LAKE MANAGEMENT STATUS REPORT

Date of Report: 12/31/2024	Fisheries Manager: Brennan Caputo	District: 1
Lake Name: Pierce Lake	County: Winnebago	Water No: 00017
Ownership (STATE, PUBC, PUBO): State		Acreage: 162.0

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 (15″ 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)
Pure Muskellunge . . . . . 1 Fish Daily creel Limit (48″ Minimum Length Limit)
Walleye, Sauger, or Hybrid Walleye . . . . . .6 Fish Daily Creel Limit (14″ Minimum Length Limit)
White, Black, or Hybrid Crappie . . . . . .25 Fish Daily Creel Limit (No Minimum Length Limit)

2. FISH STOCKING:

2024:

09/17/2024	Muskellunge	167	12.85”	Jake Wolf Hatchery
09/10/2024	Channel Catfish	3,855	4.1”	Little Grassy Hatchery
06/11/2024	Smallmouth Bass	5,628	1.25”	Jake Wolf Hatchery
05/24/2024	Walleye	9,540	1.5”	LaSalle Fish Hatchery

2023:

09/28/2023	Muskellunge	166	12.25”	Jake Wolf Hatchery
08/08/2023	Channel Catfish	3,855	7.5”	Little Grassy Hatchery
06/14/2023	Smallmouth Bass	5,161	1.5”	Jake Wolf Hatchery
06/09/2023	Walleye	8,569	1.8”	LaSalle Fish Hatchery

2022:

09/28/2022	Muskellunge	171	12.5”	Jake Wolf Hatchery
09/02/2022	Channel Catfish	4,713	8.0”	Jake Wolf Hatchery
06/15/2022	Smallmouth Bass	5,985	1.5”	Jake Wolf Hatchery
06/02/2022	Walleye	9,180	1.6”	LaSalle Fish Hatchery

3. AQUATIC VEGETATION TREATMENTS:

A vegetation treatment was completed on 4 06/10/24. A table below contains a list of chemicals that were applied.

06/10/24	AquaNeat	3 gal.	Curlyleaf pondweed & Eurasian watermilfoil
06/10/24	2-4D Amine	1 gal.	Curlyleaf pondweed & Eurasian watermilfoil

4. FISH SURVEYS:

A spring Muskie trap net survey took place on 4/15/24-4/17/2024 on Pierce Lake. The lake was sampled with 5 – 4x6 ft. 1.5in. mesh trap nets for Muskie on 4/15/2024. The nets were fished for two nights. A total of 43 Muskie were sampled during this time with water temperatures at 62 F.

A spring Walleye night shocking survey took place on 4/15/24 on Pierce Lake. The lake was sampled with 1 DC electrofishing boat with 2 dippers for a total of 30 minutes as part of a bi-annual Walleye survey. A total of 6 fish were sampled with water temperature at 62 F.

A community assessment survey took place on 09/13/24 and consisted of 2 daytime DC-electrofishing runs for a total of 60 minutes of sampling effort. Overall, 17 species and 1215 individual fish were collected.

5. LAKE MANAGEMENT PROGRESS TABLES:

Muskellunge:

A total of 43 Muskellunge were collected ranging from 410 – 1055 mm (16.1 – 41.5 in), with 42 of those fish ≥ Stock size (510 mm [20.1 in]). Average length was 829 mm (32.6 in). The PSD reached its respective target range while RSD-48 value remains at 0. Body condition (as indexed by relative weight) exceeded the 90th percentile. A high body condition indicates sufficient forage for fish growth. The CPUE was 4.3 which exceeded the goal of 1 fish per net night as set forth in the Lake Management Plan (LMP).

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		7.5	4.5	4.8	4.3
PSD	>90		59	69	92	81
RSD 48	>1		0	0	0	0
Wr	90-110		103	96	99	98

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	NS						
2021	0	3.1	4.0	0.3	0.1	0	75
2022	0	1.4	2.7	0.4	0	0	45
2023	0	0.4	4.2	0.2	0	0	48
2024	0.1	0.8	2.6	0.8	0	0	43

Largemouth Bass:

A total of 119 Largemouth bass were collected ranging from 80 – 497 mm (3.1 – 19.6 in), with 92 of those fish ≥ Stock size (200 mm [7.9 in]). Average length was 267 mm (10.5 in). This survey met the minimum required number of fish ≥ Stock size (n = 30) to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). The PSD fell within its respective target range while RSD-15 fell slightly below its respective target range. Body condition (as indexed by relative weight) exceeded the 90th percentile. A high body condition indicates sufficient forage for fish growth. Overall, the Largemouth bass population looks to be in good shape.

