LASALLE LAKE

FISHERIES STATUS SUMMARY

LOCATION – LaSalle Lake State Fish and Wildlife Area, is located in LaSalle County approximately 8 miles southeast of Marseilles or 8 miles southwest of Seneca on County Road 6.

DESCRIPTION –LaSalle Lake is a perched cooling lake impounding 2,058 surface cooling acres of water with 100 percent of the shoreline comprised of rock rip–rapped dikes. The average depth of the lake is 15 feet, but there are excavated areas within the lake up to 70 feet deep. Caution should be used on windy days as LaSalle Lake may become extremely rough. For safety, please observe wind warning lights. There is usually a 20 degree water temperature difference between the discharge and the intake. Boating is No horsepower limitation; maximum speed is 40 mph except in designated "no wake" areas; a working gasoline engine is required as the main propulsion unit; boats under 14 feet are not recommended. The lake has three concrete boat ramps and a paved parking lot large enough for 140 car/trailer parking. The boat launch is ADA accessible. Zebra mussels have been found in LaSalle Lake, therefore boaters should take appropriate measures upon departure to prevent spreading.

LASALLE LAKE HOURS- The Lake is scheduled to open on March15. Hours are from 6:00 AM to sunset seven days a week. The lake closes on October 15.

MANAGEMENT ACTIVITIES - The fishery is managed by annual species-specific surveys and stocking.

STATUS OF THE SPORT FISHERY – LaSalle Lake receives an annual stocking of Largemouth bass, Smallmouth bass, Hybrid striped bass, and Blue catfish. Below is a description of the fishery.

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. Black bass numbers at LaSalle Lake have been up and down and it has been extremely difficult to sample Black bass. Historically the Black bass population was assessed by fall electrofishing, both AC and DC. Fall samples catch rates typically were dominated by fish less than 8 inches. It is possible that larger sized black bass are habitat driven and these fish are not near shore due to lacking habitat, or they are offshore feeding on pelagic food sources. Larger fish sample sizes were limited and did not provide enough information to produce PSD and RSD numbers from samples. Fall surveys are very difficult at LaSalle due to fall weather conditions. 2024 fall surveys again had limited numbers of Largemouth collected. Only 4 Largemouth bass were sampled. Relative weights for the few fish collected were good. Results can be found in Table 1 and 2.

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. 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. In 2023 a Spring survey was done to see if better results could be attained from the 2021 Spring survey and historic Fall surveys. The 2023 survey results in good numbers of harvestable size fish. Information from the Spring survey helped to indicate areas that can be sampled efficiently for future Spring surveys. The 2024 Spring survey resulted in only 4 Largemouth bass. Results can be found in Table 3 and 4.

1.Management Plan Fall: Goal		2016	2017	2018	2019	2020	2021	2022	2023	2024
# Stock (200mm)	>100	1	NS	NS	NS	NS	NS	NS	NS	3
PSD	40-60	100								100
RSD 15	10-40	0								100
RSD 18	0-10	0								33
Effort (Min)		180	0	0	0	0	0	0	0	90

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
2012	84.4	0.2	0.7	0.2	0.0	85.5
2013						
2014	2.3	0.7	2.3	6.0	0.0	11.3
2015	8.5	1.0	0.0	1.0	0.0	10.5
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					
2022	NO SAMPLE					
2023	NO SAMPLE					
2024	0.7	0.0	0.0	2.0	0.0	2.7
Avg Wr				(97)		

3.Management Plan Spring: Goal		2021	2022	2023	2024
# Stock (200mm)	>100	10	NS	17	3
PSD (95% CI)	40-60	70(35)		100	100
RSD 15	10-40	0		77	33
RSD 18	0-10	0		6	33
Effort (Min)		180		90	120

2.Spring 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
2021	0.0	1.5	3.0	0.5	0.0	5.0
Avg Wr		(106)	(130)	(118)		
2022	NO SAMPLE					
2023	0.0	0.0	2.7	8.7	0.0	11.4
Avg Wr			(103)	(108)		
2024	0.5	0.0	1.0	0.5	0.0	2.0
Avg Wr						

Smallmouth Bass:

Smallmouth bass have accounted for a small percentage of Fall and Spring sample. Sampling seems to be habitat driven and preferred habitat seems to be out of the reach of DC electrofishing. Historic fall surveys show up and down year class with low overall catch rates typically dominated by fish less than 7 inches. The Smallmouth bass samples have similar results as the Largemouth populations with only smaller size fish collected at good rates. Habitat and food could be driving the sample numbers just like the Largemouth

population. The 2024 Fall survey resulted in less size distribution then historic samples with only fish less than 7 inches sampled.

To collect better information on the Black bass population, Spring electrofishing was started in 2021. Spring sample data has resulted in low sample sizes, but larger size distributions. The Spring 2024 sampling results can be found in Tables 3 and 4 below.

