

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

AQUATIC VEGETATION MANAGEMENT PLAN

ATCHAFALAYA BASIN

(Updated March, 2013)

WATERBODY TYPE

Impounded swamp

Owners – State of Louisiana, U.S. Fish and Wildlife Service, U.S. Corps of Engineers and private land owners.

Purposes for creation – Flood control and navigation

CONTROL STRUCTURE

The Old River Flood Control Structure

Located at the divergence of the Mississippi and Atchafalaya Rivers in Concordia Parish, it consists of four dams and an outflow channel. Construction of the structures was completed in different years.

Purpose- to divert 30% of the Mississippi River flow into the Atchafalaya River.

OLD RIVER CONTROL STRUCTURE COMPLETION	
STRUCTURE	DATE COMPLETED
Overbank structure	1958
Low sill dam and outflow channel	1963
Auxiliary structure	1986
Auxiliary structure with power plant	1986

Henderson Lake Drawdown Structure

Located in St. Martin Parish, south of Henderson Lake in the Borrow canal adjacent to the West Atchafalaya Basin Protection Levee. The drawdown structure is a gated system that can be opened to allow ingress and egress of boat traffic and used for drawdowns. It is recommended that water is released at no more than 2-4 inches/day. At this rate it would take roughly 14 days to draw the lake down to 7.0 ft. MSL.

Spillway—100ft. wide

Gate size—Gate system (open/close)

Number of gates -NA

Condition—Fair to good (repaired structure in January & February 2006)

Flow rate -NA

WATER LEVEL RANGE

Water levels vary with flood stage. Historical crest of 27.28 ft. on May 23, 1973 at the Butte la Rose gauge. Low water record of 0.33 ft. on October 17, 1976 at the Butte la Rose gauge.

SURFACE AREA RANGE

Size- 833,000 acres of land, swamp and water. The actual acreage of water varies with flood stage.

AVERAGE DEPTH

Not calculated

WATERSHED RATIO

River overflow basin that receives 30% of the water draining from 41 % of the continental United States. The area of this catchment, 1,245,000 square miles, provides an immense opportunity for rainfall to affect the water levels of the Atchafalaya basin at any time.

WATERBODY BOARD OR LAKE COMMISSION

Atchafalaya Basin Program
Louisiana Department of Wildlife and Fisheries
Louisiana Department of Natural Resources

Henderson Lake

LDWF- New Iberia (337) 373-0032

U.S. Army Corps of Engineers- Port Barre, LA (337) 585- 0853

St. Martin Land Company - (337) 228-7501

USAGE

Activities related to the oil and natural gas industry and to commercial navigation are widespread throughout the Atchafalaya Basin.

Non-consumptive

Bird watching, related eco-tours, sight-seeing, camps and houseboats.

Hunting

Duck hunting, small game hunting, deer hunting, turkey hunting, alligator harvesting, trapping.

Fishing

Recreational and commercial fishing, recreational and commercial crawfishing, recreational and commercial frogging, plus recreational and commercial crabbing are all part of the many activities occurring in the basin at one time or another.

AQUATIC VEGETATION COMPLAINTS

Annual spray requests are received from fishermen, hunters, and camp owners. The majority of these requests are to clear floating plants (mainly water hyacinth, giant salvinia and common salvinia) to provide access to fishing and hunting areas, and camps. Past requests have been minimal.

CONTROVERSIAL ISSUES

The biggest controversial issue in the Basin is land ownership and expending funds on private versus public bodies of water. Sometimes complaints are received from recreational or commercial anglers for clearing a navigable pathway through what turns out to be private property.

AQUATIC VEGETATION STATUS

Floating exotic species present the most problems. With a constant river flow through the Basin, these plants are continuously moving with the current and eventually pile up in the main channels causing limited or no access to boaters. Water hyacinth, common salvinia, and giant salvinia are the floating plants that cause the most problems. Emergent species such as sedge, alligator weed, and primrose present minimal problems at times. The total number of acres of aquatic plants in the Basin has not been calculated due to the vastness of the system and the constantly changing water levels which alter plant coverage, especially floating species.

LIMITATIONS

Since the Basin is an overflow swamp, much of the area infested with aquatic vegetation is inaccessible due to standing timber and shallow water. This results in most LDWF spray efforts being conducted in the main channels.

Due to a constant river flow, herbicides such as Sonar and Galleon are ineffective in a large portion of the Basin. The current carries the herbicide downstream reducing the necessary concentrations. During low water periods river flow is cut off from some areas (such as Henderson Lake) and Sonar or Galleon would then be effective in these situations.

Commercial crawfish harvesters claim to have higher harvest rates when crawfishing in areas infested with aquatic vegetation. Spraying herbicides in these areas are scaled back or halted during the crawfish season.

PAST CONTROL MEASURES

Aquatic plant control is conducted by Departmental spray crews who apply herbicides that are EPA approved for use in aquatic areas. Spray crews in the Atchafalaya Basin spray approximately 9,000 acres of aquatic plant infestations annually. The infestations that are targeted for spraying consist of approximately 90% floating species (water hyacinth, common salvinia, giant salvinia) and 10% emergent species (sedge, alligator weed, and primrose).

