LAKE MANAGEMENT STATUS REPORT

Date of Report: 3/7/2023 Fisheries Manager: Rob Hilsabeck

District No.: 4 LAKE NAME: Spring Lake McDonough County
County: McDonough Water No.: 0466 Ownership: Public-Coop

Acreage: 277

1. All Fish - 2 pole and line fishing only.

Walleye, Sauger, or Hybrid Walleye:

- 18 inch minimum length limit, 3 Fish Daily Harvest Limit. Muskie:
- 42 inch minimum and 1 fish per day harvest limit.

Largemouth or Smallmouth Bass:

- 15 inch minimum length limit with 3 fish daily harvest limit. Channel or Blue Catfish:
- 6 Fish daily harvest limit.

Striped, White or Hybrid Striped Bass:

- 17 inch minimum size limit with 3 fish daily harvest limit. Recreational Use Restrictions:
- All live bait greater than 8 inches must be rigged with a quick set rig.
- 2. IDNR fisheries annual spring trapnet survey was completed on 4/29/2022.

Jake Wolf hatchery stocked 3,255 hybrid striped bass at 2.0 inches on 7/6/2022.

Little Grassy hatchery stocked 8,300 blue catfish at 5.9 inches on 9/29/2022.

Jake Wolf hatchery stocked 278 muskie at 12.5 inches on 9/27/2022.

IDNR fisheries completed annual fall electrofishing survey on 10/21/2022.

LAKE MANAGEMENT STATUS REPORT

SPRING LAKE Page 2

DITTIO											Lag		
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
													LMP
Largemo	Largemouth Bass												Objective
Stock Nu	mber	96	150	96	117	49	98	110	103	196	58	107	100
PSD		74	55	48	60	67	40	48	72	79	90	66	40-60
RSD14		48	33	33	33	47	24	29	43	61	76	53	
RSD15		39	28	30	27	41	18	24	29	47	69	51	
RSD16		29	21	20	20	27	15	11	22	31	62	39	
RSD17											57	32	
RSD18		15	9	8	11	6	4	6	12	16	28	17	5-10
RSD19											16	9	
Wr > 8"		96	102	101	97	96	94	98	100	103	100	106	90-110
YAR		0.4	0.2	0.2	0.3	1.3	0.9	0	0.3	0.4	0.03	0.6	
CPUE Sto	ck	1	1.5	1	0.8	0.4	0.8	0.9	0.9	1.6	0.9	0.9	1/Min
Effort		100	100	100	149	120	120	120	120	123	67	120	
EL		100	100	100	149	120	120	120	120	123	07	120	
Effort									20	0	16	17	
NN													
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Bluegill													
Stock #		189	555	116	2780	153	363	473	211	38	148	358	
PSD		82	90	72	37	60	81	84	71	63	64	62	
RSD7		18	14	6	3	8	12	18	19	24	18	22	
RSD8		1	0	0	2	0	0.8	0.6	0.5	0	0	0	
Wr > 5"		108	101	95	100	106	102	95	97	100	98	93	
CPUE f/m	nin	3.4	2.1	1.5	36.7	1.9	3.1	5.4	5.4	0.6	2.2	3	
CPUE f/n	n	1.4	24.9	2.6	1.8	2.4	12.4	13	4.9		7.8	3.5	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Black Cra	ppie												LMP Obj
Stock#		0	0	0	1	1	5	18	16	4	1	10	
PSD					100	100	40	83	75	75	100	10	30-50
RSD9					0	100	20	28	6	50	100	0	
RSD10					0	0	20	17	6	25	0	0	20-40
RSD11					0	0	0	17	0	0	0	0	5-10
Wr					96	95	88	85	92	87	92	86	90-100
CPUE f/m	in				0.01	0.01	0	0.01	0.3	0.06	0.01	0.08	
CPUE f/n					0	0	0.3	0.9	0.5		0.8	1.3	
		1	·	1	1			_		1			l

