

LAKE MANAGEMENT STATUS REPORT

Date of Report: 2/2/2022	Fisheries Manager: David Wyffels	District: 2
Lake Name: LaSalle Lake	County: LaSalle	Water No: 00023
Ownership (STATE, PUBC, PUBO):		Acreage: 2058

LM STATUS REPORTS WILL INCLUDE THE FOLLOWING SECTIONS:

1. List of the Sport Fish Regulations in Effect.
2. Listing of Stocked Fish
3. Vegetation Treatments
4. Fish Surveys
5. Lake Management Plan Progress Table
6. Recommendations for Observed Problem Trends.

1. SPORT FISH REGULATIONS IN EFFECT:

All Fish 2 Pole and Line Fishing Only
 Large or Smallmouth Bass 1 Fish Daily Creel Limit (18" Minimum Length Limit)
 Bluegill or Redear Sunfish Statewide Regulations
 Channel Catfish Statewide Regulations
 Striped, White, or Hybrid Striped Bass . . . 10 Fish Daily Creel Limit , no more than 3 of which may be greater than or equal to 17 inches
 Walleye, Sauger, or Hybrid Walleye Statewide Regulations
 White, Black, or Hybrid Crappie Statewide Regulations

2. FISH STOCKING :

Fish Stocked:

5/13/2021	BCF	1249	9.5"	Osage Catfisheries
6/16/2021	WHB	29996	1.3"	LaSalle
6/22/2021	LMB	27125	1.5"	Jake Wolf
6/23/2021	WHB	5020	1.4"	LaSalle
6/24/2021	WBH	18565	1.4"	LaSalle
6/28/2021	LMB	20618	1.5"	LaSalle
7/19/2021	SMB	1848	3.5"	LaSalle
7/26/2021	LMB	9732	4.0"	LaSalle
8/2/2021	SMB	10693	4.0"	LaSalle
8/3/2021	SMB	7086	4.0"	LaSalle
8/17/2021	SMB	1056	4.0"	LaSalle
8/24/2021	LMB	1762	4.0"	LaSalle
9/28/2021	BCF	20580	5.1"	Little Grassy
10/5/2021	BLG	112111	1.1"	LaSalle
10/12/2021	BLG	18700	1.1"	LaSalle
10/13/2021	BLG	36005	1.4"	LaSalle
10/18/2021	BLG	21933	1.2"	LaSalle
10/19/2021	BLG	888	1.2"	LaSalle

3. AQUATIC VEGETATION TREATMENTS:

No vegetation treatments are required at LaSalle Lake

4. FISH SURVEYS

5/5/2021 Spring Bass/Bluegill survey

4 sites – 30 min each site. Largemouth, Smallmouth and Sunfish collected only

10/14/2021: Low Pulse DC Blue catfish survey

3 sites- 30min each site Low pulse DC catfish survey. All sites used a chase boat.

5. FISH KILLS:

No fish kills were reported in 2021.

6. LAKE MANAGEMENT PROGRESS TABLES:**Largemouth Bass:**

Limited reproduction of Black bass began occurring in LaSalle Cooling Lake after the two units came on line in the mid-1980's. This is similar to the fate that Black bass experienced in other cooling lakes. To protect the bass in the lake, a minimum length limit of 18 inches and a daily creel of 1 fish per day was implemented in 1986. An annual stocking program of Largemouth and Smallmouth Bass began in 1991. Very few numbers of Largemouth bass were sampled in 2016. The Smallmouth bass sample consisted of just two year classes. Numbers for PSD and RSD below should be used with caution due to the small sample size of Largemouth bass. Black bass numbers at LaSalle Lake have been up and down but for the past few years it has been extremely difficult to sample Black bass. Black bass fishermen still catch good numbers (personal communication). Historic data does show that is same issue came about in the early 2000s but then corrected in 2003. The goal for 2020 was to switch to a spring sample but because of COVID protocols no sample was done. In 2021 a Spring daytime electrofishing survey was done in efforts to better sample numbers. Spring samples results did not result in better numbers. It is most likely that Largemouth samples are habitat driven and samples will continue to suffer due to lacking habitat. The Spring Results for the Spring 2021 survey can be found in table 3 and 4. Relative weights (Wr) of Spring were excellent from the limited numbers sampled. Largemouth bass fishing was very good this year from personal communication with local fishermen.

