

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

DUBUISSON LAKE

LAKE HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

February 2014 - Prepared by
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LAKE HISTORY

GENERAL INFORMATION

Date reservoir formed

Dubuisson Lake is a 200 acre man-made lake adjacent to Interstate 49 (I-49) four miles north of Grand Prairie, Louisiana in St. Landry Parish ([APPENDIX I](#)). The borrow fill dirt from this lake was used to construct I-49 and build a rest area adjacent to the lake in 1981. This waterbody is surrounded by agricultural fields and a small block of hardwood forest. The majority of the lake has deep water (25-30 feet) but is very shallow near the shoreline and is void of any trees or woody debris. The water clarity is generally turbid year round due to runoff from irrigation and row crop practices, but develops a plankton bloom in the late summer months.

Impoundment

Owner – Department of Transportation & Development (DOTD)

Purposes for creation – recreational activities (e.g., rest area, fishing, boating, and site seeing).

Size

200 acres

Water shed

Unknown

Pool stage

N/A

Parish/s located

Located adjacent to I-49 (east side) near rest area in St. Landry parish four miles north of Grand Prairie, Louisiana. Dubuisson Lake is situated at: Latitude 30.433689 and Longitude 92.065752.

Drawdown description

There is no control structure in this lake. There is a levee around the lake with natural drainage areas where water enters and exits the lake.

LAKE AUTHORITY

Department of Transportation and Development owns the lake and the Louisiana Department of Wildlife & Fisheries (LDWF) manages the fish and wildlife resources.

LDWF – Opelousas, LA (337) 948-0255

Authorization

Department of Transportation & Development (DOTD)
428 Hugh Wallis Rd
Lafayette, La. 70586

Mike Moss

(337) 262 – 6102

mike.moss@la.gov

ACCESS

Map of lake ([APPENDIX II](#)).

Boat docks

1 boat ramp

Piers

None

SHORELINE DEVELOPMENT

Shoreline development by landowners

The shoreline on the south end of the lake consists of a rest area and a boat launch. The north, east and west ends have some timber but mostly agricultural fields.

PHYSICAL DESCRIPTION OF THE WATER BODY

Aquatic habitat consists of drop offs and artificial structure made up of tree limbs and shrubs which fishermen have placed in the lake. Presently there is no aquatic vegetation found within the lake.

Shoreline length

2.92 miles of shoreline

Timber type

No trees within the lake, but black willow (*Salix nigra*) trees grow along the perimeter of the lake.

Average depth

12 feet

Maximum depth

30 feet

Natural seasonal water fluctuation

Annual water level fluctuation is typically about 2-3 feet.

EVENTS / PROBLEMS

Siltation is occurring along the shoreline as a result of adjacent agricultural fields.

Dubuisson Lake is a small waterbody which is visited by many users groups, such as recreational fishermen, skiers, and boaters. Fishermen have complained that numerous skiers interrupt fishing activities.

MANAGEMENT ISSUES

AQUATIC VEGETATION

Dubuisson Lake has no submerged or floating aquatic vegetation. Spray crews have never had to apply herbicides in the lake.

Aquatic vegetation investigations will continue. If vegetation becomes a problem, spray herbicides will be used as a control measure.

Type map

No type maps available

Biomass

N/A

Treatment history by year available

Biological

N/A

Chemical

No herbicides have been used

Physical

N/A

HISTORY OF REGULATIONS

Recreational

Statewide regulations for all fish species, the recreational fishing regulations may be viewed at this link: <http://www.wlf.louisiana.gov/fishing/regulations>

Commercial

Commercial fishing is allowed but seldom fished; the commercial fishing regulations may be viewed at this link: <http://www.wlf.louisiana.gov/fishing/regulations>

DRAWDOWN HISTORY

There has never been a drawdown. There is a levee around the lake with natural drainage areas where water enters and exits the lake. Water levels have receded 3-4 feet in the past, but that was due to drought conditions in 1999 and 2000.

FISH KILLS / DISEASE HISTORY

A fish kill occurred on 09/17/2008 after dissolved oxygen levels plummeted following the passage of Hurricane Gustav. Numerous game fish such as largemouth bass and crappie were found dead throughout the lake. Other species such as shad, buffalo and catfishes also perished in this event.

CONTAMINANTS / POLLUTION

Water quality

Water parameters measured at the surface and near the bottom during each standardized sample include temperature, dissolved oxygen, pH, and conductivity.