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
White Crap	pie												LMP Obj.
Stock #		779	779	327	282	42	701	595	178	224	68	158	
PSD		57	39	77	54	76	90	87	64	14	25	25	30-50
RSD9		22	22	55	22	55	42	53	45	11	22	16	
RSD10		13	18	51	16	52	33	39	35	10	22	11	20-40
RSD11		6	9	29	12	41	19	23	19	7	19	8	5-10
Wr		105	95	96	85	91	96	97	94	93	94	98	90-100
CPUE f/min)	1.6	3.3	2.7	1.4	0.2	0.6	0.5	4.4	3.6	1	1.3	
CPUE f/nn		49.8	34.1	12.1	12.4	1.8	44.3	30	3.6		20.1	2.1	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Channel Ca	tfish												LMP Obj.
Stock#		52	256	177	133	180	52	57	127	17	26	54	
PSD		90	77	66	73	87	94	83	73	53	85	74	
RSD18		90	63	50	57	67	71	67	61	41	35	63	
RSD22		48	35	25	30	42	31	26	25	18			
RSD24											8	17	10-20
Wr		109	97	96	90	83	95	97	98	91	92	92	
CPUE f/min	1	0.2	0.2	0.3	0.8	0.2	0.4	0.1	0.3	0.5	0.4	0.5	
CPUE f/nn		3.1	13.6	10.1	5.1	10.6	2.3	2.4	4.5		4.4	1.9	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Blue Catfish	า												
Stock#											0	2	
PSD												0	
RSD18												0	
Wr												88	
CPUE f/min)										0	0	
CPUE f/nn											0	0.1	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Walleye		1											LMP Obj.
Stock#		0	0	0	0	3	15	10	8	2	1	4	
PSD		+ -				0	100	100	38	100	100	100	50-60
RSD18						0	100	100	38	50	100	75	20-40
Wr						94	91	102	92	100	109	92	90-110
CPUE f/min	<u> </u>					0	0.1	0.03	0.07	0.02	0.01	0.03	30 110
CPUE f/nn	<u> </u>					0.2	0.1	0.03	0.07		0.01	0.03	
CFUL I/IIII		+				0.2	0.2	0.3			0.00	0.2	

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Hybrid St Bass	riped												
Stock#		23	5	1	12	11	11	10	5	3	3	7	
PSD		91	100	100	17	91	100	80	100	67	100	100	
RSD17		48	80	100	8	91	91	80	100	0			
RSD20											100	14	
Wr		93	97	99	114	114	106	99	102	84	144	104	
CPUE f/m	iin	0.01	0	0	0.1	0	0.01	0.02	0.12	0.05	0	0.02	
CPUE f/nı	n	1.6	0.3	0.1	0.1	0.7	0.7	0.6	0.15		0.19	0.4	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Mue													
Stock#		2	1	3	4	7	0	15	9	2	3	10	
PSD		0	0	0	100	100	0	80	67	0	33	100	
RSD42		0	0	0	0	0	0	0	0	0	0	0	
Wr		107	100	100	100	100	89	106	112	97	101	103	90-110
CPUE NN		0.1	0.1	0.2	0.3	0.4	0.07	0.89	0.55		0.2	0.8	.3/netN
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Gizzard sł	nad												
CPUE f/m	in	3.1	16.9	2.8	18.6	5.4	14.3	14.9	9.6	1.2	3.4	2.9	
Yellow Ba	ISS												
CPUE f/m	in	0.1	0.3	0.3	6.6	0.2	0.2	1.4	2.2	0.2	0.7	0.3	

LAKE MANAGEMENT STATUS REPORT SPRING LAKE

Page 4

4. In 2022, 17 net nights of spring trap netting and 120 minutes of fall D.C. electrofishing was used to survey the fish population. The largemouth bass population was evaluated by 107 bass of stock size from electrofishing.

The largemouth bass population appears to be defined by a high percentage of fish from 5 to 20 inches in length with a very good average Relative weight of 106.

