Explore Louisiana's Great River Swamp

The Atchafalaya



US Army Corps of Engineers ® New Orleans District

Introduction alaya

As the Atchafalaya River flows through southeast Louisiana, its muddy waters shape and sustain a landscape of remarkable beauty. The Atchafalaya Basin, one of America's last great river swamps, stretches across 1.2 million acres, from Simmesport to the Gulf of Mexico. A rich diversity of plant and animal life thrives in the basin's bottomland hardwood forests and marshes, which support highly productive fisheries and hunting grounds and nearly 300 species of native and migratory birds. Visitors exploring



Shatters Bayou

the Atchafalaya Basin by boat or bicycle or on foot experience a Louisiana wilderness that looks much as it did when the first European settlers arrived nearly 300 years ago.

Many generations of Louisianians have hunted, harvested, fished and farmed the Atchafalaya Basin's abundant natural resources. These activities continue, but today the basin serves an additional purpose: protecting southern Louisiana from potentially devastating Mississippi River floods.

At the top of the basin, projects built by the U.S. Army Corps of Engineers divert half the Mississippi's flood flow to the Gulf of Mexico via the Atchafalaya River. Within the basin's southern two-thirds — the Atchafalaya's 833,000-acre floodplain — Corps' management efforts protect the unique ecosystem and offer hunters, fishermen, birders and others access to this wild, natural landscape.

Fighting the flood: the Atchafalaya Basin Floodway

The Atchafalaya River's springtime flooding nourishes the basin's forested wetlands and cypress and tupelo swamps. The region's role in flood protection, however, evolved from the springtime flood of another river — the great Mississippi.

Breaching levees, drowning crops, inundating towns and paralyzing industry, the Mississippi River flood of 1927 was among the most destructive in U.S. history. Over an 11-month period, the flood displaced nearly 700,000 Americans,



People on levee during 1927 flood

killed hundreds and caused close to \$400 million in property damage — the equivalent of \$10 billion in today's dollars. As it devastated communities from Illinois to Louisiana, the flood created national awareness of the river's deadly potential.

Recognizing the need for comprehensive flood protection along the Missisippi, Congress passed the Flood Control Act of 1928. The legislation directed the Corps of Engineers to develop and implement the Mississippi **River & Tribtaries** (MR&T) project, the nation's first long-term flood management program.

The MR&T project consists of four components:

- · levees to contain the river system
- channel improvements such as dredging to increase the rivers' flood-carrying capacity and improve navigation



Ariel view of Henderson swamp

- basin improvements such as dams, reservoirs, pumping stations and auxiliary channels to improve drainage and flood control
- *floodways* to provide outlets for excess flows

The MR&T project was designed to safely channel a flood of up to three million cubic feet per second (cfs) — a flow even larger than the 1927 inundation — to the Gulf of Mexico. Half of this flood, 1.5 million cfs, would pass through the lower Atchafalaya Basin via the MR&T-designated Atchafalaya Basin Floodway.

Shaping the floodway

As part of the MR& T project, in the 1940s and 1950s, the Corps built locks, pumping stations and drainage structures to channel excess water into the floodway, prevent floodwaters from inundating areas outside the floodway and permit boat traffic through the basin. These structures, located at the floodway's margins, are still in use today and include:

- the Bayou Sorrel, Bayou Boeuf and Berwick locks
- the Bayou Courtableau and Bayou Darbonne control structures
- the Charenton and East and West Calumet floodgates

• the Pointe Coupee pumping station

It became evident in the 1950s that the Mississippi was in danger of being "captured" by the Atchafalaya. Allowing the Mississippi's flow to divert to the smaller river would prove disastrous not only for communities along the Atchafalaya Basin but also for cities such as New Orleans that were economically dependent upon the Mississippi's present route. Completed in 1963, the Old River control structure near Simmesport prevents the Mississippi River's current from joining the Atchafalaya. Today, the Atchafalaya River receives waters from the Red River and from the portion of the Mississippi that is diverted through the Old River structure.