The Louisiana Department of Environmental Quality (LDEQ) collects fish species in water-bodies throughout the state, in order to determine mercury concentrations in fish. No Samples were taken in Dubuisson Lake.

<http://www.deq.louisiana.gov/portal/PROGRAMS/MercuryInitiative.aspx>

BIOLOGICAL

Fish sampling history

Techniques used for standardized sampling by LDWF including electrofishing, entanglement gear, and water quality have provided necessary data related to managing Dubuisson Lake fish populations.

Note: All standardized sampling data collected by Inland Fisheries from 1965 through present are computerized.

Gear

Table 3. Historical and present gear types employed to sample fish populations in Dubuisson Lake, Louisiana from 1990 – 2014.

Dubuisson Lake Fisheries Sampling	
Year	Sampling Method
1990	Electrofishing
2001	Electrofishing
2002	Gill nets
2003	Electrofishing, Hoop nets
2009	Electrofishing
2012	Electrofishing, Forage
2014	Electrofishing, Forage, Lead nets
2015	Gill nets
2016	Electrofishing, Forage

Electrofishing equipment along with other sampling gear such as lead nets and gill nets, allow biologists to understand and evaluate fish populations and return many fish to the water alive.

Lake records

Based on informal records maintained by LDWF fisheries biologists, the largest bass caught in Dubuisson Lake was in 2007 and weighed 9.3 pounds.

Stocking history

The total number of fish stocked by species into Dubuisson Lake, Louisiana from 2009 – 2011 is presented in Table 4.

Table 4. Fish stocking history of Dubuisson Lake, LA from 2009 to 2011.

YEAR	FLORIDA LARGEMOUTH BASS	CHANNEL CATFISH
2009	10,350	2,414
2011	2,016	1,986
Totals	12,366	4,400

All Florida largemouth bass were stocked as fingerlings, ranging from 1- 2 inches in total length. All largemouth bass were released by boat throughout the lake in suitable habitat, such as drop offs and artificial structure made up of tree limbs and shrubs which fishermen have placed in the lake.

Species profile

Table 6. List of fish species collected by LDWF or are known to occur in Dubuisson Lake, Louisiana.

Lamprey Family, PETROMYZONTIDAE

Southern brook lamprey, *Ichthyomyzon gagei* Hubbs and Trautman

Garfish Family, LEPISOSTEIDAE

Spotted gar, *Lepisosteus oculatus* (Winchell)

Bowfin Family, AMIIDAE

Bowfin, *Amia calva* Linnaeus

Freshwater Eel Family, ANGUILLIDAE

American eel, *Anguilla rostrata* (Lesueur)

Herring Family, CLUPEIDAE

Gizzard shad, *Dorosoma cepedianum* (Lesueur)

Threadfin shad, *Dorosoma petenense* (Günther)

Minnow Family, CYPRINIDAE

Common Carp, *Cyprinus carpio* Linnaeus

Cypress minnow, *Hybognathus hayi* Jordan

Weed shiner, *Notropis texanus* (Girard)

Blacktail shiner, *Notropis venusta* (Girard)

Red shiner, *Notropis lutrensis* (Baird and Girard)

Golden shiner, *Notemigonus crysoleucas* (Mitchill)

Pugnose minnow, *Notropis emiliae* Hay

Bullhead minnow, *Pimephales vigilax* (Baird and Girard)

Sucker Family, CATOSTOMIDAE

Lake chubsucker, *Erimyzon sucetta* (Lacépède)

Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)

Bigmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)

Freshwater Catfish Family, ICTALURIDAE

Black bullhead, *Ameiurus melas* (Rafinesque)
Yellow bullhead, *Ameiurus natalis* (Lesueur)
Channel catfish, *Ictalurus punctatus* (Rafinesque)
Blue catfish, *Ictalurus furcatus*, (Lesueur)
Black madtom, *Noturus funebris* (Gilbert and Swain)
Tadpole madtom, *Noturus gyrinus* (Mitchill)

Pirate Perch Family, APHREDODERIDAE

Pirate perch, *Aphredoderus sayanus* (Gilliams)

Killifish Family, CYPRINODONTIDAE

Golden topminnow, *Fundulus chrysotus* (Günther)
Starhead topminnow, *Fundulus nottii* (Agassiz)
Blackstripe topminnow, *Fundulus notatus* (Rafinesque)
Blackspeckled topminnow, *Fundulus olivaceus* (Storer)

