LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

IN OFFOFFICE OF FISHERIES
INLAND FISHERIES DIVISION

PART VI -B

WATERBODY MANAGEMENT PLAN SERIES

LAKE FAUSSE POINTE

WATERBODY EVALUATION &
RECOMMENDATIONS

CHRONOLOGY

DOCUMENT SCHEDULED TO BE UPDATED EVERY FOUR YEARS

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WATERBODY EVALUATION

STRATEGY STATEMENT

Recreational

Largemouth Bass are managed in Lake Fausse Pointe to provide the opportunity to catch ten fish per day. Sunfish and crappie are managed to provide a sustainable population while providing anglers the opportunity to catch numbers of fish.

Commercial

Commercial species are managed with statewide regulations to provide a maximum sustainable yield that does not contribute to declines in future population strength.

EXISTING HARVEST REGULATIONS

Recreational

Crappie - 50 daily

Sunfish (all species) - No limit

Black Bass (Largemouth & Spotted Bass) - 10 daily, no size limit

Yellow Bass – 50 daily, no size limit

White Bass - 50 daily, no size limit

Blue Catfish (*Ictalurus furcatus*) - minimum size 12 inches total length

Channel Catfish (*Ictalurus punctatus*) - minimum size 11 inches total length

Flathead Catfish (*Pylodictis olivaris*), also locally called spotted catfish, yellow catfish, or Opelousas cat - minimum size 14 inches total length.

The maximum possession limit for catfish caught on a recreational license shall be one hundred. The 100 fish possessed may be a single species or any combination of blue, channel, or flathead catfish. In addition, a recreational fisherman shall be allowed a daily possession limit of 25 undersize catfish, either a single species or any combination of blue, channel, or flathead catfish.

Bowfin (Choupique) – 16 inch minimum total length

Freshwater Drum (Gaspergou) – 12 inch minimum total length, 25/day under 12 inches. No limit over 12 inches.

Buffalo – 16 inch minimum total length, 25/day under 16 inches. No limit over 16 inches.

Shad – 50 pounds daily.

Crawfish – 150 pounds daily.

Paddlefish - Two paddlefish (*Polyodon spathula*) may be harvested recreationally if not exceeding 30 inches lower jaw – fork length. Paddlefish greater than 30 inches must be returned immediately to the water. Taking or possessing paddlefish in all saltwater areas of the state is prohibited. All possessed paddlefish must be dead. The possession and transportation of live paddlefish is prohibited. All paddlefish possessed on the waters of the state shall be maintained intact. No person shall possess paddlefish eggs on the waters of the state which are not fully attached to the fish.

Commercial
Statewide regulations on all species

Blue Catfish (*Ictalurus furcatus*) – 12 inches minimum length limit, no limit

Channel Catfish (*Ictalurus punctatus*) – 11 inches minimum total length limit, eight inches collar boned length limit, no limit

Flathead Catfish (*Pylodictis olivaris*) – 14 inches minimum total length limit, no limit

Buffalo (*Ictiobus spp*.) – 16 inches total length limit, no limit

Freshwater drum (*Aplodinotus grunniens*) – 12 inches minimum total length limit, no limit

Bowfin (*Amia calva*) – 22 inches minimum total length limit, no limit. Fishermen are prohibited, while on the water, from possessing bowfin eggs (roe) that are not naturally connected to a whole fish. The taking of bowfin with nets or bowfin body parts, including eggs (roe), is prohibited during the months of December, January and February.

Crawfish – No limit

Species of Greatest Conservation Need
The harvest of pallid sturgeon (*Scaphirhynchus albus*) and shovelnose sturgeon (*Scaphirhynchus platorynchus*) is prohibited. The commercial harvest of paddlefish (*Polyodon spathula*) is prohibited.

SPECIES EVALUATION

Recreational

Largemouth Bass
The Largemouth Bass population in Lake Fausse Pointe has varied over time, with a gradual decline since 2007 (see Figure 1). Habitat that could contribute to a sustainable fishery has declined over the years since the Atchafalaya Basin levee separated the lake from the rest of the Basin.

Electrofishing
See Map of electrofishing stations – Appendix I

Electrofishing sites in Lake Fausse Pointe have been abandoned over time. In the original plan for standardized electrofishing, randomly selected sites were to be sampled annually. There were six original sites. Numbers of fish were so low that protocol was compromised and new sites were explored that would provide greater sampling success. Old sites were abandoned and sites that provided reasonable numbers and sizes of targeted species (e.g., Largemouth Bass) were sampled annually. Attached maps of sampling sites show where Largemouth Bass were collected in the lake. The canal and borrow pit system located adjacent to the lake has consistently had the best water quality over time.

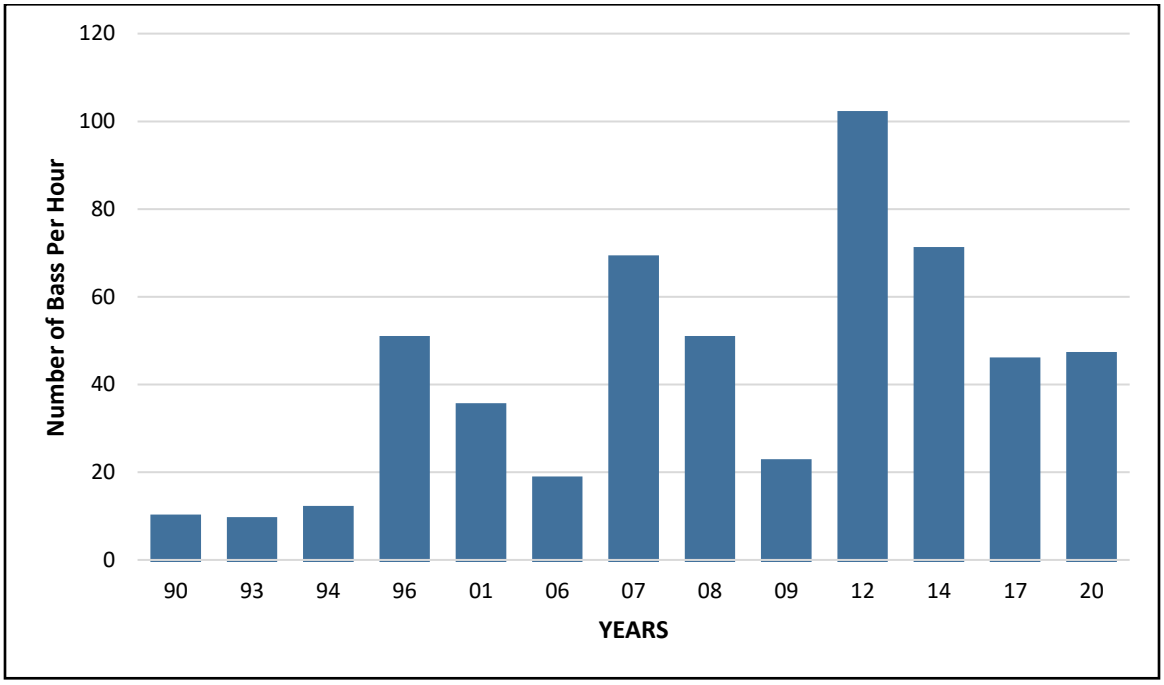

Figure 1. Total catch-per-unit-effort (CPUE) for Largemouth Bass in Lake Fausse Pointe, Louisiana, for spring electrofishing samples from 1990 – 2020.

In Figure 1, spring electrofishing total catch per unit effort (CPUE) is presented in number of Largemouth Bass per hour for all years sampled. Early samples included sites in the lake itself where results were lacking. Later results reflect abandoning these sites and finding fish in adjacent waters such as the Texaco canal system and borrow pits along the Basin levee.

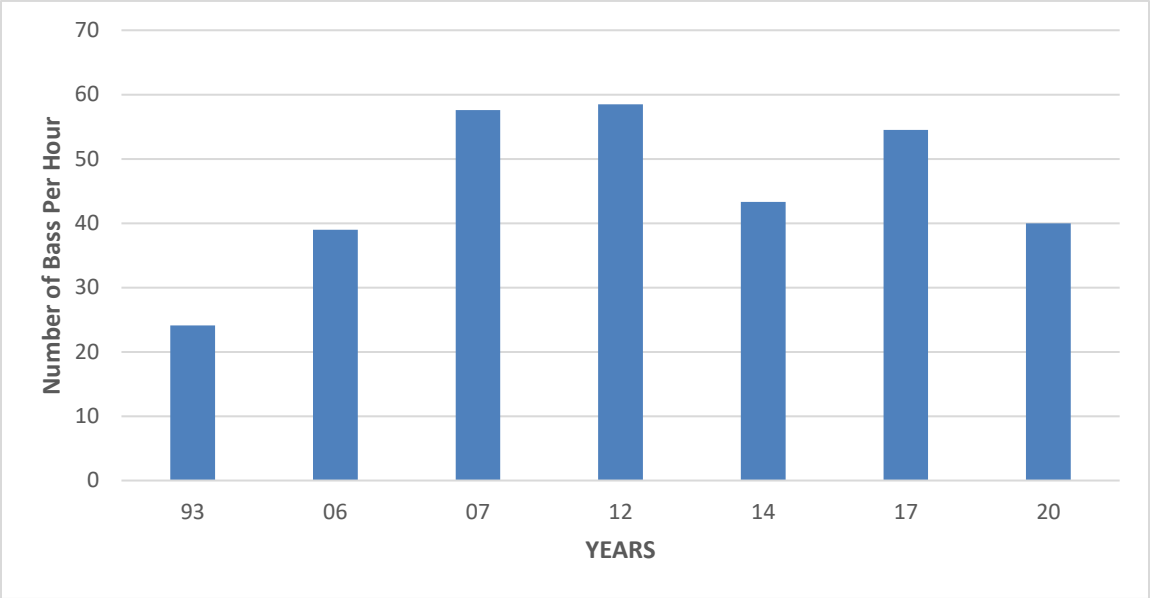

Figure 2. Total catch-per-unit-effort (CPUE) for Largemouth Bass in Lake Fausse Pointe, Louisiana, for fall electrofishing samples from 1993 – 2020.