Berwick Lock

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Key events in the Atchafalaya Basin's history

1927: Along the Mississippi River from Illinois to Louisiana, the most destructive river flood in U.S. history displaced some 700,000 Americans. 1928: Congress passed the Flood Control Act of 1928, authorizing the Mississippi River & Tributaries project and designating the Atchafalaya Basin Floodway as the major outlet for flood flows on the lower Mississippi River. 1930s–1940s: Early efforts to control Mississippi River floods in the Atchafalaya Basin focused on building guide levees and dredging the Atchafalaya River to increase its capacity.







1954: The Corps undertook a major effort to further increase the Atchafalaya River's capacity by dredging the channel, building spoil banks to confine the flow and closing off 22 distributaries.

1963: The Old River Control structure was built to prevent the capture of the Mississippi River by the Atchafalaya.

1968: Dredging of the Atchafalaya River was discontinued due to environmental concerns and lack of funding.

1972: Congress directed the Corps to look beyond flood control and develop a plan to manage and preserve the water and land resources of the Atchafalaya Basin. **1982:** After 10 years of research, public debate and coordination with multiple state and federal agencies, the Corps released a study outlining a balanced approach to water resource problems in the basin.

1988: The Corps began work on the Atchafalaya Basin Floodway System Project.







Protecting the land; passing the flood

For decades the Corps dredged the Atchafalaya River, increasing its capacity so the river could handle floodwaters from the Mississippi. By the early 1970s, however, environmental concerns brought an end to dredging operations. Congress directed the Corps to develop a compromise between the need for flood control and concerns for the environment.

In 1982, after 10 years of research, public debate and coordination with multiple state and federal agencies, the Corps released a study outlining a balanced approach to water resource problems in the basin: the Atchafalaya Basin Floodway System (ABFS) project.

Spanning 595,000 acres in the Atchafalaya River floodplain, the ABFS project area is 15 miles wide, reaching from U.S. 190 in the north to Morgan City in the south. Split down the middle by the Atchafalaya River and a series of manmade waterways that form the Atchafalaya Basin Main Channel, the floodway is confined by more than 400 miles of levees. By preserving and restoring the floodway's natural hydrology, the ABFS project ensures the Atchafalaya's floodwaters can flow safely to the Gulf of Mexico.

With the co-sponsorship of the Louisiana Department of Natural Resources, the Corps began work on the ABFS project in 1988. To date the Corps has spent \$108 million, most of it to begin the acquisition of 388,000 acres of floodway lands; the Corps owns 50,000 acres of this land and has purchased easements



Roseate Spoonbill

over privately owned property. The estimated total project cost, including real estate purchases and recreational development, is \$230 million.

Protective easements

Within the ABFS project area, the Corps has purchased approximately 110,000 acres of the authorized 338,000 acres of protective easements. These easements leave the property in private ownership, not open to public access, but the following restrictions apply: Owners can continue to use their properties for existing purposes but may not build new structures or obstruct the flow of water across their land without a written consent from the Corps. A process is in place to handle these requests. The Corps also limits timber harvesting to preserve vital wildlife habitat and the aesthetic values of the basin.

Water management units

As the Atchafalaya River's muddy floodwaters wash over the land, they leave behind silt and sand. Built up over time, this sediment can prevent the flow of water through the floodway. And while a wetland that receives too little sediment will starve, too much sediment can eventually choke off wetland vegetation and aquatic life. By designating water management units (WMUs) within the floodway, the Corps controls the movement of sediment to preserve the area's unique habitat.

Within three WMUs — Buffalo Cove, Henderson Lake and Flat Lake — the Corps raises and lowers natural or manmade levees and opens, closes and realigns channels to improve water flow. In the



Henderson Swamp

Henderson WMU, the Corps and the state of Louisiana have also addressed the growth of two invasive aquatic plants: hydrilla, by lowering the lake's water level; and water hyacinth, by spraying with herbicides.

Resource development

The Atchafalaya Basin boasts abundant natural resources — highly productive commercial fisheries, agricultural lands, oil and gas fields and commercial forests. The Corps allows development of these resources provided it does not interfere with floodway operations or the project's environmental protection purposes.