Livebearer Family, POECILIIDAE

Western mosquitofish, *Gambusia affinis* (Baird and Girard)
Sailfin molly, *Poecilia latipinna* (Lesueur)

Silverside Family, ATHERINIDAE

Brook silverside, *Labidesthes sicculus* (Cope)

Sunfish Family, CENTRARCHIDAE

Banded pygmy sunfish, *Elassoma zonatum* Jordan
Green sunfish, *Lepomis cyanellus* Rafinesque
Warmouth, *Lepomis gulosus* (Cuvier)
Orangespotted sunfish, *Lepomis humilis* (Girard)
Bluegill, *Lepomis macrochirus* (Rafinesque)
Dollar sunfish, *Lepomis marginatus* (Holbrook)
Longear sunfish, *Lepomis megalotis* (Rafinesque)
Redear sunfish, *Lepomis microlophus* (Günther)

Spotted sunfish, *Lepomis miniatus* (Valenciennes)
Bantam sunfish, *Lepomis symmetricus* Forbes
Florida largemouth bass, *Micropterus floridanus* Kassler et al.
Northern largemouth bass, *Micropterus salmoides* (Lacépède)
White crappie, *Pomoxis annularis* Rafinesque
Black crappie, *Pomoxis nigromaculatus* (Lesueur)

Perch Family, PERCIDAE

Bluntnose darter, *Etheostoma chlorosomum* (Hay)
Slough darter, *Etheostoma gracile* (Girard)
Cypress darter, *Etheostoma proeliare* (Hay)
Logperch, *Percina caprodes* (Rafinesque)

Drum Family, SCIAENIDAE

Freshwater drum, *Aplodinotus grunniens* Rafinesque

Nomenclature and phylogenetic order follows Nelson, *et al.* 2004. Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 6th Edition. American Fisheries Society Special Publication 29. 386 pp. Exceptions are noted.

Threatened/endangered/exotic species

No T&E or endangered species documented in Dubuisson Lake to date.

Creel

No creel surveys were conducted in Dubuisson Lake.

HYDROLOGICAL CHANGES

This lake is turbid especially after heavy rain events, and remains turbid throughout the year. The only time the lake develops a plankton bloom is during the summer months when rain events are minimal.

Water use

Hunting

No

Skiing

Yes

Scuba Diving
No

Swimming
Yes

Irrigation
No

APPENDIX I

(return to date formed)

Louisiana Office of State Lands		Asset Management Report - 5/9/2011	
4-49-021		DOTD I-49 REST AREA - GRAND PRAIRIE	
Vicinity Map		Site Map	
			
Status:	Active	Setup Date:	5/31/1997
Department:	DEPT OF TRANSPORTATION & DEVEL		
Agency:	TRANS & DEV OFF OF THE SEC		
Group:	REST STOPS		
Function:	REST AREA		
Facility:	DOTD I-49 REST AREA - GRAND PRAIRIE		
Address1:	I-49 NORTH OF OPLEOUSAS		
Address2:			
City:	GRAND PRAIRIE	State:	LA
Contact:	Mike Moss	Zip:	
E-Mail:	mike.moss@la.gov	Phone:	(337)262-6102
<hr/>			
Land Acquisition:	\$123,239.00	Minerals:	MIXED
Convey Docs:	7	First Date:	1/16/1981
Ownership:	OWNED		
Acreege:			
Total:	205.92	Owned:	205.92
		Leased:	0
		Transfer:	0
		R.O.W.:	0
Buildings:			
Active Bldgs:	3	Area (Sq Ft):	3,434
		Replacement Cost:	\$603,688.00
Description:	VARIOUS PARCELS IN SEC 1, 2, 11 & 12, T4S-R3E ON I-49 APPROX 10 MILES NORTH OF OPLEOUSAS.		
Notes:	DOTD PROVIDED SOME (BUT NOT ALL) CONVEY DOCUMENTS-ACREAGE INCOMPLETE.		
<hr/>			
Approx. Land Value:	\$35,000.00	Approx. Timber Value:	\$0.00
Approx. Total Value:	\$638,688.00		
Ann. Operating/Maint. Expense:	\$177,471.00		
Estimated Maintenance Backlog:	\$100,000.00		
Current State of Utilization:	Interstate Rest Area in service		
Recommendations for Future Utilization:			

APPENDIX II

[\(return to map\)](#)

Dubuisson Lake Map

