

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

INDIAN CREEK LAKE

LAKE HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

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TABLE OF CONTENTS

LAKE HISTORY	5
GENERAL INFORMATION	5
<i>Date reservoir formed.....</i>	<i>5</i>
<i>Impoundment</i>	<i>5</i>
<i>Size.....</i>	<i>5</i>
<i>Water shed.....</i>	<i>5</i>
<i>Pool stage.....</i>	<i>5</i>
<i>Parish/s located</i>	<i>5</i>
<i>Drawdown description.....</i>	<i>5</i>
<i>Who controls.....</i>	<i>6</i>
LAKE AUTHORITY.....	6
<i>Lake Association.....</i>	<i>6</i>
<i>Authorization</i>	<i>6</i>
<i>Boat docks</i>	<i>7</i>
<i>Piers.....</i>	<i>7</i>
<i>State/Federal Facilities</i>	<i>7</i>
<i>State/National Parks.....</i>	<i>7</i>
<i>Shoreline development by landowners.....</i>	<i>7</i>
PHYSICAL DESCRIPTION OF LAKE.....	7
<i>Shoreline length.....</i>	<i>7</i>
<i>Timber type.....</i>	<i>7</i>
<i>Average depth.....</i>	<i>7</i>
<i>Maximum depth</i>	<i>8</i>
<i>Natural seasonal water fluctuation.....</i>	<i>8</i>
EVENTS / PROBLEMS.....	8
MANAGEMENT ISSUES	8
AQUATIC VEGETATION.....	8
<i>Biomass.....</i>	<i>10</i>
<i>Treatment history by year available</i>	<i>10</i>
HISTORY OF REGULATIONS.....	12
<i>Recreational.....</i>	<i>12</i>
<i>Commercial</i>	<i>12</i>
DRAWDOWN HISTORY	13
<i>Purpose.....</i>	<i>13</i>
<i>Success.....</i>	<i>13</i>
<i>Fishing closure</i>	<i>13</i>
<i>Depth below pool.....</i>	<i>13</i>
<i>Estimated % exposed.....</i>	<i>13</i>
<i>Who operated structure?</i>	<i>13</i>
<i>Fish kills</i>	<i>13</i>
FISH KILLS / DISEASE HISTORY, LMBV	14
CONTAMINANTS / POLLUTION.....	14
<i>Water level.....</i>	<i>14</i>
BIOLOGICAL.....	14
<i>Fish samples</i>	<i>14</i>
<i>Lake records</i>	<i>15</i>
<i>Stocking History</i>	<i>15</i>
<i>Species profile.....</i>	<i>16</i>
<i>Genetics</i>	<i>18</i>

<i>Threatened/endangered/exotic species</i>	19
CREEL	19
HYDROLOGICAL CHANGES	19
WATER USE	19
<i>Hunting</i>	19
<i>Recreational watersports</i>	19
<i>Fishing</i>	19
<i>Scuba Diving</i>	19
<i>Swimming</i>	20
<i>Irrigation</i>	20
APPENDIX I	21
APPENDIX II	22
APPENDIX III	24
APPENDIX IV	25

LAKE HISTORY

General Information

Date reservoir formed

Louisiana House Bill No. 963 in the regular session of 1964 authorized the Rapides Parish Police Jury to construct a dam and reservoir on Indian Creek within the Bayou Boeuf Watershed. To review HB 963 see [Appendix I](#).

Indian Creek Lake dam construction began in 1968 and was completed in 1972.

Impoundment

Ownership – House Bill No. 963 authorized the Rapides Parish Police Jury to construct Indian Creek Reservoir either acting alone or in cooperation with the United States of America.

Purposes for creation – First priority is for agriculture irrigation. The Police Jury has established a dedicated drawdown pool to 76.0 MSL (10.5' below pool) if needed to meet agricultural needs by route of Bayou Boeuf. Secondary purpose was to enhance wildlife & fisheries habitat and provide recreational opportunities for the citizens of the state.

Size

2,250 acres

Water shed

23.9 square miles (ratio 6.8:1) of pineland in south Rapides Parish

Pool stage

86.5 mean sea level (MSL)

Parish/s located

Rapides

Drawdown description

During normal drawdowns for lake management the water is lowered 3 to 4 inches per 24 hour period. The maximum drawdown rate is undocumented however according to elevations listed in Louisiana Department of Transportation and Development (LADOTD) dam inspection documents the water level can be lowered 24 feet.

Spillway

The principle spillway is 80 feet wide with a crest elevation of 86.5 feet MSL. The spillway is located on the north end of lake on the east side.

Description of the Dam

Indian Creek Dam consists of two earthen embankments, separated by 2,900 feet of natural ground. The overall total length of the dam is about 7,900 feet.

Dam height is 37 feet.
Structural height is 42 feet.
Hydraulic height is 37 feet.
Maximum discharge is 3,680 cubic feet per second
Maximum storage is 38,200 acre-feet.
Normal storage is 25,000 acre-feet.
Surface area is 2,250 acres.
Drainage area is 24 square miles.

Outlet Works (Drawdown Structure)

The outlet works consists of a 10' x 10' square concrete tower. It is topped with 1-72 inch slide gate. The slide gate is an Armco Model 35-05C set at an invert elevation of 62.5 feet MSL. The outflow pipe is 72 inches in diameter and 272 feet long. It is pre-stressed round concrete pipe.

