal restoration and gulf hypoxia that go beyond the flood protection levees. This proposal describes the common intentions of researchers and managers to integrate data, implement current technology, and to develop partnerships as necessary components of any effective planning process.

Project Title - Maintenance dredging of the sediment trap at the opening of Dogleg Canal

Type of Problem – Sedimentation

Background: The U.S. Army of Corps of Engineers (COE) was requested by the Louisiana Governors Office in early 1996 to open the Dogleg Canal to the Atchafalaya River to allow freshwater to flow into the area of the Atchafalaya Basin between East Grand Lake to the east, west to the Atchafalaya River, south to southern extent of Schwing Chute, and north to Texas Gas pipeline canal. The request was made by the State on behalf of commercial fishing interests to improve water quality, primarily dissolved oxygen levels in water, while minimizing sediment impacts in the targeted mentioned area.

The COE excavated a minimum opening in the existing earthen closure at the Dogleg (Closure No. 15), located on the east bank of the Atchafalaya Basin main channel at approximate river mile 94.2. The bottom of the cut was dug to about 10 feet wide at an elevation of +8.0 to 10.0 feet National Geodetic Vertical Datum (NGVD). The cut was designed to be 4 to 6 feet deep, with side slopes of 1v: 2H and a top width of 26 to 34 feet at an approximate elevation of +14.0 feet NVGD. The cut extended 600-700 feet away from the river. The cut started at the earthen barrier that separated the canal from the river, not at the river itself.

The Dogleg Canal opening provided a provisional method of re-introducing highly-oxygenated river water into the Schwing Cove/Schwing Chute area during high river stages of late winter and early spring, when low water temperatures reduced bacterial decomposition activity. The canal also refreshed the backswamp areas near Schwing Cove by providing flow during intermediate and lower river stages.

The success of the Dogleg opening was due in part to an existing “punch bowl” opening between the river and the canal that served as a “natural” sediment trap. The bowl-like outline of the opening reduced the velocity of the water exiting the river into the canal by creating several large back eddies that facilitated deposition of suspended sediment before it entered the Dogleg Canal. Unfortunately the “punch bowl” is almost completely filled by sediment allowing more sediment to leave the river and accrete at the eddies formed at the opening of the canal and at the end of the canal where a debris dam exists potentially shortening the useful life of this freshwater diversion.

Nominating Party – The TAG

Statement of Problem - The sediment trap (punch bowl) at the entrance to Dogleg has filled in and ceased to function as a trap for sediment. This has caused sediment to be transported further into the canal potentially decreasing the canals ability to transport freshwater into the swamp adjoining the canal.

Proposed Work Area - Location: Lat: 29.54.43.01 N
Lon: 91.27.21.33 W

Action Description - Dredge out the sediment trap between the Atchafalaya River and the Dogleg Canal to its original dimensions and restore its functionality as a sediment trap.

Proposed Project to Address Problem - USGS and LWFS personnel prior to dredging will flag the outline of the sediment trap. Original COE implementation plans/designs will be utilized to determine the elevations the sediment trap will be dredged to and spoil will be deposited into the river to be transported naturally to the coast to aid in coastal restoration. It is critical that the opening from the river into the sediment trap not be opened any wider that the width that existed when the cut was first opened. Dredge method will be either suction or bucket, but has not yet been determined.

Request for Evaluation – This project will be comprised of evaluation and assessment of habitat conditions and processes.

Project Title - Development of a complete and specific plan to address water quality and sedimentation in East Grand Lake/Flat Lake WMU through modification of water and sediment inputs

Type of Problem – Water Quality and Sedimentation

Nominating Party – By the TAG through requests from stakeholders of the Atchafalaya Basin

Statement of Problem – Aquatic habitat conditions in the East Grand Lake and Flat Lake Water Management Units (WMU) (See Figure 1) vary with the annual flood cycle and have been shown to deteriorate and become unsuitable for the appropriate growth and health of forest and aquatic organisms develop for some period each year. The primary cause of this annual problem limited water flow much of the WMU because spoil deposition from canal construction, dredging for navigation, and flood-driven sediment deposition patterns blocks water movement and causes hypoxia. The artificially maintained hydrology causes the routing of sediment to deep-water fisheries habitat, and results in the filling and loss this habitat. It also starves other areas of valuable sediment that is necessary for proper forest development.