In figure 2 fall electrofishing total catch per unit effort (CPUE) is presented in number of Largemouth Bass per hour for all years sampled. Fall samples remained consistent with spring samples as shown in the graph above.

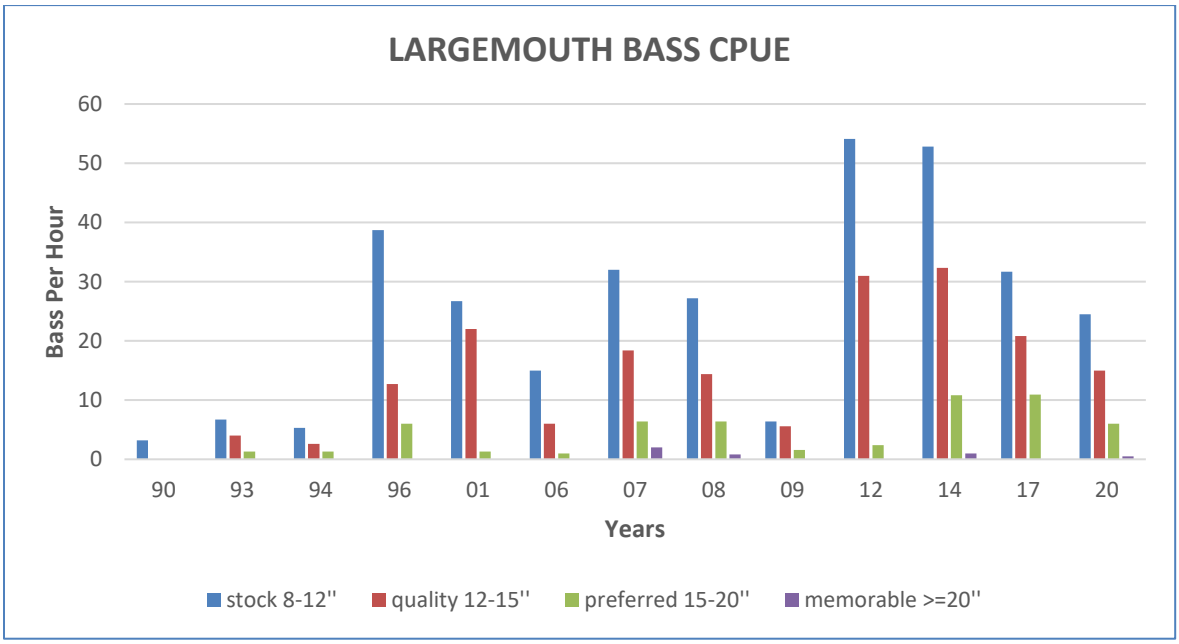

Figure 3. Largemouth Bass CPUE (number per hour) by size group for spring electrofishing samples from Lake Fausse Pointe, 1990 – 2020.

Figure 3 indicates that there is little consistency in results of electrofishing samples, even when considering stocking history (Table 1). Some years might reflect sampling after stocking of fingerling bass but other years do not seem to have been affected by stocking. Large hurricane-related fish kills in 1992, 2005 and 2008 more than likely had an effect on sampling results. Also the August flood of 2016 changed/reduced habitat throughout the lake. Changing the locations of sampling sites increased sampling results more than any other factor as figure 2 shows increase in CPUE samples taken in 2012, 2014, 2017and 2020.

Largemouth Bass Age and Growth

Samples for Largemouth Bass age and growth analysis have been collected in conjunction with LDWF standardized sampling. The last age sample data available, 2007, was small (Fig. 4). Only 38 Largemouth Bass were captured in fall electrofishing sampling. There is a high level of variability in the average length at capture for each age class of bass in Lake Fausse Pointe. Not much can be ascertained by age data alone. Eventually, there needs to be a project implemented on the lake to assess mortality and growth using more data than what has been collected. There also needs to be a method developed to evaluate the habitat and watershed in more detail to determine the future hydrology and physiography of the lake and their potential impacts on fish populations.

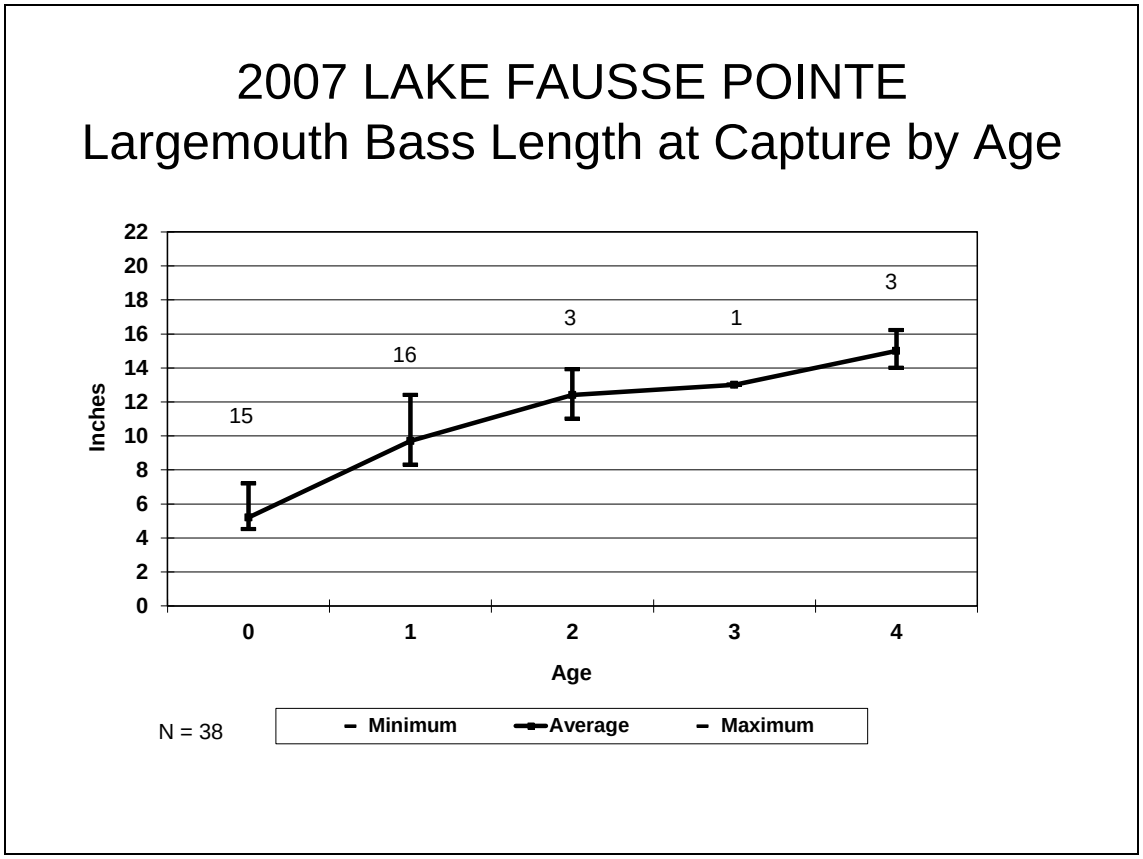

Figure 4. Lake Fausse Pointe, Louisiana, Largemouth Bass length-at-capture by age from LDWF 2007 fall electrofishing samples.

Largemouth Bass Genetics

Table 1 shows the stocking history of Lake Fausse Pointe. Florida Largemouth Bass (FLMB) fingerlings and Phase II fingerlings have been stocked into the lake beginning in 2000. These stockings were not designed to supplant the native Northern Largemouth Bass population with Florida genetic stock. The stockings were conducted to increase the opportunity for anglers to catch bass larger than what the native stock has proven capable of attaining through the introduction of FLMB genetics into the breeding population.