Who controls

Spillway opening is on an as needed basis for irrigation. Gate opening is handled by the Rapides Parish Police Jury (RPPJ) or Department of Agriculture personnel. Openings at the request of LDWF for habitat or fisheries management purposes must be approved by RPPJ.

Lake Authority

Indian Creek Reservoir is owned by the Rapides Parish Police Jury. Through interagency agreement with the Louisiana Forestry Commission and the United States Department of Agriculture Soil Conservation Service, RPPJ is responsible for maintenance and operation of the impoundment. See [Appendix II](#).

Primary contact information-

Rapides Parish Police Jury
P.O. Box 792
Alexandria, LA. 71301
Tel: 318-473-6660
Fax: 318-473-6670

Lake Association

Citizen's Group- Indian Creek Lake Environmental Association
P.O. Box 725
Lecompte, LA. 71346
President – John Carter

Authorization

No official authorization, the Indian Creek Lake Environmental Association is a self-

organized group of concerned citizens.

Access

Maps with locations (see [Appendix III](#))

1. Indian Creek Recreation Area Boat Ramp – concrete ramp- Fee Required
2. Long Field Road Ramp – No Fee/ Rough- sand and gravel ramp
3. Martin Springs Boat Ramp – concrete ramp - No Fee

Boat docks

No public boat docks

Piers

No public fishing piers are available. A limited number of private piers associated with homes and camps.

State/Federal Facilities

LDWF Booker Fowler Fish Hatchery utilizes Indian Creek Lake water for hatchery production.

Indian Creek Recreation Area is located on the shoreline of the reservoir. It is owned and operated by the Louisiana Department of Agriculture and Forestry (LDAF). The recreation area is used extensively for camping.

LDWF Wildlife Division operates the Alexander State Forest WMA on lands located adjacent to much of the lake. The lake is included as part of the WMA.

State/National Parks

NONE

Shoreline development by landowners

Approximately 10% of the shoreline is developed by landowners with homes and camps. The majority of the shoreline property is owned by state lands. It is managed for timber production by the Louisiana Department of Agriculture and Forestry.

Physical Description of lake

Shoreline length

35.3 miles

Timber type

Indian Creek is an open water lake. Approximately 30% of the lake has visible dead timber above the water line. No live timber is found in the lake.

Average depth

11 feet

Maximum depth

25 feet

Natural seasonal water fluctuation

Due to the extremely small watershed (6.8 : 1), water levels rarely rise above the normal pool elevation. However, normal low water fluctuations of 1' to 2' are common due to agriculture irrigation.

Events / Problems

The invasive aquatic plant, hydrilla (*Hydrilla verticillata*) is causing problems for recreational users of the lake. However, the complex cover provided by hydrilla is associated with some benefit to sport fisheries.

MANAGEMENT ISSUES

Aquatic Vegetation

Indian Creek has been surveyed (type mapped) for aquatic vegetation 15 times since 1983. In the 1980's, native aquatic vegetation was predominantly found in the shallow water areas of the lake. Submersed vegetation included fanwort (*Cabomba caroliniana*.) and coontail (*Ceratophyllum demersum*). Emergent vegetation included white water lily (*Nymphaea odorata*) and American lotus (*Nelumbo lutea*). Type maps conducted in the 1990's reported the lake to be in excellent condition with no aquatic vegetation issues. Only small amounts of native submergents were found during this time period. Emergent vegetation was primarily American lotus and white water lily. It was during this time period that cutgrass (*Zizaniopsis* spp.) became established in the lake. It is currently found along the majority of the shoreline. This is beneficial because it helps to reduce shoreline erosion.

Hydrilla was first reported in the lake in the late 1990's and was first listed on the 2000 type map. By 2002, it could be found growing out to the 12 foot contour in some locations. Since that time, hydrilla has been a constant problem. It precludes access for anglers and recreational boaters. It causes aesthetic problems at the Indian Creek recreation area by encroaching upon the beaches at the three designated swimming areas.

Shoreline blockage is an issue for boaters wishing to access the camping area from the water. Booker Fowler Fish Hatchery had problems with hydrilla blocking the water intake in 2010 and 2011. Numerous complaints are received annually from home and camp owners around the reservoir as well. The majority of the shallow water areas within the reservoir and the shoreline around the entire reservoir were matted with hydrilla.

Herbicide applications utilizing aquathol super k at a rate of 4.5 pounds per acre foot were conducted in 2008 and 2010 for hydrilla control. The treatment areas were approximately

200 acres in size. The areas selected were in the vicinity of the Indian Creek Recreation Area and the area of the lake that is developed with homes and camps. Herbicide applications were successful in reducing the amount of hydrilla in the treated areas. However, benefits were short-lived and hydrilla returned in the treated areas during the second growing season. Small scale in-water herbicide applications have proven to be ineffective for long-term hydrilla control.