Lake Management Plan:	Goal	2020	2021	2022	2023	2024
# Stock (200mm)	>100	56	61	36	85	92
PSD	40-60	82	59	56	36	41
RSD 15	20-40	23	25	19	24	16
Wr	90-110	100	94	110	99	99

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
2020	39	10	33	13	0	95
2021	24	25	20	15	1	85
2022	33	16	13	6	1	69
2023	74	54	11	19	1	159
2024	27	54	23	15	0	119

Walleye:

A total of 6 Walleye were collected ranging from 337 – 583 mm (14.4 – 28.3 in), with 6 of those fish ≥ Stock size (250 mm [9.8 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). Only 6 fish were collected during the survey due to warmer than usual water temperatures. Another survey will be conducted in 2026 to evaluate Walleye stocking success in the lake.

Lake Management Plan:	Goal	2022	2024
# Stock(250mm)	>30	27	6
PSD	30-60	89	N/A
RSD 14	30-60	100	N/A
Wr	90-110	92	94

Spring nocturnal DC electrofishing CPUE (fish/hr.) of each length group of Walleye collected.

Year	<9.8”	9.8-15.0”	15.0-20.1”	20.1-24.8”	24.8-29.9”	>29.9”	Total CPUE
2022	0	6	44	2	2	0	54
2024	0	2	6	4	0	0	12

White Crappie:

A total of 36 White Crappie were collected ranging from 198 – 355 mm (7.8 – 14.0 in), with 36 ≥ Stock size (80 mm [3.1 in]). Average length was 254 mm (10.0 in). This survey did not meet the minimum required number of fish > Stock size (n = 50) to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). However, I believed 36 fish > Stock size sufficient to continue with the analysis. The PSD and PSD-P exceeded their respective target ranges. Body condition (as indexed by relative weight) fell just below the 90th percentile. A low body condition might indicate insufficient forage for fish growth. Despite White Crappie densities being low, size quality is high as shown by the PSD-P value.

Lake Management Plan:	Goal	2023
#Stock (130mm)	>100	36
CPUE (fish/nn)		1.9(20)
PSD	30-60	97
PSD-P	>10	53
Wr	90-110	85

Fall trap netting CPUE (fish/nn) of each length group of White Crappie collected.

Year	<5.1”	5.1-7.9”	7.9-9.8”	9.8-11.8”	11.8-15.0”	>15.0”	Total
2023	0.0	.1	0.8	0.8	0.2	0.0	1.9

Black Crappie:

A total of 187 Black Crappie were collected ranging from 163 – 343 mm (6.4 – 13.5 in), with 187 ≥ Stock size (80 mm [3.1 in]). Average length was 213 mm (8.4 in). This survey met 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 exceeded its respective target ranges while the PSD-P fell below its respective ranges. Body condition (as indexed by relative weight) met the 90th percentile target goal. A good body condition could indicate sufficient forage for fish growth. Despite Black Crappie densities being high, and good body condition, very few above quality sized Black Crappie were collected (as indicated by low the PSD-P value).

Black Crappie

Lake Management Plan:	Goal	2023
#Stock (130mm)	>100	187
CPUE (fish/nn)		9.4(20)
PSD	30-60	83
PSD-P	>10	3
Wr	90-110	90

Fall trap netting CPUE (fish/nn) of each length group of Black Crappie collected.

Year	<5.1”	5.1-7.9”	7.9-9.8”	9.8-11.8”	11.8-15.0”	>15.0”	Total
2023	0.0	1.6	7.5	0.2	0.1	0.0	9.4

Bluegill:

A total of 366 Bluegills were collected ranging from 20 – 190 mm (0.8 – 7.5 in), with 294 ≥ Stock size (80 mm [3.1 in]). Average length was 113 mm (4.4 in). This survey met the minimum required number of fish 227 ≥ Stock size (n = 50) to quantify population demographics as set forth in the Lake Management Plan (LMP). The PSD fell within its respected range while the RSD-7 fell below its target range. Body condition (as indexed by relative weight) exceeded the 90th percentile. 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 could be due to the high fishing pressure put on the lake. It's also possible larger fish are present but were difficult to collect due to the large amount of vegetation in the water during the survey.

Lake Management Plan:	Goal	2020	2021	2022	2023	2024
#Stock(80mm)	>100	115	72	142	277	294
PSD	20-40	19	25	7	6	28
PSD-P	05-20	3	0	0	0	0
Wr	90-110	102	100	119	100	100

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"	Total
2020	62	93	19	3	177
2021	22	54	18	0	94
2022	26	132	10	0	168
2023	112	261	16	0	389
2024	72	212	82	0	366

Gizzard Shad:

Gizzard shad are the primary food for all the predators in Pierce Lake. The 2023 sample showed good YOY production.

Lake Management Plan: Goal:	2020	2021	2022	2023	2024
YOY Present	Yes	Yes	Yes	Yes	Yes

6. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

1. Work with constituents to build Habitat structures for the lake.
2. Treat the Lilly pads and Lotus in the upper end of the lake.
3. Treat Olson Lake early to produce a better bloom on Pierce Lake.
4. Continue fish population surveys on a routine basis.