1.Management Plan Fall:	Goal:	2016	2017	2018	2019	2020	2021	2022	2023	2024
# Stock (180mm)	>100	7	NS	NS	NS	NS	NS	NS	NS	0
PSD		43								0
RSD 15		0								0
RSD 18		0								0

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

Year	<7	7-11	11.1-14	14.1-17	17.1-20	> 20	Total
2012	31.6	5.3	2.0	0.2	0.0	0.0	39.1
2013							
2014	12.7	6.0	4.0	1.7	0.7	0.0	25.1
2015	40.5	0.5	1.5	1.0	1.5	0.0	45.0
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						
2022	NO SAMPLE						
2023	NO SAMPLE						
2024	8.7	0.0	0.0	0.0	0.0	0.0	8.7

3.Management Plan Spring:	Goal:	2021	2022	2023	2024
# Stock (180mm)	>100	7	NS	4	2
PSD (95% CI)		0		0	0
RSD 15		0		0	0
RSD 18		0		0	0

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

Year	<7	7-11	11.1-14	14.1-17	17.1-20	> 20	Total
2021	1.0	5.0	0.0	0.0	0.0	0.0	6.0
Avg Wr		(86)					
2022	NO SAMPLE						
2023	4.0	2.7	0.0	0.0	0.0	0.0	6.7
Avg Wr		(86)					
2024	0.0	1.0	0.0	0.0	0.0	0.0	1.0
Avg Wr							

Bluegill:

Historic Fall samples show a diverse population with excellent size distribution. The 2024 fall survey showed good numbers of fish over 6 inches with an RSD 7 of 39 (Table 1). The Catch rate of fish in the 3- 6-inch range was down from historic samples. Fall relative weights for all size classes sample was excellent (Table 2).

Spring assessments are done as part of the Spring Black bass survey. The 2024 survey results can be found in Table 3 and 4. Springs samples in 2024 also showed reduced catch rates of fish in the 3-6 range that the Fall survey showed. The Spring survey showed good numbers of fish over 7 inches with an RSD 7 of 22.

1.Management Plan Fall:	Goal:	2016	2017	2018	2019	2020	2021	2022	2023	2024
#Stock(80mm)	>100	508	NS	NS	NS	NS	NS	NS	NS	108
PSD	20-60	44								80
RSD 7	10-15	1								39
RSD 8	5-20	0								0

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

Year	<3	3.1-6	6.1-8	8.1-10	Total
2012	2.2	58.9	91.1	2.4	154.6
2013					
2014	39.7	372.0	62.0	1.3	475.0
2015	7.5	345.0	153.0	0.0	505.5
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				
2022	NO SAMPLE				
2023	NO SAMPLE				
2024	0.0	14.7	57.3	0.0	72.0
Avg Wr		(121)	(105)		

3.Management Plan Spring:	Goal:	2021	2022	2023	2024
#Stock(80mm)	>100	382	NS	468	211
PSD (95% CI)	20-60	34(7)		15(3)	75(7)
RSD 7	10-15	14		3	22
RSD 8	5-20	0		0	1

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

Year	<3	3.1-5.9	6-7.9	8-9.8	Total
2021	13.5	126.0	62.5	2.5	204.5
Avg Wr		(119)	(113)	(107)	
2022	NO SAMPLE				
2023	0.0	266.7	44.7	0.7	312.1
Avg Wr		(119)	(113)	(107)	
2024	3.5	26.0	78.0	1.5	109.0
Avg Wr					

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. The 2024 survey was the highest catch per unit effort since 2014. Catch rates had returned to pre-fish kill 2020 sample numbers. Increases in catch rates came with declined relative weights for all size groups

sampled. An interesting note was the decline in relative weights for fish over 30 inches which has historically been excellent.

1.Management Plan	: Goal	2016	2017	2018	2019	*2020	2021	2022	2023	2024
# Stock (300mm)	>100	250	293	172	147	147	117	240	NS	295
PSD		35	27	32	20	6	47	31		31
RSD 30		3	1	2	0	1	2	2		1
RSD 35		1	0	1	0	0	0	0		0
Effort (Min)		90	90	60	60	60	90	225		90

* Summer fish kill

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

Year	<12	12-20	20.1-30	30.1-35	> 35.1	Total
2014	14.0	123.3	20.0	1.3	0.0	158.6
2015	0.0	41.3	0.0	0.0	0.0	41.3
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)		
2022	4.5	44.3	18.7	1.1	0.0	68.5
Avg Wr	(109)	(84)	(92)	(109)		
2023	NO SAMPLE					
Avg Wr						
2024	0.0	136.7	58.7	1.3	0.0	196.7
Avg Wr		(82)	(84)	(88)		

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 and Gizzard shad population to feed on.

Hybrid Striped Bass:
Hybrid Striped Bass were not sampled in 2024. Future goals are to evaluate the Hybrid striped bass population by short set experimental gill nets.

ADDITIONAL FISH SPECIES – LaSalle Lake supports a variety of other fish species which include Walleye, Crappie Species, White bass, Flathead catfish and others. LaSalle Lake is supported by a gizzard shad and Threadfin forage base as well as various other minnow.

FISHING REGULATIONS – Statewide fishing regulations apply at this lake (see current Illinois Fishing Information booklet and IFISHILLINOIS website http://www.ifishillinois.org/ for specific details).

Additional Site Specific fishing regulations:

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, Flathead, and Blue Catfish. . . Statewide Regulations
Striped, White, or Hybrid Striped Bass. . 10 fish Harvest Limit with no more than 3 Fish greater than or equal to 17″
Walleye, Sauger, or Hybrid Walleye. . . . . Statewide Regulations
White, Black, or Hybrid Crappie . . . . . Statewide Regulations

CONTACT INFORMATION – Illini State Park: 815-795-2448
IDNR Fisheries County Biologist: 630-360-4185

LaSalle Lake Map