Another herbicide application was conducted on April 10, 2012. The treatment areas were approximately 200 acres in size. The areas selected for treatment were in the vicinity of the Indian Creek Recreation Area and the area of the lake that is developed with homes and camps. Herbicide applications were successful in reducing the amount of hydrilla in the treated areas. A total of 830 gallons of Aquathol K® were applied at a rate of 4.2 gallons per acre-foot of water. The results of the treatment were positive and the majority of the hydrilla in the treated areas was killed. However, the use of biannual herbicide applications to control hydrilla in high use areas has been and will continue to be labor intensive and cost prohibitive.

Triploid grass carp (TGC), when stocked at the appropriate rates, have proven to be effective at controlling submergent vegetation, especially hydrilla. Due to the limited effectiveness of herbicide treatments discussed above, and the numerous problems associated with the use of drawdowns, triploid grass carp have been introduced as a control measure. Three thousand (3000) TGC were stocked at 5 locations around the lake on May 11, 2012. The 8" to 12" fish were stocked at a rate of 3 fish per vegetated acre. Booker Fowler Fish hatchery stocked an additional five (5) TGC that were 38" TL into the lake on November 15, 2012. Annual vegetation surveys are being conducted each summer (July - August) to determine the success of the TGC in reducing hydrilla growth.

Giant salvinia (*Salvinia molesta*) was discovered in the lake in 2008, but has not caused major problems to date.

The most recent vegetation survey in Indian Creek Reservoir was conducted on July 1 and July 16, 2015. Hydrilla continued to be problematic. It was matted to the surface out to the 13 foot depth contour and covered approximately 1,000 acres or 50% on the lake's surface area. There was a fringe of giant cutgrass along 75 % of the shoreline and approximately 30 acres of American lotus in the lake. Both common and giant salvinia were found in the reservoir, but were not causing serious problems. Coverage was less than 100 acres. However, herbicide applications are required two to four days per month to keep it from becoming problematic. Alligator weed was present, but did not cause problems. It was sprayed incidentally during applications to control salvinia. Hydrilla is expected to continue to be a problem in 2016, and coverage should be near 1,000 acres. Giant salvinia acreage may approach 300 acres due to the mild winter in 2015/2016.

Type map

A total of 15 vegetation surveys (type maps) have been conducted on Indian Creek Lake between 1983 and 2015. The surveys were conducted in 1983, 1984, 1988, 1991, 1992, 1993, 1995, 1997, 1999, 2000, 2007, 2008, 2009, 2012, 2014 and 2015. Vegetative type maps can be viewed in **Appendix IV**.

Biomass

No biomass sampling has been conducted.

Treatment history by year available

Biological

Triploid grass carp (TGC) were stocked into the lake on May 11, 2012. The TGC were stocked at a rate of three fish per vegetated acre. A total of three thousand (3,000) carp between 8” and 12” long were released at 5 sites around the lake.

An additional stocking of three-thousand (3,000) TGC were stocked in the fall of 2015. This stocking increased the TGC stocking rate to 6 fish per acre of submersed vegetation.

Chemical

LDWF spray crews utilize foliar herbicide applications as periodic complaints are received from the public. Also maintenance spraying is conducted two to four days per month, primarily to prevent the spread of giant salvinia. For a complete summary of herbicide applications see Table 1.

Herbicide applications in the past have been applied at the following rates:

Aquathol Super K (granular): Used at a rate of 4.5 pounds per acre foot to treat hydrilla early in the spring when water temperatures are cool.

Aquathol K (liquid): Used at a rate of 4.2 gallons per acre foot to treat hydrilla.

Glyphosate (Aquamaster, Aquastar, etc.): Used at a rate of 0.75 gallons per acre to treat alligator weed, water hyacinth, and giant and common salvinia during the active growing period.

Diquat (Reward, Knockout): Used at a rate of 0.75 gallons per acre to treat alligator weed, water hyacinth, and giant and common salvinia during the slower growing period or winter months.

Surfactant is added at a rate of 1:4 (surfactant: herbicide) for all herbicides.

Future herbicide applications for the treatment of giant and common salvinia will be in accordance with the LDWF Aquatic Herbicide Application Procedures. Schedule and rates listed below:

April 1-October 31: glyphosate (0.75 gal/acre)/diquat (0.25 gal/acre)/Turbulence (0.25 gal/acre)

November 1 – March 31: diquat (0.75 gal./acre)/90:10 nonionic surfactant (0.25 gal/acre)

Physical Characteristics

Indian Creek has been drawn down 3 times since hydrilla was discovered in the lake in the late 1990's. The first scheduled drawdown was in 2002. This drawdown was unsuccessful due to extensive rainfall. The drawdowns that occurred in 2003 and 2005 did provide some short-term reduction in hydrilla biomass in shallow water areas.

Table 1. Herbicide applications in Indian Creek Lake, Louisiana from 2005 to present.

