

LAKE MANAGEMENT STATUS REPORT

Date of Report: 01/03/2024	Fisheries Manager: Brennan Caputo	District: 1
Lake Name: Lake Sule	County: Ogle	Water No: 4112
Ownership (STATE, PUBC, PUBO): Public Co-op Rochelle Park District		Acreage: 76.6

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 (14" Minimum Length Limit)
- Bluegill or Redear Sunfish 5 Fish Daily Creel Limit (No Minimum Length Limit)
- Channel Catfish 6 Fish Daily Creel Limit (No Minimum Length Limit)
- Muskellunge 1 Fish Daily Creel Limit (36" Minimum Length Limit)
- Striped, White, or Hyb. Striped Bass . . . 3 Fish Daily Creel Limit (17" Length or Longer)
- Walleye, Sauger, or Saugeye 6 Fish Daily Creel Limit (14" Minimum Length Limit)
- White, Black, or Hybrid Crappie 10 Fish Daily Creel Limit (No Minimum Length Limit)

2. FISH STOCKING:

2023:				
07/26/2023	Largemouth Bass	616	4"	LaSalle Hatchery
08/23/2023	Largemouth Bass	350	5.1"	LaSalle Hatchery
09/28/2023	Muskellunge	77	12.25"	Jake Wolf Hatchery
2022:				
06/08/2022	Saugeye	5,832	2.2"	LaSalle Hatchery
07/19/2022	Channel Catfish	1400	7"	Little Grassy Hatchery
08/16/2022	Largemouth Bass	701	4"	Jake Wolf Hatchery
08/26/2022	Largemouth Bass	624	4"	LaSalle Hatchery
09/29/2022	Muskellunge	82	12.5"	Jake Wolf Hatchery

3. AQUATIC VEGETATION TREATMENTS:

No Vegetation treatments were required in 2021. Lake Sule develops a heavy algae bloom in the summer producing a shallow Secchi depth. The lake drains approximately 700 acres of agricultural land, along with roadside drainage from I-39 and I-88. Major water quality issue and shoreline degradation has developed due to the wave action on this lake.

4. FISH SURVEYS:

A spring Muskie trap net survey took place on 04/10/23 – 04/12/23 on Lake Sule. The lake was sampled with 5 – 4x6 ft. 1.5in. mesh trap nets for Muskie on 4/10/2023. The nets were fished for two nights. A total of 3 Muskie were sampled during this time with water temperatures at 51.2 F.

A community assessment survey took place on 05/01/23 and consisted of 2 daytime DC-electrofishing runs for a total of 60 minutes of sampling effort. Overall, 15 species and 1365 individual fish were collected.

5. LAKE MANAGEMENT PROGRESS TABLES:

Muskellunge:

A total of 3 Muskellunge were collected ranging from 578 – 660 mm (22.8 – 26.0 in), with 3 of those fish > Stock size (510 mm [20.1 in]). Average length was 614 mm (24.2 in). The 2023 netting survey yielded no quality and above sized fish for the third year in a row. This adds to the evidence of a total Muskie kill during the 2020 fish kill.

Lake Management Plan:	Goal	2019	2020	2021	2022	2023
Net nights: (# nets)	2(5)	2(5)	NS	2(5)	2(5)	2(5)
CPUE (fish/nn)	>1.0	1.0		0.0	0.0	0.3
PSD	>80	100		0.0	0.0	0.0
RSD 36	>25	40		0.0	0.0	0.0
Wr	90-110	95		0.0	0.0	95

Spring trap net CPUE (fish/nn) of each length group of Muskellunge collected.