1.Management Plan Fall:Goal		2016	2017	2018	2019	2020	2021
# Stock (200mm)	>100	1	NS	NS	NS	NS	NS
PSD	40-60	100					
RSD 15	10-40	0					
RSD 18	0-10	0					
Effort(Min)		180	0	0	0	0	0

2.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Largemouth bass collected at LaSalle

Year	<8	8-12	12.1-15	15.1-20	> 20	Total
2016	3.0	0.0	0.3	0.0	0.0	3.3
2017	NO SAMPLE					

2018 NO SAMPLE
 2019 NO SAMPLE
 2020 NO SAMPLE
 2021 NO SAMPLE

<u>3.Management Plan Spring: Goal</u>		<u>2021</u>
# Stock (200mm)	>100	10
PSD (95% CI)	40-60	70(35)
RSD 15	10-40	0
RSD 18	0-10	0
Effort(Min)		180

2.Spring diurnal DC electrofishing CPUE (fish/hr) of each length group of Largemouth bass collected at LaSalle

<u>Year</u>	<u><8</u>	<u>8-12</u>	<u>12.1-15</u>	<u>15.1-20</u>	<u>> 20</u>	<u>Total</u>
2021	0.0	1.5	3.0	0.5	0.0	5.0
Avg Wr		(106)	(130)	(118)		

Smallmouth Bass:

Smallmouth bass have accounted for a small percentage of Fall samples and this continued in the 2021 survey done in the Spring. Sampling seems to be habitat driven and preferred habitat seems to be out of the reach of DC electrofishing. Relative weights of the 2021 survey did show a possible a lack of quality food source for the few sampled young Smallmouth bass.

<u>1.Management Plan Fall:</u>	<u>Goal:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
# Stock (180mm)	>100	7	NS	NS	NS	NS	NS
PSD		43					
RSD 15		0					
RSD 18		0					

2.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Smallmouth bass collected at LaSalle

<u>Year</u>	<u><7</u>	<u>7-11</u>	<u>11.1-14</u>	<u>14.1-17</u>	<u>17.1-20</u>	<u>> 20</u>	<u>Total</u>
2016	16.7	1.3	1.0	0.0	0.0	0.0	19.0
2017	NO SAMPLE						
2018	NO SAMPLE						
2019	NO SAMPLE						
2020	NO SAMPLE						
2021	NO SAMPLE						

<u>3.Management Plan Spring: Goal:</u>		<u>2021</u>
# Stock (180mm)	>100	7
PSD(95% CI)		0
RSD 15		0
RSD 18		0

4.Spring diurnal DC electrofishing CPUE (fish/hr) of each length group of Smallmouth bass collected at LaSalle

<u>Year</u>	<u><7</u>	<u>7-11</u>	<u>11.1-14</u>	<u>14.1-17</u>	<u>17.1-20</u>	<u>> 20</u>	<u>Total</u>
2021	1.0	5.0	0.0	0.0	0.0	0.0	6.0
Avg Wr		(86)					

Hybrid Striped Bass:

Hybrid Striped Bass were not sampled in 2017. Future goals are to evaluate the Hybrid striped bass population by short set experimental gill nets

Bluegill:

Bluegill continue to do excellent at LaSalle Lake. A Spring survey was done in 2021 to better sample numbers of Black bass and Bluegill. The Spring survey did not provide better numbers and a better size distribution. Larger fish were up in shallower areas allowing better sampling efforts. The Spring survey showed excellent population with a PSD of 34 and a RSD 7 of 14. Relative Weights of the Spring fish were excellent. Spring relative weights are going to be high due to reproductive females holding eggs increasing overall fish weight but good Spring relative weight indicate quality forage and health. 2021 Survey results can be found in tables 3 and 4.

<u>1.Management Plan Fall:</u>	<u>Goal:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
#Stock(80mm)	>100	508	NS	NS	NS	NS	NS
PSD	20-60	44					
RSD 7	10-15	1					
RSD 8	5-20	0					

2.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Bluegill collected at LaSalle

<u>Year</u>	<u><3</u>	<u>3.1-6</u>	<u>6.1-8</u>	<u>8.1-10</u>	<u>Total</u>
2016	4.3	95.0	74.3	0.0	173.6
2017	NO SAMPLE				
2018	NO SAMPLE				
2019	NO SAMPLE				
2020	NO SAMPLE				
2021	NO SAMPLE				

3.Management Plan Spring: Goal: 2021

#Stock(80mm)	>100	382
PSD (95% CI)	20-60	34(7)
RSD 7	10-15	14
RSD 8	5-20	0

4.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Bluegill collected at LaSalle