Year	Acres Treated	Vegetation
2007	7	Alligator Weed
	7	American Lotus
	7	Giant Cutgrass
	7	Water Lily
2008	18	Alligator Weed
	74	American Lotus
	68	Giant Cutgrass
	147	hydrilla
	117	Common Salvinia
	35	Giant Salvinia
	44	Water Lily
2009	20	Alligator Weed
	15	American Lotus
	118	Giant Cutgrass
	32	Common Salvinia
	4	Water Shield
2010	60	Alligator Weed
	70	American Lotus
	30	Giant Cutgrass

	200	Hydrilla
	4	Giant Salvinia
2011	5	Alligator Weed
	3	American Lotus
	21	Giant Cutgrass
	70	Giant Salvinia
2012	27	Alligator Weed
	53	American Lotus
	34	Giant Cut Grass
	198	Hydrilla
	319	Giant Salvinia
2013	3	Alligator Weed
	122	American Lotus
	4	Common Salvinia
	1285	Giant Salvinia
	7	Water Shield
2014	1	Alligator Weed
	74	American Lotus
	5	Giant Cut Grass
	290	Giant Salvinia
2015	5	Alligator Weed
	128	American Lotus
	862	Giant Salvinia

History of Regulations

Recreational

Statewide regulations for all fish species, the recreational fishing regulations may be viewed at the link below:

<http://www.wlf.louisiana.gov/fishing/regulations>

Commercial

The commercial fishing regulations may be viewed at the link below:

<http://www.wlf.louisiana.gov/fishing/regulations>

Rapides Parish Ordinance Article I, Section 19.5 -1. Rules and Regulations for Recreational Areas; Part B (4) b3. – prohibits the use of fishing nets, seines, slat traps or similar devices. The complete Rapides Parish Ordinance can be viewed at the following link. This regulation is a not a state law thus it is not enforced by the LDWF enforcement division personnel. It is enforced by the authority of the local Rapides Parish Sheriff’s Office.

<http://library.municode.com/index.aspx?clientId=10429>

Drawdown history

Drawdowns have been conducted on several occasions since hydrilla became established in the lake. The first priority of the reservoir is providing water for irrigation. The lake has a small watershed and extensive rainfall is required for the lake to refill. Drawdowns are always of concern to the RPPJ, and they are hesitant to approve drawdowns greater than 8’ below pool elevation. The concern is that the reservoir may not refill in a timely manner due to the small watershed (6.8 to 1). Also, water levels lower than 6 feet below pool elevation would prohibit Booker Fowler Fish Hatchery access to water needed to operate the hatchery. A complete drawdown history is found in Table 2 below.

Table 2. Drawdown history of Indian Creek Lake, Louisiana.

DRAWDOWN HISTORY				
Date Opened	Date Closed	Purpose	Results	Issues
Sept. 2002	Dec. 2002	Hydrilla control	Unsuccessful	Extensive rainfall
Sept. 2003	Dec. 2003	Hydrilla control	Successful	Short term benefits
Sept. 2005	Dec. 2005	Hydrilla control	Successful	Short term benefits

Purpose

Drawdowns have been conducted to provide hydrilla control.

Success

Drawdowns have provided a reduction in hydrilla biomass in the shallow waters of the lake. Drawdowns have been limited to a maximum depth of 8’ by the governing body of the lake, and since hydrilla is established out to the 12’ contour it is quick to regrow following the drawdown. In most years, this regrowth occurs the second growing season following the drawdown.

Fishing closure

The lake has not been closed to fishing during the drawdowns.

Depth below pool

The maximum depth below pool during a drawdown has been 8 feet.

Estimated % exposed

Approximately 30% of the lake bottom is exposed during an 8’ drawdown.

Who operated structure?

Drawdown structure gate opening is handled by RPPJ or the Department of Agriculture and Forestry personnel at the request of RPPJ.

Fish kills

No documented fish kills have occurred during drawdowns or at any other time.

Fish kills / disease history, LMBV

A review of the records indicates Indian Creek Lake was not sampled for LMBV. No fish kills or disease history has been documented.

Contaminants / Pollution

No documented records of contaminants or pollution have been located in the files. Currently there are no fish consumption advisories for Indian Creek Lake. However, annual updates can be found at the DEQ and LDWF links below:

<http://www.deq.louisiana.gov/portal/tabid/2201/Default.aspx>

<http://www.wlf.louisiana.gov/fishing/fish-consumption-advisories>

Water level

Normal pool elevation for Indian Creek Lake is 86.5 M.S.L. Water levels do not fluctuate greatly due to the extremely small watershed. The lake water is utilized for irrigation purposes, thus water fluctuations of 1' to 2' below pool elevation are common during summer and fall months.

Biological

Fish samples

Table 3. Historical and proposed fisheries sampling on Indian Creek Lake, Louisiana for the period 1979 – 2019.

YEAR	SAMPLING GEAR
1979	Rotenone – 6 stations
1982	Rotenone – 4 stations
1983	Rotenone – 6 stations
1987	Rotenone – 6 stations
1990	Electrofishing (Spring 2 stations; Fall 1 station); Forage (1 station) LMB Age and Growth; Genetic analysis
1991	Electrofishing (Spring 1 station)
1995	Electrofishing (Spring and Fall 1 station); Forage (1 station)
1997	Gill Nets (3 stations)
1998	Electrofishing (Spring 6 stations)
1999	Electrofishing (Spring 6 stations, Fall 4 stations); Shoreline seining (3 stations)

2000	Gill nets (3 stations); Shoreline seining (3 stations)
2001	Shoreline seining (3 stations); Genetic analysis
2002	Electrofishing (Spring and Fall 4 stations)
2004	Electrofishing (Spring and Fall 4 stations); Gill Nets (3 stations)
2005	Lead Nets (6 stations); Frame Nets (2 stations)
2006	Electrofishing (Spring and Fall 4 stations); Age and Growth; Genetic analysis
2007	Lead Nets (4 stations); Gill Nets (3 stations)
2008	Electrofishing (Spring and Fall 4 stations); Age and Growth; Genetic analysis
2009	Electrofishing (Spring 4 stations); Gill Nets (3 stations)
2013	Electrofishing (Spring and Fall 4 stations); Forage (1 station)
2016	Electrofishing (Spring and Fall 4 stations); Forage (1 station)
2017	No sampling scheduled
2018	No sampling scheduled
2019	Electrofishing (Spring and Fall 4 stations); Forage (1 station); Genetic analysis

Lake records

No official records are kept for Indian Creek Lake.

