# LAKE MANAGEMENT STATUS REPORT

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| Date of Report: 12/31/2024 | 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:

2024:

| | | | | |
|---|---|---|---|---|
| 05/22/2024 | Saugeye | 7,316 | 1.3” | LaSalle Hatchery |
| 06/24/2024 | Largemouth Bass | 3619 | 1.5” | LaSalle Hatchery |
| 08/14/2024 | Largemouth Bass | 3872 | 4” | Jake Wolf Hatchery |
| 08/16/2024 | Largemouth Bass | 957 | 4” | LaSalle Hatchery |
| 08/19/2024 | Channel Catfish | 840 | 4” | Little Grassy Hatchery |
| 09/29/2024 | Muskellunge | 77 | 12.85” | Jake Wolf Hatchery |

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 2024. 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 04/08/24 – 04/10/24 on Lake Sule. The lake was sampled with 5 – 4x6 ft. 1.5in. mesh trap nets for Muskie on 4/08/2024. The nets were fished for two nights. A total of 2 Muskie were sampled during this time with water temperatures at 45 - 49 F.

A community assessment survey took place on 05/13/24 and consisted of 2 daytime DC-electrofishing runs for a total of 60 minutes of sampling effort. Overall, 12 species and 1109 individual fish were collected.

## 5. LAKE MANAGEMENT PROGRESS TABLES:

**Muskellunge:**

A total of 2 Muskellunge were collected ranging from 366 – 741 mm (14.4 – 29.2 in), with 3 of those fish > Stock size (510 mm [20.1 in]). Average length was 554 mm (21.8 in). The 2024 netting survey yielded no quality and above sized fish for the fourth year in a row. This adds to the evidence of a total Muskie kill during the 2020 fish kill.

| Lake Management Plan: | Goal | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Net nights: (# nets) | 2(5) | NS | 2(5) | 2(5) | 2(5) | 2(5) |
| CPUE (fish/nn) | >1.0 | | 0.0 | 0.0 | 0.3 | 0.2 |
| PSD | >80 | | 0.0 | 0.0 | 0.0 | 0.0 |
| RSD 36 | >25 | | 0.0 | 0.0 | 0.0 | 0.0 |
| Wr | 90-110 | | 0.0 | 0.0 | 95 | 82 |

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 |
|---|---|---|---|---|---|---|---|
| 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 |
| 2024 | .1 | .1 | 0 | 0 | 0 | 0 | 2 |

**Largemouth Bass:**

A total of 21 Largemouth Bass were collected ranging from 118 – 497 mm (4.6 – 19.6 in), with 18 of those fish ≥ Stock size (200 mm [7.9 in]). Average length was 267 mm (10.5 in). This survey did not meet the minimum required number of fish > Stock size (n = 30) to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). However, I believed 18 fish > Stock size sufficient to continue with the analysis. Both the PSD and RSD-14 fell below their respective target ranges. A lower PSD and RSD-14 value could indicate a growth bottleneck due to an overabundance of Stock and Quality-sized Largemouth. This is to be expected with the supplemental stocking program. The stocking does look to be improving the overall population of the bass in the lake. This program will be reevaluated in 2025 to see if it is still improving.

| Lake Management Plan: | Goal | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| # Stock (200mm) | >100 | 10 | 45 | 28 | 9 | 18 |
| PSD | 40-60 | 29 | 4 | 4 | 0 | 22 |
| RSD 14 | 30-40 | 3 | 4 | 0 | 0 | 22 |
| Wr | 90-110 | 101 | 101 | 95 | 93 | 96 |

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 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 |
| Spring 2024 | 3 | 14 | 0 | 4 | 0 | 21 |

**Bluegill:**

A total of 527 Bluegills were collected ranging from 50 – 200 mm (2.0 – 7.9 in), with 526 ≥ Stock size (80 mm [3.1 in]). Average length was 149 mm (5.9 in). This survey did meet the minimum required number of fish ≥ Stock size (n = 50) to quantify population demographics as set forth in the Lake Management Plan (LMP). The PSD fell above 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 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| #Stock(80-150mm) | >100 | 57 | 118 | 208 | 259 | 526 |
| PSD | 20-40 | 31 | 21 | 37 | 30 | 64 |
| PSD-P | 5-20 | 4 | 0 | 1 | 0 | 0 |
| Wr | 90-110 | 106 | 105 | 105 | 105 | 106 |

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 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 |
| Spring 2024 | 1 | 192 | 333 | 1 | 527 |

**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.