In addition to recorded stocking efforts by Louisiana Department of Wildlife and Fisheries (LDWF), local bass anglers held tournaments for a number of years and purchased Largemouth Bass fingerlings, which were stocked in the lake by LDWF personnel. These additional stockings were conducted in 1998, 1999, 2001, 2003 and 2005. The local tournament organizers commonly reported that they were stocking "Florida bass". For the first "angler purchased" bass stocking effort, a sample was genetically tested and a small percentage contained the pure Florida genome, while many of the fingerlings were hybrids, and a large portion were actually Northern Largemouth Bass. Although no further batches were tested, it is assumed that, being from the same source, the subsequent stocked batches were similar in genetic composition.

Table 1. Largemouth Bass stocking history for Lake Fausse Pointe, Louisiana, by year 1993 and 2000 – 2019.

YEAR	Florida Largemouth Bass	Northern Largemouth Bass
1993		286,203 fingerlings
		444 adults
2000	647,518 fingerlings	
2001	164,292 fingerlings	
2002	154,182 fingerlings	
2003	157,277 fingerlings	
2004	155,050 fingerlings	
2005	153,056 fingerlings	
2006	57,498 fingerlings	
2007	207,480 fingerlings	
2008	20,790 fingerlings	
2009	6,768 Phase II fingerlings	
2010	1,020 Phase II fingerlings	
2014	80,304 fingerlings	
2019	1.8 million fry	

Samples for genetic analysis have been analyzed in conjunction with LDWF standardized electrofishing at designated sample sites. Liver tissues are sent to the LSU School for Renewable Natural Resources for genome analyses.

Table 2. Genetic analysis from Largemouth Bass liver tissues collected from fall electrofishing samples in Lake Fausse Pointe, 1999, 2006, 2007 and 2018.

LARGEMOUTH BASS GENETICS					
Year	Number	Northern	Florida	Hybrid	FLMB Influence
1999	77	90%	2%	8%	10%
2006	39	92%	0%	8%	8%
2007	73	88%	7%	5%	12%
2018	79	81%	1%	18%	19%

It should be noted that genetic samples were taken at the same sites where Florida Largemouth Bass fingerlings were stocked through the years. Even then, the percentage of influence resulting from these stockings was very low (Table 2). There are no records kept of large fish captured on Louisiana waterbodies, other than those kept by the Louisiana Outdoor Writers Association. That leaves managers with no way to determine if anglers have benefitted from these stockings, other than anecdotal evidence and newspaper articles. There have been no reports of trophy fish (i.e., >12 lbs.) harvested in Lake Fausse Pointe.

Forage

Forage availability for 1993 through 2017 is shown in Table 3 which shows how many fish less than or equal to 5 inches were taken per hour of electrofishing for those years.

Bay Anchovies consistently make up the highest percentage of the total number of all species in forage samples, for all years. Shad and sunfish account for the remainder.

Table 3. Forage sampling results (catch-per-unit-effort) from LDWF fall electrofishing samples in Lake Fausse Pointe, LA, for the years 1993, 1995, 1999, 2006, 2007, 2012, 2014, 2017, and 2018

	ELECTROFISHING FORAGE SAMPLES ALL FISH <= 5 INCHES TOTAL LENGTH								
Year	1993	1995	1999	2006	2007	2012	2014	2017	2018
CPUE	1261.3	336.0	1320.0	547.4	644.4	740.8	683.5	314.3	334

Biomass sampling over the years is reported in Table 4. The reported results are the number of fingerlings per acre for each year that biomass sampling was conducted. The results were low for years up until 1988 and then changed drastically for 1989 and 1990. There is no explanation for this change but it shows that fingerlings are available for forage in this system.

Table 4. Forage results from LDWF one acre biomass (rotenone) sampling in Lake Fausse Pointe, LA, for 1967 - 1990. Forage fishes are less than or equal to 5 inches in total length.

BIOMASS SAMPLING RESULTS FOR FINGERLINGS PER ACRE BY YEAR						
Year	1967	1972	1984	1988	1989	1990
No./Acre	71.0	14.0	141.3	43.0	4719.0	488.0

The bass population fluctuating in this lake system. Stocking has influenced sampling in some years but has not consistently produced the results that one might expect according to the number of bass fingerlings stocked. The amount of turbidity in the lake through the year is likely influencing this population, by suppressing foraging efficiency and reproductive success. Sampling sites moved to other areas that are less affected by this turbidity has improved sampling results, but does not reflect the apparent decline in habitat as well as the bass population in the lake. If something is not done to curtail the amount of sediment entering the lake, the bass population will continue to decline. Bass will exist only in very small numbers, except for years when the lack of rainfall reduces sediment intrusion, allowing for greater primary productivity and subsequent foraging and reproductive success. Even if strong year classes are produced in those "dry" years, they will not persist if past sampling results are any indication.

Crappie Electrofishing

Figure 5 shows that Black Crappie make up the majority of crappie sampled by electrofishing in Lake Fausse Pointe. There were a few White crappie collected in some of the years. The Black Crappie population afforded some opportunity for recreational angling success until the most hurricanes in 2008. Crappie catches have remained relatively low since 2008.

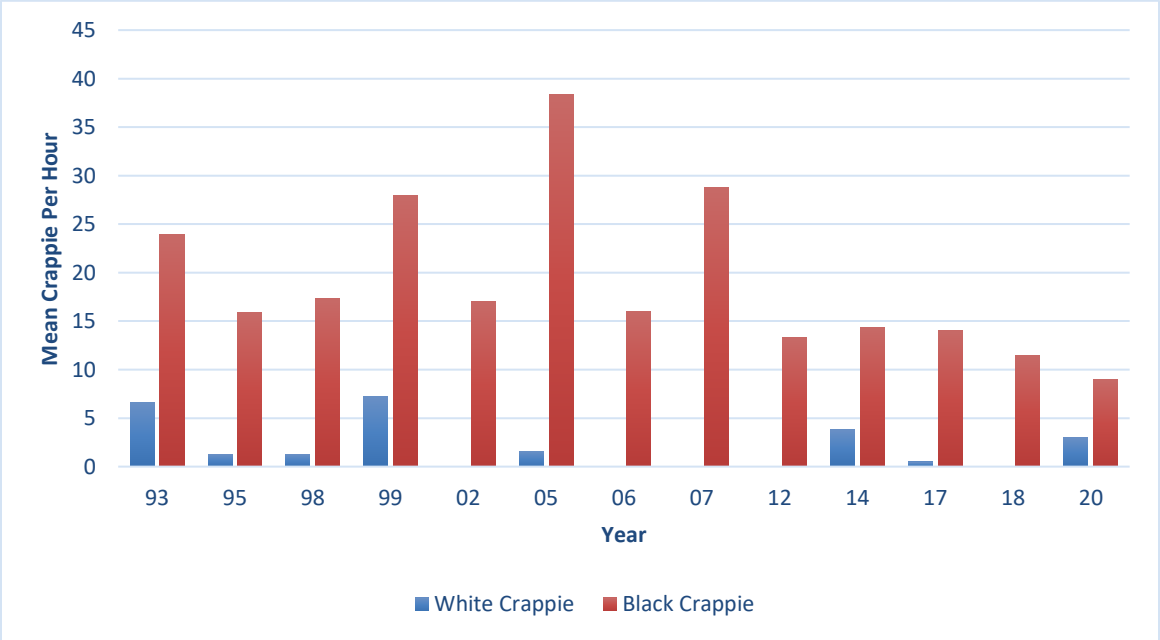

Figure 5. Mean CPUE (number per hour) for Black Crappie and White Crappie in fall electrofishing samples in Lake Fausse Pointe, LA, for 1993 - 2020.

Crappie Age and Growth

Age and growth data for crappie has been generated from fall standardized electrofishing efforts in the lake. Since Black Crappie is the predominant species of crappie found in the basin, age and growth of Black Crappies is presented in Figure 6. Growth is rapid through Age 2 (10"), and then slows considerably over the next two years.

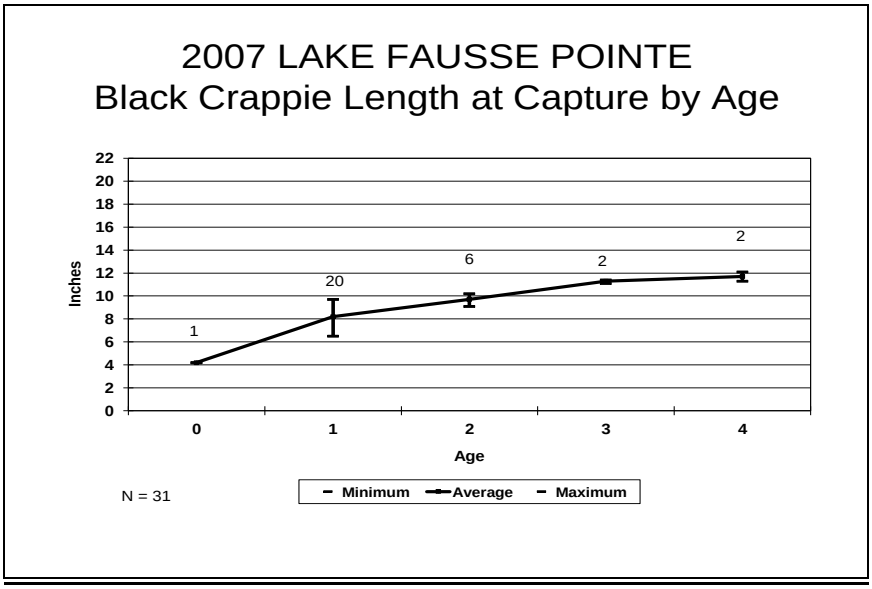

Figure 6. Black crappie length-at-capture by age from LDWF 2007 fall electrofishing sampling in Lake Fausse Pointe, LA.