Stocking History

Fish stockings have been sporadic in Indian Creek Lake. A pure Gulf Coast strain of striped bass was stocked each year from 1996 until 1998. The purpose of this experimental stocking was to establish a population of striped bass which could be used as hatchery brood stock. Gill net sampling found no evidence that this experimental stocking was successful.

Undocumented incidental fish stocking has also occurred in Indian Creek Lake. Booker Fowler Fish Hatchery draws water from the lake for operational purposes. Water is also released from the hatchery; and after flowing through settling ponds this water is allowed to drain into the lake. The incidental stocking can be substantiated by the presence of hybrid striped bass in the lake and LMB genetic testing in 2006 found 48% and 2008 found 30% of the LMB tested contained Florida bass alleles. Since only three Florida largemouth bass stockings have occurred in Indian Creek Lake, the high percentage of the Florida genome is likely the result of unintentional stockings from the hatchery. Historical fish stocking records can be found in Table 4

Table 4. Fish stocking records for Indian Creek Lake, Louisiana, from 1992 – 2016.

Year	Florida bass	Channel Catfish	Striped Bass	Black Crappie	Tripliod Grass Carp
1992		40,000			
1993			2,000		
1994		17,500	32,854		
1995	3,250 (fry)	54,950	34,986		
1996	500 (adult)		39,890*	68,500 200 adults	
1997			20,815*		
1998			37,195*		
2008	31 (adult)				
2009	18 (adult)				
2012					3,018
2013	894,600				43
2014	29,400				12
2015					3,004
2016	349,000 (fry)				

* Gulf Coast Strain Striped Bass

Species profile

As per *Freshwater Fishes of Louisiana* by Dr. Neil H. Douglas, fish species listed below in Table 5 have been collected or are likely to occur in Indian Creek Lake.

Table 5. Fishes collected or likely to occur in Indian Creek Lake, LA

Lamprey Family, PETROMYZONTIDAE

Southern brook lamprey, *Ichthyomyzon gagei* (Hubbs and Trautman)

Chestnut lamprey, *Ichthyomyzon castaneus* (Girard)

Gar Family, LEPISOSTEIDAE

Spotted gar, *Lepisosteus oculatus* (Winchell)

Longnose gar, *Lepisosteus osseus* (Linnaeus)

Shortnose gar, *Lepisosteus platostomus* (Rafinesque)

Alligator gar, *Lepisosteus spatula* (Lacépède)

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

Blacktail shiner, *Cyprinella venusta* (Girard)
Common Carp, *Cyprinus carpio* (Linnaeus)
Cypress minnow, *Hybognathus hayi* (Jordan)
Striped shiner, *Luxilus chrysocephalus* (Rafinesque)
Golden shiner, *Notemigonus crysoleucas* (Mitchill)
Emerald shiner, *Notropis atherinoides* (Rafinesque)
Taillight shiner, *Notropis maculatus* (Hay)
Weed shiner, *Notropis texanus* (Girard)
Mimic shiner, *Notropis volucellus* (Cope)
Bullhead minnow, *Pimephales vigilax* (Baird and Girard)
Creek chub, *Semotilus atromaculatus* (Mitchill)

Sucker Family, CATOSTOMIDAE

Lake chubsucker, *Erimyzon sucetta* (Lacépède)
Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)
Bigmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)
Black buffalo, *Ictiobus niger* (Rafinesque)
Spotted sucker, *Minytrema melanops* (Rafinesque)

Freshwater Catfish Family, ICTALURIDAE

Black bullhead, *Ameiurus melas* (Rafinesque)
Yellow bullhead, *Ameiurus natalis* (Lesueur)
Tadpole madtom, *Noturus gyrinus* (Mitchill)
Channel Catfish, *Ictalurus punctatus*
Flathead Catfish, *Pylodictis olivaris* (Rafinesque)

Pike Family, ESOCIDAE

Grass pickerel, *Esox americanus vermiculatus* (Lesueur)
Chain pickerel, *Esox niger* (Lesueur)

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)
Blackspotted topminnow, *Fundulus olivaceus* (Storer)

Livebearer Family, POECILIIDAE

Western mosquitofish, *Gambusia affinis* (Baird and Girard)

Silverside Family, Atherinidae

Brook silverside, *Labidesthes sicculus* (Cope)

Temperate Bass Family, Percichthyidae

White bass, *Morone chrysops* (Rafinesque)

Yellow bass, *Morone mississippiensis* (Jordan and Eigenmann)

Striped bass, *Morone saxatilis* (Walbaum)

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 punctatus* (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

Swamp darter, *Etheostoma fusiforme* (Girard)

Slough darter, *Etheostoma gracile* (Girard)

Drum Family, Sciaenidae

Freshwater drum, *Aplodinotus grunniens* (Rafinesque)

Genetics

Electrophoretic analysis of largemouth bass was first conducted in 1990 in Indian Creek. Since that time it has also been conducted in 2001, 2006, and 2008. The complete record of genetic testing is found in Table 6 below.