Proposed Work Area - The planning of environmental management will begin in the East Grand Lake and Flat Lake WMUs, with the primary focus of this first iteration in planning to consider these 5 inputs to the WMU: Bayou Sorrel, American Pass, Blue Point Chute, Coon Trap Weir, Indigo Bayou, and the Dog Leg Canal (See figure 2).

Action Description - To develop a plan that outlines specific modifications to the water management unit to realign water flow patterns in the WMU and to strategically redirect sediment in a manner that minimizes the filling of waterways and lakes and benefits forest development.

Proposed Project to Address Problem – The project will not include construction items in this annual plan. The result of the Action Description will be a specific list of construction items to accomplish water and sediment realignment.

Request for Evaluation – This project will be comprised of evaluation and assessment of habitat conditions and processes.

Summary and Analysis - Many scientific studies have been completed in this area and there is a significant knowledge base from which to evaluate environmental conditions and biological processes in this part of the ABFS. Those studies show that open-water areas that provide valuable only low-water refuge for fish are becoming scarce through time. Less than 13% of the entire floodway is now open-water and only a subset of that habitat is capable of providing this type of fisheries refuge. If the current trend in loss of open-water habitat continues, the population stability of some fish species Atchafalaya Basin will diminish. Water distribution into the WMU should be more evenly distributed so that manner. Sediment distribution studies confirm that faster moving water in channels carry sediment farther into the WMU. LIDAR imagery shows the development of higher elevations along the banks of delivery channels sustains current velocity and sediment delivery to interior waterways. Sediment is delivered farther and farther into the interior in the process and eventually interior waterways provide a route for most of the water to bypass the floodplain as it segments the WMU into ever smaller isolated areas.

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

• Lake Fausse Pointe

• Lake Dauterive

• Henderson Lake WMU
– Open top and bottom locks
– Indian Bayou
– Dixie Pipeline Canal

• Cocodrie Swamp WMU
– Bayou LaRose
– Bayou Garofier
– Guidry Road
– Bayou Livingston
– Bayou Cocodrie

• Beau Bayou Swamp WMU
– Little LaRompe
– Ripley Bayou
– Bayou LaRose
– Bayou DePlombe
– 400 Dollar Bayou
– Bayou Ella & Bayou May

• Buffalo Cove WMU
– Bayou Jean Louis
– T-Bayou Chene
– Bayou Crook Chene @Wanda Pipeline
– Bayou Eugene
– Red Bayou
– Mile Point Bayou
– Phillips Canal above Amerada Hess

• Grand Lake WMU
– Blue Point Chute

• Big Alabama WMU
– Alabama Bayou
– Bayou Des Glaises
– Brown Bayou
– Bristol Bayou
– King's Ditch
– Cow Bayou
– Pat's Throat
– Work Canal

• Pigeon Bay WMU
– Hog Island Pass
– Sawyer's Cove
– Jakes Bayou

• Flat Lake/East Grand Lake WMU
– Bayou Sorrel
– Murphy Lake
– Williams Canal
– Bee Bayou
– Keelboat Pass

• Upper Belle River WMU
– Big Bayou Pigeon confluence with Little Bayou Pigeon
– Little Bayou Pigeon From Texaco Canal to Grand Lake
– Little Bayou Long
– Bayou Mallet
– DOE/21" Canal
– 16" Canal
– Big Fork Canal
– Lower End of Grand Lake
– Duck Lake
– Bayou Boutee
– American Pass

References

The following publications and sources were referenced in the development of the 2009 Atchafalaya Basin Annual Plan:

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