<u>Year</u>	<u><3</u>	<u>3.1-6</u>	<u>6.1-8</u>	<u>8.1-10</u>	<u>Total</u>
2021	13.5	126.0	62.5	2.5	204.5
Avg Wr		(119)	(113)	(107)	

Blue Catfish:

Blue catfish were first stocked in 1999 (70,563 - 4.8 inches). They came from Joe Hogan Fish Hatchery in Arkansas. A creel completed in 2007 reported that more pounds of blue catfish were caught and harvested than any other species. It was also the number 1 sought after species by anglers at LaSalle Lake. Trophy sized fish are reported by anglers but do not show up in the annual low pulse DC electrofishing surveys. The 2017 annual low pulsed DC survey sampled 293 individuals ranging from 340mm to 827mm. Blue catfish continue to have very good relative weights as previous years. The 2018 sample was cut short due to weather issues that made for a memorial day for all. A total of 172 Blue Catfish and 2 Flatheads were sampled. The low plus DC electrofishing is very effective at sampling fish up to 35 inches. Larger individuals have been caught by fishermen. One reported to me by the Chicago Tribune was 73 pounds. The 2019 sample was again cut to the sample sites 1 and 2 (Warm and Middle pools). Catch rates were similar to previous years with the exception to the fish greater than 30 inches. The 2020 sample had the lowest CPUE of fish 20-30 inches in the past 5 years. Catch rates for fish 20-30 inches has averaged around 45 fish per hour in the last 4 years. The 2020 sample had very few larger sized fish even seen during sampling. Larger individual population numbers may have been greatly impacted by the summer fish kill. Monitoring will continue to evaluate the impacts of the fish kill. The fall 2021 survey had one of the lowest CPUEs in the past 6 years but with better size distribution. The biggest difference from previous years was the change in 12-20 inch group, but the survey showed increases in fish larger 20 inches from the 2020 survey post the fish kill. Numbers in the 20-30 inch group increased from 8 fish/hr to 35 fish/hr.

<u>1.Management Plan</u>	<u>:Goal</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
# Stock (300mm)	>100	250	293	172	147	147	117
PSD		35	27	32	20	6	47
RSD 30		3	1	2	0	1	2
RSD 35		1	0	1	0	0	0
Effort(Min)		90	90	60	60	60	90

2.Fall diurnal low pulse electrofishing CPUE (fish/hr) of each length group of Blue catfish collected at LaSalle

<u>Year</u>	<u><12</u>	<u>12-20</u>	<u>20.1-30</u>	<u>30.1-35</u>	<u>> 35.1</u>	<u>Total</u>
2016	0.0	109.0	53.3	4.0	0.7	167.0
2017	0.0	143.3	49.3	2.6	0.0	195.2
Avg Wr		(88)	(99)	(114)		
2018	0.0	117.0	51.0	2.0	2.0	172.0
Avg Wr		(91)	(96)	(112)	(124)	
2019	0.0	117.0	30.0	0.0	0.0	147.0
Avg Wr		(88)	(89)			
2020	0.0	138.0	8.0	0.0	0.0	147.0
Avg Wr		(81)	(93)			
2021	0.0	41.3	35.3	1.3	0.0	77.9
Avg Wr		(89)	(95)	(110)		

Channel Catfish:

LaSalle Cooling Lake has a large population of channel catfish. These fish are characterized by poor Relative Weights and small size despite the large Threadfin shad, Gizzard shad and mussel population to feed on.

Gizzard Shad:

Gizzard shad numbers remain stable with fish from 3.9 -9.4 inches collected in the 2016 sample. Gizzard shad less than 7 inches dominated the 2016 sample.

<u>Management Plan:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
YOY Present	X	NS	NS	NS	NS	NS
CPUE (fish/hr) < 6inches	41.7					
CPUE (fish/hr)	126.7					

Threadfin Shad:

Threadfin shad numbers remain stable with fish from 2.8 -5.5 inches collected in the 2016 sample. Threadfin shad less than 4 inches dominated the 2016 sample. These fish will provide good forage for the predator population going into the winter and spring of 2017.

<u>Management Plan:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
YOY Present	X	NS	NS	NS	NS	NS
CPUE (fish/hr) < 4inches	181.3					
CPUE (fish/hr)	183.7					

6. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

1. Complete a Fall community sample in 2021.
2. Evaluate the Large Blue catfish size class with gill nets. Lacking data on age and growth of older fish would be beneficial for stocking adjustments.
3. Evaluate the Hybrid Bass population with gill nets. Age and growth of Hybrids done with this survey