Table 6. Genetic analyses of the largemouth bass population in Indian Creek Lake, Louisiana from 1990, 2001, 2006 and 2008.

Year	% Northern	% Florida	% Hybrid	% Florida Influence
1990	98	0	2	2

2001	63	7	30	37
2006	52	10	38	48
2008	70	4	26	30

Threatened/endangered/exotic species

None documented.

Creel

No creel survey has been conducted on Indian Creek Lake.

Hydrological Changes

Hydrological changes have been minimal since the lake was created in 1972. Development around the shoreline has been restricted due to the majority of the watershed is owned by the state of Louisiana and is managed for timber production.

Water Use

Hunting

Hunting on Indian Creek Lake is regulated as part of the LDWF Wildlife Management Area System. The lake is utilized for duck hunting. Statewide regulations apply except waterfowl hunting is prohibited after 2:00 PM. Permanent duck blinds are not allowed on the lake. However, there are 40 acres of private land located on the South end of the lake and one permanent blind is located on this property. A copy of the Louisiana Hunting Regulations including Wildlife Management Area (WMA) Regulations can be viewed at the link below.

<http://www.wlf.louisiana.gov/hunting/regulations>

Recreational watersports

Recreational water sports are very popular on Indian Creek Lake and include water skiing, jets skis, party barges, and other recreational boats. The extreme ends of the lake are not suitable for water sports but the main body of the lake is free of obstructions for skiers and recreational boaters. Due to the Indian Creek Recreational Area located on the shoreline the lake is used extensively for water recreation.

Fishing

Indian Creek Lake is utilized extensively for recreational fishing -- primarily for largemouth bass and crappie.

Scuba Diving

Minimal scuba diving is done on Indian Creek Lake due to limited water clarity.

Swimming

Yes

Irrigation

Indian Creek Lake was built to provide water for irrigation. Water is released from the lake as needed and channeled through a series of bayous to provide downstream farms with irrigation water.

Appendix II

([return to Lake](#) authority)

Contract authorizing Rapides Parish Police Jury control of Indian Creek

CONTRACT AND AGREEMENT

BE IT KNOWN AND REMEMBERED that on this the 22nd day of April, 1974, appeared RAPIDES PARISH POLICE JURY, represented herein by Leverna Perry, President; LOUISIANA FORESTRY COMMISSION, represented herein by James E. Nelson; and UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE, represented herein by C. T. Duly; who have and do by these presents enter into the following agreement regarding the operation and maintenance of Indian Creek Reservoir and Recreation Area.

The Rapides Parish Police Jury shall be responsible for the maintenance and operation of the reservoir and spillway and shall have full authority over the control of the pool levels so as to accomplish the purposes for which the reservoir was constructed.

The Rapides Parish Police Jury will maintain the blacktop road commencing at Louisiana Highway 613 and extending to the entrance building of the recreation area, and all blacktop roads and parking areas within the recreation complex.

The Rapides Parish Police Jury will maintain all fills constructed on the State Forest road system during the construction of the said reservoir.

The Rapides Parish Police Jury, its agents and employees shall have full access to maintain the reservoir and control structure.

The Louisiana Forestry Commission shall operate and maintain and manage the Indian Creek Recreational Area and shall have the right and authority to assess and collect fees for the use of the recreational area which funds so collected shall be used exclusively for the maintenance and operation of the Indian Creek Reservoir and Recreational Area.

It is agreed by and between the parties hereto that in order to insure the effective operation of the reservoir and recreational area, there shall be created the Indian Creek Reservoir and Recreational Area Advisory Committee, which shall serve the parties in an advisory capacity. The said Advisory Committee shall be composed of eight (8) members, two (2) representatives or members from each of the following four (4) bodies:

Appendix II continued

Page 2.

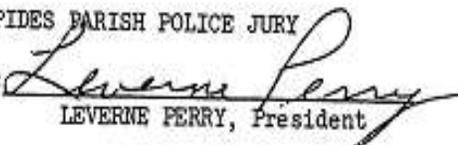
1. Rapides Parish Police Jury
2. United States Soil Conservation Service
3. Louisiana Forestry Commission
4. Louisiana Wild Life & Fisheries Commission

The Chairman of the Watershed Committee of the Rapides Parish Police Jury shall serve as Chairman of the Indian Creek Reservoir and Recreational Area Advisory Committee.

THUS DONE AND SIGNED in multiple originals on the day first above written.

