

LAKE MANAGEMENT STATUS REPORT

Date of Report: 01/03/2024	Fisheries Manager: Brennan Caputo	District: 1
Lake Name: Levings Lake	County: Winnebago	Water No: 4105
Ownership (STATE, PUBC, PUBO): Public Co-op Rockford Park District		Acreage: 26.0

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

2. FISH STOCKING:

2023:				
10/19/22	Bluegill	6102	1.2"	LaSalle Fish Hatchery
09/21/22	Bluegill	7526	1.2"	LaSalle Fish Hatchery
08/24/22	Largemouth Bass	350	5.1"	LaSalle Fish Hatchery
07/26/22	Largemouth Bass	660	4.0"	LaSalle Fish Hatchery
2022:				
09/26/22	Bluegill	356	2.1"	LaSalle Fish Hatchery
09/26/22	Bluegill	8115	1.2"	LaSalle Fish Hatchery
09/01/22	Channel Catfish	479	8.0"	Jake Wolf Hatchery
08/25/22	Largemouth Bass	663	4.0"	LaSalle Fish Hatchery
07/28/22	Largemouth Bass	660	4.0"	LaSalle Fish Hatchery

3. AQUATIC VEGETATION TREATMENTS:

No vegetation treatments were required

4. FISH SURVEYS:

A fall community assessment survey took place on 09/12/23 and consisted of 1 daytime DC-electrofishing run for a total of 10 minutes of sampling effort. Overall, 7 species and 106 individual fish were collected.

5. LAKE MANAGEMENT PROGRESS TABLES:

Largemouth Bass:

A total of 28 Largemouth Bass were collected ranging from 70 – 370 mm (2.8 – 14.6 in), with 24 \geq Stock size (200 mm [7.9 in]). Average length was 258 mm (10.2 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 24 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 Bass. This is to be expected with the supplemental stocking program. This program will be reevaluated in 2026 to see if it is still needed.

<u>Lake Management Plan:</u>	<u>Goal</u>	<u>2020</u>	<u>2023</u>
# Stock (200mm)	>100	9	24
PSD	40-60	89	33
RSD 14	20-40	0	4
Wr	90-110	96	93

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

<u>Year</u>	<u><7.9"</u>	<u>7.9-11.8"</u>	<u>11.8-15"</u>	<u>15-20.1"</u>	<u>> 20.1"</u>	<u>Total CPUE</u>
2020	42	6	48	0	0	96
2023	24	96	48	0	0	168

Bluegill:

A total of 51 Bluegills were collected ranging from 40 – 180 mm (1.6 – 7.1 in), with 36 \geq Stock size (80 mm [3.1 in]). Average length was 107 mm (4.2 in). Average length was 105 mm (4.1 in). This survey met the minimum required number of fish \geq Stock size ($n = 30$) to 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 lower PSD and RSD-14 value could indicate a growth bottleneck due to an overabundance of Stock and Quality-sized Bluegill. This is to be expected with the supplemental stocking program. This program will be reevaluated in 2026 to see if it is still needed.

<u>Lake Management Plan:</u>	<u>Goal</u>	<u>2022</u>	<u>2023</u>
#Stock(80mm)	>100	11	36
PSD	20-40	36	8
PSD-P (8 in)	5-20	0	0
Wr	90-110	98	94

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

<u>Year</u>	<u><3.1"</u>	<u>3.1-5.9"</u>	<u>5.9-7.9"</u>	<u>7.9-9.8"</u>	<u>9.8-11.8"</u>	<u>Total CPUE</u>
2020	0	42	24	0	0	66
2023	90	198	18	0	0	306

Common Carp:

The Common Carp population remains high in the lake which adds to the turbidity of the water. This in turn can inhibit native plant growth for fish habitat and displace more desirable fish species. Removing them from the lake will reduce the fish biomass on the lake and lower the turbidity within the lake.

6. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

1. Continue requesting Non-vulnerable Channel Catfish (NVC) on a biennial basis
2. Continue Bluegill stocking program for another 3 years. Reassess the population in 2026.
3. Continue Largemouth stocking program for another 3 years. Reassess the population in 2026.
4. Continue fish population surveys on a routine basis
5. Remove Common carp to decrease water turbidity and increase water clarity.
6. Plant submergent and emergent aquatic vegetation to help absorb nutrients in the water. This will also add much needed fish habitat and structure to the lake.