The Department has been introducing salvinia weevils onto salvinia plants in various portions of the state to serve as an aid in controlling salvinia infestations. Since the summer of 2007, approximately 78,000 weevils have been released on salvinia infestations in the Bayou Postillion and Bayou Long areas. Weevil damage to salvinia plants has been observed in and around the release sites. Past surveys have shown that the weevils have survived the winters and are spreading into new areas where salvinia infestations are present.

During 2012, LDWF District 9 spray crews treated 1,140 acres of giant salvinia using 877 gallons of Aquamaster; 1,002 acres of water hyacinth with 500 gallons of 2,4-D; 892 acres of sedge (Cuban bulrush) with 686 gallons of Aquamaster; 80 acres of common salvinia with 62 gallons of Aquamaster; 55 acres of alligator weed with 28 gallons of 2,4-D; 3 acres of coontail with 1 gallon of Galleon; and 2 acres of duckweed with 1 gallon of Galleon.

RECOMMENDATIONS

2013 recommendations for the Atchafalaya Basin include:

Utilize Departmental spray crews to continue applying EPA approved herbicides onto aquatic plant infestations. Water hyacinth will be controlled with 2,4-D (0.5 gal/acre). Both common and giant salvinia will be controlled with a mix of glyphosate (0.75 gal/acre) and diquat (0.25 gal/acre) with Aqua King Plus (0.25 gal/acre) and Thoroughbred (8 oz/acre) surfactants from April 1 to October 31. Outside of that time frame, diquat (0.75 gal/acre) and a non-ionic surfactant (0.25 gal/acre) will be used. Sedge will be controlled with the aforementioned salvinia treatments if it is associated with those plants. If it is targeted specifically, diquat (0.75 gal/acre) or glyphosate (0.75 gal/acre) can be used in conjunction with a non-ionic surfactant (0.25 gal/acre). If necessary, private contract applicators will be used to assist with herbicide treatments.

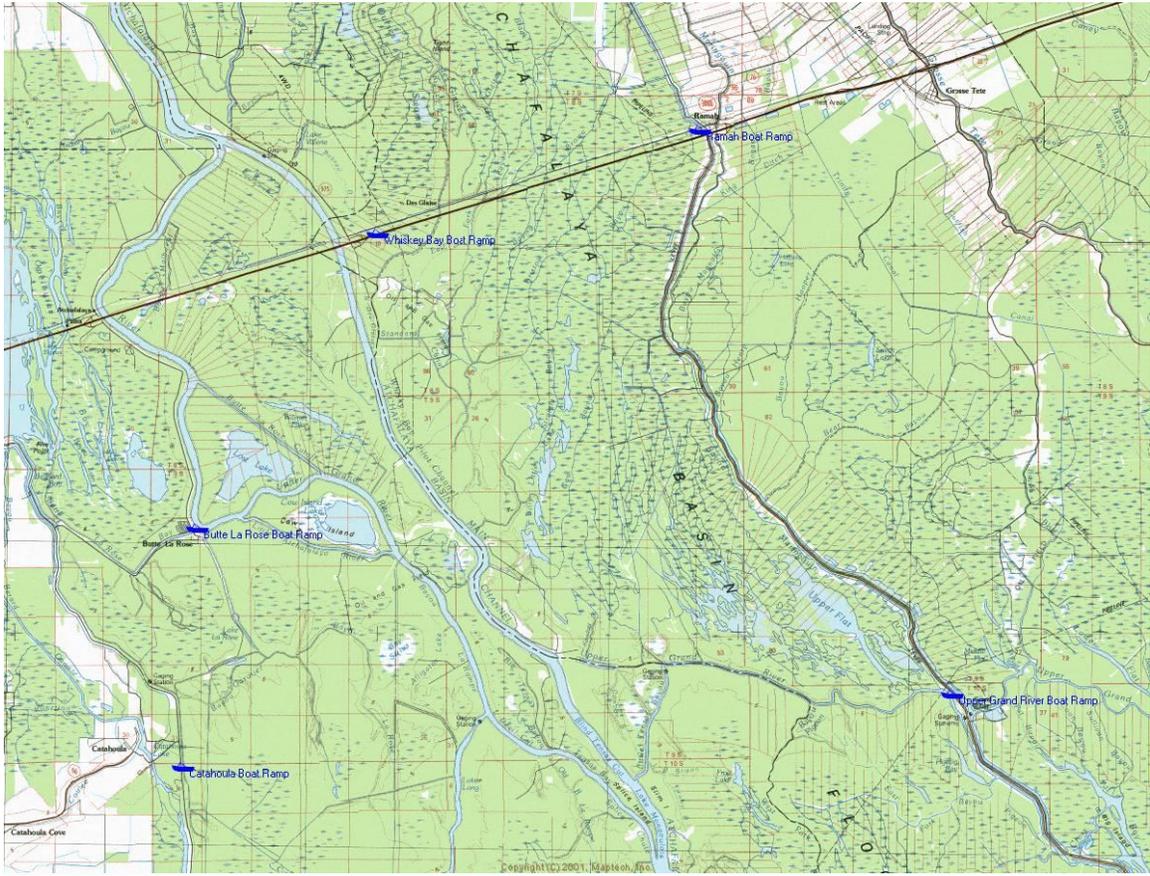
If necessary, use Sonar or Galleon in areas where favorable conditions persist.

Continue releasing giant salvinia weevils in areas of heavy infestation.

Access Maps

Atchafalaya Basin

NORTH RAMPS



MID-BASIN RAMPS



SOUTH RAMPS