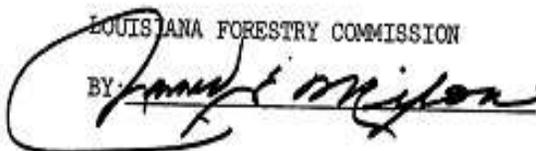
RAPIDES PARISH POLICE JURY

BY:


LEVERNE PERRY, President

LOUISIANA FORESTRY COMMISSION

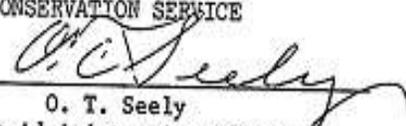
BY:



UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

BY:


O. T. Seely
State Administrative Officer

Appendix III
([return to Access](#))

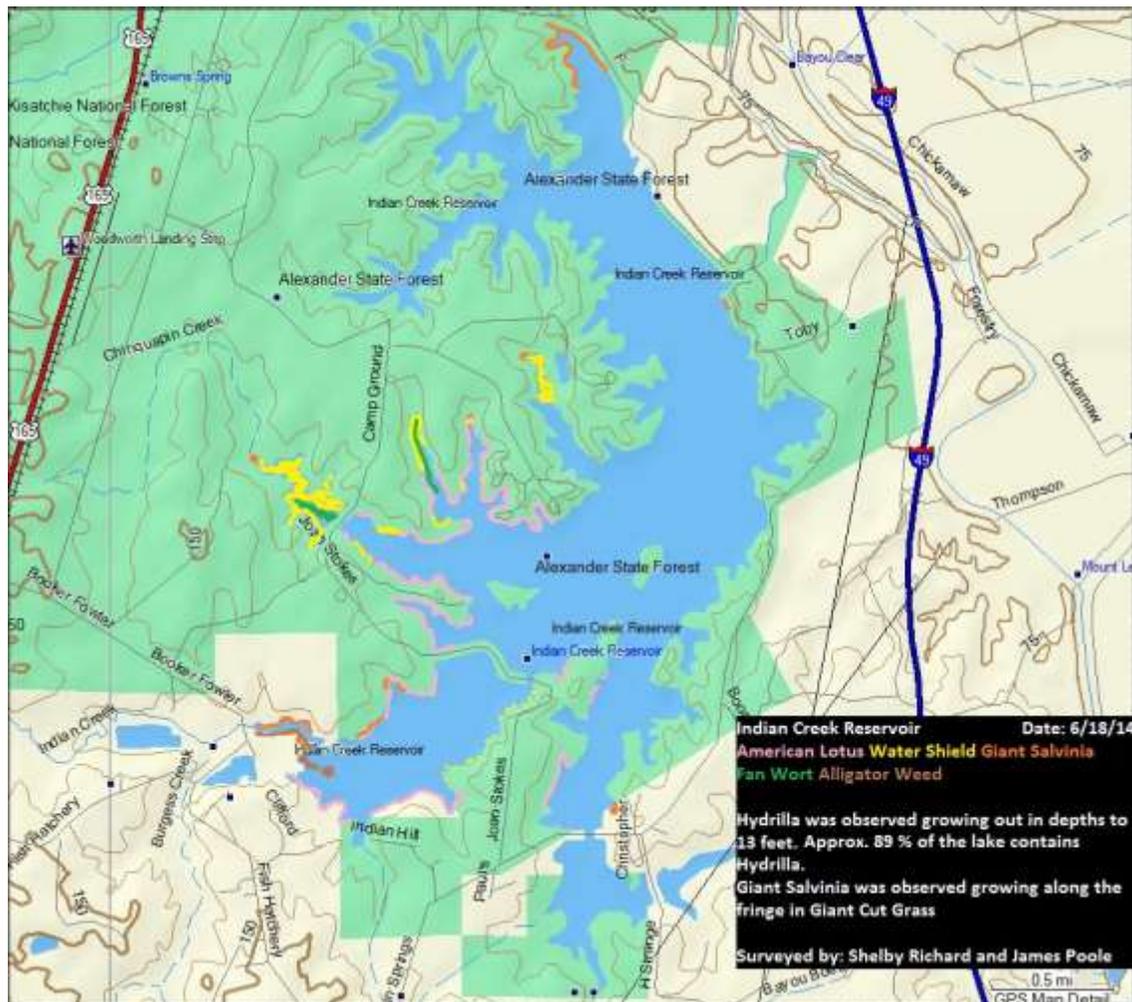
Indian Creek Lake
Boat Ramps, Rapides Parish, Louisiana.



Appendix IV
([return to Typemap](#))