There appears to be no reason to change regulations on crappie in the lake at this time. It is not clear what improvement could be made on a cyclical population of fish living in a declining habitat and subject to the perils of hurricane-related fish kills.

Crappie Population Assessment

A thorough population assessment of the crappie population was conducted from 2013-2015.

The fall of 2013 marked the first year of a three-year population assessment (2013-2015) project for crappie on Fausse Pointe. The study included intensive sampling and an access point creel survey in 2015 to describe angler participation and habits. The purpose of the study was to obtain accurate estimates of length distribution, age composition, and growth and mortality rates of the crappie population. This information will be used to determine if alternative regulations would have a desired effect on the population. Because lead nets are very efficient at capturing crappies, future samples will also be taken utilizing this gear to assess populations.

Lead nets were used by fisheries biologists to collect crappie from Fausse Pointe each fall. Length and weight measurements were recorded for each fish and sagittal otoliths (inner-ear bones) were removed from approximately 25% of the sampled fish for age and growth analyses. Annual growth rings on the otoliths provide an accurate measurement of fish age. Size and age for all of the sample fish were combined to generate estimates of average growth rate and longevity. Angler surveys were also conducted during the sample period to document fishing effort, angler catch rate and harvest rates.

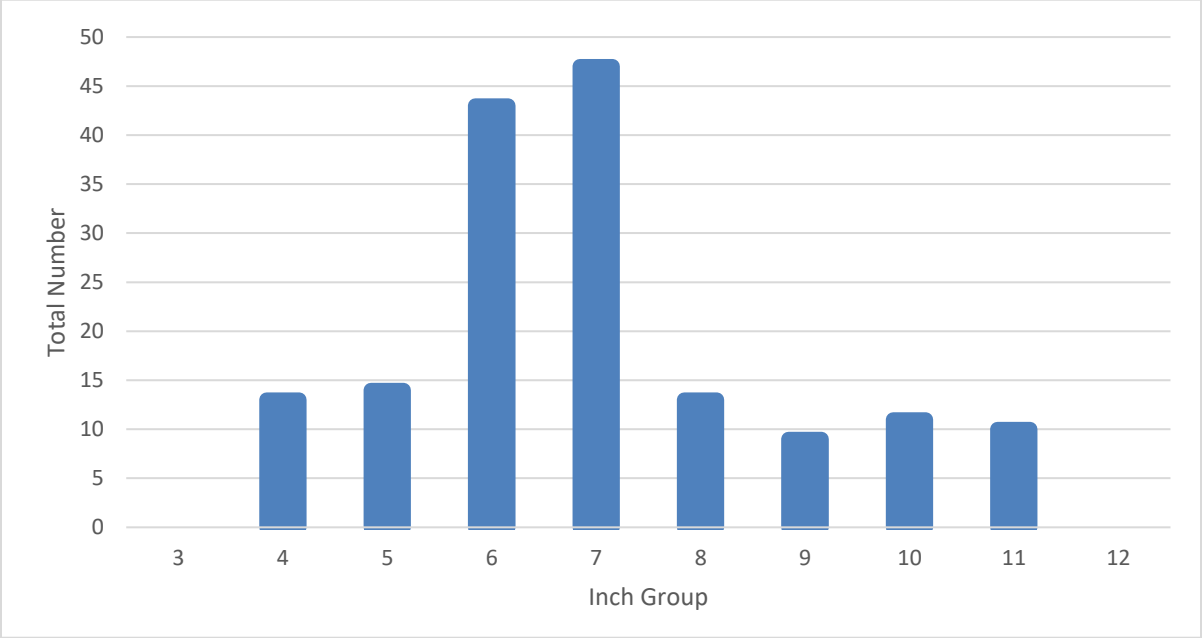

Figure 7. The size distribution (inch groups) of crappie captured in lead net samples at Fausse Pointe, Louisiana in the fall of 2013. N= 150.

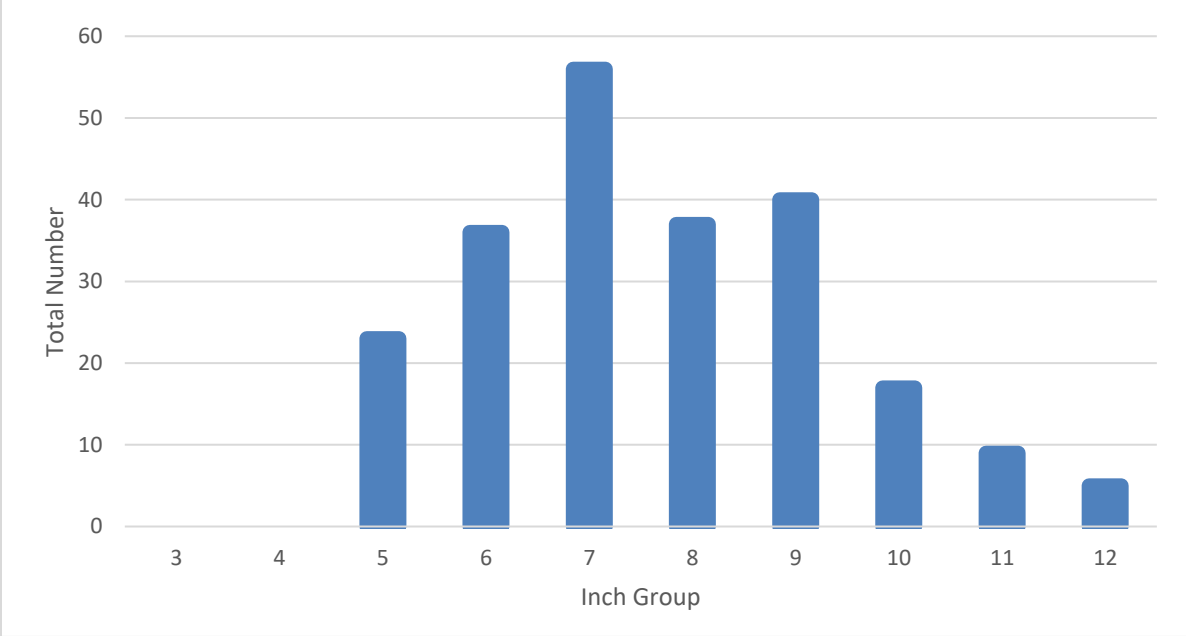

Figure 8. The size distribution (inch groups) of crappie captured in lead net samples at Fausse Pointe, Louisiana in the fall of 2013. N= 223.

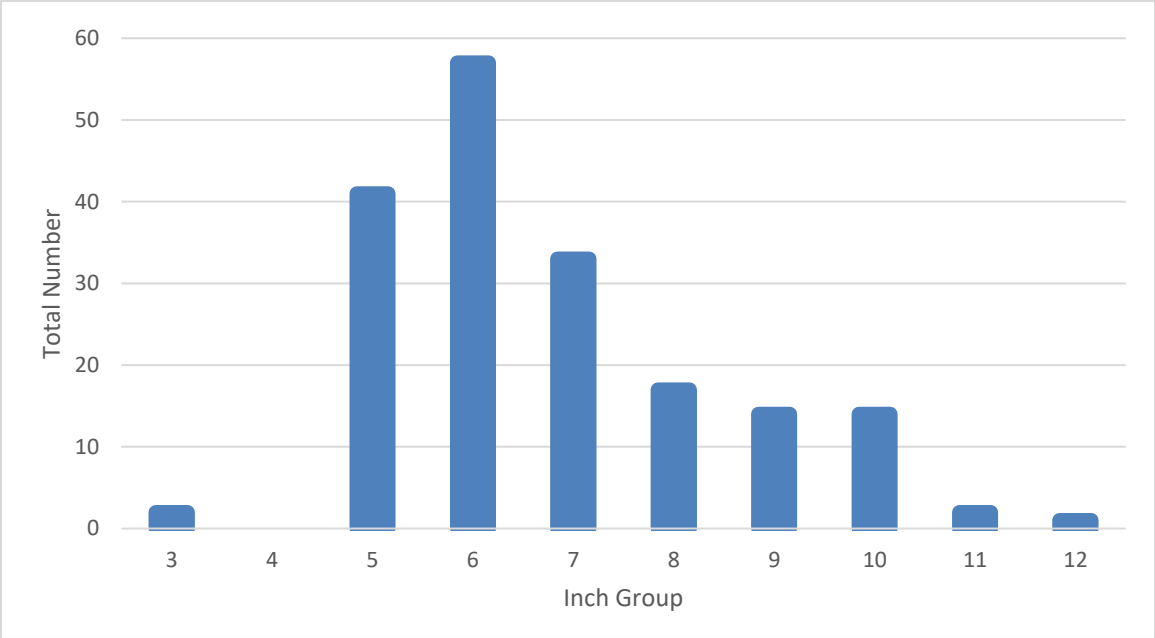

Figure 9. The size distribution (inch groups) of crappie captured in lead net samples at Fausse Pointe, Louisiana in the fall of 2013. N= 181.