The 5-year averages from 2012 to 2016 were PSD of 61, RSD15 of 33, RSD16 of 23, and RSD18 of 10. And a 5 year average CPUE .9 fish per minute over 8 inches with pulse D.C. electrofishing.

The 2022 electrofishing survey indicated a size structure that was at a PSD of 66, RSD15 of 51, RSD16 of 39 and the RSD18 of 17. These are all extremely good indices and a collection rate of .9 fish per minute over 8 inches in length. The current bass population is present in a moderate density of fast-growing fish. This is a very good largemouth bass population!

The bluegill population was sampled by 358 fish in fall 2022 electrofishing survey. The current bluegill population is rated as average with the larger fish up to 7.5 inches in length. This population is of moderate density and in good body condition with a Wr average of 93. The competition with the gizzard shad and carp have limited the bluegill condition and growth.

The yellow bass population was sampled by 32 fish from 4 to 8 inches in length. The current size structure can allow the harvest of yellow bass by anglers. Typically, the yellow bass populations can be very cyclic from a high density of small fish to a low density of fish over 7 inches.

The white crappie population has been very dense in recent years. The 5-year averages from 2015 to 2019 were an RSD10 of 35 and an RSD11 of 23. Only 56 black crappies have been sampled in 2015 thru 2022 by electrofishing, and this population is at a very low density.

In 2022, the white crappie population was sampled by 158 fish in the fall electrofishing survey. The size structure was lower with only 11% of the collected fish over 10 inches and 8% over 11 inches in length. I believe this lower size structure in the 2022 survey is primarily due to the use of electrofishing data only, without the spring trap net data to reveal the larger part of the white crappie population present in Spring Lake. The average WR value of 98 was also good.

The walleye population was sampled by 4 fish in the fall electrofishing survey. The size range was from 17 to 19 inches in length. The body condition was good with a Wr value of 92. And fish from both the 2020 and 2018 stockings were sampled. A stocking of 4,340 walleye at 1.7 inches in length occurred in 2021 from LaSalle hatchery. In 2017, the walleye regulation was

increased to an 18-inch minimum length limit and 3 fish daily harvest limit. The spring trap nets, fall electrofishing and angler harvest reports should allow a continued evaluation of the walleye population.

A total of 10 muskie were sampled in the spring trap net survey in 2022. These fish ranged from 17 to 37 inches long. The body condition of these fish was very good at an average Wr of 103. A low-density population, of quality size muskie are present in Spring Lake. Jake Wolf Hatchery stocked 281 muskie at 10.75 inches in 2016, d 279 fish at 12.5 inches in 2017, 281 fish at 12.5 inches in 2018, 281 fish at 13.5 inches in 2019 and no muskie were stocked in 2020, 279 fish at 13 inches in 2021, and 278 fish at 12.5 inches in 2022. An annual stocking is now scheduled to maintain a low density of healthy muskie. In 2017, the muskie harvest regulation was changed from the statewide 1 fish daily harvest at a 36-inch minimum size, to a 42-inch minimum and 1 fish per day harvest limit. The goal of the new regulation is to protect the fish for at least 1 more year from angler harvest.

The channel catfish population was sampled by 54 fish in the fall 2022 electrofishing survey. The current channel catfish population is rated as excellent with the larger fish up to 30 inches in length! This population is of high density and in good body condition. No annual stocking of non-vulnerable channel catfish has occurred in Spring Lake. A natural reproducing population is well established.

In 2018, the stocking of 5,976 blue catfish at 5.9 inches occurred in Spring Lake! The IDNR Little Grassy Hatchery began production in 2018 using brood fish obtained from Powerton Lake and the Mississippi River near Grafton. It will be exciting to evaluate this introduction. In 2022, 2 blue catfish from 15 to 16 inches were collected in the spring trap net, and anglers have reported catching them. In 2020, Little Grassy hatchery stocked an additional 2,490 blue catfish at 4.8 inches on 10/8/2020. In 2021, 8,300 fish at 5.1 inches were stocked, and in 2022, 8,300 fish at 5.9 inches were stocked. A natural reproducing population has been established in Canton Lake with a 1-time stocking of non-vulnerable blue catfish at a rate of 20 per surface acre.