Recreation and public access

Some of the country's best outdoor recreation is found in the scenic cypress swamps, lazy bayous and hardwood forests of the Atchafalaya Basin Floodway. Here hunters,



Male Wood Duck

fishermen, bird watchers, hikers, paddlers, bicyclists and others enjoy a unique wilderness experience yearround. Working with state and other federal agencies, the Corps of Engineers provides public access to the basin, supported by minimal development that ensures protection of the area's remarkable habitat.

Public access lands

Access to the basin's wilderness areas is permitted on lands managed by the Corps of Engineers, the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and Fisheries. Recreational development of these lands is accomplished by the Corps in conjunction with other federal agencies, the state and local parishes. Nearly 17,000 acres of Corpsowned bottomland hardwoods comprise Bayou des Ourses (Bayou of the Bears). Located at the northeastern end of the floodway, Bayou des Ourses is part of a 44,000-acre tract of protected land that includes the Atchafalaya National Wildlife Refuge and Sherburne Wildlife Management Area (WMA). Managed as a single unit by the Louisiana Department of Wildlife and Fisheries, these three areas offer excellent hunting and fishing, complemented by all-weather roads, ATV trails, two campgrounds, a shooting range and boat launches.

Across the Atchafalaya River from the Sherburne WMA complex lies **Indian Bayou**, 28,500 acres of forest, swampland, bayous and lakes managed by the Corps of Engineers. Although park benches and picnic



Atchafalaya Basin



Henderson Swamp

tables are located at some of the area's more scenic spots development is limited in most of the basin. Twenty-five miles of trails facilitate hiking, biking and horseback riding. A 17-mile marked paddling trail lets visitors tour the bayou without a guide.

At the basin's southwestern edge near Charenton and the Attakapas Wildlife Management Area, **Shat**- ters Bayou consists of approximately 2,000 acres of cypress and tupelo swampland in an area known for bountiful small and large game, furbearers, crawfish, and game fish. Nearly 50,000 acres of Corps-owned land within the Atchafalaya Basin Floodway System project is accessible to the public.

In partnership with the state of Louisiana, the Corps plans to develop

an additional 1,500 acres of land to offer recreational opportunities such as:

- campgrounds for recreational vehicles, tents and primitive camping
- paddling, hiking, biking and interpretive trails
- \cdot a visitor center
- boat landings that feature access roads, parking, lighting, restrooms, drinking water, piers and launch ramps

Co-sponsored by Avoyelles Parish, a boat launch at Simmesport has been built and boat launches are planned for Myette Point, Krotz Springs, Butte La Rose, Bayou Pigeon and Bayou Sorrel.

Hunting and fishing

The Atchafalaya Basin's great diversity of wildlife includes abundant game, big and small, including white-tailed deer, fox squirrel, gray squirrel, swamp rabbit, turkey, woodcock, waterfowl and furbearers such as nutria and mink. To access the hunting grounds, ATVs are permitted on designated trails. A Corps-managed 350-acre tract within Indian Bayou is the first public land in Louisiana to provide an area specifically for wheelchairbound hunters.

Throughout the basin, lakes and waterways feature excellent recreational and commercial fishing. The most popular catches include

- · catfish
- \cdot sunfish (bream)
- · crappie (sac-a-lait)

- · freshwater drum (gasper-gou)
- · yellow, striped and largemouth bass

Blue crab, shrimp and crawfish are harvested recreationally and commercially in the basin.



Fishing in the Atchafalaya Basin

Birding and nature watching

Nearly 300 species of native and migratory birds have been observed in the Atchafalaya Basin, including songbirds, raptors, pipers, plovers and waterfowl. Here they find prime nesting, resting and breeding habitat. An important wintering area for waterfowl on the Mississippi Flyway, the basin is part



Wood Stork Birding Event

of the America's Wetland Birding Trail (*www.americaswetland.com*) and offers extraordinary birdwatching opportunities year-round.