Age structure of the lead net sample (2013-2015) is shown in Figure 10. Ninety seven percent of the total sample were comprised of age-1 and age-2 crappie. The majority of the species collected were black crappie (87%). Average length at age for Spring Bayou crappie is provided in Table 5. Growth rate is slow through all age classes as shown in figure 9.

Figure 10. Growth rate of crappie collected by lead nets in Fausse Pointe, LA. from 2013-2015.

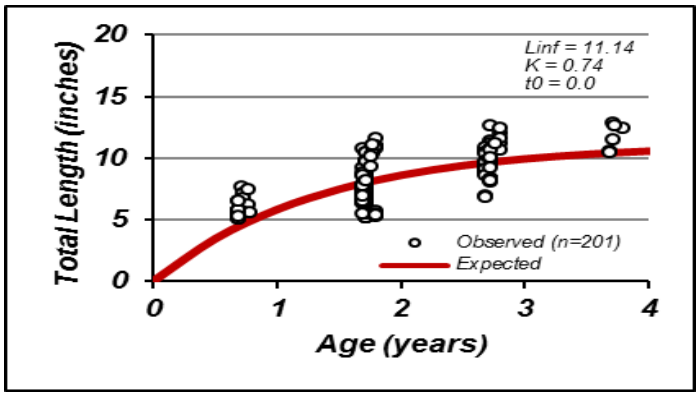

Table 5. Length at age of crappie in Fausse Pointe, LA. from 2013-2015.

Age	Length in Inches
T1.0	4.64
2.0	7.32
3.0	9.98

An access point creel survey was conducted in 2015 at Fausse Pointe. Good numbers of crappie harvested from 8-11 inches with some crappie exceeding 13 inches in length as shown in figure 11.

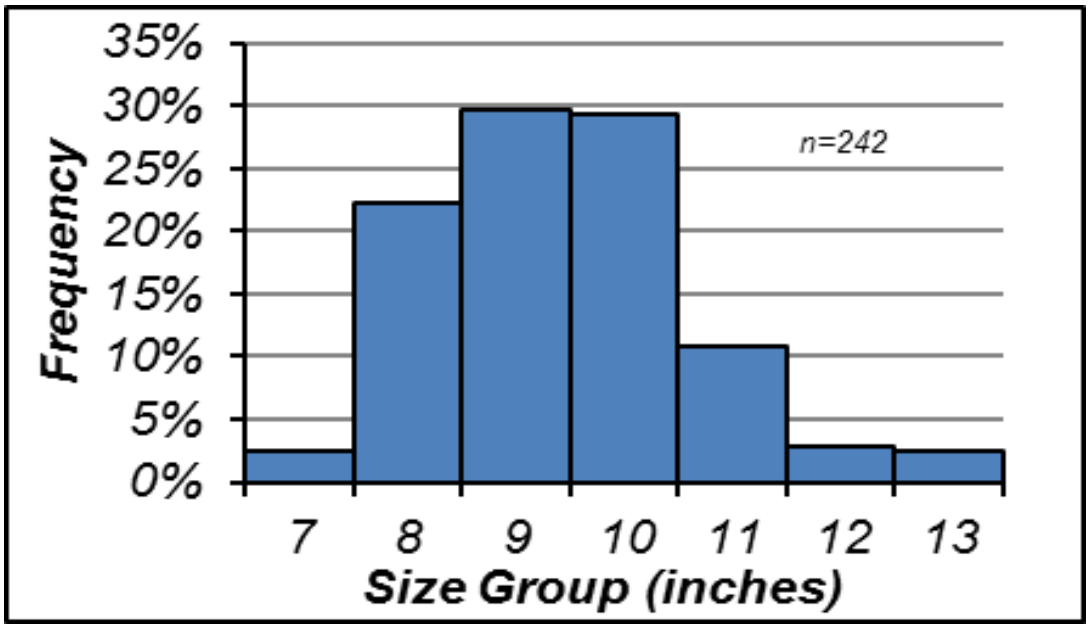

Figure 11. Frequency percent of crappie harvested from 2015 creel survey.

It is important to note that crappie populations and their fisheries are not only influenced by fishing effort, but also by anthropogenic and environmental factors. The type and degree of human activity within watersheds, riparian zones, and specific waterbodies can affect crappie populations by altering critical habitats. Additional factors influencing crappie populations include aquatic vegetation coverage, water level management, and habitat improvements. The frequency of floods, drought, and hurricanes can also influence crappie populations. While consideration of these factors is important in effective fisheries management, evaluating how these factors affect the Lake Fausse Pointe crappie population and fishery is beyond the scope of this report.

The Lake Fausse Pointe crappie population has a low maximum age, slow growth rate, high mortality rate, with moderate recruitment variability when compared with the other crappie populations included in this project. The Lake Fausse Pointe crappie fishery is currently managed with no size restrictions and a 50 fish per day creel limit. Given the current dynamics of the Lake Fausse Pointe crappie population and fishery, size limit implementation would cause a decrease in yield while substantially increasing the numbers of crappie that would need to be released by anglers.

Commercial

LDWF standardized gill net sampling in the lake produces consistent catch rates of catfish and Smallmouth Buffalo. Blue Catfish are the most common catfish captured in gillnets, although flathead catfish are captured in most years.

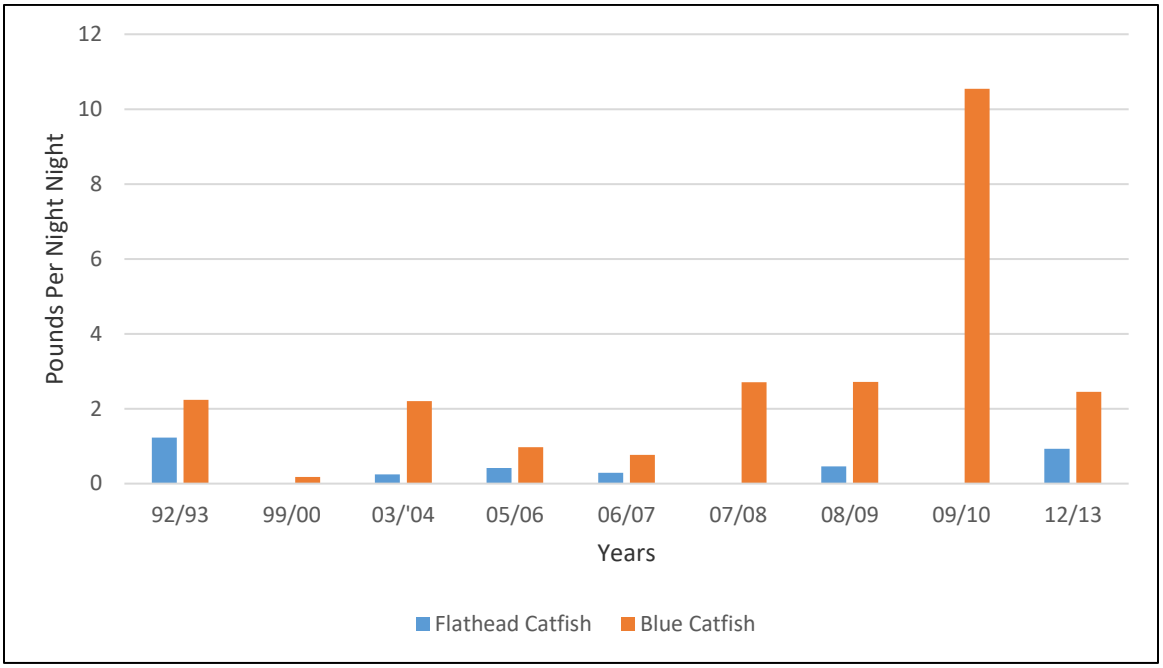

Figure 12. Results of LDWF winter gillnet sampling in Lake Fausse Pointe, LA, for Blue Catfish and Flathead Catfish, in pounds caught per net night from 1992 - 2013.

Smallmouth Buffalo are captured with regularity in gill net samples. Bigmouth Buffalo are also captured in most years although not with the same success (Figure 13).