Year	<20.1”	20.1-29.9”	29.9-38.2”	38.2-42.1”	42.1-50”	>50.0”	Total Fish
2019	0	0	.8	.2	0	0	10
2020	N/A						
2021	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0
2023	0	.3	0	0	0	0	3

Largemouth Bass:

A total of 11 Largemouth Bass were collected ranging from 172 – 248 mm (6.8 – 9.8 in), with 9 of those fish ≥ Stock size (200 mm [7.9 in]). Average length was 221 mm (8.7 in). Unfortunately, this survey did not meet the minimum required number of fish > Stock size (n = 30) to quantify population demographics as set forth in the lake management plan (LMP). The Largemouth bass population has been in a decline since the 2020 fish kill. Previous annual Largemouth bass stockings have been at a rate of <10 advanced fingerling bass per acre. Boosting the annual stocking to 50 advanced fingerling bass per acre will hopefully aid in the recovery of the population. Annual population surveys will be done to assess the recovery of the bass population.

Lake Management Plan:	Goal	2019	2020	2021	2022	2023
# Stock (200mm)	>100	19	10	45	28	9
PSD	40-60	58	29	4	4	0
RSD 14	30-40	6	3	4	0	0

Wr 90-110 102 101 101 95 93

Annual diurnal DC electrofishing CPUE (fish/hr.) of each length group of Largemouth bass collected.

Year	<7.9"	7.9"-11.8"	11.8"-15"	15"-20.1"	>20.1"	Total
Fall 2019	77	8	8	4	0	97
Fall 2020	100	10	2	2	0	114
Fall 2021	45	48	0	2	0	95
Fall 2022	27	27	1	0	0	55
Spring 2023	2	9	0	0	0	11

Bluegill:

A total of 259 Bluegills were collected ranging from 111 – 192 mm (4.4 – 7.6 in), with 259 \geq Stock size (80 mm [3.1 in]). Average length was 140 mm (5.5 in). This survey did meet the minimum required number of fish \geq Stock size (n = 50) to quantify population demographics as set forth in the Lake Management Plan (LMP). The PSD fell within its respective target range, while PSD-P had an assessment of 0. Body condition (as indexed by relative weight) fell within the goal range. A high body condition indicates sufficient forage for fish growth. Despite Bluegill densities being high, and good Bluegill body condition, very few larger Bluegill were collected (as indicated by low the PSD-P value). This is to be expected with the poor Largemouth bass population.

Lake Management Plan:	Goal	2019	2020	2021	2022	2023
#Stock(80-150mm)	>100	105	57	118	208	259
PSD	20-40	21	31	21	37	30
PSD-P	5-20	0	4	0	1	0
Wr	90-110	99	106	105	105	105

Annual diurnal DC electrofishing CPUE (fish/hr.) of each length group of Bluegill collected.

Year	<3.1"	3.1"-5.9"	5.9"-7.9"	7.9"-9.8"	Total
Fall 2019	23	85	15	0	123
Fall 2020	864	57	26	0	947
Fall 2021	118	185	48	0	351
Fall 2022	62	132	76	0	270
Spring 2023	0	182	77	0	259

Rough and Stream Fish Species:

Rough fish access Lake Sule through the discharge ditch, which is a direct connection to the Rock River via Kite Creek. A rock barrier was constructed but had to be removed due to tile drainage issues. River Carp Suckers, Freshwater Drum, Buffalo Species, Common Carp, and Gizzard Shad have been sampled in Lake Sule. Due to the summer 2020 die off the spring removal efforts and the fall sample showed a significant reduction in rough fish.

Fish Kill:

08/31/20 – Very few game species were observed but surveys since the event have shown significant die off of larger predators. Majority of dead fish consisted of Freshwater drum, River Carpsucker, Quillback, Buffalo species and Common Carp.

6. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

1. Continue to remove rough fish through electrofishing or other means as necessary.
2. Habitat is needed as the lake has little to no structure. Fish habitat will help with rough fish control.
3. Aquatic vegetation is needed in the lake for fish habitat and lake structure.
3. Continue the annual stocking Largemouth bass, Channel catfish, Saugeye and Muskellunge to help control non-game fish species.