In 2022, 7 hybrid striped bass were sampled in the spring trap net survey and 2 in the fall electrofishing survey. They ranged in size from 5 to 28 inches in length. The average body condition was low for the younger fish but very high for the fish over 15 inches. A low density population of hybrid striped bass up to trophy size will be available in Spring Lake. Competition from the dense yellow bass and crappie populations for the appropriate size food will be the biggest challenge for the annual stocking of hybrid striped bass in Spring Lake.

Recommended Lake Management Activities with Rationale for Implementation:

Supplemental stocking is required for the following species due to no natural recruitment currently occurring in Argyle Lake.

Walleye: 2,500/year at 4 inches which is 10/acre.

Muskie: 250/year at 10 inches which is 1.0/acre.

Blue Catfish: 5,000 fish per year at 8 inches which is 20/acre.

Hybrid Striped Bass: 4,000/year at 2 inches which is 16/acre.

Biological Surveys - Conduct annual surveys to measure trends in fishery population dynamics, angling regulations and progress toward management goals. In the spring, assess the walleye, muskie, black and white crappie, bluegill, hybrid striped bass and channel catfish populations by a trap net survey. In the fall, utilize D.C. electrofishing to sample a target number of at least 100 stock-size largemouth bass and the other sportfish.

Coordinate with the WIU Fisheries Department on the potential for graduate research work on the Spring Lake fishery.

Aquatic Vegetation Control - IDNR Fisheries will apply aquatic herbicides as needed to manage exotic or nuisance aquatic plants for fishing access or sportfish management. At this time, Spring Lake has no issues with submerged aquatic plants or exotic plant management.

Lake Access - Coordinate with the site staff on the development of shoreline fishing areas, the boat dock and scheduled improvements for lake access. Mr. Ryan Hansen has been doing a great job of maintaining and improving the site amenities!

LAKE MANAGEMENT STATUS REPORT SPRING LAKE

Page 8

In 2022, no fishing tournaments were registered and completed with IFISH for Spring Lake. $\$

Site Map - update the site map of the lake as needed.

Waterbody	Species	Size (in)	Count	Delivery Date	Source
Spring Lake - McDonough County (00466)	Blue Catfish	5.9	8300	9/29/2022	#1 Little Grassy Hatchery (09050)
Spring Lake - McDonough County (00466)	Muskellunge	12.5	278	9/27/2022	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	2	3255	7/6/2022	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Blue Catfish	5.1	8300	9/29/2021	#1 Little Grassy Hatchery (09050)
Spring Lake - McDonough County (00466)	Muskellunge	13	279	9/9/2021	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.3	5232	6/18/2021	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Walleye	1.7	4340	6/17/2021	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Blue Catfish	4.8	2490	10/8/2020	#1 Little Grassy Hatchery (09050)
Spring Lake - McDonough County (00466)	Walleye	1.5	5460	6/17/2020	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.4	3276	6/17/2020	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Muskellunge	13.5	281	9/17/2019	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.5	4320	7/1/2019	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Blue Catfish	5.9	5976	10/10/2018	#1 Little Grassy Hatchery (09050)
Spring Lake - McDonough County (00466)	Muskellunge	12.5	281	9/13/2018	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.4	2872	6/20/2018	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Muskellunge	12.5	279	8/31/2017	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Muskellunge	10.75	281	8/26/2016	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.6	2926	6/22/2016	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Muskellunge	11.9	280	9/2/2015	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.5	2790	6/24/2015	#3 LaSalle Fish Hatchery (09010)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1.5	2770	6/30/2014	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	1	2770	6/28/2013	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Striped Bass x White Bass (Wiper)	4	2839	8/23/2012	#2 Jake Wolf Hatchery (09000)
Spring Lake - McDonough County (00466)	Muskellunge	11	277	8/23/2012	#2 Jake Wolf Hatchery (09000)