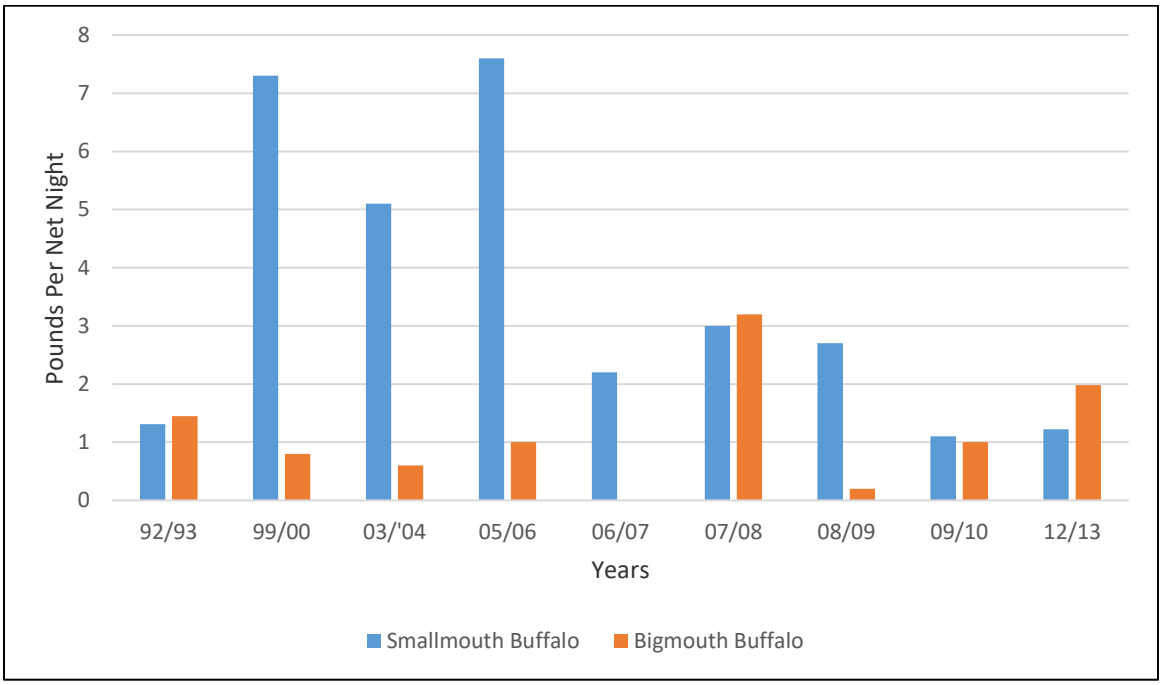

Figure 13. Pounds of Smallmouth and Bigmouth Buffalo caught per net night (100 feet of net fished overnight) from LDWF winter gillnet sampling in Lake Fausse Pointe, LA, for 1992 - 2013.

Non-confidential reports of landings from LDWF commercial trip ticket data are available to show the approximate pounds of the commercial harvest from the lake. These data are not completely specific to waters only within the lake but are representative of the area. It is assumed that the lake, due to the expanse of the area, is a major contributor to these numbers. Table 5 shows the consistent landings of buffalo fish throughout the years from this area. Buffalo account for the largest amount of finfish landings from the area. The numbers are fairly consistent and reflect the general sustainability of the buffalo fish population in this lake.

Table 6. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Bowfin		Buffalo		Bullheads		Carp	
Year	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)
2000	-	-	78,227	8,946	0	0	0	0
2001	162	64	168,424	20,914	0	0	-	-
2002	-	-	205,722	22,826	0	0	-	-
2003	-	-	365,086	42,434	0	0	-	-
2004	-	-	274,511	34,487	0	0	-	-
2005	2,565	1,254	223,218	29,417	0	0	-	-
2006	-	-	143,546	18,883	-	-	3,991	472
2007	-	-	128,284	19,330	0	0	2,348	302
2008	-	-	119,176	16,671	0	0	-	-
2009	838	222	99,746	13,933	0	0	946	118
2010	13,726	7,641	87,788	12,690	0	0	1,117	140
2011	68,894	42,725	139,377	20,520	250	30	3,329	448
2012	18,442	15,592	136,138	18,998	0	0	2,691	364
2013	48,411	52,931	102,003	19,177	0	0	4,707	626
2014	91,402	114,172	154,923	22,664	0	0	4,516	549
2015	34,796	37,589	191,666	29,357	0	0	3,533	462
2016	-	-	82,805	12,126	-	-	-	-
2017	-	-	20,395	3,007	-	-	-	-
2018	-	-	20,822	2,980	-	-	-	-
2019	-	-	17,826	2,901	-	-	-	-
2020	76	19	12,172	1,767	-	-	-	-

Blue catfish and channel catfish landings are shown in Table 7 and are consistently commercially important species harvested from this lake. In terms of value the channel catfish are nearly double that of all other finfish. But from 2016 – 2020 the blue catfish increased considerably and surpassed channel catfish during this time frame and has become a consistent contributor to the value of the commercial fishery in the lake.

Table 7. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Blue catfish		Channel catfish		Flathead catfish	
Year	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)
2000	45,467	25,132	103,880	55,144	0	0
2001	41,334	18,759	130,738	54,994	1,646	803
2002	43,292	18,445	117,103	52,092	2,291	980
2003	25,410	11,769	14,247	6,434	-	-
2004	71,134	34,084	62,975	29,967	-	-
2005	14,888	6,980	17,441	8,217	-	-
2006	18,444	9,462	47,859	22,345	-	-
2007	82,546	34,220	30,561	14,668	-	-
2008	35,490	15,729	9,349	4,087	-	-
2009	12,398	3,555	6,908	2,779	6,054	3,204
2010	15,202	9,406	8,110	3,807	4,865	2,396
2011	75,561	42,354	51,644	30,843	12,312	6,315
2012	80,625	43,208	38,333	21,945	6,592	3,360
2013	11,845	7,965	7,924	4,086	6,806	3,403
2014	8,912	5,281	6,293	3,149	5,491	2,948
2015	10,792	5,347	10,709	5,267	7,286	3,639
2016	528,492	253,956	253,269	162,041	10,021	5,011
2017	339,672	161,601	91,375	49,583	19,870	9,765
2018	268,030	129,864	48,275	24,739	9,458	4,359
2019	311,352	151,047	84,455	42,998	8,188	3,876
2020	185,28	91,362	79,287	40,057	9,834	4,822

Although Table 8 shows that alligator gar are not a large component of the total fishery of the lake, they are still quite significant. It is interesting to note that the value per pound of the alligator gar exceeds that of all other finfish.

Table 8. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Unclassified gar		Longnose gar		Spotted gar		Alligator gar	
Year	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)
2000	0	0	-	-	0	0	4,059	4,050
2001	-	-	2,174	1,396	-	-	-	-
2002	-	-	-	-	0	0	1,018	1,182
2003	12,734	5,053	0	0	0	0	3,689	3,854
2004	-	-	-	-	0	0	7,190	4,668
2005	-	-	-	-	0	0	869	670
2006	-	-	-	-	0	0	1,349	2,206
2007	-	-	-	-	0	0	3,239	4,510
2008	-	-	-	-	0	0	-	-
2009	598	390	798	521	0	0	807	822
2010	956	749	502	311	0	0	2,745	4,080
2011	62	25	940	556	0	0	4,755	5,357
2012	0	0	1,107	899	0	0	3,713	3,939
2013	139	139	38	15	0	0	1,590	1,305
2014	0	0	616	248	0	0	2,384	2,568
2015	0	0	97	42	0	0	4,819	4,211
2016	0	0	-	-	0	0	4,133	4,806
2017	0	0	-	-	0	0	8,289	9,267
2018	0	0	-	-	0	0	-	-
2019	0	0	-	-	0	0	6,116	6,913
2020	0	0	-	-	0	0	1,714	1,899

Were it not for the confidentiality of the reports, it is likely that gizzard shad would be a large contributor to the value of the commercial fishery of Lake Fausse Pointe (Table 9).

Table 9. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Gizzard shad		Unclassified shad		Freshwater drum	
Year	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)
2000	0	0	38,835	5,014	-	-
2001	-	-	-	-	11,320	1,763
2002	-	-	-	-	8,876	1,467
2003	17,738	2,469	-	-	12,146	1,814
2004	0	0	160,853	24,482	4,933	791
2005	0	0	-	-	-	-
2006	0	0	66,133	10,519	1,832	308

Species	Gizzard shad		Unclassified shad		Freshwater drum	
2007	0	0	144,466	23,295	3,223	552
2008	0	0	77,231	12,548	4,904	790
2009	22,350	3,364	16,660	12,018	9,208	1,378
2010	0	0	2,220	439	10,600	1,714
2011	108,985	21,797	147,828	56,828	13,266	2,254
2012	321,906	64,381	72,438	21,825	13,272	2,025
2013	33,807	6,755	167,023	54,164	11,807	2,376
2014	9,600	1,920	105,618	24,026	13,711	2,722
2015	0	0	63,715	14,420	14,520	2,412
2016	-	-	71,671	16,674	17,237	3,076
2017	0	0	-	--	14,450	3,172
2018	0	0	-	-	8,387	2,894
2019	0	0	-	-	7,837	1,486
2020	0	0	4,259	1,118	4,785	1,041

The fact that Table 10 shows confidential landings of grass carp and silver carp, shows that they have been harvested from the lake. In most years, commercial anglers have not reported the catch of these three species, but reports increased in 2014/2015 as shown in table 9.