The basin boasts a great diversity of other wildlife, including:

· 45 species of mammals

- numerous reptiles and amphibians, such as the American alligator and 24 snake species
- endangered or threatened species including the Louisiana black bear, Florida panther, bald eagle, piping plover, Bachman's warbler and Arctic peregrine falcon

Boating and paddling

Many visitors traverse the Atchafalaya Basin Floodway as the region's early inhabitants did: by boat. Though most modern paddlers choose canoes and kayaks over dugouts and pirogues, their experience on the basin's lakes, bayous, swamps and creeks is much the same, offering close-up views of



American Alligator

cypress swamps and wetlands and the creatures that inhabit them.

The Corps of Engineers, in partnership with Atchafalaya Paddling Trails, the state of Louisiana and volunteers, has mapped out a network of paddling trails in the Atchafalaya Basin (www.atchafalayapaddletrails. org). Marked by reflective blue-andwhite posts, these trails allow visitors to navigate the bayou without a guide.



Canoeing on Bayou Courtableau



Trail Ride on Indian Bayou

Hiking, biking and horseback riding

For hikers, horseback riders and mountain bikers, the Corps of Engineers has developed and maintains more than 30 miles of trails crisscrossing the public access areas of the Atchafalaya Basin Floodway.

Events in the Atchafalaya Basin

Communities of the Atchafalaya Basin host a variety of cultural and outdoors events throughout the year. For current information about planned events in the basin, visit *www.atchafalaya.org*.

STEP OUTSIDE ® Day provides a free, fun, hands-on introduction to



Duck calling STEP OUTSIDE Event



Archery at STEP OUTSIDE

the outdoors for children, families and people with disabilities. Activities include fishing, skeet shooting, archery, bird watching, photography, crafts and boat rides. The event is held each May at the Sherburne Wildlife Management Area; for more information, call the Corps of Engineers at (337) 585-0853.



Fishing on Henderson Swamp

Hunting and fishing seasons in the Basin

The following chart is a guide to the hunting and fishing seasons in the Atchafalaya Basin. The basin is made up of private and public lands. Hunting seasons are different in these areas. To verify season dates prior to going into the field, visit the web site, www.wlf.state.la.us.

Hunting and Fishing Seasons in the Basin

Deer:

Archery: October thru mid-February* Muzzle-loader: November thru January* Without dogs: November thru December* With or without dogs: November thru January*

Quail: mid-November thru late February

Rabbit: October thru late February

Squirrel: October thru late February

Turkey: late March thru mid-April

Waterfowl: September thru January*

Fishing season: year-round

Shrimping: early to mid-May–July and mid-August–December

*Start and end dates for these seasons vary by hunting method and location. Visit *www.wlf.state.la.us* for current, specific information.





Wild Flowers

Safety tips

The Atchafalaya Basin Floodway is a multi-use area. The Corps of Engineers encourages visitors to exercise caution and common sense.

Prior to your trip, visit the U.S. Army Corps of Engineers web site, *www.mvn.usace.army.mil*, click "Recreation," then click "Atchafalaya Basin Floodway System." Detailed hunting safety guidelines are available through this site, as are maps for some public access areas of the floodway.



Paddling Trail Head

While in the basin, observe all posted rules, regulations and safety guidelines, and read notices posted on bulletin boards throughout Corps' public access areas. Be alert to dangers posed by insects, snakes, alligators and poisonous plants. Be sure someone knows where you're going and when you expect to return in case you need help.



Contact Information a

For more information about the Atchafalaya Basin, contact us:

U.S. Army Corps of Engineers New Orleans District Public Affairs Office P.O. Box 60267 New Orleans, LA 70160-0267 (504) 862-2201 www.mvn.usace.army.mil Atchafalaya Basin Welcome Center 8:30 a.m. to 5:00 p.m., seven days a week Interstate 10 at exit 121 Butte La Rose, Louisiana (337) 228-1094 *dnr.louisiana.gov/sec/atchafalaya/wcenter.ssi* The welcome center is operated by the Louisiana Departments of Natural Resources (DNR), Culture, Recreation and Tourism (CRT), and Transportation and Development (DOTD).

photos courtesy of the U.S. Army Corps of Engineers, New Orleans District

