LAKE MANAGEMENT STATUS REPORT

| Date of Report: 01/03/2024 | Fisheries Manager: Brennan Caputo | | District: 1 |
|--------------------------------------|-----------------------------------|--------------------|----------------|
| Lake Name: Lake Le-Aqua-Na | | County: Stephenson | Water No: 0003 |
| Ownership (STATE, PUBC, PUBO): State | | | Acreage: 43.4 |

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

<u>1. SPORT FISH REGULATIONS IN EFFECT:</u>

| 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 | . No Fish Daily Creel Limit (No Minimum Length Limit) |
| Channel Catfish | .6 Fish Daily Creel Limit (No Minimum Length Limit) |

2. FISH STOCKING:

| 2023: 08/08/23 | Channel Catfish | 1125 | 7.5" | Little Grassy Hatchery |
|-------------------|-----------------|-------|------|------------------------|
| 06/14/23 | Smallmouth Bass | 4743 | 1.5" | Jake Wolf Hatchery |
| 2022: | | | | |
| 10/06/22 | Bluegill | 20196 | 1.2" | LaSalle Fish Hatchery |
| | U | | | 5 |
| 10/06/22 | Bluegill | 773 | 2.1" | LaSalle Fish Hatchery |
| 09/29/22 | Bluegill | 26244 | 1.2" | LaSalle Fish Hatchery |
| 09/29/22 | Bluegill | 818 | 2.1" | LaSalle Fish Hatchery |
| 09/22/22 | Redear Sunfish | 2760 | 2.2" | LaSalle Fish Hatchery |
| 09/16/22 | Redear Sunfish | 12808 | 1.3" | LaSalle Fish Hatchery |
| 08/29/22 | Channel Catfish | 2400 | 8.0" | Little Grassy Hatchery |
| 06/23/22 | Largemouth Bass | 9765 | 1.3" | LaSalle Fish Hatchery |

3. AQUATIC VEGETATION TREATMENTS:

A vegetation treatment was completed on 05/25/2023 and 07/20/23. A table below contains a list of chemicals that were applied.

| 05/25/23 | Aquathol K | 5 gal. | American Elodea and Curlyleaf Pondweed |
|----------|--------------|---------|--|
| 07/20/23 | Cutrine Plus | 10 gal. | Algae |

4. FISH SURVEYS:

A fall community assessment survey took place on 09/18/23 and consisted of 2 daytime DC-electrofishing runs for a total of 60 minutes of sampling effort. Overall, 6 species and 404 individual fish were collected.

5. LAKE MANAGEMENT PROGRESS TABLES:

Largemouth Bass:

A total of 99 Largemouth Bass were collected ranging from 159 - 341 mm (6.3 - 13.4 in), with $98 \ge \text{Stock size}$ (200 mm [7.9 in]). Average length was 268 mm (10.6 in). This survey met the minimum required number of fish \ge Stock size (n = 30) to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). Both the PSD and RSD-14 fell below their respective target ranges. A low PSD and RSD-14 value indicate an overabundance of small-sized Largemouth Bass and a low number of quality sized Largemouth. This is to be expected from a newly stocked lake. As the population ages, future analysis will be done to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). Body condition (as indexed by relative weight) was in the desired range. A high body condition indicates sufficient forage for fish growth.

| Lake Management Plan: | Goal | 2023 |
|-----------------------|--------|------|
| # Stock (200mm) | >100 | 98 |
| PSD | 40-60 | 5 |
| RSD 14 | 20-40 | 0 |
| Wr | 90-110 | 97 |

Fall 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 CPUE |
|------|-------|-----------|----------|----------|---------|------------|
| 2023 | 1 | 93 | 5 | 0 | 0 | 99 |

Bluegill:

A total of 180 Bluegills were collected ranging from 20 - 202 mm (0.8 - 8.0 in), with $112 \ge \text{Stock size}$ (80 mm [3.1 in]). Average length was 80 mm (3.1 in.). This survey met the minimum required number of fish \ge Stock size (n = 50) to quantify population demographics as set forth in the Lake Management Plan (LMP). The PSD and PSD-P value fell below their respective ranges. This is to be expected from a newly stocked lake. As the population ages, future analysis will be done to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). Body condition (as indexed by relative weight) was within its respective range. A high body condition indicates sufficient forage for fish growth.

| Lake Management Plan: | Goal | 2023 | |
|-----------------------|--------|------|-----|
| #Stock(80mm) | >100 | | 112 |
| PSD | 20-40 | 2 | |
| PSD-P (8 in) | 5-20 | 1 | |
| Wr | 90-110 | 96 | |

Fall 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" | 9.8-11.8" | Total CPUE |
|------|-------|----------|----------|----------|-----------|------------|
| 2023 | 68 | 110 | 1 | 1 | 0 | 180 |

6. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

- 1. Continue requesting Non-vulnerable Channel Catfish (NVC) on an annual basis
- 2. Continue fish population surveys on a routine basis