Table 10. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Grass carp		Silver carp		Bighead carp	
Year	Lbs.	Value($)	Lbs.	Value($)	Lbs.	Value($)
2000	-	-	0	0	0	0
2001	-	-	0	0	0	0
2002	-	-	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	-	-	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0

Species	Grass carp		Silver carp		Bighead carp	
2012	0	0	0	0	0	0
2013	0	0	0	0	0	0
2014	0	0	9,707	1,456	1,138	171
2015	298	45	77,701	11,644	25,780	3,867
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0

Table 11 shows both the landings of blue crab and wild crawfish. The blue crab landings are common in this area and the market often differentiates between "lake" crabs, sold at a higher price, and "bay" crabs. The lake crabs are usually large male crabs captured in the Fausse Pointe system during periods of low water in the spring to summer months.

It is puzzling to see reports of wild crawfish reported from this system. In all the years of sampling in this lake, crawfish traps have never been observed anywhere in the lake, canals and bayous, or back water swamps surrounding the lake.

Table 11. LDWF trip ticket data (Area 607) for commercial fish landings, species reported in total pounds and value by year, 2000 – 2020.
"-" = Confidential non-reportable, "0" = No landings

Species	Blue crab		Wild crawfish	
Year	Lbs.	Value($)	Lbs.	Value($)
2000	42,609	30,422	-	-
2001	-	-	200,721	158,999
2002	-	-	1,117,624	573,923
2003	8,395	9,141	1,068,586	587,558
2004	-	-	1,077,678	542,957
2005	6,669	5,794	855,203	432,443
2006	-	-	73,525	62,586
2007	-	-	703,900	387,070
2008	8,556	7,278	838,659	485,061
2009	266,426	238,413	5,065,206	4,169,438
2010	61,268	66,628	4,447,537	4,323,179
2011	66,367	57,798	2,272,788	2,475,489
2012	77,895	108,203	1,105,621	1,266,116
2013	51,783	50898	3,276,196	2,453,939

Species	Blue crab		Wild crawfish	
2014	35,762	40,129	1,585,702	1,732,621
2015	55,706	58,453	804,305	947,730
2016	-	-	226,124	153,176
2017	1,922	1,540	143,065	131,312
2018	9,401	14,959	204,683	176,814
2019	4,272	4,855	-	-
2020	-	-	-	-

Species of Greatest Conservation Need

Paddlefish (*Polyodon spathula*) are routinely captured in standardized gill net sampling in Lake Fausse Pointe. They are listed as Louisiana state S3, meaning they are rare and local throughout the state or only found locally, (albeit abundantly at some of its locations) in a restricted region of the state, or because of other factors making it vulnerable to extirpation (21 to 100 known extant populations).

Creel Surveys

Largemouth Bass Anglers
Access point creel surveys are conducted on water bodies to collect fishery dependent data from anglers including: fishing pressure, catch rates, harvest, size structure of harvested fishes, angling success and species preference. Bass fishing trips to Fausse Pointe in 2015 averaged 2.87 anglers per boat (Table 12).

Table 12. Average number of Largemouth Bass anglers interviewed, time fished, and distanced traveled to Fausse Pointe, LA during the 2015 creel survey.

BASS ANGLERS State regulations – no minimum/10fish creel			
Year	Mean no. of anglers in party	Mean trip length (hours)	Mean one-way distance traveled to ramp
2015	2.87	3.59	30

Bass anglers on Fausse Pointe averaged 3.5 hours per trip fishing after having driven approximately 30 miles to the ramp where they launched their boat. Participation by local Largemouth Bass anglers made up the majority of fishermen interviewed during 2015. Their residences included St. Martin, Lafayette, and Iberia parishes.

Table 13 reports the number of Largemouth Bass caught, released and harvested per trip by month during 2015. Catch rates were found to be the highest in the month of March. Additionally, catch rates were high in March and April likely due to Largemouth Bass nesting activities. The number of bass harvested (48) is far below the number of bass released (131). This difference may be attributed to bass fishermen catching smaller bass and releasing them.

The average weight of a Largemouth Bass harvested in the 2015 creel survey was 1.29 pounds.

Table 13. Largemouth Bass caught, released and harvested per trip by anglers on Fausse Pointe, LA, during the 2015 creel survey.

State regulations – no minimum length/10 fish creel				
Month	**LMB caught per trip**	**LMB released per trip**	**LMB harvested per trip**	**LMB Avg. weight**
1	0.84	0.46	0.38	1.55
2	0.28	0.23	0.05	1.38
3	2.85	1.43	1.42	1.75
4	1.14	0.89	0.25	1.09
5	0.75	0.50	0.75	1.36
6	0.92	0.92	0.00	0
7	1.08	1.03	0.05	1.02
8	0.50	0.19	0.31	1.12
9	1.00	0.00	1.00	0.72
10	0.96	0.96	0.00	0
11	2.00	2.00	0	0
12	1.06	0.81	0.25	1.61

Although Largemouth Bass only averaged 7% of the total fish harvested for Fausse Pointe, Largemouth Bass is one of the most desired fish pursued by Fausse Pointe anglers. During 2015, Bluegill and crappie were the most abundant species harvested by anglers (Figure 14).

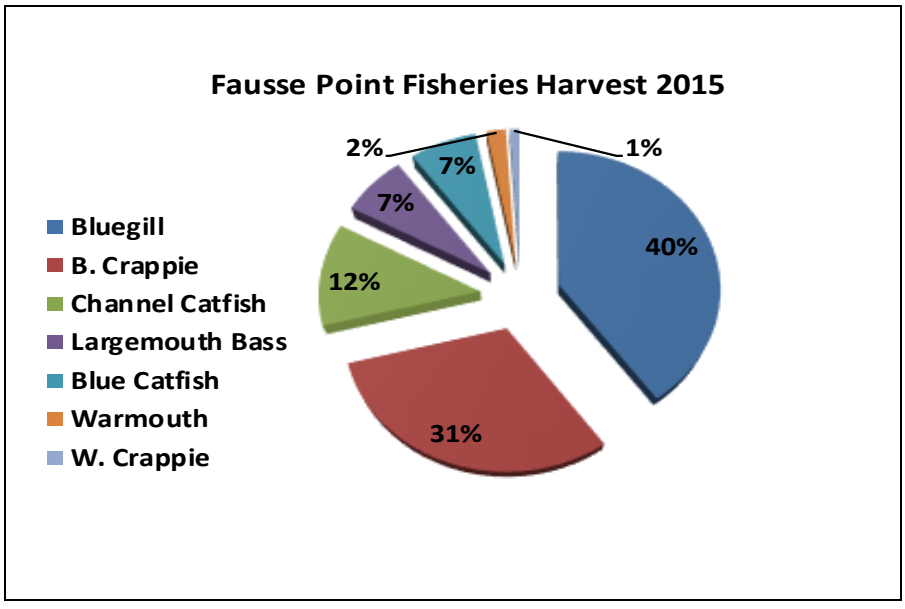

Figure 14. Percent (%) by number of total fish species harvested by anglers from Fausse Pointe, LA during the 2015 creel survey.

Sunfish Anglers

Sunfishes made up the greatest percentage of species harvested in Fausse Pointe during 2015 (Figure 13). Bluegill by far make up the majority of sunfish harvested in Fausse Pointe, followed by Warmouth and Redear Sunfish (Table 14). The best chance to harvest these sunfish is during the months of May and June when they are spawning.

Table 14. Percent by number of common sunfish species harvested by anglers on Fausse Pointe, LA, during the 2015 creel survey.

2015	Bluegill	Redear Sunfish	Warmouth
Percent	96%	0.001%	4%

Crappie Anglers

Good numbers of crappie were harvested from Fausse Pointe (Figure 15) in the months of January, March and December. These high numbers are due to the spawning activity in the early part of the year. In later months of the creel survey, crappie harvest was very minimal.