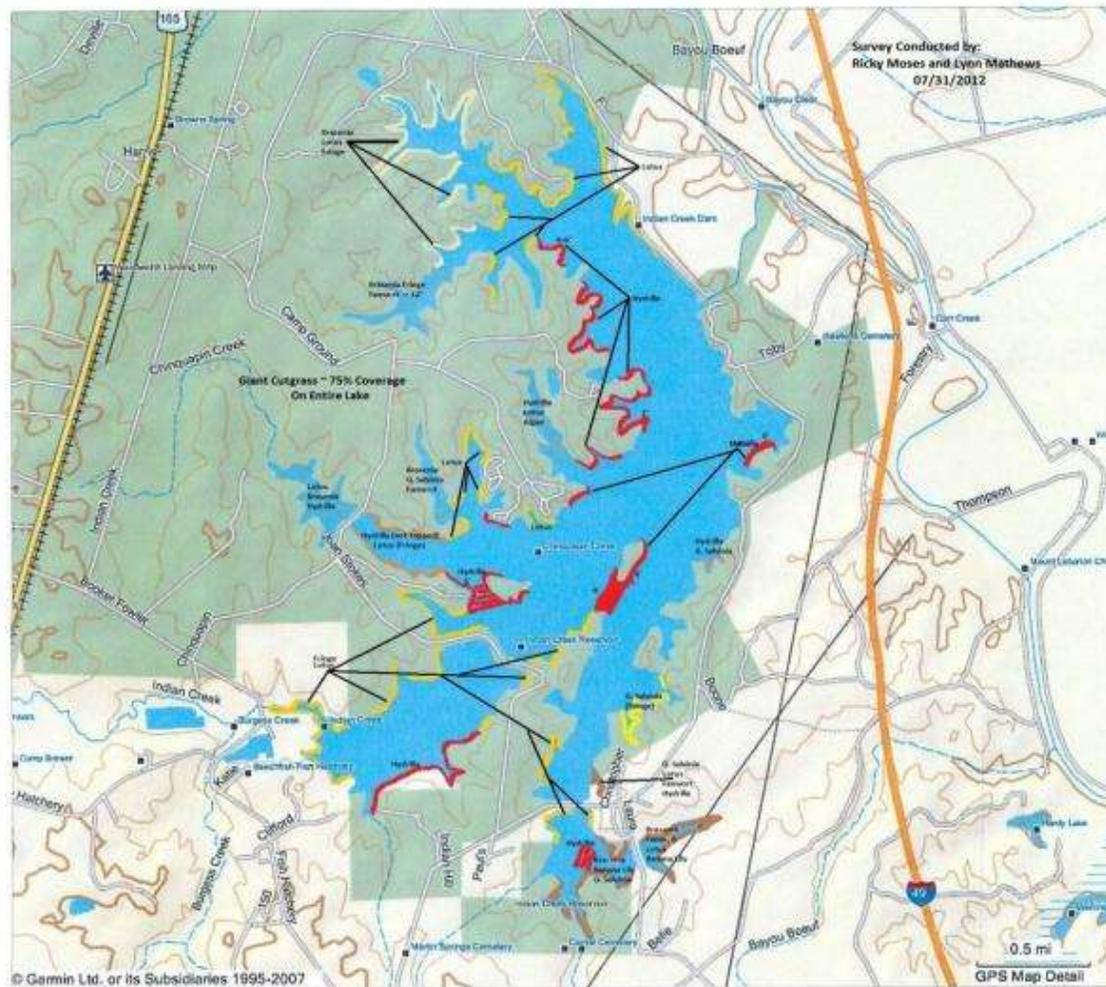
Indian Creek Lake
Vegetation Type Map
June 2014

A vegetation survey was conducted on June 18, 2014 in Indian Creek Reservoir. Hydrilla coverage was estimated to be approximately 1000 acres. Salvinia, both giant and common covered less than 10 acres. It may be more of a problem in 2015 than in 2014 due to mild temperatures during the winter of 2014/2015. Salvinia coverage may reach 300 acres in 2015. The only other significant vegetation was American lotus which covered approximately 100 acres. There is a fringe of giant cutgrass along 75 % of the shoreline. It is beneficial because it provides shoreline erosion protection from wave action generated by the extensive water recreational that occurs on the lake.



Indian Creek Lake Vegetation Type Map July 2012

An aquatic vegetation survey was conducted on 31 July 2012. Hydrilla was the only vegetation causing serious problems. Approximately 40 % of the lake (800 acres) contained hydrilla and it was established out to the 14' contour. There is a fringe of cutgrass along 75 % of the shoreline; however it covers less than 100 acres. This is beneficial to help reduce shoreline erosion from wave action. Indian Creek receives extensive usage from recreational water sports. American lotus was found throughout the lake in shallow water areas; acreage was less than 200 acres. Giant salvinia was found scattered on the south end of the lake with coverage less than 100 acres.



Indian Creek Lake
Vegetation Type Map
August 2009

Indian Creek, located just east of Woodworth, La in Rapides Parish, is a 2,250 acre reservoir which lies mostly inside the Alexander State Forest WMA boundary. It is owned and controlled by the Rapides Parish Police Jury and was created primarily for agricultural needs with wildlife and fisheries habitat enhancement and recreational opportunities for the citizens of the state being secondary. Pool stage is 86.5 MSL and the average depth is 9 feet with a maximum depth of about 25 feet. Water fluctuations in the 1980's and 1990's due to agricultural needs may have caused aquatic vegetation to grow in deeper than normal water. The Police Jury has established a dedicated drawdown pool to 76.0 MSL if needed to meet agricultural needs by route of Bayou Boeuf.

The reservoir was surveyed for the presence of aquatic vegetation on August 18, 2009. The water was very clear.

As in past years, Hydrilla is present in about 80% of the reservoir out to about the 8' contour and in some instances it reaches out to approximately the 12' contour. Below the long field Bridge there was very little Hydrilla. Giant Cutgrass was found encircling 90% of the reservoir. About 40% of this has been treated.

Other aquatic vegetation observed was Alligator Weed, Lotus, Pickerelweed, Fanwort, Panicum and Filamentous Algae. Banana Lily has expanded from a small patch above the H Strange road to about 300 yards of shoreline above and below H Strange Road.