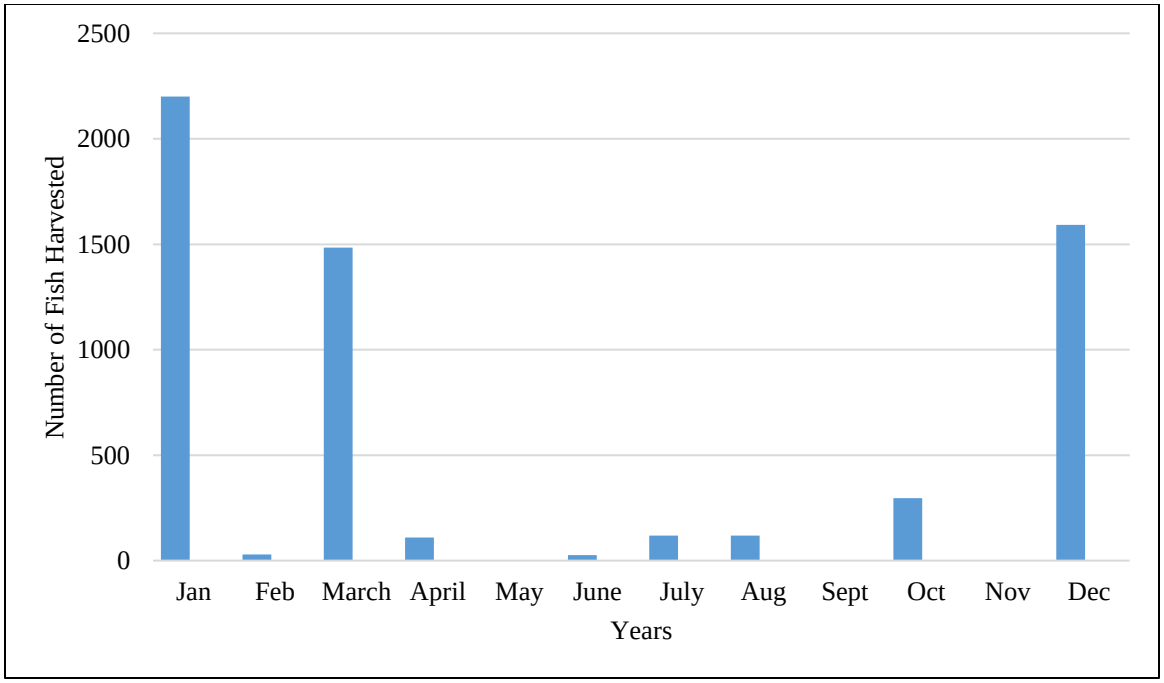

Figure 15. Total estimated number of crappie harvested by anglers on Fausse Pointe, LA, during the 2015 creel survey.

HABITAT EVALUATION

Aquatic Vegetation

As of October 2019, water hyacinth *(Eichhornia crassipes*) made up the majority of the vegetation observed in Lake Fausse Pointe. Approximately 400 acres of water hyacinth were present. Other plants present included common salvinia (550 acres), alligator weed (100 acres) and water lettuce/giant cutgrass mix (300 acres). Hydrilla covered approximately 400 acres, mainly in the Sandy Cove area. American lotus normally is abundant throughout the complex, but due to high water levels associated with the August flood of 2016, this emergent vegetation was greatly reduced. However, this plant is slowly increasing, especially in the Sandy Cove area.

Chemical Control

LDWF conducts aquatic vegetation control in an effort to provide boater access to the primary bayous and canals in the Lake Fausse Pointe/Lake Dauterive area. Each year LDWF spray crews work to control nuisance aquatic vegetation. Aquatic vegetation is typically treated with the EPA-approved herbicides glyphosate, diquat, and 2,4-D, which are the more common herbicides used to treat various types of nuisance aquatic plants. The most common nuisance aquatic plants treated are water hyacinth (*Pontederia crassipes*), common salvinia *(Salvinia minima),* water paspalum *(Paspalum repens),* alligator weed (*Alternanthera philoxeroides*) and para grass *(Urochloa mutica).*

Table 15. Acres of aquatic vegetation treated by spraying by LDWF in Lake Fausse Pointe, LA, each year from 2008 to 2019.

VEGETATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
Alligator weed			45	39	25	21	19	4	0	23	13	0	189
American lotus				4			4	6	0	0	0	0	14
Cutgrass			20	3	16	2	5		0	0	0	0	46
Paragrass				3		5	10		0	0	0	0	18
Pennywort		60	3				13		0	5	5	0	86
Common Salvinia				5	40	85	100	11	54	160	*295	20	770
Water hyacinth	80	690	460	102	392	509	82	*1,560	*690	85	18	0	4,668
Water paspalum	7		7	14	7	8			0	28	10	0	81
Willow tree				7									7

As seen in Table 15, water hyacinth is the most abundant nuisance aquatic vegetation that occurs in Lake Fausse Pointe. However starting in 2017, common salvinia spread throughout the lake as shown in table 15. The majority of the effort by LDWF spray crews is directed towards these plants. The amount of control necessary for water hyacinth and common salvinia is variable from year to year as evidenced by the acres per year in Table 15. * LDWF spray crews and herbicide contractors combine to manage the coverage of these plants.

Due to contract spray crews in 2016 and 2018, aquatic plants such as water hyacinth and common salvinia have decreased. Therefore, only 20 acres of common salvinia were treated in 2019.

Biological Control

No biological control measures have been implemented.

CONDITION IMBALANCE / PROBLEM

Sediment delivery has increased with the clearing of bottomland hardwood forests surrounding the lake for agriculture. Urban areas have developed in the historical floodplain of the Atchafalaya Basin outside of the Basin levees. These urban areas have decreased the coefficient of roughness that slows rainwater runoff. Sediment delivery to the lake has been increased by gravity drainage projects to protect structures from flood waters. Cane farmers have improved drainage efficiency, moving water quickly and effectively from their fields to the nearest sump, Lake Fausse Pointe. Water pumped from the Atchafalaya River by the Teche-Vermilion pumping station is routed through the lake by the West Atchafalaya Basin Levee borrow pit from Bayou Teche through the Teche-Lake canal control structure. Bayou Portage, Tete Bayou and the Jeanerette Canal drain expanses of sugar cane fields of rainwater and soil. In winter, it is not uncommon in standardized gill net sampling to catch many sugar cane billets and few fish in Lake Dauterive.

Suitable spawning substrate is limited in the system. Fish that do successfully spawn apparently experience low survival of their offspring. Turbid conditions inundate the entire system in the spring, and reduce the chance of survival of hatched fish.

Fish stocking over the years has produced little to no increase in catch rates in LDWF sampling, and anglers still complain of poor fishing success in the lake.

Vegetation control of water hyacinth and common salvinia varies from year to year and the number of acres appears to be manageable by LDWF spray crews. Efforts to control this plant have been successful in past years.

CORRECTIVE ACTION NEEDED

A habitat and resources assessment tool needs to be developed for Lake Fausse Pointe to identify sources of sediment. Use of satellite imagery and LiDAR (Light Detection and Ranging) information in a geographical information system (GIS) to identify where the main sources of sediment are and where they are being deposited in the lake should be explored. This tool would help to make a decision on how to restore habitat quality.

It is suspected that eliminating the flow of sediment pumped from the Atchafalaya River would greatly decrease the amount of sediment inflow into the system. Reducing the amount of time that the Teche-Lake Canal is open to allow the same water in the lake from Bayou Teche would provide an additional decrease in sediment inflow.

If the lake could be made nearly completely tidal, sediment sequestered in the lake could be exposed to the atmosphere to allow oxidation and compaction of exposed acreages. These areas might increase in water depth and provide suitable spawning habitat for nesting fish. If

the amount of sediment entering the system in the spring at spawning time could be reduced, there might be more survival of spawned fry of nesting fish.

RECOMMENDATIONS

1) Develop a GIS tool to assess the sediment delivery to this lake system. Use this information to formulate a solution to reducing sediment input in to the system and provide a method of allowing the lake to dry during the year.

2) Commercial fishing seems to be the best attribute of this lake. The habitat is apparently conducive to large catches of buffalo, catfish, and shad. This trends need to be monitored through landings data to see if the habitat eventually causes a decline in these fisheries as well.

3) LDWF will continue to participate in the legislatively created Lake Fausse Pointe and Grand Avoille Cove Advisory Board to help in their efforts as concerned stakeholders in this area.

4) Nuisance aquatic vegetation in Lake Fausse Pointe will continue to be monitored and controlled by LDWF spray crews as needed according to the Aquatic Herbicide Application Procedures (Table 16). All complaints from the public concerning impediments to navigation will be managed with LDWF spray crews until acreage amounts show a tendency to increase.

Table 16. LDWF Aquatic Herbicide Application Procedures.

Plant Species	Herbicide	Surfactant
Common/Giant Salvinia (April 1 to October 31)	Glyphosate (0.75 gal/acre) + Diquat (0.25 gal/acre) or Clipper (2 oz./acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Common/Giant Salvinia (November 1 to March 31)	Diquat (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Water Hyacinth	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
Water Hyacinth in waiver areas (March 15 to September 15)	Glyphosate (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Alligator Weed (undeveloped areas)	Imazapyr (0.5 gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Alligator Weed (developed areas)	Imazamox (0.5 gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
American Lotus	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
American Lotus in waiver areas (March 15 to September 15)	Glyphosate (0.5 gal/acre)	Nonionic surfactant (0.25 gal/acre)
American Lotus in waiver areas with potable water intakes (March 15 to September 15)	Triclopyr (0.5gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Duckweed	Diquat (1.0 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Cuban Bulrush (*Oxycaryum cubense*)(sedge)	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
Cuban Bulrush (sedge) in waiver areas (March 15 to September 15)	Glyphosate (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Water Lettuce (*Pistia stratiotes*)	Diquat (1.0 gal/acre)	Nonionic surfactant (0.25 gal/acre)

APPENDIX I

(Click here to return)

Electrofishing sites in Lake Fausse Pointe

Overview

North electrofishing sites

South electrofishing site